Minority toponyms on maps
The rendering of minority toponyms
on topographic maps of Western Europe

Proefschrift
ter verkrijging van de graad van doctor in de sociale
wetenschappen aan de Rijksuniversiteit te utrecht, op
gezag van de Rector Magnificus Prof.Dr.O.J. de Jong,
volgens besluit van het college van decanen in het
openbaar te verdedigen op vrijdag 3 juni 1983 des
namiddags te 4.15 uur door

Ferdinand Jan Ormeling

geboren op 20 november 1942 te Utrecht

utrechtse geografische studies

Promotores:
Prof.dr.Ir C.Koeman
Prof.Dr D.P.Blok (Iniversiteit van Amsterdam)

CONTENTS

List of figures

List of tables

PREFACE

The realization of this study is due, in the first place, to prof.dr.ir. C. Koeman, whose enthusiasm and deep knowledge of historical cartography has been an important stimulant. I have also been fortunate in securing the interest and help of prof.dr. D.P. Blok from the University of Amsterdam, who allowed me to profit from his linguistic and toponymic expertise, and whose advice saved me from many a wrong step. Moreover he has seen this thesis through its draft stages in both Dutch and English. I would never have reached this stage, however, if it were not for the spatial orientation and methodological knowledge conveyed by prof.dr H.J. Keuning at the Groningen University Department of Geography. His permission to take up cartography as a subsidiairy subject, in the face of strong opposition, was not his least contribution. Further, I am privileged to have been 'shaped' in matters linguistic and historic by professors Hospers and Jongkees of Groningen University. They laid the foundations for this study.

The sabbatical leave granted by the Department of Geography of the University of Utrecht and the financial assistance of its Cartography Section enabled me to visit a number of topographic agencies all over Western Europe in 1981. I am deeply thankful indeed for the kind assistance and guidance received from the toponymic subdepartments or officers of these agencies. I owe them the material and the additional Information that enabled me to check the results of my map-analyses. Jan Dekker induced me, rightly, to refrain from moral judgments which the subject-matter may have evoked, and directed me to more rewarding yardsticks for the evaluation of the various governmental attitudes to minority toponyms. He and Nellejet Zorgdrager helped me through the proof-reading stage, set and shaped by Johan Borchert as editor of this publication-series. Mr. R.P.J. Oddens, map curator of the Department of Geography, allowed me the prolonged use of topographic maps. The actual production of this treatise has been realized in a comparatively short time thanks to the help of Mr. G.W.J. van Omme who drafted the maps and graphs and Mr. G.H. Huijgen who produced the photographs, Mrs. A.H. Snetselaar who typed the tables, and Mrs. M. van der Linden, Mrs. J. van der Loo and Mrs. H. Opdenberg who produced the type-script. Their help is very much appreciated.

The idea of translating this treatise into English came about thanks to the help of my father, F.J. Ormeling Sr., and Mr. G.P. Oxtoby. In the translation there was the problem of how to render the toponyms. For a better understanding of the issues and the areas involved, the use of English exonyms seemed appropriate. This would be in direct contradiction, however, with the 'local names policy' advocated also for rendering minority language toponyms in the final recommendations of this study. The partial solution chosen was to render English exonyms in the text, tables, maps and illustrations, but to mention minority-version toponyms at least once in the text, if such versions could be retrieved.

Although leave was granted by the Department of Geography, I could only manage to take the time off because of the temporary assistance of Corné van Elzakker, Menno-Jan Kraak and Kees de Voogd, who very ably took charge of my teaching tasks, a seemingly thankless job for which I am, however, most grateful.

F.J. Ormeling.

1. MAPS AS EXPONENTS OF OFFICIAL ATTITUDES TOWARDS MINORITY TOPONYMS

1.1 Introduction and Scope

Of the various sources used to establish the spelling of geographical names or toponyms, maps form a very special category as they present a clear view of the location and extent of the named geographical features. Only maps can indicate whether or not different names refer to the same feature. Only maps allow correlations between toponyms and historical developments such as changes in the political boundaries. Other sources such as lists of railway-stations and post-offices, post-marks and gazetteers do not offer this same possibility.

When mapping operations are carried out, topographers receive special instructions for the treatment of toponyms. In his visits to various topographic agencies, the author found that these instructions are usually classified, or treated as confidential and intended for internal use only. Consequently, they could not be used to trace trends in the dealings with toponyms. For this purpose, one has to rely on the actual map.

By comparing subsequent map series of the same areas, where linguistic minorities were or are prevalent, an insight was gained into the various trends or developments in the government approach to toponyms. Such maps serve as silent witnesses to, or reflections of the official attitudes with regard to minority toponyms.

By means of reference to maps, an attempt has been made to reconstruct government attitudes, especially for those areas where minority languages are spoken.

The present thesis is by no means a linguistic study. Nor is it meant as a geographical or sociological contribution to the study of minority groups. It is intended to be a cartographical analysis in which the author, with the help of glossaries - explanatory lists of generic terms - and a minimum of basic knowledge of name-elements, has determined whether names on maps are those of a minority language or of an official one. The study has been carried out in a number of contact-zones such as

can be found between French and Dutch languages (Belgium and French-Flanders), between French and German (at Eupen-Sankt Vith and in Alsace-Lorraine), between the English and Celtic languages (in Wales, Scotland and Ireland), French and Celtic languages (Brittany), German and Italian (South Tirol), German and Slovene (Carinthia), German and Sorbian (Lausatia), and French and Italian (Vallée d'Aoste and Corsica).

On the basis of map-analysis, linguistic minorities will be categorized according to the manner in which their toponyms have been dealt with.

Because this study deals with the attitude of the government to minority languages, its starting-point coincides with the beginning of national mapping programmes such as by the Cassinis in France, Roy and Colby in Great Britain, De Ferraris and Krayenhoff in the Netherlands, and Daun in the Habsburg monarchy. These activities greatly accelerated the collection of geographical names.In taking these activities as a starting-point, this study is limited in space and time to Western Europe from approximately the year 1780. Its scope is further restricted by public accessability of topographic maps, which in Eastern Europe is minimal (for the geographic scope of this study, refer to figure 1).

With Breu (1971), countries can be divided into two main groups:
a)   countries where only one language is spoken.
b)   countries where more than one language is spoken.

Group (b) can be divided again into:
b1) countries with minority languages.
b2) countries where the various languages have equal status.

The latter is the case in Switzerland and Belgium. In countries where languages do not have equal status, there is a tendency to grant certain rights to minority languages. This is the case, for example, in Great Britain for Welsh and Gaelic. The present study is limited to the geographical names in areas where minority languages are spoken. The map has been chosen as source of Information since it is the best medium by which any change in government attitudes towards linguistic minorities can be followed.

The plan of this study is as follows: In Chapter 2 the way in which toponyms are collected and processed will be dealt with. Prior to this, the sources of errors resulting from field collection and office treatment of names by topographers and cartographers will be discussed (Paragraph 1.4).

Subsequently, the official attitudes per country with regard to the spelling of toponyms in regions where minority languages are spoken will be dealt with (Chapter 3). The study will be concluded with the indication of a number of characteristic governmental attitudes to minority toponyms (Chapter 4). Finally, an attempt will be made to evaluate and assess these attitudes (Chapter 5), comparing them to the 'local names policy' as propagated by the United Nations.

