Geography of Daily Life Names, or What is Geonomastics?

Evgeny Shokhenmayer

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Abstract

This article aims to discuss, firstly, the substantiation of a new discipline within applied onomastics with a short excursion into the historical domain, its relationship to other sub-disciplines, then its difference from toponymy, and finally to give examples of contemporary works at the intersection of geography, linguistics, onomastics, cartography, map semantics and others.

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Introduction

Let us discuss the discipline known as 'onomastics'. By definition its field of study is concerned with proper names: anthroponyms, toponyms, hydronyms, astronyms, etc. Proprial units are so multifaceted that onomastics may cover a wide range of scientific activities. The philological point of view deals with the linguistics of proper nouns, their grammar, meaning, morphology, and even etymology. On the other hand, "observing the geographical and chronological distribution of certain names and then putting this knowledge to use (for instance by saying that because of his name, someone probably comes from a certain city or area, and then basing demographic observations on this) will take us to another level of onomastics which we may call 'applied' onomastics…"[1] (Bodel, 2001:77). In this article, we will show how name geography can include the application of onomastics for social research and public policy but also has a parallel history in academic research seeking to understand the processes by which naming mechanisms of people evolve geographically and are formed spatially on the map.

The geographical dimension of names has been an almost wholly unexplored dimension in onomastics. This is a surprising state of affairs since modern onomastics can claim roots in a number of spatially-aware antecedents: the cartographic tradition of dialectology, linguistic anthropology, cultural geography, and so on. The name has been untheorised, unexamined, and its role in shaping and being shaped by culture untested. Furthermore, human geography, the discipline to which onomasticians might reasonably look in order to rectify this under-exploration, itself underwent, in the last quarter of the 20th century, a great deal of self-searching, questioning its objectives and its very existence as a separate field of science. Therefore, *geonomastics*, or geographic onomastics, can be considered as one of the onomastic meta-disciplines, even though the term is absolutely new.

What's in a name?

However, it is curious to note that, about fifty years ago, John K. Wright (1891–1969), an American geographer notable for his cartography, geosophy, and study of the history of geographical thought, in his review "The Language of Geography"[2] of *A Glossary of Geographical Terms*, polemicizing with L. Dudley Stamp, points out:

[1] John Bodel, Epigraphic evidence. Ancient history from inscriptions. London: Routledge, 2001. 246 S.
[2] In *The Geographical Journal*, Vol. 128, No. 1, 1962 (http://www.jstor.org/pss/1794117).

> "The particular 'science' in question might be called *geonomastics* and it could be pursued as a branch of either semantics, or of *onomastics*, which Mr. Aurousseau says is 'the scientific study of the human habit of naming things' […], or of geosophy, which I once defined as 'the study of the nature and expression of geographical ideas' […] and is itself a branch of epistemology" (Wright, 1962:73; author's italics).

It might also seem extraordinary, but more than one hundred years ago, Francesco L. Pullé (1850-1934), an orientalist from the University of Bologna, used the adjective 'geonomastic' in his article *Geography in Italy in 1901*:[3]

> "The proportions of the various *geonomastic* lists can be conjectured from a work by Signor Crivellari in conjunction with Professor Ulrico. […] The work in question was about the Alpine Department of Bormio, including the three communes of Bormio, Valfurva, and Valdidentro, contained in…" (Pullé, 1902; author's italics).

So, a logical definition must view geoonomastics as the study of onomastics in relation to geography and as systematisation of the facts about how proper names are used on a given territory/map. To this may be added the following derivative words:

- *ge(o)onomastic* (adjective) – relating to the study of the geography and repartition of names;
- *ge(o)onomast*, *ge(o)onomastician*, or even *ge(o)onomatologist* (noun) – a person who studies proper names in relation to geography;
- *ge(o)onomasticon* (noun) – a collection of names and terms or a list of proper nouns naming places or persons within one or more areas;
- *ge(o)onomastically* (adverb) – in a ge(o)onomastic way;

It is essential to point out that the noun *geonym* does not fit in that word-formative system. Since the last resolution concerning the Working Group on Terminology, adopted by the Eighth Conference (VIII/3, 2002), the terms 'geonym', 'geoname' and their definitions were discussed by the Working Group at its meeting on the occasion of the 22nd session of the United Nations Group of Experts on Geographical Names and approved for inclusion in the *Glossary* in 2004. Geonym is defined as a geographical name or name of a geographical feature, while geoname is an informal alternative for geographical name. As we will see below, the elementary unit of geonomastics is represented by the proprial unit, a name of a general onomastic feature and not only a geographical one.

Relationship to onomastics, geography and other disciplines

The controversial case in the spectrum of specialisations in onomastics is what is generally called an "applied discipline". While some epistemologists regard it as a type of sub-discipline, others do not construe it on that level, arguing that the activities within an applied discipline include more than just subsets of the component-specific sets of activities which constitute a discipline (Posner, 2003:2357). Applied onomastics investigates the properties of names in the context of non-onomastic activities. When a person involved in geography describes the properties of names used on a map, when a literary critic describes contextual properties of names used in poems, when a historian working in medieval studies describes historical properties of names used in the Middle Ages, then they may offer their onomastic descriptions as instruments to achieve a certain non-onomastic goal such as influencing that analysis of a map, judging the aesthetic quality of that poem, or clarifying the ideas and the

[3] In *Scottish Geographical Journal*, Vol. 18, Issue 9 September 1902 , pages 471 – 479.

usage of those names in the past. While describing the properties of a name is an onomastic activity, analysing a map is not. It is motivated by particular interests from outside onomastics.

