

THE THESAURUS OF ARCHAEOLOGICAL TOPONYMY<sup>1</sup>

ABSTRACT

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This paper describes a data-base created for the geographical and administrative identification of archaeological place-names: the Thesaurus of Archaeological Toponymy (Thesaurus di Toponomastica Archeologica, TTA). The compilation of this data-base began in 1987 and now contains about 8,000 place-names. The TTA is a structured and controlled vocabulary mostly of the archaeological toponymy and micro-toponymy of Tuscany. The data-base is organized in two hierarchical structures arranged from broader to narrower context (one: nations, states, provinces, communes, cities, inhabited or deserted archaeological sites; and two: catchment basins, cities, inhabited or deserted archaeological sites). The TTA provides both the vernacular and Italian names of places, variant in other languages and historical names; the record for a place may also contain the descriptive note, geographical coordinates and bibliographic source of the names.

## INTRODUCTION

The Thesaurus of Archaeological Toponymy is a result of the cataloguing operations of the books kept in the Libraries of the Museo Archeologico Nazionale of Florence and of the Istituto di Studi Etruschi ed Italici.

The Museum's collection was instituted in 1871. Beginning in 1899 Luigi Adriano Milani curator of the Museum, saw to the transfer of the archaeological heritage as well as the volumes dealing with Egyptology, Etruscology and Graeco-Roman archaeology that had been housed at the Uffizi until that moment; to this first, ancient nucleus many further acquisitions have been added and the present heritage consists of approximately 40,000 volumes. The Library of the Istituto di Studi Etruschi ed Italici was placed beside it since 1930 and the book heritage owned by the Institute stands at approximately 10,000 volumes. Together they form a centre of documentation for the preservation of the Tuscan archaeological heritage.

In the second half of 1987 a program of bibliographical data management<sup>2</sup> led to the beginning of compilation of a Dictionary of Subjects, dedicated to this field. The Dictionary of Subjects of the bibliographical resources is carried out by the adoption of key-words drawn from titles, texts, fore-words, abstracts, indexes, as well as from the language of archaeologists. The key-words consist of a single word (lemmas as 'temple') or a compound word (syntagms as 'Hera temple'). In this way we have registered a considerable quantity of associated concepts, agents, activities, materials, archaeological items, and place-names.

## THE CONTEXT: THE ARCHAEOLOGICAL BIBLIOGRAPHY

It is quite simple to reach the origin of the bibliographical information as each subject is available in any of the informatic catalogues which can be found by using a key word or free text. However, this does not hold for the subject 'place-names', since they have been in the archaeological bibliography for only 15 years, and not in every case has it been de-

med necessary to perfect the publications with maps, including those connected to excavations or the recognition of such: almost all previous publications were lacking in them. Thus, until 15 to 20 years ago, the sites, on the whole, were not placed in their geographical environment. Furthermore, both the variant place-names (that several sites have been subjected to over the years), and the vast quantity of homonymous names has only added to the confusion. The very same archaeological publications that are supposed to assist in locating the sites geographically, such as atlases and maps, are organized according to a cartographic subdivision or to the chronology, morphology and the illustrations of the objects discovered.

From the very beginning of this work, since place-names and micro-place-names have represented the majority of subjects recorded, it has been necessary to identify a means that will allow us not only to trace the source of the bibliographical information, but also to identify the geographical and administrative location of the site.

## PLACE-NAMES OF ARCHAEOLOGICAL SITES: QUANTITY AND CHARACTERISTICS

As described in the Dictionary of Subjects sixty per cent of the items consists of place-names (slightly more than 8,000 but expanding), because they are related to archaeology in a wide sense, including places of discovery, location, restoration, study and events. The most recorded places are the Tuscan ones, even if the Thesaurus is open to the entire Mediterranean area. Obviously, the further we get, the rarer and more casual the places become.

It is common knowledge that archaeological sites have a great deal of variable features: we can have places very rich in buildings, remains and finds, or simply places where only one object was found such as a statue, or a coin or a shard. They can have the same name of one single building or of one street or of one river, etc. They can cover wide chronological periods, or witness only short fractions of time. In spite of such variety, the archaeological sites have two common fea-

# Database Applications

tures: all of them have a place-name and most have a geographical placement.