1.2 Terminology used in this study

When, in this study, the term minority is used, it is based on the description and definition by Wirth, i.e.," a group of people who, because of their physical or cultural characteristics are singled out from the others in the society in which they live for differential and unequal treatment, and who therefore regard themselves as objects of collective discrimination" (Wirth 1945). Van Mechelen states that it is better to talk of dominant and inferior (sub-ordinate) groups, than of majorities and minorities. A minority is not always definable by numbers. According to his theory,it is a group which feels discriminated against and neglected by another group (the majority) as a result of an assumed inferiority. A minority is formed as differences between groups become marked, followed by the development of a status hierarchy between them (Van Mechelen 1962). According to Wagley and Harris it is the emergence of the modern state that brings people with different cultural background together into one organizational form that affects all aspects of social life. One of the characteristics of the initial period of the national state is the aim to eliminate minorities as recognizable groups. This elimination generally occurs by means of suppression or prohibition of certain cultural manifestations so as to promote assimilation (Wagley & Harris 1967). Minorities generally resist such assimilation attempts, experiencing this as a form of discrimination. Before any resistance can be offered, an awakening-process is required, brought about by a number of activists setting themselves up as self-appointed representatives of the group, which, in their opinion, satisfies or must satisfy the characteristics of the minority. Linder the influence of this activism, the different character of the group is recognized and this self-recognition leads to a sense of discrimination and eventually to conflicts with the majority. Van der Plank who considers ethnic minorities practically identical to linguistic minorities, gives a number of examples of these conflicts: conflicts in the field of language used in the church, in administration and in education (Van der Plank 1971).

No conflict as a result of the language used on maps has yet occurred. For a working definition of the concept linguistic minority, language must be distinguished from dialect. Where linguistic boundaries are represented on maps in this study, they are based on linguistic affinity. Within a group of language variants that have a greater mutual affinity then they have with language variants outside the group, variants may occur which have an official spelling, a codification, or for whose orthography there are at least official standards. Such variants can fulfil the function of an administrative language, and will in most cases be the vehicle of a cultural tradition. In the context of this study, such a variant (standard language) is meant when the words language and linguistic are used. It has been found impossible to give a tight definition to cover all language communities described in this study.

The only kind of minority a topographic map can reveal is the linguistic one. With a variant of Wirth's definition, a linguistic minority can be defined as a group whose

language is distinguished from the rest of the society in which it lives, by the dissimilar treatment resulting in the feeling of being the object of collective discrimination. Stephens describes a linguistic minority as a group within a state which speaks a language which is different from the language of the majority of the population of that state (Stephens 1976).

In the definition of Van Mechelen, we have seen that the concept of minority is clearer when viewed in a sociological context, as an inferior (sub-ordinate) group. In this way, the linguistic minority is a group within a state which does not have the same native-language as does the dominant group. This results in the fact that the group, because of its dissimilar treatment, considers itself to be the object of collective discrimination.
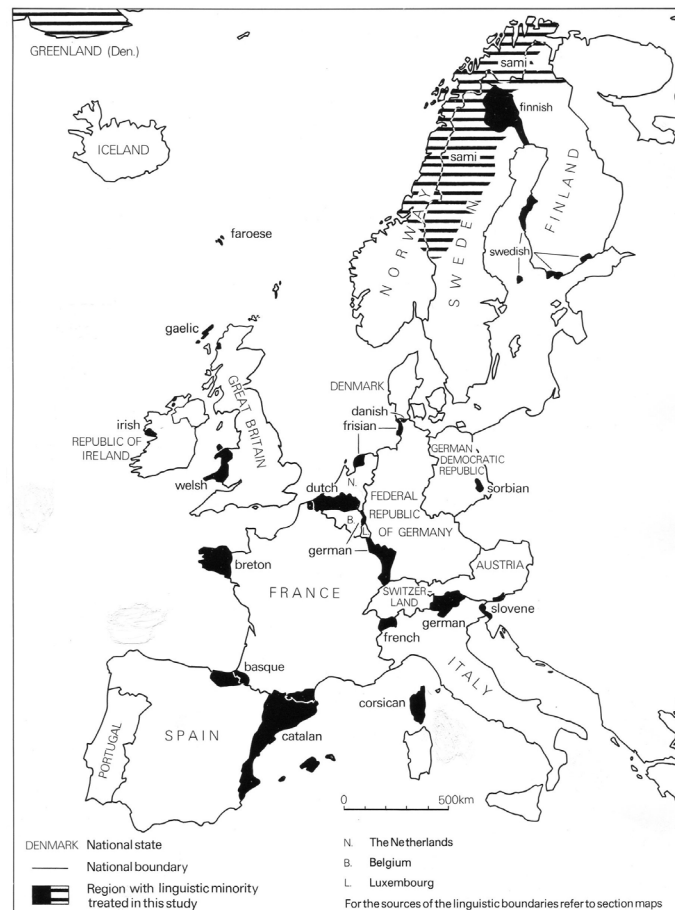
Figure 1 Linguistic minorities in Western Europe

In this context, minorities mean autochtonous population groups which are so firmly settled in a region that they are considered to be its historical inhabitants. Apart from this historical component, the linguistic minorities which are studied here also need a spatial component to be reflected on maps. Only concentrated linguistic minorities have been studied and not the more diffuse, in the assumption that even if the latter have their own toponyms, these cannot be collected locally by topographers (Van Amersfoort 1978, p.65). For this reason, names used by peoples such as gypsies are not dealt with.

In countries with different language-communities, which, by law, are treated equally, there may in practice be discrimination, even on the map. Apart from this, since the beginning of governmental topographic mapping programmes, the minority Situation in a certain country might have changed. This is the case in Belgium and Finland for example, where the numerical majorities have for a long time formed sociological minorities. The historical development in these countries in relation to the toponyms on the map are, for the reasons previously mentioned, a point of discussion in this study.

Exonyms are defined as names used in a certain language Community to designate geographical features outside the area where the language concerned has official status, and having a different written form from that which exists in the official language of the area in which this feature is located (Ormeling Sr. 1980, see also Van der Krogt 1980).

Finally, the term toponym in this study should be defined. Unless indicated otherwise, the term toponym is used for all names mapped but not for separate topographical designations (e.g. factory, town-hall, source etc.). Consequently, names of places, waterways, mountain-ranges, administrative entities, local terrain features, separate buildings, regions and roadways all fall within this term.Following Aurousseau's example (Aurousseau 1957), dedications such as Willemstad, Aeroport Charles de Gaulle, appellatives such as Overijssels Kanaal, Irish Sea, designations such as Golfo di Napoli, Bristol Channel, and descriptions or descriptive names such as Long Island, Waddenzee etc., will be considered as being toponyms or geographical names. The term minority toponyms refers here to toponyms used (in areas occupied) by linguistic minorities.

In the country descriptions in Chapter 3, minority toponyms have been divided into: unchanged names, names adapted (frenchified, anglicized) to the majority language, names translated into the majority language, and new names. Only those name-changes have been identified as translations which were supposed to be understood as such by the present local population. Translations which occurred in earlier periods and which will not be recognized as such by lay-men, will have been categorized as adaptations. Amongst the adapted names, a number of gradations can be discerned (see paragraph 1.6, case 2-8 for a further subdivision), one of which is an adaptation in a narrower sense. Here a name has been changed in order to fit into the structure of the majority language (e.g. Toledo - Tolède, Puglia - Pouilles, Argentina -l'Argentine). The term 'adaptation' shall be used in this sense and will include various, chronologically differentiated processes. However they will not be entered into here.

During the adaptation-process there is a stage at which a toponym is no longer part of the minority language but has been made part of the majority language. A minority toponym remains a minority toponym when phonetically rendered in the majority language spelling (e.g. Sulzbach – Soultzbach-les-Bains). Only when its structure has been adapted (and of course also when the name is translated) it becomes part of the majority language (Schlettstadt - Sélestat). Thus majority (or minority) language orthography and majority (or minority) language proper should not be considered as equal, strictly speaking. Unless otherwise stated, however, both concepts will be covered by the term majority (or minority) language.

1.3 The official registration of geographical names

Place-names which are part of the spoken language follow the same development as does the rest of the language. Stewart calls this phonetic parallelism (Stewart 1975). By recording those names the cartographer imposes a restraining influence on this development. The spoken language may change without influencing the spelling of place-names once established. In the Netherlands in the 19th century, place-names which were in use during mediaeval times, such as *Beusichem* and *Doetinchem* were known as *Beusekom* and *Deutekom*. About 1850 these medieaval names were made standard for maps by the Royal Netherlands Academy of Sciences and Letters. Because this out-dated spelling was maintained, and due to the greater mobility of the population and the resulting increased map-use, those names found on maps defeated those which were used locally.