So, applied onomastics is a field of activities which is broader than onomastics. As such, it can neither be regarded as a sub-discipline of onomastics nor, indeed, as a new scientific discipline. But in what relationship is geonomastics with onomastics? Answering this question is complicated by two unclarities at once: the correlation onomastics – linguistics, and geonomastics – geography. On the one hand, the term geonomastics could be determined by trying to solve that set of equations, but on the other hand, the system of inequalities is likely and they do not correspond to the mathematical one.

Although the realm of onomastics may be thought of as going beyond the borders of linguistics, onomastics is a linguistic discipline at heart. The place of linguistics in onomastics as well as of onomastics in linguistics, the relationship between onomastics and linguistics and their interdependence are major themes of all onomastic works. As linguistics has undergone momentous change in recent decades, its effect on onomastics is readily observable. In addition, contemporary onomastics is focusing on the description of proper names in various grammatical models, the description of names at different linguistic interfaces, the search for onymic markers and neuro- and psycholinguistic findings concerning names.

However, returning to our "sought quantity", we should point out that in onomastics, for example, geography is used to help structure its domain, as manifested in maps called "atlases of family names". In this context, geography is an auxiliary field of onomastics. It may be called an "auxiliary discipline" of onomastics. Geography is one of the domain-related auxiliary disciplines of onomastics and studying the domain of onomastics may therefore be regarded as part of applied geography. We may conclude that if someone studies not the domain but another component of that discipline, i.e., its means of presentation, methods, or perspectives, then this set of activities is called a *meta-study*. If it is recurrent, it is a *meta-field*. Consequently, with respect to interdisciplinary approach, geonomastics can be considered as a *meta-discipline*.

Geonomastics versus toponomastics

Why do we need a 'new' geonomastics if we can use an 'old good' toponomastics?

We would point out that toponomastics or toponymy is the scientific study of place names (toponyms), their origins, meanings, use and typology. The word 'toponymy' is derived from the Greek words *tópos* (τόπος) ('place') and *ónoma* (όνομα) ('name'). Toponymy is itself a branch of onomastics, the study of names of all kinds. So, 'placename' is literally calqued from Greek toponym. Etymologically, as a prefix, *geo-* is taken from the Greek word γη or γαια meaning "earth", usually in the sense of "ground" or "land". *Geo-* is thus a prefix for many words dealing in some way with the earth, including among others: geopolitics, geosophy, geocaching, geocoding, geolocation, geotagging, etc. By extension of meaning, nowadays we may say *geography of the Moon* without referring to the Earth/earth.

Nevertheless, in our view the portmanteau word 'geonomastics' has been inspired by another similar construction, that of geolinguistics. If we take it as point of departure, we can avoid all equivocality and any significant overlaps between toponomastics and geonomastics. Whereas toponymy solely deals with placenames, we assume that geonomastics may handle

all types of names in relation to geography. As we have already mentioned, it can be about atlases of surnames, maps of forenames, diagrams of certain proprial units, schemes for repartition of onyms in a given territory, distributional figures of various forms of one name, of shared onymic roots in hydronyms, or of ethnic names among other nations, percentage maps of one personal name in different areas, and so on. Customarily, toponomastics does not include these kinds of studies. They concern geolinguistics rather than toponomastics.

In this case, onomastic geography, or geonomastics, is the branch of onomastics and human geography that studies the geographic distribution of proprial units or their constituent elements. There are two principal fields of study within the geography of names: the "geography of names", which deals with the distribution through history and space of names, and "onomastic geography", which deals with regional onomastic variations within languages. Various other terms and sub-disciplines have been suggested, including a division within the examination of onomastic geography separating the studies of change over time and space, and the "geolinguistics of names", a study within the geography of language concerned with 'the analysis of the distribution patterns and spatial structures of names in contact', but none have gained much currency.

From this standpoint, geonomastics has a lot to do with areal onomastics, contact onomastics, dialect onomastics, dialectology, dialectography, cartography, population genetics, human geography, geodemographics, ethnography, historical geography and anthropology. Many studies have researched the effect of 'name contact', as the languages or dialects of peoples have interacted. This territorial expansion of language groups has usually resulted in the overlaying of names upon existing speech areas, rather than the replacement of one name by another. An example could be sought in the Norman Conquest of England, where Old French names became the name of the aristocracy, and Middle English names remained the names of the majority of the population.[4]

Onomastic geography, as a field, is dominated by onomasts rather than geographers. We would describe the difference as resulting from a focus on names, and only then with their geographical or social variation, as opposed to investigation of the processes making for change in the extent of name areas. Geonomastics has been geographical only in the sense that it has been concerned with the spatial distribution of onomastic phenomena. In recent times greater emphasis has been laid upon explanation rather than description of the patterns of naming change. The move has paralleled similar concerns in geography and onomastic studies. These studies have paid attention to the social use of names and to naming variations in dialects within cultures in regard to social class or occupation. And we are sure that the future of name studies and the study of class-marked or diachronic distinctions are likely to be of considerable interest to everyone.

