A study of the toponyms of places and areas in relation to the physical characteristics of the terrain of the province of Cuenca, Spain.

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SINTESI

In Spagna, la normalizzazione linguistica delle regioni (comunidades autónomas) con lingua propria diversa dallo spagnolo (fondamentalmente basco, catalano e galiziano) ha favorito, sin dalla costituzione dello stato democratico nel 1978, il recupero e la regolarizzazione dei nomi di luogo e delle loro diverse varianti; invece, le regioni in cui si parla esclusivamente il castigliano, come Cuenca, sono spesso prive di un corpus o di un repertorio di toponimi esaustivo e affidabile.

In questo contesto, si affronta uno studio toponimico, partendo dalla Linguistica e dalla Geografia, di una serie di vocaboli riportati nella cartografia di base della Spagna (Mapa Topográfica Nacional, 1:25.000), fra i quali si presta particolare attenzione ai nomi dei luoghi/località legati alle caratteristiche fisiche del territorio –substrato calcareo con abbondanza di terre argillose - come il toponimo charca (stagno), che fa riferimento a un accumulo d'acqua più o meno permanente e che si presenta in varie forme nella zona studiata: charco, chabarco, abanco, tollo, colocha, nava, poza, cenagal, ecc. Lo studio linguistico della variazione sinonimica di questi toponimi, insieme alla loro distribuzione geografica mediante il trattamento in un Sistema d'Informazione Geografica, consente di stabilire una serie di regole sul comportamento toponimico all'interno della Spagna.

RÉSUMÉ

En Espagne l'ainsi-dite “normalisation linguistique” des zones avec une langue propre autre que l'espagnol (le basque, le catalan et le galicien) a donné lieu à une étude attentive des noms de lieux de ces endroits. Par contre, la toponymie des régions de l'Espagne où l'on parle castillan a été souvent négligée. C'est le cas de la province de Cuenca, dans la communauté actuelle de Castilla-La Mancha, au centre de l'Espagne.

C'est dans ce contexte que notre recherche (qui forme partie d'un projet de recherche plus vaste) vise à brosser une étude toponymique à l'aide de la Toponymie et de la Géographie, sur des séries de toponymes trouvés dans la cartographie basique de l'Espagne (Mapa Topográfico Nacional, 1:25.000). Cette étude ne prétend nullement être exhaustive et se borne seulement aux noms de lieux (communes, hameaux, écarts, lieux-dits, etc.) appartenant à un champ sémantique inséparable des caractéristiques physiques du sol, bref un substrat calcaire avec abondance de terres argileuses, qui est la cause de l'emmagasinage des eaux de façon plus ou moins permanente. On trouve, en effet, de nombreux noms pour la description des lieux avec ces caractéristiques. Quelques-uns d'entre eux sont bien connus, comme charco, poza, cenagal, etc., mais d'autres sont à peu près aujourd'hui disparus de la langue vivante, comme chabarco, clocha, tollo, nava, etc. L'étude linguistique des variations para-synonymiques de ces toponymes étayée avec l'examen de leur distribution grâce à un Système d'Information Geografica.

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Géographique nous permet d'établir à grands traits un tableau de quelques règles sur ce champ toponymique dans la province de Cuenca et ailleurs.

ABSTRACT
Following the constitution of the democratic state in 1978, the linguistic standardisation of autonomous communities with a language other than Spanish (Basque, Catalan and Galician) has led to the recovery and regularisation of place names and their different variations in Spain. In contrast, it is often the case that regions in which only Castilian Spanish is spoken, such as Cuenca, there is no corpus or catalogue of toponyms available that is both exhaustive and reliable.

Bearing this in mind, the present study will analyse, from both a linguistic and geographical perspective, a series of toponyms taken from base maps of Spain (National Topographical Map, 1:25,000), with a particular focus on the names of places/geographical areas in relation to the physical characteristics of the terrain. Cuenca has a limestone substrate and an abundance of clay soils, as may be demonstrated by the toponym charca “small pond”, which refers to the collection of water on a more or less temporary basis that occurs in many different ways in the area in question: charco chabarco, abanco, tollo, colocha, nava, poza, cenagal, etc. The linguistic analysis of the synonymic variation of these toponyms and their geographical distribution using a Geographical Information System will allow us to draw a series of conclusions on the use of toponyms in inland Spain.