In relation to the maps of the Ordnance Survey, Harley states:
"By the end of the (19th) century, the Ordnance Surveyors   ....   could have seen the maps becoming an authority in their own right. The single fact of the presence of many names on the printed ordnance map tended to crystallize local usage" (Harley 1971).

The recording of geographical names in mapping has obtained the same significance as the establishment and registration of family-names under Napoleon. The printed word possesses an aura of unimpeachableness and codification. Once a name has been established, and once a certain orthography has been chosen, a mapping service will not readily change that orthography, even when it appears to be incorrect. An example of this can be found in the conclusion of the Dorington-committee, which in 1892 examined the British Ordnance Survey. It recommended that a previous instruction for British topographers for the rendering of place-names was to be maintained. This instruction reads:

"When names have assumed a corrupted form which is thoroughly established, their orthography should not be altered, even when they are known to be etymologically wrong" (Seymour 1980).

This is related to the following: the etymological meaning of a toponym has been surpassed by its functional meaning; the name which originally indicated certain characteristics of the place or events that occurred there, has now gradually   gained the function of distinguishing the place from others. When we say that we are going to Amsterdam, we no longer mean that we are going to the dam on the river Aemstel, but that we are going to Amsterdam and not Rotterdam, or any other place (Blok 1965). In this context, the resistance against the amendment of a spelling once established, such as is indicated above, can be understood. It would be interfering with the functional relationship between the names on the map (which cost much effort and toil to collect, record and reproduce), and the objects on the ground that they define. The same is happening on an international scale; the Britsh and Americans for example, have charted the whole world on a large scale for the benefit of shipping and air-navigation. During this mapping process many errors have been made in the spelling of geographical names. These spelling errors have, nevertheless, become generally adopted by map-users. Subsequently, when officers of the merchant navy consult sea-charts of the Cornish coast for example, and see *Menanvawr* (Cornish for large rock) instead of the now established *Man 0'War*, even when both names indicate the same geographical feature, they might become confused and confusion may endanger the general safety of navigation.

The effect of the codification of names by mapping is stronger than by other written sources, due to the fact that these names are projected directly onto the picture that man has of his environment. When one wishes to acguaint oneself with one's surroundings, it is easier to consult a map than to consult any other kind of description in which names appear. The influence of printed Information increases as the distance between oneself and a named entity becomes greater, and the possibility of finding out its name by oral communication decreases. In this way, the printed source of information increases its influence on spelling and pronunciation more than local oral usage. An example of this can be found in the countryside around the town of Doetinchem in the Netherlands, where one still speaks of *Deutekom*. Elsewhere in the country one has conformed since long to the name *Doetinchem*, which had been codified in 1850.

1.4   Sources of errors

The official view of minority languages, such as revealed in the spelling of toponyms on maps, can result in a systematic distortion of names. This will be discussed below. Apart from this, there is also an unsystematic distortion caused by errors during the field-collection, office-treatment and reproduction of names. From the moment a toponym is collected and registered, up until the moment it appears on the printed map, the following occurs:
In the process of topographic survey (A), the toponym is noted down on a field-sketch from an oral source (A1), or taken from a written source (A2) such as road-signs or place-name signs. After being recorded on a field-sketch the name is written neatly (B) in a name-book or a name-file together with a note stating the source or authority on which the spelling is based. For a map from a series drawn to a certain scale, a name-model is

made (C) by taking toponyms from name-files. This name-model is the starting-point for the application of the names on the reproduction-original (D) which will finally be printed (E). In all these stages, errors may occur.

Errors made during registration (A) are the best known. Lewis Morris wrote in 1757 that Welsh place-names "have been murdered by English map-makers" (Walters 1970), French toponymists have made lists with 'cacographies' based on the maps of the Cassinis, and K. de Flou describes how French estate-managers of Flemish Crown properties compiled records with toponym-errors such as *Pas de Poule* instead of *Paddepoel* and *l'Amour* instead of *de Moere* (De Flou 1929). Such errors in the recording of toponyms are quite often discussed in literature on toponyms[1]. In the report of the Dorington-Committee which was previously mentioned, the cause of this category of spelling errors was described as follows:

"The sound of the name is in the first instance incorrectly caught and written down by a person ignorant of the languages; this is then conjecturally corrected, from the faulty pronunciation so written down by a person having no local knowledge" (Seymour 1960).

The fact that the topographer or surveyor collecting the names does not understand the local informer, will occur quite regularly. The resulting errors will be the more serious when the local informer does not speak the same language as the topographer or surveyor. The second possible cause for the occurrence of errors may result from the transfer (B) of the names recorded on the name-file. Recordon quotes from the 'Instruction generale pour les travaux topographiques de la carte de France' (1831) how:

"Quelquefois les noms ne se trouvent pas écrits de la meme manière sur les mappes et sur la mise au net, et le dessinateur qui les écrit sur le 80.000e est fort embarassé, ne sachant si le nom de la mise au net est rectifié ou erroné" (Recordon 1947).

The transfer of the names from the name-files on to the name-model for a map (C) has only been introduced by well-organized topographic Services. These also institutionalized the checking carried out by the heads of the survey parties collecting and registering names. In Krayenhoff's time, regulations already existed for the collection and recording of names in the Netherlands which were to be strictly followed. One example reads as follows:

"Similarly, they shall ensure that the true names of places and objects on their maps will be recorded with great precision; to succeed in doing this, it will be compulsory to submit to the Secretary or other civil servants of that Secretary, the required certifications of those names; those certifications shall be submitted together with all their notes" (Krayenhoff 1807).

With the help of these records, the principals were able to carry out checks on the spellings of names. At a later stage this was facilitated by providing name-files with columns in which local authorities could certify the correctness and precision of the spelling of the toponyms.

A new possibility of errors arose, when the cartographic draughtsman had to reproduce the names on the original drawing (D). Names were initially rendered on copper-plates or lithographic stone in the form of a mirror-reversed image and this did not make checking any easier. Moreover as highly specialized craftsmen, cartographers and engravers were not always working in the same location as the topographers, which hampered consultation.

Skelton reports how the British maps by Speed - engraved in Amsterdam about 1610 - carried traces of this; unfamiliarity with Speed's Latin and English resulted in language errors. A marginal note from Speed that had to be checked -*quaere*- (Latin for; "inquire") was misunderstood by the Dutch engraver. It started a life of its own as the place-name *Quaere* (Skelton 1961).

The last source of errors is a technical one. The production of a printed map (E) from a

drawing by means of a copper-plate is quite simple; there are no "in-between-stages". In the case of a great number of printing runs however, the plates could wear, resulting in damaged names. With present methods of reproduction, the possibilities of damage to names have increased considerably. The names, printed on small pieces of adhesive film applied to the original by wax may loosen and get stuck in the wrong place or may be lost completely during the photographic processes finally resulting in errors on the printing-plate itself.

In general, it can be said that the present built-in spelling-checks of geographical names on topographic maps function so well that only one or two names per map-sheet have a spelling that differs from that envisaged by the authorities. How good that result is, can be seen when viewing the first printed maps of the Netherlands from an Italian edition of Ptolemy (see fig. 2) on which more than 40% of the names contains spelling-errors.

Figure 2 Map of the Netherlands from Castaldi's edition (1547) of Ptolemy's Geographia.

1.5 Systematic distortion

Apart from accidental errors which occur during the process of collecting, recording and processing of toponyms, in minority regions a more systematic distortion of the names on the maps by those collecting and recording them may occur.

The official regulations and procedures of the topographic institutes state for example, that all names must be changed or amended in such a manner that they are compatible with the spelling or word-structure of the majority language. Likewise, there might be a regulation stating that names be spelled in the official spelling of the minority language of a region, but this is not often the case.Regulations can differentiate between categories such as place-names, names of municipalities or parishes, regional names, and names of rivers. These regulations and procedures rarely have any influence on versions of minority toponyms in use in the majority language before the large-scale national mapping activities started.