Cartography, cartosemiotics and geonomastics

The results of onomastic research can be demonstrated by means of cartography and map semiotics. In our case, it means drawing an onomastic map. By the latter we mean a thematic map showing the geographic distribution of the names or isoglosses of an onomastic continuum of the same proprial unit. A collection of such maps is a geonomastic atlas. Now let us have a look at some ensuing theoretical points.

[4] Insley, John 'The study of Old English personal names and anthroponymic lexica // Person und Name. Methodische Probleme bei der Erstellung eines Personennamenbuches des Frühmittelalters, edited by D Geuenich, W. Harbrichs and J Jarnut Berlin: Walter de Guyter, 2002, pp. 148-176.

It is important to remark that it is related to thematic cartography which involves maps of specific geographic themes, oriented toward specific audiences. This map illustrates a particular onomastic subject and contrasts with the general map, in which the variety of geographical phenomena regularly appears together. The contrast between the both of them lies in the fact that onomastic maps use the base data such as boundaries, coastlines and places only as point of reference for the name phenomenon being mapped (Norman Thrower, 2007:95). Onymic maps also emphasise spatial variation of one or a limited number of onomastic distributions. These distributions may be physical phenomena, such as place of residence, or statistical characteristics, such as name frequency and name density issues. In our context the description of that difference by Barbara Petchenik[5] "in place, about space" could be rephrased as "in name, about space". While general maps show where something is in space, onomastic maps tell a name story about that place. As the volume of geographic data has exploded over the last century, onomastic cartography has become increasingly useful and necessary to interpret spatial, cultural and social data.[6] We are firmly of the opinion that geonomastic maps can portray social, physical, cultural, political, economic, agricultural, sociological and any other aspects of a nation, region, state, city, or even a whole continent.

Additionally, we believe that cartosemiotics, also called cartographic semiotics, being the semiotic study of cartographic models (or cartographic representation forms) such as maps, globes, relief models, animations, and many others, can be very helpful for our geonomastic meta-discipline. These models and onomastic maps have in common that they represent the space of the earth by means of a model space. The aims of cartosemiotic research are intellectual enlightenment as well as practical application. The subject matter of cartosemiotics is covered under five themes: (1) map symbolism, also called map language, that is, the type of sign systems that are manifested in individual map faces; (2) marginal notes; (3) peripheral signification phenomena; (4) the processes in which humans handle signs, or sign processes for short; and (5) the contexts in which signs and sign processes are embedded (Wolodtschenko, 2006; Schlichtmann, 2008). Taking into consideration these cartosemiotic points and cartosigmatic and cartosemantic investigations (Wolodtschenko, 2007), we could enrich and contribute a lot to geonomastics for it simplifies map-drawing and map-reading tasks.

Onomastic maps serve three primary purposes:

- First, they provide onomastic information about particular locations;
- Second, they provide general information about spatial and naming patterns;
- Third, they can be used to compare naming patterns on two or more maps.

Common examples are maps of statistical data such as name frequency or name popularity. When designing an onomastic map, cartographers must balance a number of factors in order to effectively represent the name data. Besides spatial accuracy and aesthetics, quirks of human visual perception and the presentation format must be taken into account.[7]

In addition, the audience is of equal importance. Who will "read" the onomastic map and for what purpose helps define how it should be designed. A geographer might prefer having

[5] Barbara Petchenik (1979). From Place to Space: The Psychological Achievement in Thematic Mapping, American Cartographer 1.
[6] Thematic Maps: Map Collection & Cartographic Information Services Unit. University Library, University of Washington. Accessed 27 Dec 2009.
[7] http://en.wikipedia.org/wiki/Thematic_map

onomastic information mapped within clearly delineated county boundaries. An onomatologist could certainly benefit from county boundaries being on a map, but linguistic and cultural nature seldom falls into such smooth, man-made delineations. In which case, a dasymetric onomastic map charts the desired information underneath a transparent county boundary map for easy location referencing.

An onomastic map is **univariate** if the name data are all of the same kind. Name frequency, forename distribution, and population density are three examples of univariate data. **Bivariate** name mapping shows the geographical distribution of two distinct sets of data, one of which is the onomastic one. For example, a map showing both population density and surname frequency may be used to explore a possible correlation between the two phenomena. More than two sets of data leads to **multivariate** mapping. For example, a single map might show administrative division and one-name popularity in addition to population density and name distribution.