Key Words
Italian / French /English
Cuenca (Spagna), toponimi, stagno / Cuenca (Espagne), toponymie, mare / Cuenca (Spain), toponimy, small pond

1. INTRODUCTION
The physiographical characteristics of land and its geological composition have given rise to numerous toponyms in the different linguistic frameworks that have arisen in Spain. Although the existence of toponyms that describe the characteristics of the land does not seem to require any further explanation, a detailed look into these tends to bring more questions to the fore than certainties. The linguistic evolution of these words, on the one hand, and the changes that the land itself undergoes due to natural causes or because of changes made by farming the land, on the other, can distance the original reason behind a specific toponym from the place it names. Other unknown causes may also affect this link, such as whether these toponyms have been moved from their original location on different maps.

If we pay close attention to the linguistic characteristics of each toponym and the geography of the terrain, it is possible to re-establish these relationships. The aim of the present article is therefore to analyse a series of toponyms and their meanings in the province of Cuenca in relation to the characteristics of the land. We will analyse them from different viewpoints, comparing them with the locations in which they are found elsewhere in Spain. Our study has been carried out as part of a research Project financed by the Spanish Ministry of Education and Science (FFI2010).
In what follows, we look at the methodology adopted before giving a brief summary of the linguistic framework of our study and a general description of the characteristics of the terrain in question, before ending with some specific examples.

2. METHODOLOGY

Toponymic studies tend to be multidisciplinary in nature. The methodology that we have adopted for the present analysis is largely based on gathering as much data as possible on the toponyms of a particular area to then compare and analyse them with those of other areas. Toponymy is a science that is essentially linguistic in nature because it requires an understanding of the phonetic history of the languages of toponyms, as well as information on dialectology and lexis (etymological and historical dictionaries, dictionaries of local languages), etc. However, it also relies heavily on the information that other sciences provide. It is a known fact that the words susceptible of becoming toponyms in any language cover a wide semantic range, from names of people, references to settlements, zoonyms, phytonyms, hydronyms, oronyms or, more generally, names related to the nature of the terrain.

Toponymy undergoes a process of constant change and renewal, often because the reality referred to by toponyms undergoes change and renewal itself, amongst other reasons. However, there are some toponymic semantic fields in which such changes are less frequent or may even be inexistent. Thus, the information that geographical studies can provide are of great importance, since at least some of the details that toponimists can glean from such studies refer to the natural features of land that cannot change (oronyms, for example). In other branches of geographical study, however, the relationships that exist between linguistic and geographical data are much more complex, since we can identify changes to nature that have occurred over a long period in history, from hundreds of years to millennia. Such is the case, for example, of toponyms that refer to springs or lakes that no longer exist or species of trees whose current distribution does not coincide with the extension of toponyms used to designate that particular species (as has been noted in recent work by Carrillo López, et al., 2010).

In the present study we have focused our attention on a group of toponyms closely linked to the idea of hollows in the terrain and the accumulation of water, that we can exemplify with the noun charco “pond”, which is the most common word from this group found in Spanish-speaking land. Alongside this term, we have also come across others that are less common but whose meaning seems to be very similar to that of charco “pond”: chabarco, abanco, tollo, colocha, nava, etc.

Now that we have identified the terms to be studied, we will look at their location on different maps: the National Topographical Map 1:25,000, geological map 1:200,000, Corine Land Cover maps, Google Earth satellite maps and photographs from the Ministry of Environment.

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2 A good summary of the history of each of these terms can be found in the Diccionario crítico etimológico castellano e hispánico (DCECH) and in the Diccionari etimologic i complementan de la llengua catalana (DECLC) along with detailed bibliography. When it comes to toponyms in Catalan-speaking areas, in particular the terms toll and clotxa, it is particularly interesting to look up the group OC. The term charco, which is standard in Spanish, poses serious etymological problems, since it is only found in Castilian Spanish and Portuguese. It is likely that the word shares a relationship with chabarco/chavarco but this is by no means certain. Both tollo and colocha (and their different variants) are also of obscure origin, but are also found in Catalan-Aragonese territory and may well trace back to Latin. Finally, the origins of abanco and nava are also difficult to pinpoint and it is usually thought that they are pre-Roman.
As well as examining the above maps visually, we have also carried out a digital analysis using different geoprocesses in the ArcGIS Geographical Information Systems programme, with the aim of framing and linking each toponym selected with the orography of its location, as well as the geomorphology of the land and its known uses.