## CHOICE OF METHOD

According to the Guidelines of International Standard Organisation, the definition of a thesaurus in structural terms is a controlled, dynamic of semantically and hierarchically dictionary correlated terms that covers a specific field of knowledge (ISO 2788/1974), followed in 1986 by a further definition: 'Thesaurus: a dictionary to be used as a reference book in which words with similar concepts are grouped together' (ISO 2788/1986). The former definition is clear enough not to require further explanations, while in the latter it is sufficient to substitute 'concepts' for 'place-names', thus highlighting the usefulness of applying this method to archaeological topography and place-names, indeed it makes it possible to give explicit connections a priori... in a relatively simple hierarchical context, namely the semantic connection defined as 'part - the whole', in which the subordinate defines a part compared to the whole as represented by the dominating part. It is accepted only for those cases where it is considered that the connection 'part - the whole' contains strong, mutual implications, and more precisely in the following taxonomies: the human body, geographical location, and social hierarchical disciplines and structures (Trigari 1992).

We wish to point out that our choice of using a controlled, structured dictionary which in our opinion has the merit of clarifying a priori the connection between the place-names (Fig.4 and Fig.5), has not been adopted by the curators of the Alexandria Digital Library Gazetteer or by other similar prestigious instruments found on the internet<sup>3</sup>, because it is likely they were able to utilize other systems of registration from the very beginning. On the contrary the Thesaurus of Archaeological Toponymy was born on paper, with all the limitations this can bring, and on the basis of example available, like local works by Cammarosano and Passeri (Cammarosano and Passeri 1984), and of Papaldo and Signore (Papaldo and Signore 1989) or to international publications such as the Art & Architecture Thesaurus of the Getty Information Program (Petersen 1990). Much has been written about thesauri since the end of the 19th century, but the bibliography of geographical and place-names thesauri goes back only to the last decade of the 20th century.<sup>4</sup>

Symbols Getty's Thesauri	Symbols of TTA	
USE (use)	as preferred	place-name
UF (used for)	as alternative	place-name
TT (top term)	as national	place-name
BT (broader term)	as regional	place-name
BTP (broader term partitive)	as district	place-name
NT (narrower term)	as municipality	place-name
NTP (narrower term partitive)	as locality	place-name

Figure 1

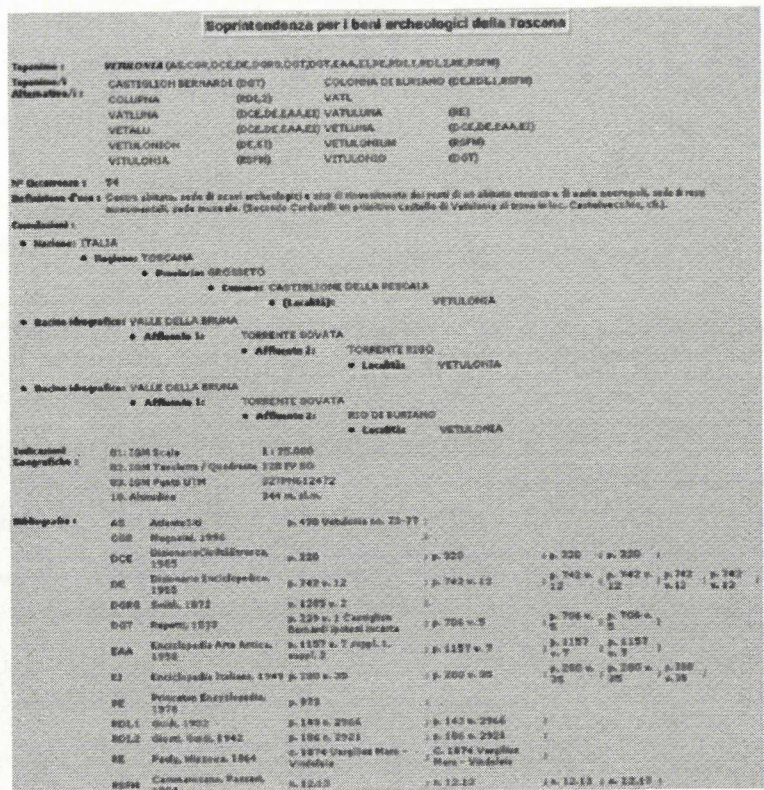


Figure 2 The file of Vetulonia.