Cartographers use many methods to create onomastic maps,[8] but five techniques are especially noted:

- **Choropleth name mapping shows statistical-onomastic data aggregated over predefined** regions, such as states or counties, by shading or colouring these regions. For example, countries with higher rates of a certain surname might appear darker on a choropleth map and reversibly. This technique assumes a relatively even distribution of the measured onomastic phenomenon within each region;
- The **proportional symbol** technique uses symbols of different sizes to represent onomastic data associated with different locations or areas within the map. For example, a disc may be shown at the location of each city in a map, with the area of the disc being proportional to the frequency of one concrete name in the city;
- **Isarithmic maps** depict smooth continuous onomastic phenomena such as precipitation where, for example, a line connects points on a map that have the same form of a given name;
- A **dot** may be used to locate each occurrence of an onomastic phenomenon; it is a map where each dot represents one name or one set of names. Where appropriate, a dot may indicate any number of names, for example, one dot for every 100 persons bearing the same name;
- A **dasymetric** onomastic map is similar to a choropleth map, but one in which the regions are not predefined but chosen so that the distribution of the measured onomastic phenomenon within each region is relatively uniform (Slocum et al., 2005).

Nowadays, we are at liberty to create onomastic maps with the help of a free online application to build and share thematic maps (e.g., MapsGeek http://www.mapsgeek.com/) or by means of free software for creating online as well as offline interactive maps (e.g., StatPlanet http://www.sacmeq.org/statplanet/).

Examples of geonomastic techniques

Although space has been under-theorised in onomastic studies, a number of researchers, from traditional onomatologists through to those interested in the cartography of contact, have, of course, been actively engaged in research on the geography of name distribution. A common production of onomastic investigators of different cultures is the shaded and dotted map

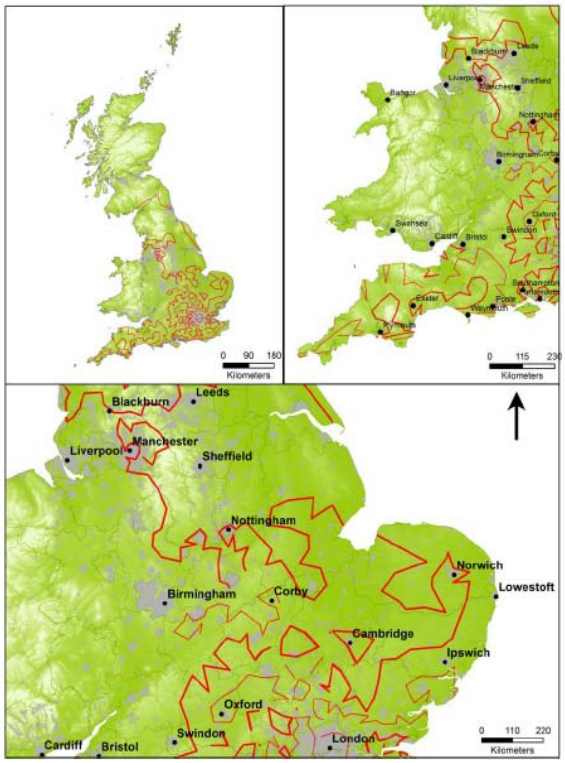
[8] Michael Friendly (2008). "Milestones in the history of thematic cartography, statistical graphics, and data visualization": http://www.math.yorku.ca/SCS/Gallery/milestone/milestone.pdf

showing where one onomastic feature ends and another begins or overlaps. Various compilations of these maps for Europe have been issued over the years, including William J. Smith's *Atlas of Family Names in Ireland* (1988), Gabriel Lasker's *Atlas of British Surnames* (1990), Ann Marynissen's *De atlas van familienamen in het Nederlandse taalgebied* (1995), Ian Gregory's *The Great Britain Historical GIS Project: From maps to changing human geography* (2002), Steve Archer's *19th Century British Surname Atlas* (2003), Damaris Nübling and Konrad Kunze's *Deutscher Familiennamenatlas* (2005-2012), Stefanie Barker, Stefankai Spoerlein, Tobias Vetter, Wolfgang Viereck's *An Atlas of English Surnames* (2007), Gerrit Bloothooft's *Nederlandse Familienamenbank* (2009) and *Nederlandse Voornamenbank* (2010), Peter Gilles's *Luxemburgischer Familiennamenatlas* (2009-2012), and Rudolf Steffens's *Digitales Flurnamenlexikon* (underway).

The last part will present an overview of current research in the spatial realisation of name use from within the distributionist tradition.

"The Surname Regions of Great Britain"

The project with this title was started in 2009 under the aegis of the Department of Geography at University College London by Paul A. Longley, James A. Cheshire and Alex D. Singleton. These British scholars remind us that the UK population retains a strong sense of regional identity. There have been few studies into the regionalisation of British surnames and none that utilise any register that can claim to be nationally representative. The National Social Map presented in this project may be called the first comprehensive attempt to create a regional geography of Great Britain based upon the clustering of surnames. The resulting map illustrates a strong relationship between people's surnames and geographic location. The homogeneity within each of the surname regions identified is striking given that spatial contiguity constraints were not included within the clustering process. The scholars used various methods from cartography and other sciences: Coefficient of Relationships by Isonymy, Lasker Distance, Ward's Hierarchical Grouping, *K*-lgorithm and Multidimensional Scaling. The maps re work by geographers in the field of surname 10).[9]