The historical development of the contacts between the language regions

determines the nature of those name-versions. When two language communities live together for a long time, and do so peacefully, both communities will introduce their own versions of geographical names on the other side of the border. These versions will vary from mere spelling-adaptations to more radical forms of linguistic adaptation. Where more violent contacts occur, the dominant language community will be more easily inclined to impose its own names on objects in the minority region. With the exception of Catalonia and the Alsace, the minority regions in Western Europe do not belong to economically important regions. They are mainly sparsely populated agriculturally orientated areas, with a low income per capita and a low level of urbanization.

Because of these geographical characteristics, only a small number of place-names from minority regions will be considered for introductioh or small- and medium-scale maps. Besides this, the scale - as a cartographical factor - also has an independent influence. The largest of objects in the minority regions are the first to be given a version different from its original minority form. Because they are the largest, the name will be taken at a moment when the dominant language community does not understand the minority language sufficiently. On maps at a small scale there is only enough space for the largest of objects, and therefore, only for those toponyms which in their spelling or form have become part of the majority language.

Historical and geographical factors can explain why a certain attitude is taken with regard to minority toponyms. They are not however, the main subject of the present investigation and study. This study is primarily directed towards the official regulations and procedures. Nevertheless, these historical and geographical factors are treated in Chapter 3 whenever this is necessary, in order to obtain a better understanding of the Situation. They are also discussed in Chapter 4 in the comparison of attitudes. The influence of the cartographical factor is demonstrated in Chapter 3 as well, and is re-introduced again in Chapter 4.

1.5.1   Official regulations and procedures

In the regulations and procedures for the topographer, it is stipulated first of all of which category of features the names are to be collected. In the case of the French topographic map for example, only the 'noms de détail', in other words, the names of objects indicated by means of point-symbols have to be collected (D'Hollander 1956). Initially, field names were not intended for topographic but for cadastral maps.

Surveyors of the Cadastral Survey in the Netherlands are instructed to record the first name of bilingual street name-posts on their maps. This regulation means, in the case of the Dutch province of Fryslân, that the Dutch name will be chosen since it is always placed above the Frisian name on the street-post. Indirectly, this means that it is a regulation giving preference to the spelling in the majority language.

Regulations of this nature also occur in a more direct form, such as: "transform minority toponyms into forms which corresgonds to the national language". This is discussed in Chapter 3.

Regulations can also refer to the official spelling which is mostly identical to the spelling of the majority language. Such references assume the existence of a gazetteer which includes the official spelling of toponyms.

Official regulations and procedures may also include clauses stating that names collected in the field be submitted to a national advisory body that might take a certain attitude with regard to the spelling of those names. Examples of this can be found in the 'Commission de Toponymie' of the 'Institut Géographique National' in France, and the 'Koninklijke Commissie voor Toponymie en Dialectologie' in Belgium. The final decision on the orthography is, however, almost always reserved for the topographic services. The spelling of names of administrative entities, however, is in most European countries laid down by law, which prevents

topographic services determining their own orthography.

1.5.2   Historical factors

When, in the case of colonisation there has been a long-lasting and close contact between language communities, one finds a large number of translated names in those contact-zones. Kranzmayer mentions as examples of this the German-Slovene contact-zone in Carinthia and the German-Italian contact-zone in South Tirol where respectively 41% and 30% of the names are translated versions (Kranzmayer 1933). In a less peaceful contact situation, the percentage of names which are phonetically and structurally adapted to the majority language, is much higher.
For the Czechoslovak-German contact-zone in Bohemia, and for the Italian-Slovene contact-zone in Istria, the percentages of this kind of derivations are 71% and 70% respectively, whilst the percentage of translated versions in the same areas are both only about 11%.

The duration of the period in which the one language community is dominated by the other is also a very important factor. The spelling of the place-names in the French regions of Roussillon and French-Flanders for example remained practically unchanged, for approximately a hundred years, after which a frenchification gradually occurred. The regionalism of the Middle Ages and Renaissance-era contrasts with the nationalism of the last two centuries. The idea born during the French revolution of one united nation, speaking one language, is as much a phase in history as the greatly increased interest in regional history and linguistic minorities during recent decades. Thus the attitude towards minority toponyms may change with time and different categories of toponyms appear on maps in different periods. Their treatment may also vary. Larger objects were recorded first - possibly on the maps of the Renaissance period; the microtoponyms were only recorded on maps during the 19th or 20th century.

1.5.3   Geographical factors

Names on maps fall under various categories such as place-names, hydronyms, oronyms and names of administrative units. When generalized, the names of the most important objects in the various categories as well as the objects themselves will be retained as much as possible. With place-names this selection procedure takes place on the basis of economical, demographical and administrative criteria. It was stated above that, in the economically underdeveloped minority language regions in Western Europe few places are considered for representation on small- and medium-scale maps. Those elements which would mostly be recorded on maps would be mainly the rivers, mountain-ranges and coastal features such as bays, straits, capes and islands etc..

These are the categories of names which are less frequently represented on most of our reference-maps (such as road and tourist-maps), than the names of populated places. In the minority regions, most settlements are too small to meet the criteria for representation on maps. The omission of names on the map can also be seen as a distortion. This systematic distortion which is the result of generalization leads to the emphasis of certain categories of names on smaller scales.
In many minority language regions (e.g. Brittany, Flanders, South Tirol), the speakers of the majority language are mainly concentrated in the larger urban areas. These demographical aspects also affect the retention of old names and the choice of new names. Where town-developments take place in such cities as Brest, Brussels or Bolzano, names of new residential areas are generally rendered in the majority language.

Also the territorial concept of a name can influence its rendering. Many Celtic names are related to a certain region or area (a territory inhabited by a group or Community) and not to point-features such as villages. In regions where the

topographer is not familiar with recording such territorial concepts, there is the danger of the disappearance of such a category of names.

1.5.4 Cartographical factors

The scale of a map can in many ways influence the character of the name represented in a certain region independently and systematically. Moreover, there is an increase of certain categories of mapped toponyms related to historical development (refer also to 1.2). This study is limited to the printed result of systematic mapping. Generally accessible printed topographic maps started to appear after 1530. The first topographic map-sheets are drawn to medium and small-scale and show provinces or states. Larger scale printed maps only appeared at a much later stage and initially in areas which were economically advanced, such as the province of Holland and Lombardy during the 17th century.

The cadaster stands alone in this development due do the manuscript-character of its maps and their related inherent, limited accessibility. Figure 3 attempts to show this development:

Figure 3 The relation between map-year and map-scale (and therefore the number of toponyms) on publicly accessible map-series in the Netherlands.

The space available on maps for toponyms is related to their scale. Apart   from this, through the centuries, the cartographer has had a continously changing interest in the various categories of toponyms. On Cassini's maps - as well as on their smaller scale predecessors - one finds only the names of large settlements, rivers and isolated estates. Regional and coastal names, as well as names of mountain-ranges, are hardly represented, even though there is sufficient space on the map. The last categories first appeared on the map with the introduction of the cadaster (regional names and field names etc.)» with the publicatior of reliable sea-charts and the awakening of man's interest in his natural environment during the second half of the 19th Century. The names of small features have only been introduced on maps in recent years. Their presence has been effected by the Publishing of maps at larger scales, because of the changed interest of the map-user and the topographer and the availability of new sources.

When one considers that in the generalization process only the most important objects of a map-sheet are tranferred to a smaller scale and if one realizes that the names of the largest objects in a minority language region are first to be considered

for transformation in the majority language, then it is quite evident that there will be relatively more names transferred to the majority language on small-scale maps and derived maps than on maps of a larger scale. This phenomenon is indicated in this study by the term scale-effect. In Brittany for example, there are various places which are called "kemper", which indicates the merging of two rivers. The largest of these places is known in French as *Quimper*, smaller versions are represented on the map by the word *Kemper*. Only the largest, Quimper, is to be found on the medium- and small-scale maps.