## THE FILES FOR THE REGISTRATION OF THE PLACE-NAMES

[1] Our place-names are arranged in records, according to the pattern adopted by the Art and Architecture Thesaurus, and also Getty Thesaurus of Geographic Names, whose hierarchical relations between terms are borrowed for the toponymy. In this way the symbols, that in the Getty Thesaurus express the relations between terms, become as those shown in the Figure 1.

[2] The standards of the cataloguing can be well understood from the place-name's file of Vetulonia (see also Fig.2).

[2.1] In the field of preferred place-name is recorded the place name used in the present cartography.

[2.2] In the field of alternative place-name are recorded historical and linguistic variants of the place-name. Each variant provides an approach to information, i.e. the same result can be obtained looking under the Etruscan place-name 'Vatl' or under the late medieval one of uncertain origin 'Castiglion Bernardi'.

[2.3] The number of the occurrences shows the quantity of publications held by the library in which the place-name is present.

[2.4] The scope note shows the essential features of the site indicated by the place-name, thus Vetulonia being a particularly famous site in Italy is described briefly as: an inhabited place, a site of archaeological excavations and an Etruscan settlement and necropolis.

[2.5] In the field of correlations the preferred place-name is listed in a hierarchy according to the present administrative

subdivision of the land; so 'Vetulonia' is in the municipality of 'Castiglione della Pescaia', in the district of 'Grosseto', in the region of 'Tuscany' and finally in 'Italy'.

[2.6] Furthermore, the preferred place-name is listed also in a second hierarchy of the names of the catchment basin that embrace the site, that allows us to show the settlements and the remains and to reconstruct the topography of the ancient peopling; so 'Vetulonia' is situated between the 'Torrente Rigo' (North) and the 'Rio di Buriano' (South), affluents of 'Torrente Sovata' in the 'Bruna's' catchment basin.

[2.7] In the field of geographical information we record the scale, the number and the data of the topographical map, the co-ordinates of Mercator's Projection and / or Gauss Boaga, the cadastral data, the elevation.<sup>5</sup>

[2.8] Under these data it is possible to insert one or more pictures.

[2.9] In the field of sources we record the titles concerning the place-names' variants.

[2.10] In the last field, not visible in figure 2, the name of the person filling in the registration, has been recorded.

[3] Further information on the file

[3.1] The place-names of uncertain location are tied to the most probable hierarchies. If the effective location is verified, it is possible to cross them out from the wrong hierarchy. In the same manner the place-names of archaeological sites, that are localized on boundary-lines and belong to different municipalities, can be assigned to different hierarchies.

[3.2] We have introduced a further level too<sup>6</sup>: the sub-locality.

This has no administrative value, but it allows us to insert at a correct level the place-name pertaining to sites included in a broader one. For example, this device avoids an urban area like 'Rome' being on the same level as 'Largo Argentina', or 'Firenze' being on the same level as 'Piazza della Signoria'.

[3.3] Obviously the free-text research can be applied also to the field of the scope note, allowing us to locate all the inhabited places, settlements, monumental complexes, necropolises, occasional finds and their relative features.

INDEXES AND HIERARCHIES

[1] This type of cataloguing allows us to obtain the sequence of file containing place-names, that may be ordered according to a chosen rule.

[1.1] The alphabetical index of preferred place-names and their variants, perfected by the definition of the use which provides essential features.

[1.2] The index of place-names with respective historical, linguistic and synonymic variants.

[1.3] Another which shows the geographic and administrative location of the preferred place-names (Fig.3).

[1.4] A hierarchical index in which every preferred place-name is arranged in alphabetical order in the catchment basin that embraces the sites (Fig.4).

[1.5] And finally a hierarchical index of the preferred place-names arranged in alphabetical order, level for level, with the place-names belonging to the same administrative area (Fig.5).

[2] Moreover, the structure of the thesaurus foresees the registration of the other hierarchies bound to further territorial subdivisions, like the historical and ecclesiastical ones, in which we will be able to insert the place-names, even if these further data-bases are not yet implemented.