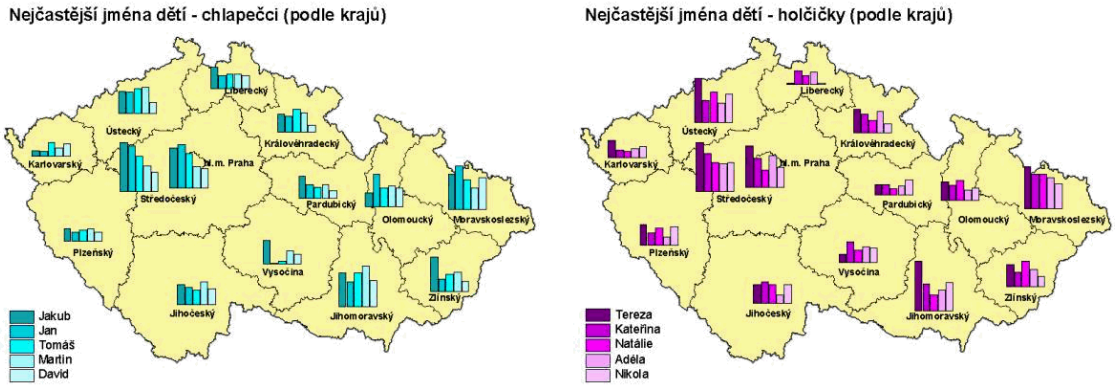


Map 1: 2001 Surname barriers created from the Monmonier's Algorithm. BOUNDARY AND SRTM DATA: CROWN COPYRIGHT ORDNANCE SURVEY 2009

[9] http://www.mirrorservice.org/sites/www.journalofmaps.com/article_depository/europe/Cheshire_Surnames_1252757156.pdf

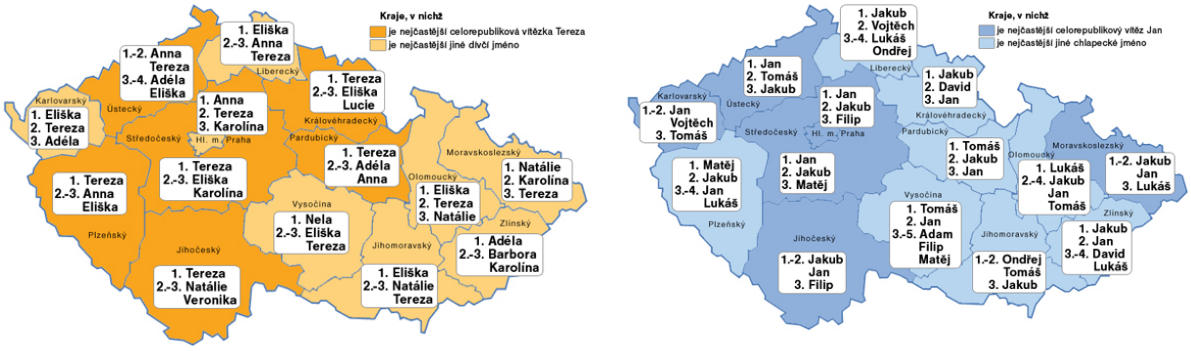
Český statistický úřad, 2010[10]

The Czech Statistical Office is the organisation which collects, analyses and disseminates statistical information for the benefit of the various parts of the local and national governments of the Czech Republic. It accomplishes this goal through the management of the Czech Statistical Service. Monitoring investigations in the sphere of name frequency in Czech Republic does not constitute the main scientific task of the Czech Statistical Office, but its results remain annually highly desirable from society's perspective. The statistics of forenames can explain to some extent the popularity of concrete names and their evolution over the course of time by comparison to their parents' names, and it helps partly to reveal tendencies in baby-naming. For example, see below the map[11] of the five most frequent boys and girls' names distributed by administrative regions (Map 2):



Map 2: The most frequent names of boys (left) and girls (right) per region

The Czech scholars then mark differences in the regions where the most frequent names are not at the top of the table. These areas are light colours (Map 3):



Map 3: The three most frequent names of boys (left) and girls (right) with the respective areal highlighting

It is obvious that Moravia (south-easterly), being a pretty traditional region with a commanding influence of the Catholic Church, does not hasten to accept fashionable names. The variability of names is more intensive than in 2009 and it is higher for girls' names. The Statistical Office records some 'exotic' onyms for the Czech Republic, such as Chloe, Ban Mai, Megan and Uljana for girls, Abdev, Dean, Ronny and Timothy for boys. However,