Some of the toponyms have been examined in person, with a view to understanding the geographical characteristics of the area in detail and comparing the information with those who live there. Indeed, speaking to the inhabitants of the areas studied has been a source of great interest. We also sent questionnaires to various regional government offices on such matters. When it comes to the most important toponyms, we have looked at their use in the rest of Spain in order to compare the relationships that they share with orography, geology and land use, paying particular attention to their location in large geological areas and regions.

All of the above has brought to light tendencies and relationships in terms of the location of these toponyms that may provide information on the reasons behind their proliferation, absence and relationships with the physical aspects of their surroundings and human activity. Although our work is on-going, a series of examples can serve as a sample of the above.

3. THE LINGUISTIC FRAMEWORK

Toponymy is a true reflection of the linguistic history of a particular geographical location and, through this linguistic history, it also is an accurate reflection of history in general. The linguistic history of Spain is complex and multifaceted, making Spanish toponymy an extremely challenging area of research.

Although in truth we know very little about the languages spoken in the Iberian Peninsula before the arrival of the Romans at the end of the third century BC, we can be certain that both Indoeuropean and non-Indoeuropean languages were spoken there. An early and thorough Romanisation then wiped out these languages completely, with the exception of the Basque language, which still thrives today and is spoken in a small area of Spain.

The Germanic invasions that occurred at the end of the Roman Empire did not bring about any linguistic substitution in any way. In fact, the new invaders, themselves a linguistic and social minority in a sea of Hispano-Romance, adapted to the existing language, which was still Latin at that time.

The Arabic invasion in the eighth century did have an impact however, since alongside the new religion (Islam), the Arabic language (to a lesser extent, Berber) was absorbed in wide areas of the peninsula and the Balearic Islands. We can thus affirm that in large areas, the population changed the language they spoke gradually and, in fact, Latin came to disappear.

It was only at a later date, during the long period in which the Christian kings of the north reconquered and re-populated the south from the tenth to fifteenth centuries, that these territories were “re-latinised” again. However, this time it was not Latin that they began to speak, but rather the different languages into which Latin had by that time evolved. Thus, from east to west, Galician-Portuguese, Leonese, Castilian, Aragonese and Catalan spread throughout the Peninsula and the islands.

4. THE TOPONYMY OF SPAIN

As we have already mentioned, Spain's toponymy is a reflection of the country’s multifaceted and complex past. Naturally, when we speak of “Spanish toponymy” we are making a wide-sweeping generalisation since each area of Spain has its own history,
sometimes very different from that of the rest of the country. The current status of studies on Spain’s toponymy is very uneven, since although some areas have been studied in great detail, others have hardly been studied at all. The province of Cuenca, on which the present study is based, is, in our opinion, an area that has been studied very little.

Located in the central-eastern area of Spain, Cuenca is Castilian-speaking as a result of the reconquest that took place there in the twelfth and thirteenth centuries by the kingdom of Castile. The toponyms found there that are posterior to these dates are therefore mainly Castilian, or Spanish, in nature. However, we should also bear in mind the definite existence of previous layers, that is of toponyms that are completely Arabic, Latin or Mozarab in nature (Late Latin toponyms that were adopted and used first by the Latin-speaking population and then by the Arabic-speaking population during the centuries following the Arabic conquest and the subsequent “castilianisation”). Finally, it is important to bear in mind the surprisingly strange existence of some toponyms that could be traced back to before the gradual Romanisation of the area that must have taken place from the second century B.C. onwards and that was have most probably complete with the change in era.

5. GEOGRAPHY

The Iberian Peninsula, made up of both Portugal and Spain (92,000 and 493,000 km$^2$ respectively), is located between 36 and 43 degrees latitude north and between 3E and 9W longitude. It is surrounded by the Atlantic to the north and west, and by the Mediterranean to the east and south. It is linked to France and the rest of Europe via the Pyrenean mountain range (with 7 peaks over 3,000 metres above sea level) and separated from Africa (and the Arab Maghreb in particular) by a narrow stretch of sea just 14km wide known as the Strait of Gibraltar, where the Atlantic meets the Mediterranean. It was via this narrow stretch of water that the Arabic influences previously mentioned arrived in the Peninsula.
The most noteworthy physiographical feature of the Peninsula is its vast and high plateau, standing at more than 600m above sea level. It is located in the centre of the Peninsula and covers an area of 240,000 km², that is, half of Spain. It is also the greatest unit of relief and the oldest in the Iberian Peninsula, its origins tracing back to the Hesperic Massif arising as a result of the Hercynian orogenic movement).