Figure 3 : Index of the preferred place names

Figure 4 Hierarchical index of preferred place-names in the catchment basin

CONCLUSIONS

The intention of this work is to contribute to the knowledge regarding the distribution of ancient peopling connected with the geomorphological structure and the present administrative division of the territory that reflects the one used in Italian Institutes responsible for the preservation, conservation and fruition of the cultural heritage.

As the implementation of the database is fortuitous (as already explained, it is tied to the Library acquisitions) and therefore not even the territory of our region can be considered complete, however, it should be kept in mind that the list a theoretical contribution to the analysis of the problem has been supplied; as far as our work in concerned, we feel that

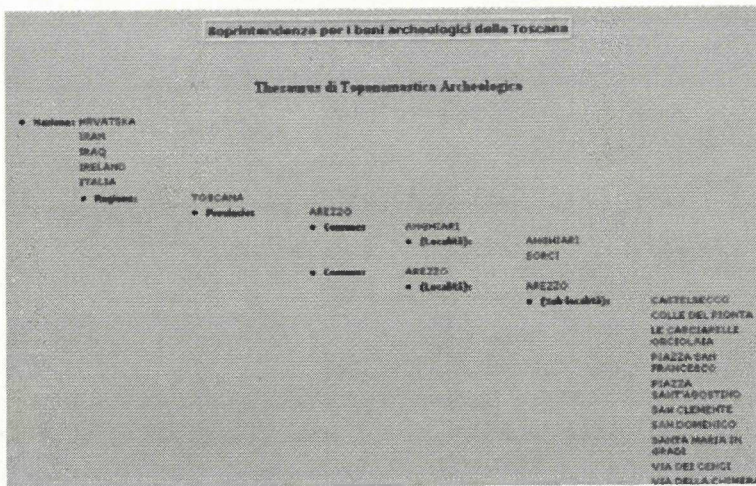


Figure 5 Hierarchical index of preferred place names-in the administrative subdivisions

the initial objective will have been reached when the implementation of all the place-names of archaeological sites in Tuscany has been finished.

The Thesaurus of Archaeological Toponymy is presently available for consultation only in the libraries of the Archaeological Museum and the Istituto di Studi Etruschi<sup>7</sup> that are visited by erudites, professors, archaeologists and university students made up mainly of Europeans and Americans (about 600 persons a year). The following developments, such as the expansion of the geographical area and the neighbouring regions the increase in software adaptability and the capacity to interact with other databases, depend to a large extent on funding that will have to be found. However, the first partial result will be the opportunity to consult, from the beginning of 2004 the Thesaurus of Archaeological Toponymy on the Biblioteca Nazionale di Firenze site ([www.bncf.sbn.it](http://www.bncf.sbn.it)), in the space entitled 'Segnalibri'. Only after an initial running-in stage will we be able to assess its merits and demerits based on the answers that visitors to the site will be asked to give to specific questions.

<sup>1</sup> The Thesaurus of Archaeological Toponymy is a data-base elaborated in collaboration with Dr. Donatella Venturi. The revision of the Italian text is the work of Dr. M. Iozzo. The translation of this paper is of Mrs. Doris Gage.

<sup>2</sup> At first we used an software in DB3 created on purpose, until the end of the year 1999; in the 2000 we have acquired a new software (elaborated by Logica s.r.l. of Florence in collaboration with G. Pardi and D. Venturi and taking advantage of the fundamental suggestions by Laura Corti of the Scuola Normale Superiore di Pisa and Toni Petersen and Marisa Trigari of the International Federation of Library Association and Institutions, IFLA) in which the data is formatted in SQL, it is elaborated in Visual Basic and Access and the results of the queries are formatted in HTML.

<sup>3</sup> In Google to the query: Mediterranean Archaeological Gazetteer turn out to be over 600 pages.

<sup>4</sup> The Clearinghouse, Instytut Informacji Naukowej, Technicznej, i Ekonomicznej (IINTE) of Warszawa, whom we consulted on this subject at

the end of 1988. They replied that nothing had been published.

<sup>5</sup> During the debate following the exposition of this work at the convention CAA 2003, a thoughtful colleague kindly pointed out the usefulness of inserting both the latitude and the longitude of the site.

<sup>6</sup> A symbol for this level does not exist in the specialized literature.

<sup>8</sup> The two Libraries are in the same building and have the same address: (via della Pergola, 65-50121 Firenze, Italia).

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