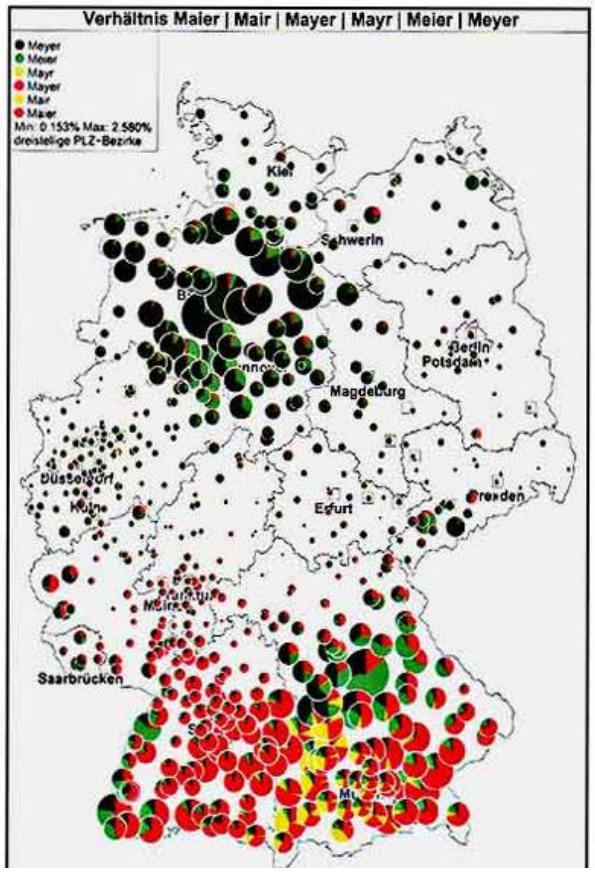
[10] Czech Statistical Office http://www.czso.cz/
[11] http://www.czso.cz/csu/redakce.nsf/i/mapy

scholars also document several new 'interesting' names: Gaia, Graciela, Malvína and Ribana for girls, Diviš, Kelvin, Lev and Maxián for boys.[12]

Deutscher Familiennamenatlas[13] (DFA)

The German Family Names Atlas represents a very curious project under the direction of two famous onomatologists, Prof. Damaris Nübling from Mainz and Prof. Konrad Kunze from Freiburg. Starting with the viewpoint that surnames are the only area of the European languages which is insufficiently studied in its distinctive spatial variety, and that historically formed name landscapes in Germany still remain in astonishing stability, they have analysed last names within the Federal Republic of Germany on the basis of their corpora from telephone directories (state in 2005). The onomastic and statistical data have been systematically ascertained; representative examples have been pointed out and the results have been presented in a 4-volume atlas with 970 annotated maps. The project was started in 2005 and will last until 2012.

Researching multi-faceted onomastic data requires a subdivision of the surname atlas in two parts where the first one treats only expression-sided phenomena and pursues purely linguistic objectives (grammatical part: I), while the second one studies mainly aspects of content motivation and the fixation of the names and also tries to do justice to interdisciplinary interests (lexical part: II). Philological features of collected materials from the grammatical part have been presented according to the following points: Graphemics, Phonemics, Morphemics, and Syntagmatics of the names. Cultural-historical characteristics described in the lexical part consider in each case the specific logical value of five differently motivated surname classes: full name, origin, dwelling, profession, and physical or personal signs. A final chapter "On the geographic typology of surnames" complements both these material-analytically investigated parts with attempts at a synthesis and tries to grasp the spatial structure of the German name world in its general contours. Name research is thereby put for the first time on a load-bearing foundation of recent data which allows the examination of old and particularly the development of new questions. As an illustration of this project we propose the map showing the isogloss of an onomastic continuum of the same proprial unit – the family name of Meier [or Maier, Mair, Mayer, Mayr, and Meyer] – and its statistical repartition in Germany (Map 4).



Map 4: Percentage and cartographic relationship between the surnames of Maier, Mair, Mayer, Mayr, Meier, and Meyer from *Deutscher Familiennamenatlas* (2005) (http://www.igl.uni-mainz.de/forschung/namenforschung.html)

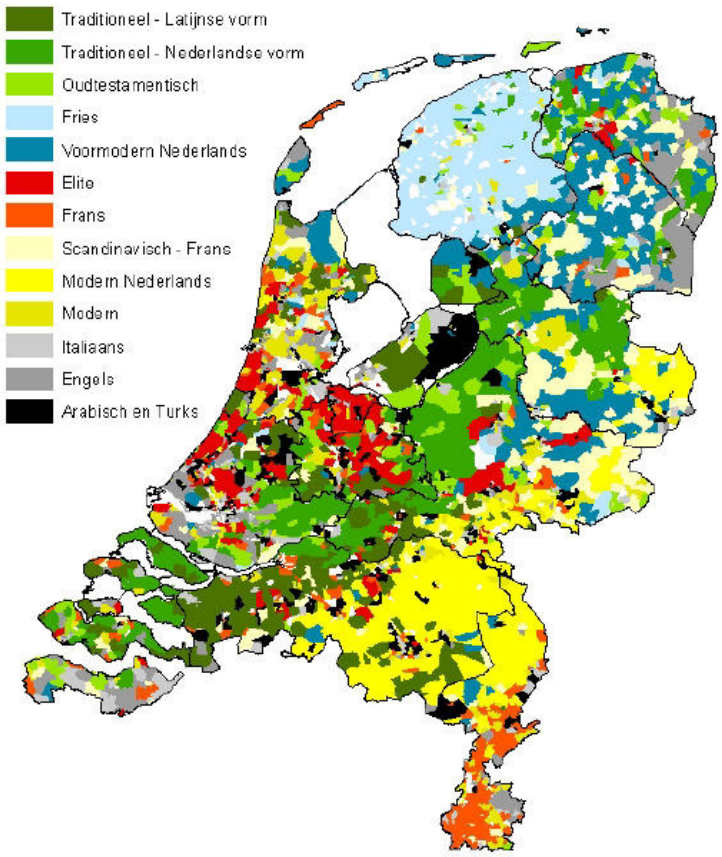
[12] http://www.czso.cz/csu/redakce.nsf/i/nejcastejsi_jmena_deti_v_lednu_2010
[13] http://www.igl.uni-mainz.de/forschung/namenforschung/