Official regulations and procedures, historical, geographical and cartographical factors together, have a specific influence on every minority-toponym.
The various possibilities are shown below:

1.6   Types of distortions of toponyms

Stewart (1975) indicates that geographical names can be transformed fror one language to another in four different ways. He distinguished the following:
  a) the phonetic tranfer, a form of oral transfer whereby one does not understand the other language.
  b) translation, a form of oral transfer whereby one does understand the other language.
  c) folk etymology, an oral, phonetic transfer followed by a change due to etymological re-interpretation.
  d) visual transfer. Here, the name is transferred from one language to the other by way of written sources, in particular maps[2].

To the borrowing of the sound (a) and of the meaning (b), Kranzmayer adds the following:
  e) cases whereby there is no relation between the names for a geographical feature in the two languages on the grounds of ignorance, prejudices or political motives (Kranzmayer 1933).

The French Institut Géographique National (IGN) distinguishes, apart from the phonetic adaptation of a name from a minority language to the official spelling of the majority language (a), the following:
  f) adaptation to the structure of the majority language (e.g. the adaptations to the endings in the majority language such as is the case in Argentina-l'Argentine) (IGN 1978).

Draye(1943, p.58) distinguishes, within the 'Ortsnamenausgleich'-phenomenon to the advantage of a dominating language, next to phonetical transfer (a) and translation (b), also a partial assimilation in which a foreign suffix is substituted by one which belongs to the dominating language. This specific phenomenon could not be traced here, due to insufficient linguistic expertise. In practice these cases will have been categorized in (f). The possibilities mentioned may distort only a small part of the toponyms or occur in combination with one another. An attempt to create a hierarchy of the types of distortions of minority toponyms by the central administration on its published map-series, might look as follows (the situation in France has been taken as an example):

	example
1)unchanged acceptance of the minority name in the usual spelling	Herzeele-Herzeele
2) the addition of diacritical marks for the benefit of pronunciation	Rexpoede-Rexpoede
3) the addition of articles or case endings	Kastenwald-LeKastenwald
4) the addition of name elements	Vernet-Vernet les Bains
5) the addition of French generic names	Hohwald-Foret de Hohwald
6) phonetic representation in the French spelling	Strassburg - Strasbourg
7) adaptation to the structure of the French language	Weissenburg - Wissembourg
8) transformation under the influence of folk etymology	Masengott - Maisongoutte
9) translation into the majority language	St.Kreuz-Ste.Croix aux Mines
10) Substitution by a new name in the majority language	

In Chapter 3, the types of distortion distinguished here will be divided into: (I)unchanged names, (II) names adapted to the majority language (cases 2 to 8), (III) names translated into the majority language, and (IV) new names in the majority language.

In this study, the phenomenon of place-name pairs indicating the same feature differently although derived from one common form (e.g. Luik, Liege and Lüttich all derived from the old form "Leodico" (Boileau 1972)), has been purposely avoided. When, on a map of an area with a Dutch-speaking population, a feature-name is recorded in the form common to the French-speaking population, instead of in a form commonly experienced as being Dutch, then this will be considered as being an adaptation to the majority language, or frenchification, even though the French form may be derived from the same old basic form as the Dutch one and even though the French form may be older.

Ecclesiastical names or church names form a separate category in the toponyms investigated for this study. It seems that they are easily transferred into a (Roman) majority language.

1.7   Sequences of attitudes

The distortions pointed out in paragraph 1.6 quite often occur in a certain pattern or order. In French-Flanders for example, and in most other minority language regions where maps in the minority language existed, one finds successively an initial unchanged acceptance (1), a partial representation according to the French spelling (6), a partial translation (8), and finally addition of name-elements (4) and accents (2) in the 20th Century. This is also the case for the Alsace. In Roussillon, the order is 1-6/7/8-4/2, the last two types of distortion also occur here in the 20th Century. For Corsica, the Basque Provinces and Brittany, it is more difficult to say, since 18th century maps in the native language are non-existent.
Where minority language communities succeed in influencing the orthography of their toponyms by juridical means, four possibilities are open to them. As soon as an official orthography of their language appears and their own toponyms have become standardized, one can:

11) propagate and adopt the official orthography in one's own
language.
12) transliterate this official orthography phonetically into the
official state language.
13) attempt to correct the most important errors which have
occurred during the process of transformation (e.g. incorrect
phonetic representation, incorrect translation, partial
translation).
14) decide to adopt bilingualism.

In this last case, not only the minority version of names is accepted, but also that of the majority. The order in which this occurs may depend on the local numerical ratio between speakers of both languages. In Finland for example, as soon as the percentage of Finnish or Swedish-speakers decreases to below 10% in a community, the geographical features here no longer have to be given bilingually. This potential for change may cause extra work for topographers.

The activities of the topographic services in the field of toponyms will be discussed first (Chapter 2), to give an idea of the general problems and difficulties in this field. We need this background before going into detail on the topographic attitude to minority toponyms (Chapter 3).

Footnotes to Chapter 1

1 Mansion says about this: "unfortunately, these maps (of the military staff) show clear evidence of ignorance of the language of those who drew up the names. Even where the names have been properly listened to, they are quite often written incorrectly or not rendered with sufficient precision" (Mansion 1929).

Parmentier (1879-1880) stated: "L'ignorance de la valeur des termes geographiques dans les langues etrangères a souvent fait tomber les cartographes dans de grossières erreurs. Je pouvais citer l'exemple des Djebel Manarf et des Oued Manarf. "Ma narf" (en arabe "Je ne sais pas") etait la réponse ordinaire des Indigènes qu'on interrogeait sur le nom d'une montagne ou d'un ruisseau".

On the minute-plans of the Dutch Cadaster, errors are to be found as well. On the sheet pertaining to Wijk bij Duurstede for example the *Oeverstraat* has been called *Hoevestraat* (embankment street and farm street respectively) and also the *Velpoort* instead of *Veldpoort* (skin gate and field gate respectively). With these kinds of errors it must be taken into account that toponymy has never been a part of the training program of topographers. In that context it is not really their fault that they have not been able to to develop this aspect of the topography in the right manner.

2 Stewart describes here how the name of the state Florida was transferred into English visually and not orally, since the accent in English was put on the first syllable of the word, whereas in Spanish the accent was put on the second syllable (Stewart 1975, p.60).

2. PROCEDURES EOR ESTABLISHING THE SPELLING OF GEOGRAPHICAL NAMES IN WESTERN EUROPE

2.1 Introduction

In Western Europe large-scale topographic maps have been produced by national mapping services for more than 150 years. In the various states, procedures have been developed and introduced which provide for the collection and processing of toponyms for their recording on maps. These procedures vary in character. Some make provisions for topographic services to establish and determine their own spelling-forms. Others have to take into account the aid of advisory place-names committees or institutes. In some cases, the spelling recommended by those same committees is mandatory, and has to be adopted by the topographic agencies.

Examples of the procedure first mentioned are to be found in the United Kingdom and France, where the mapping services act autonomously and determine the spelling of toponyms not hindered or assisted by advisory bodies, taking into account local traditions and customs. In most countries, the role of place-names committees has become important: in Austria, Switzerland and Denmark, the place-names committees prescribe the spelling of most names and the topographic Services have merely to follow instructions.
Elsewhere, these committees fulfil a more formal, subordinate role, although it rarely occurs that a topographic mapping organization does not adhere to their recommendations. Such situations are to be found in countries like Sweden, Finland and Belgium.

The manner in which the procedures are established also differs from one country to another. In the United Kingdom and France only internal regulations and procedures exist by which names have to be treated. In Sweden and Switzerland, the authority to determine the spelling of names has been granted by act of government to either the topographic service or the cantonal place-names committees. In Sweden, even a law is in preparation to accommodate such procedures.

In some countries, activities carried out in the collection and determination of place-names for maps, are distributed among a number of mapping agencies. In the Netherlands for example, the cartographic division of the Water Management Department collects and determines the names of waterways: the same is done by the hydrographic service for names of estuaries and the geographical features therein, whilst the topographic service collects all other names. Elsewhere this is not formally stipulated, but mapping-authorities allow each other the right of consultation of the proposed names prior to publication. Whatever the procedure, in all countries it is the topographer who collects names; whoever finally determines their spelling, it is the topographic services who decide which names are to be rendered on maps. The selection of the names is their privileged right.