The Alpine orogenesis broke up the Hesperic Massif, separating the plateaux with the so-called Cordillera Central or Cordillera Carpetana, with the north sub-plateau the highest and widest. Its edges were compressed giving rise to a belt of various mountain systems; of particular significance in the area studied are the Sistema Ibérico and the Serranía de Cuenca. The latter of these is an elevated area with sudden peaks and intricate geological formations, although it is not a mountainous region as its name would imply, and for the most part it is covered with pines. Due to its characteristics, the central area was made a hunting reserve from early on (1973-2007), meaning that its flora and fauna has been preserved to the present day and it is currently known as the Serranía de Cuenca National Park.

Going back to the general features of the Iberian Peninsula’s orography, three large units have been identified in relation to the materials that make up its soil: siliceous land (the initial Hesperic base referred to above); limestone, the result of accumulations of sea and shallow areas of water that during the secondary era surrounded the eastern side of Hesperic formations and, when compressed by the Alpine push, formed mountainous systems that border the plateau in a ‘z’ formation; and the clay-soil area of Spain that arose as a result of the quaternary sediments that accumulated in the two plateaux.
6. Geographical features of the province of Cuenca

The province of Cuenca, where the main focus of our research lies, is located in central Spain, in the east of the Castile-La Mancha autonomous region. It covers 17,061 km².

In terms of relief, the province of Cuenca shows a marked difference between the north and east (a mountainous area covered with the sierras of the Sistema Ibérico) and the south and west, a basin of sediment where the diversity of the geological substrate means that there are various types of plain.

6.1 – The Iberian System or Sistema Ibérico

The Sistema Ibérico is found in the mountainous areas of the north and east and is made up of a group of reliefs that stand out to a greater or lesser extent in a northeast-southeast direction. Its peaks are levelled out due to the erosion that took place after the Alpine orogeny, giving rise to a landscape of high and extended páramos with deep and narrow valleys carved out by the rivers Tajo and Júcar and their tributaries. There, where the vastness and purity of the limestone allows it and the structural conditions needed are met, we come across an important karstic landscape with both external (sinkholes, ravines, emergences, etc.) and internal (chasms, underground tunnels, etc.) features.

6.2 – Serranía de Cuenca

The Serranía de Cuenca lies to the north and east of the province. It is a vast range and the most extensive of the Sistema Ibérico. Although its peaks are not extremely high (around 1,800m above sea level), the erosion that occurred to its limestone in the Secondary and Tertiary inferior periods, mostly marine in origin, created spectacular karstic formations. Of these, the deep “ravines” carved by rivers and the “enchanted cities” stand out in particular. Although the dominant rocks are calcareous (limestone and...
dolomite) they are not exclusive and other softer rocks are also found (sandstone, clay, gypsum) where erosion has led to wide peripheral hollows and intramountainous furrows.

The geological formation of the area begins in the Lower Tertiary or Paleogene (Eocene and Oligocene) when lake sediments (marlstone and gypsum) settle first, followed by river detritus (in the Alpine orogenesis).

With the Alpine Orogency (Middle Tertiary period), the bordering regions of Hercynic bedrock, in which large quantities of sediment including rocks had accumulated in the Secondary and Lower Tertiary periods, some of the softer rocks (clay, marlstone, gypsum, etc.) and other not so soft ones (sandstone, limestone, conglomerates, etc.) became deformed by folding, giving rise to the reliefs of the Sistema Ibérico. The terrain of the Serranía de Cuenca folded easily with a succession of anticlines and synclines.

6.3 The sediment basin
The reliefs of the south and west of the province of Cuenca – plateaux, páramos and plains – are characterised by their elevation of between 600 and 700 metres. In their morphology, original flat forms are predominant, some due to erosion and others supported by structures and horizontal layers of sediment. Generally speaking, these elevated plains are interrupted and delimited by deep and incised valleys, carved into the land by rivers.