Naming and subcultures in The Netherlands

Established in the 1990s, the project of Gerrit Bloothooft represents challenging and multi-dimensional onomastic research. The investigation has been devoted to a very fugacious and subtle layer of names – forenames. However, we must confess that the Dutch onomastician develops his own ingenious approach to these proprial units. We can quote several websites presenting spatial distributions of first names, such as Nametrends.net and NameMapper for the USA, where it is called 'geographic popularity', but we have not found any significant academic research on geographical repartition of forenames for full populations,[14] maybe because of the fact that they are not as stable as surnames, and every generation 'imports' something new therein.

Taking into consideration that naming mechanisms changed considerably during the last century, Bloothooft assumes that parental naming preferences are related to socioeconomic factors that originate in subcultures in society. On the basis of the first names of all the 3.5 million children in the Netherlands who were born during the period 1983-1999, he showed that naming patterns can be identified, and that these patterns can be related to geographical, cultural, economical and social factors (Bloothooft, 2002).[15]

Starting from the view point that the first names of children in the same family do show a culturally determined relation between the names, the scholar from the University of Utrecht first limited his database to those families which have more than one child. As a unit for analysis he used the name pair, the combination of the names of each pair of children from the same family. Taking into account that the frequency of a name pair itself is not enough, because it is biased by the general popularity of the constituting names of a pair, Bloothooft computed the geometric average as a symmetric measure of relationship between the two names. An iterative clustering procedure was applied to establish distinct sets of names. The author then aggregated the information on name sets per postal code area, for which social-economic indicators, religion, and geographical descriptors are known. For this, he computed for each name group the deviation from the grand average for The Netherlands. The name group that most positively deviated from the grand average was assigned to the

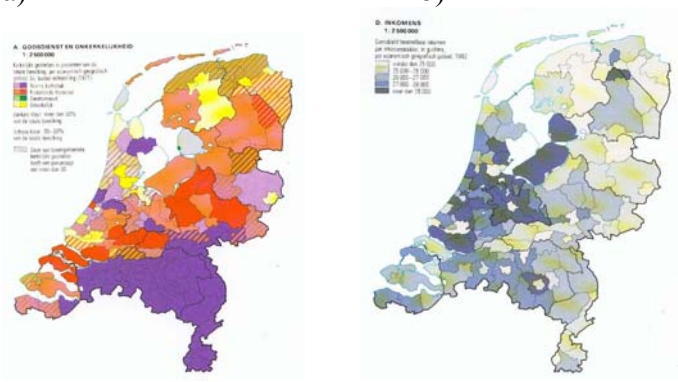


[14] But see: Head, K., & Mayer, T. (2008). Detection of local interactions from the spatial pattern of names in France. Journal of Regional Science, Volume 48, Number 1, pp. 67-95.

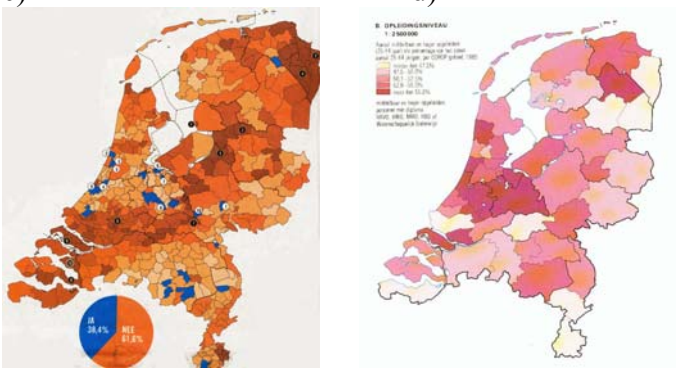
[15] Congress Acts. 21st International Congress of Onomastic Science, Uppsala, August 19-24, 2002. http://www.let.uu.nl/~Gerrit.Bloothooft/personal/Publications/ICOS2002%20Naming%20and%20subcultures.pdf

postal code area. It was obvious that regional factors are in play in naming. He then described the various areas, and paid attention to some social-cultural descriptors of these areas which were available from the National Bureau of Statistics (Bloothooft, 2008).
This is well illustrated by the thematic onomastic map and various socioeconomic, religious, income, EU voting, and educational maps for comparative studies (below).

a) b)



c) d)



Map 5: Distributional map of forenames in Netherlands in 2010 (from the presentation of Gerrit Bloothooft "Voornamen, familienamen, en een historische basisadministratie" in Lelystad) and their comparison with the maps demonstrating the repartition of religion (a), income (b), EU votes (c) and educational level (d) in 2006 (from the presentation by Gerrit Bloothooft "Analysis of first names in The Netherlands, full population studies" CTL colloquium in Utrecht) See: http://www.let.uu.nl/~Gerrit.Bloothooft/personal

By way of conclusion

As we can see, geonomastics is a meta-discipline which can be useful for multiple geographic projects. The analysis of proprial units represents a very promising alternative method to be employed as a proxy for culture, language, and cartography. Personal names are in principle good indicators of ethnicity, at least in relation to the immediately previous generations that gave the forename to their descendents and probably exercised some preference in the surname. Names can be viewed as a kind of self-assignment of ethnicity that is likely to have strong links to the language, culture and geography of a person's ancestry. Names can be used in particular to identify the main ethnic minority populations in some areas with a relatively good degree of accuracy.