Not all types of geographical names are influenced to the same extent, as far as their spelling is concerned, by government acts or regulations. The names of municipalities and larger administrative entities are laid down by law in all countries. They appear on lists of electoral districts, in laws or acts pertaining to territorial divisions and/or in census-results. Besides these administrative names, it is possible to distinguish the following categories: settlement-names, regional names, field-names, polder-names, names of waterways, roads and motorways, names of bridges and other pieces of engineering, and farm-names.

One of the first principles in the establishing of names is that the names of objects are determined by their administering bodies. In this manner, names of detached buildings are established by their owners and names of objects administered by municipal councils are determined by those councils. These could be municipal roads for example, but also ground property administered by councils (e.g. a 'Foret

communale'or housing estates on council ground). Provincial and governmental bodies do likewise to objects which they directly govern. In the Netherlands this is also practised by land drainage authorities who control waterways. Names of water-reservoirs and power-stations are determined and fixed by their managing authorities, i.e. the electricity boards. Where a topographic service is compelled to adhere to names established by such authorities, it still has the opportunity to determine the spelling of regional- and field-names, and those of waterways and mountains. In a number of countries however, the topographic services are not content with the principle of establishing names by administering bodies, and assess them, whether by comparison to local traditions or by Consulting expert naming authorities. As far as names of cadastral lots and properties are concerned, in a number of countries, a competence-struggle exists between the topographic agency, the cadastral services and, if present, the place-names committees.

The countries in Western Europe vary in the extent in which they record and collect dialect-forms of geographical names on topographic maps. In Flanders, the Netherlands, the Federal Republic of Germany, the greater part of Austria, Denmark, Sweden and Finland the names which are recorded in dialect-form are transformed into the Standard orthography before being printed on maps. In Norway, local dialect-forms are more or less rendered in a standardized form (in Nynorsk). In the French-speaking part of Belgium (Wallonia), one aims at the rendering of names in compliance with local dialect pronunciation, the same as in Luxembourg where most names of municipalities also have a standardized French version. In Switzerland and in Austrian Tirol and Vorarlberg, the place-names committees give preference to dialect-names, as long as they do not clash with forms which have already become widely accepted in the Standard orthography, especially in the case the names of large and well-known geographical features. The general tradition found in Great Britain and France, dating from the 18th Century, of asking the gentry for the geographical names in their local surroundings, has probably divested many names of their dialect-character. The custom of British topographers in conforming to local traditions in relation to toponyms and their orthography does not result in forms which, at first sight, differ from standard English, at least not on the map.

The French, during the last years, render the sounds of toponyms according to local usage. For that purpose, France is divided into a number of dialect regions, each with their own peculiarities in relation to Orthographie usage. The instructions for Spanish topographers prescribe the writing of names in the local dialect, with the exception of those which have already been determined and fixed by law (names of municipalities). Information on methods followed in Italy could not be traced. When consulting Italian maps, one gets the impression that most names, as far as their suffixes are concerned, conform to the Toscan standards. The distribution of the various preferences for rendering names in the Standard orthography or in dialect-form in Western Europe, can be seen on figure 4.

In a number of border-regions, one does not conform to the orthography used for the same language on the other side of the frontier. This is the case in Sweden for example, in the Finnish-speaking region along the Finnish border, and also in France in Alsace-Lorraine and in Roussillon. The Standard for High-German is not followed in Alsace-Lorraine, neither is the official Finnish orthography followed in the region of the Torne-Finns in Sweden and that for Catalan in Roussillon. Toponyms in these areas which have been conceived as dialect-forms, do not have the same spelling as do those on the other side of the frontiers where the centres are found of the relevant language regions.

Figure 4 Dialect names on topographic maps in Western Europe.

With this remark, we touch upon the various attitudes with regard to linguistic minorities, a subject which will be treated in Chapter 3. In Western Europe linguistic minorities are found in particular in the peripheral parts of national states. In the largest parts of these countries the spelling of toponyms has become stabilized after more than a hundred years of interference from the topographic services. It is only in the linguistic minority areas that people often feel discriminated by the manner in which their geographical names are spelt on the map. Ireland is the only country in Western Europe which is active in the reform of the spelling of place-names within the totality of its territory.

In the selection of examples of national procedures in the present chapter a representative choice has been aimed at. The United Kingdom has been chosen as a representative of those countries without statutory rules and regulations with regard to the orthography of place-names. Sweden has been chosen as an example of a country with a longstanding scientific guidance of the spelling of place-names.
Belgium has been taken as an example of those countries which have a statutory procedure and a centralized, official decision-forming with regard to the spelling of place-names. And finally, Switzerland where a decentralized official decision-forming has lead to a greater emphasis on local forms of spelling.

2.2   The Situation in Belgium

The concern for the orthography of geographical names is part of the task of producing a base map of Belgium allotted to the Nationaal Geografisch Instituut (NGI) by the Belgian government. After the Second World War, this institute

commenced with the publication of a new map-series based on a new method of surveying as well as a new collection of toponyms (at least as far as there can be question of this in Europe, since old cartographic sources are used in their collection). According to the new method all names were drawn up on standard forms on which space was reserved for the name-versions, such as were given by 1) De Ferraris (1770-1777), 2) Poppe (private cadastral maps front the beginning of the 19th Century), 3) Van der Maelen (large-scale maps of Belgium, 1:20 000 and 1:80 000 round about 1850), 4) the Cadaster, 5) the Planchette minute, i.e the field sketch of the base map published from 1840 onwards, 6) the 'Atlas van de onbevaarbare waterlopen' (Atlas of the unnavigable waterways) at scale 1:10 000 and finally 7) the Dictionary of Belgian municipalities by Houet (Houet, Cleeren 1950).

Apart from these, columns were reserved for the indication of the spelling of names according to the local population and municipal administration, for the spelling as suggested by the topographic section of the NGI, for the advice of the Royal Committee for Toponymy and Dialectology (KCTD) and for the spelling finally established by the NGI.

In order to collect this Information, after an extensive investigation of sources, municipal council committees were sent sections of the topographic map of their territory and were requested to check the names, to make amendments or additions on the basis of the local, generally accepted versions. With this information included, these standard forms were sent to the KCTD for advice, whereupon the final selection or decision was made by the NGI. In 1970, the map 1:25 000 (M834) was completed and a start was made to publish a second edition of which the map series 1:50 000 (M736) will be derived. Until this is completed, the old 1:50 000 series, type M735 R, will continue to be published. This old series is a revised and generalized version of the fourth edition (3rd revision) of a pre-war map to scale 1:40 000.

From about 1950, the number of Dutch-speaking personnel at the NGI gradually increased. In 1963, the number of Dutch- and French-speaking personnel was equal. From about 1948, the KCTD became involved in the activities of the NGI; from 1955 onwards, a toponymic assistant was employed at the institute and from 1976, there have been permanently employed Dutch and French-speaking toponymic assistants.

The errors which have occurred in the past, caused by incorrect transfers of Dutch names by French-speaking cartographers, can now be avoided.

The Royal Committee for Toponymy and Dialectology (KCTD) consists of a Dutch- and French-speaking team. The Dutch-speaking section is requested by the NGI to advise on matters with regard to the spelling of geographical names in the Dutch-speaking part of Belgium; the
French-speaking section does likewise for the French- and German-speaking regions. Both sections advise on matters with regard to the spelling in the official bilingual area of Brussels (the 19 municipalities). For the linguistic boundaries, refer to figure 35. The principles for both sections of the KCTD and of the NGI are as follows[1]:
   a) the spelling of the names must be linguistically justified
   b) the form represented on the map must be recognizable for the local population
   c) foreigners should be able to pronounce the names intelligibly for the local population.

Beside this, there are differences in views taken by both sections: the Dutch-speaking section has opted for the systematic transformation of all obsolete and dialect forms of names into standard Dutch. For example: *Waainberg* becomes *Wijnberg*; *Weyenberg* becomes *Weidenberg*; *Karenberg* becomes *Keienberg* and *Briestrate* becomes *Bredestraat*, etc..