The hollow nature of the basins and the fact that they are surrounded by mountains led to their siltation and filling up during the Upper Tertiary Era (Neogene) with sedimentary layers that tend to adopt an appreciably horizontal or sub-horizontal disposition. On the sides of the basin, detritic materials tend to accumulate (rocks, stones, conglomerates, sandstones, arkose and clay layers), whilst in its centre chemical sediments are found in systems of large lakes (gypsum, limestone, etc.). In this area, we can identify the following places:

6.3.1 - La Alcarria. Located in the northeast of the province, La Alcarria is made up of perfect plains named ‘páramos’ or ‘alcarrias’ that, at an elevation of between 700 and 1,000 metres above sea level, have remained elevated against the bottoms of the valleys, giving a tabular relief. The main cause of erosion here is the River Tajo and its tributaries. La Alcarria is split into two by the Sierra de Altomira, a straight and far-reaching line that extends from north to south for 125km, with peaks that reach 1,179 metres in height. Its geological structure in the form of an anticline is made up of limestone rocks from the Cretaceous period, and its sides are extremely asymmetric, with a steeply-inclined western side and a gently-sloping eastern side.

6.3.2 - La Mancha. Located to the east and south of the province, La Mancha is made up of a wide plain of heights of between 700 and 900m, through which tributaries of the Guadiana river flow without settling in a fixed spot, so deep valleys have not been carved into the landscape. The main geological material towards the west of the formation is Miocene detritic sediment (sand, clay, etc.) scored with Jurassic and Cretaceous furrows that offer a continuation of the sierras of Altomira and Santa Quiteria to the south. In the eastern area of La Mancha, however, predominant materials are mainly chalky, marly and of gypsum in nature from the Paleogene. Of particular interest is the band of quaternary alluvial materials (mud, sands, clays) in the south (San Clemente).
6.3.3 - La Manchuela. This is the name given to the area between the Júcar and Cabriel rivers, to the south of the province. It is a plain of 700 metres in height where the mainly detritic materials (clay, sand, gypsum), from the Neogene (Miocene) and Paleocene eras, are marked by a series of seasonal streams.

7. RELATIONSHIP BETWEEN TOPONYMS AND THE NATURE OF THE LAND

The toponyms chosen (those that may mean charco, which we can define as a “cavity that fills with water on a more or less permanent basis”) can appear throughout the province, given the abundance of lithic material susceptible of forming waterlogged areas: clays, marlstone, gypsums and limestone (in the Serranía de Cuenca “poljes” are referred to as “navas”). However, a first look at the location of such toponyms shows a strong concentration of the toponyms charco, chabarco, chavarco, tollo, hoyo, reoyo, lavajo, etc. (fig. 3) in the Manchuela area (fig. 4). These toponyms always refer to places that are located mainly on clay soils, from both the tertiary and the quaternary eras (fig. 5). The use of the same toponyms in other areas of the province is very sporadic and not very representative, even in the lower grounds to the south of the Mancha Baja, where endorrheism is spatially very important, as is demonstrated by the number of lakes there.

![Fig. 4: Location of five toponyms in the province of Cuenca that are used to refer to areas related to the idea of hollows and water-logging. The % symbol indicates that a search has been carried out for each toponym in a total of 33,128 registrers that include this root in some part of the name.](image)
Fig. 5. Example of the location of the toponym chabac\textit{\text{co}} on a Digital Globe satellite image with MTN toponyms superimposed 1:25,000.

It is interesting to note that, despite the logical formation of pools in Cuenca as a result of the geological structure mentioned, a search of the Spanish Nomenclator from 2006 (the most up-to-date version at the time of writing) for all words beginning with \textit{Char*}, shows 1,456 listings (the majority of which are small ponds or ponds plus a second name referring to a saint). These are located in siliceous areas of Spain and there is a significant number between Cuenca and Valencia, as we can see on the map in figure 6.
The strong concentration of toponyms in the provinces of Salamanca (fig. 7) and Caceres is related to endorheism, since many streams find no exit-route and become blocked, and livestock farming, since the presence of ponds is of great value for the keeping of animals.

Note: We would like to thank the IGN in Spain for allowing us to access maps and toponymic data resources in Nomenclator.

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