Naming is produced within a cultural ideology that almost demands a representation of certain ideas/messages pertaining to such major themes as identity, politics, geographic space and society, as well as macro themes relating to ethnicity, gender, sexuality, history and culture. However, it is necessary to recognise that a considerable quantity of interesting and valuable considerations concerning the functioning of proper nouns in concrete societies has not yet led to the formation of a harmonious and consecutive theory of geonomastics. Today we still do not have any complete description of onomastic systems for the spatial distribution of forenames.

Various onomastic studies currently tend towards the development of an interactive environment for researchers, built upon efficient indexing, geo-referencing and cartographic visualisation. Yet even when fully linked, with 100% reliability, the database will be of little use if it cannot be searched efficiently. Visualisation tools can be helpful, even in the production phase, to access the large amount of data. All researchers can also benefit from software to exploit the spatio-temporal information in the data (see thematic links below). By explicitly geo-referencing data records, learning and knowledge representations can be made to encompass onomastic components temporally and geographically. Nowadays, exploration and data mining must be done in a graphical interface allowing easy manipulation based upon spatio-temporal criteria. This will make it possible, for example, to display onscreen regions with high/low frequencies or the spread of certain variations in names during a specific period in given territories. Application of these criteria to large cartographic databases will have an innovative character. In particular the mining of onomastic spatio-temporal patterns, the development of application-specific ontologies and the extension of mark-up languages to spatio-temporal ones form an active modern research area.

Bibliography

Bloothooft, G. 2002. Naming and subcultures in The Netherlands. In: E. Brylla and M. Wahlberg (ed.) *Proceedings International Conference of Onomastic Sciences*. Part 2, 53-62. Uppsala.

Bloothooft, G.; Groot, L. 2008. Name Clustering on the basis of parental preferences, *Names*, Vol.56. 3, 111-163.

Bloothooft, G.; Onland, D. 2011. Socioeconomic determinants of first names, *Names*. Vol.59. 1, 25-41.

Cheshire, J.; Mateos, P.; Longley, P. A. 2009. Family Names as Indicators of Britain's Regional Geography. *CASA Working Paper Series*. 149.

Cheshire, J.; Longley, P.A.; Singleton, A.D. 2010. The Surname Regions of Great Britain. *Journal of Maps*, v2010, 401-409.

Thrower, N.J.W. 2007. *Maps & Civilization: Cartography in Culture and Society*. University of Chicago Press.

Posner, R. 2003. The Relationship between Individual Disciplines and Interdisciplinary Approaches. *Semiotik: ein Handbuch zu den zeichentheoretischen Grundlagen von Natur und Kultur*. Vol. 3, 2341-2374.

Schlichtmann, H. 2008. Cartosemiotics. In: Bouissac, P., ed., *Semiotics encyclopedia online*. Toronto: E.J. Pratt Library - Victoria University.

Slocum, T. et al. 2005. *Thematic Cartography and Geographic Visualization*. Prentice Hall. 2nd Edition.

Wolodtschenko, A. 2003. Structural Models in Cartography. In: *The Selected Problems of theoretical Cartography 2002. Proceedings of a seminar of the ICA-Commission on Theoretical Cartography,* 73-81. Dresden: ICA.

Wolodtschenko, A. 2006. *Атласная картосемиотика. [Atlaskartosemiotik]*. Dresden.

Wolodtschenko, A. and Gordyeyev, A. 2007 Cartosigmatic Analysis of Atlases (On an example of analog atlases of the Sankt Petersburg/Leningrad). In: *Proceedings of the 23. ICC*, Moscow.

Wolodtschenko, A. 2009 Zur Klassifizierung der Kommissionen der Internationalen Kartographischen Vereinigung (IKV). In: *Meta-carto-semiotics: Journal for Theoretical Cartography*, Vol.2.

Wolodtschenko, A. 2009. Atlasregister: Struktur, Systematik und Namensammlung (am Beispiel des Nationalatlas Bundesrepublik Deutschland). In: *Proceedings of the 23rd International Congress of Onomastic Sciences (ICOS-2008)*. Toronto: CDROM.

Wolodtschenko A. 2009. *E-glossary: Картосемиотика [cartosemiotics] (3rd ed.)*. Dresden: Technische Universität Dresden.

Dr. Evgeny Shokhenmayer
Ginsterweg 20
32425 Minden
Germany
eugen1979@mail.be

(since February 2012, Associate Professor at Zhejiang University, China)