The French-speaking section has opted for a return to the archaic and/or the dialect-forms of the Walloon toponyms. Within this context a certain standardization

of generic terms and of homonymous names has been introduced; in this manner such forms as *Tienne, Tien* and *Tiène* are represented on the map as *Tiène*. The principles of the French-speaking section are:

1) to secure a correct etymological derivation. For example, the toponym *Pré d'Amite* is a corruption of the name of a pasture named after a certain lady called Ida and is corrected into the form *Pré Dame Ide*.
2) unless necessary, the Walloon form when still in use must not be frenchified; its pronunciation can be modified by the addition of diacritical signs.
3) the orthography of names must be simplified as much as possible. This results in the fact that mute letters ('lettres inutiles') or letters which can result in an incorrect pronunciation must be avoided as much as possible.

The committee-members of both sections of the KCTD follow official sources. There is a law[2] stating that the spelling of names of municipalities and hamlets is to be determined and fixed by the government. So far only municipality-names have been standardized however. They are published in the Alphabetical List of Belgian municipalities[3], and on the Administrative map of Belgium[4].

Names of some terrain features such as navigable waterways are to be found in the official gazette. They are taken over integrally by the NGI. The responsibility for the orthography of names of new streets and squares is that of the individual municipal councils which are advised by provincial (in the Dutch-speaking region of Belgium) and regional (in Wallonia) committees. During the extensive fusion of municipalities round about 1970, the council-committees were ordered by Royal Decree to request the advice of the Royal Committee for Toponymy and Dialectology when names were to be amended or changed. A notable source for the names of waterways is the above-mentioned 'Atlas der onbevaarbare waterlopen'[5] which is kept up-to-date by all provincial authorities. Another source for the names of woods and forests and of unnavigable waterways are the Forestry Commissions and Water Boards. The spelling such as is used by these authorities is not always adopted by the KCTD, even when they are found on name-signs.

The collection of the names thus established resulted in the first edition of the topographic map 1:25 000 (1955-1970). This series showed names to the north of the Dutch-French language-boundary as studied by the Dutch-speaking section of the KCTD, and to its south as studied by the French-speaking section. The abbreviations on the map (Sce., Fme.,Chap.le) were only indicated in the French version, not only in the official French-speaking region, but also in the Dutch-speaking region. In officially bilingual Brussels, Dutch names were at the most to be found in parentheses beneath the French versions, e.g. Bruxelles (Brussel); Molenbeek-Saint-Jean (Sint-Jans-Molenbeek).

In the second edition of the 1:25 000 (1970-) the NGI introduced a simplified procedure with regard to the collecting and processing of place-names in which not all sources were referred to. Henceforth one simply wrote to the municipal council-committees with the request to check the accompanying map-section of the first 1:25 000 edition for faulty spellings, and to find out whether additions or amendments were requested, and whether names could be deleted. The council-committees were now confronted with the fact that, in many cases, the spelling they had advised during the first inquiry had not been followed. This resulted in a diminishing eagerness to further co-operate and in a low response. Due to this attitude, the collecting of toponymic material became difficult to carry out.

In the meantime, in 1971 a law covering regionalization was promulgated[6] and enforced. In 1973 a 'Kulturelle Rat für die Ostkantone' was instituted. As a result of this law, the German language obtained a protected position in the districts of Eupen and Sankt Vith, in the from now on official German-speaking part of Belgium. On the map, this resulted in a germanization of the names of municipalities in this region. Names of hamlets and abbreviations, however, are still given in French in the second edition of the 1:25 000 series. Modifications in the language-boundary between the French- and Dutch-speaking parts of Belgium in

1971 gave also rise to changes on the face of the map.

On the new 1:50 000 (M736) map-series, published from 1970 onwards, the spelling was taken from the second edition of the 1:25 000 map. The great care to render the correct toponyms is apparent from the map of the bilingual area of Brussels (Jouret 1975) shown in figure 5. Here all names and abbreviations have been rendered in the two national languages and positioned so carefully, that in the north of the city the Dutch-language versions were indicated first and in the south of the city the French-language versions, (e.g. *St.Jans-Molenbeek/Molenbeek-St.Jean*, and *Ixelles/Elsene*. No French names were recorded in the officially Dutch-language areas.
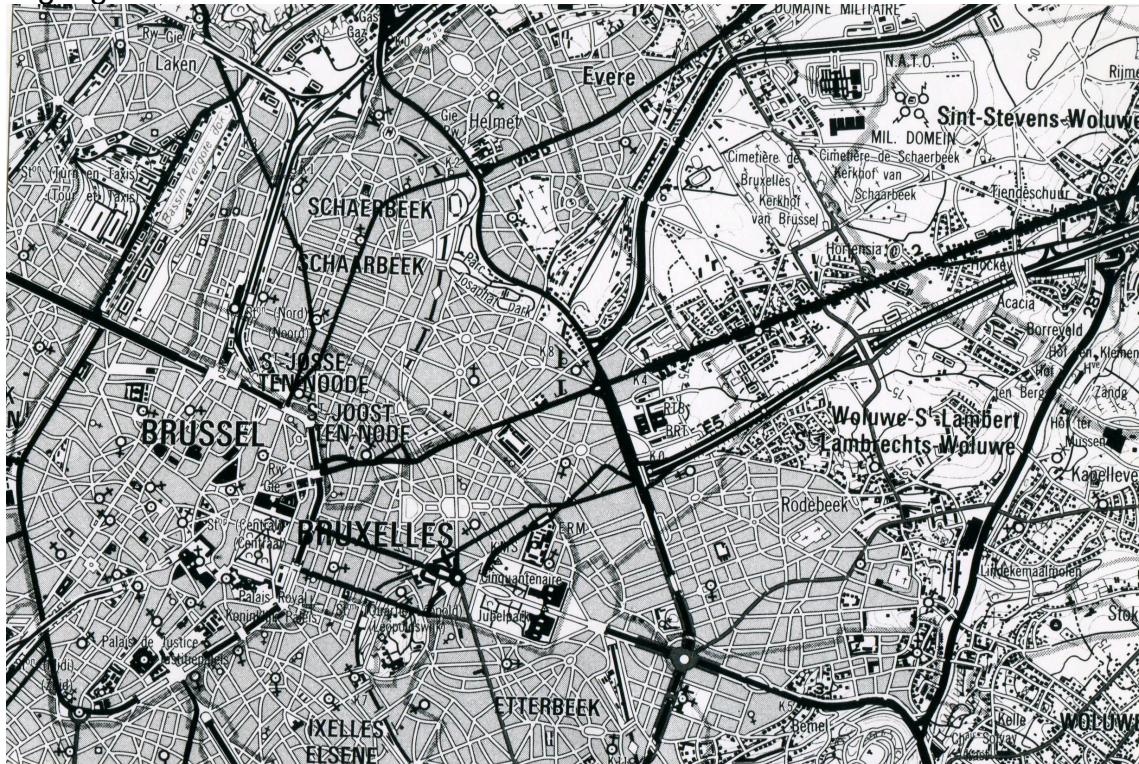
Figure 5 Bilingual Brussels. Detail of the topographic map 1:50 000, sheet 31, Bruxelles/Brussel, 1974.

The disappointing lack of co-operation of the municipal councils mentioned above forced the NGI to set up a nation-wide collection of toponyms for the third edition of the 1:25 000 series. From now on, the municipal councils are briefed on the usefulness of name-collecting and on the value of their assistance. Members of the NGI visit the council-committees in order to stimulate the supply of necessary information, to prepare them for possible linguistic corrections by the KCTD and to assist in the completion of the enquiry-forms. The municipal councils are now requested to indicate not only the spelling of names, but also the categories to which they belong, the extent of local use and the precise location of the named entities. The extent of local use has been divided into three categories which will be used at a later stage for the selection of names for derived maps series. These categories are: 1) names which are also well-known outside the specific municipalities; 2) names which are only well-known within the municipalities to young and old and 3) names which are only well-known to the older generation within a municipality. In order to facilitate the completion of the forms and the categorization of the names, the different possibilities are defined on a separate, accompanying stencil-sheet (for example, in order of importance: centre-district-residential area-village-hamlet).

As stated above, if necessary a toponymic assistant of the NGI further assists municipal councils in completing the enquiry-forms and in defining the extent of the named features. The forms to be completed consist of three different versions. On the first, the NGI indicates the names already in use on the last edition of the map. On the second, the NGI makes suggestions and proposals with regard to the new

names to be incorporated, collected within the framework of the documentation-activities carried out by toponymic assistants of the NGI (e.g. from tourist-brochures, planning-maps etc.). On the third form, the municipal councils can themselves make suggestions and proposals with regard to new names. On the three forms, the council must indicate not only their views in relation to the correct orthography, but also the type of name and the extent of its local use. By stamping the documents the council makes its advice official. It is intended that, for the benefit of future automatic processing, the names and their codes are fed into a names-data-bank which can be used later on for the automatic production of name-plates and of gazetteers.

Together with the secondary toponymy, i.e. the names of separate buildings, at the NGI all names are indicated on a map-section of the series 1:10 000 after receiving the reactions from the councils. Subsequently, this section is passed on to the KCTD together with the set of completed enquiry-forms, included those used for the first edition of the 1:25 000 series (stating all cartographical sources) and finally, a list of names on which the KCTD has to decide. Within thirty days, the KCTD notifies the NGI of their advice; the NGI can then decide on the final spelling. Names which are put on the map by way of the above procedure have no official character, i.e. their spelling has not been ratified by any particular law, except those names which, as is the case for municipality-names, have been determined and fixed elsewhere. Legends and marginal information are given with the Dutch version first on maps of Dutch-speaking regions; the same rule is followed with French in French-speaking regions.

With regard to the official bilingual area of Brussels, where all names and abbreviations were recorded in Dutch and French on the second edition of the 1:25 000 series, views in relation to the third edition have now changed somewhat. Names which were originally Dutch will be given in the Dutch version only; names which originate from the bilingual period are represented in both languages; new names are only rendered in their official version and not in translation. This has been done in order to avoid a congestion of names on the map and to avoid over-translations which might seem ridiculous, and finally, to meet the demands of the current language-acts.

Dutch-language school-atlases show names in Wallonia in the Dutch version, sometimes with the French names in parentheses. In the 'Kleine Wereldatlas' (Goossens 1970) e.g. names such as Luik, Aarlen, Bastenaken, Bergen, Borgworm, Moeskroen, Doornik, 's Gravenbrakel, Eigenbrakel, and Waver are to be found. Versions in the French language are not given. Belgian schoolatlases in the French language (Sporck, Pierard 1968) do likewise: toponyms in Flanders are given in the French language with the Dutch versions sometimes added in parentheses.

The topographic service in France still uses the versions in the French language7 for those maps showing the Dutch-speaking parts of Belgium. One can find here names such as La Panne-Bains for De Panne; Furnes for Veurne; Coxyde-Bains for Koksijde-Bad; Moeres for De Moeren and so forth. The new sheets of the Carte de France 1:25 000 (1980) copy for those areas outside their own state-territory the official maps issued by the country in question. This is the Belgian topographic map 1:25 000.
For the Belgian surveyors, there are neither regulations for the selection of names, nor preferences stated for language versions. Neither is this the case for NGI-cartographers when selecting place-names for derived map-series. The extent of local use indicated by the council-committees is decisive for the choice of names by the 'Bureau for toponymy' at the NGI.

2.3 The Situation in Sweden

Official rules for the spelling of Swedish toponyms do not exist. The only official

regulation is that of a Royal Decree of October 1927[8], according to which the principles of the dictionary published by the Swedish Royal Academy of Sciences[9] must be applied in the spelling of place-names in the cadastral registers and other official documents and publications[10]. This dictionary however, does not include any principles; these must be derived by comparison of the words which it contains. In practice, this means that etymologically recognizable elements of place-names must be spelled in accordance with that list.

The authority for the standardization of geographical names has been divided according to name-categories. The names of administrative entities are determined and fixed by the government and published in official lists. The governmental authority is not laid down by law but has been established by order of Royal Decree. Administrative names (names of regions, provinces, municipalities, parishes etc.) are published in lists of the Statistitska Centralbyrå[11]. By the building-act[12] names of town-districts and residential blocks are determined by municipal councils. This is the only case in which the authority to give names is laid down by law. In practice, the councils also determine the names of roadways, parks, bridges and other communicational artefacts.

In the past, the Swedish railways, postal and telegraph services have played an important part in the allocation, changing and transfer of names. Their role is now largely finished, since no more new lines or services are introduced. The part which they played was even more important because in sparsely populated Sweden, post- and telegraph-offices and railway-stations became the nuclei of larger settlements named after them. The names of churches and cemeteries are determined by the ecclesiastical bodies. Practically all other names are standardized by the Statens Landmäteriverk (the LMV, the Swedish topographic and cadastral service). This service has the authority to determine and fix the spelling of names in cases where no other bodies are entitled to do so. This has been established by a Royal Decree[13], which states that it is the duty of the LMV to aim at a functional and precise rendering of place-names on its mapS (Ringstam 1978a). According to a Royal Decree of 1974[14], the LMV has the authority to determine and fix cadastral names and numbers, though this is done in conjunction with and after consulting the Ortnamnsarkiv at Uppsala (the OAU - place-names archive) and land property owners concerned.

It is not quite clear which body - the municipal councils or the LMV - has the authority to determine the names of villages. In practice, the cadastral names which the LMV is allowed to determine, are often identical to the names of the villages. There is also uncertainty as far as field-names are concerned. In order to remove this uncertainty a governmental committee has been formed which had to report on the matter in 1982, for the benefit of a legislative proposal. As far as the hydronyms are concerned, the LMV determines the names on land while the names at sea are standardized by the Sjövartsverk (the Swedish Hydrographie Service). The Swedish Statistical Office distinguishes 1700 densely populated regions (Statistika tätorter). These statistical areas often comprise various villages and are indicated on small-scale maps by a yellow hue. After consultation with the statistical office, the LMV also determines the names of these units (Ringstam 1978b).

During its activities, the LMV consults the place-names archive at Uppsala, whose advice is practically always followed. Two years before its topographers go into the field for the survey of the base-map (Ekonomiska Kartan), the LMV sends a list of cadastral names to the offices of the OAU. The orthography is checked by the OAU and often a list of additional names is supplemented, which, in the opinion of the OAU, also belong on the map. Subsequently, the topographers examine the spelling, usage and location of both groups of names in the field. The resulting 'Namnkalk' (name-tracing), is then first returned to the OAU for correction. It is not clear whether this results from a deliberate policy of either the DAL) or the LMV, but hardly any trace of dialect-forms is found in the place-names on Swedish topographic maps (Rostvik 1981).

There is no official Swedish gazetteer. The closest to such a publication is a descriptive list of 130 000 geographical names of municipalities, farms, post-offices and railway-stations (i.e. without the names of fields or physical features) published by the Swedish postal-service[15]. Primarily, this list reflects the names as they are locally used. In the case information on local use is not available, names are derived from the map.

The Hydrographie Service, since 1975, publishes a new series of charts. An agreement has been made with the LMV according to which the hydrographers first send their proof-prints to the LMV for checking the spelling of the names. Corrections are adopted by the Hydrographie Service. Only for the names of navigational aids, such as light-houses, it does not follow suit. This category of names remains unchanged in connection with (assumed) safety requirements. In general, one can say that the Situation in Sweden in relation to names differs from those in other Western-European countries since, in Sweden, the names were already collected before the topographers went into the field, and because from the start of the surveying of the Generalstabkarta (about 1910) 1:100 000, topographers were always accompanied/guided by linguists.

2.4 The Situation in Great Britain

In the United Kingdom there is no national authority which determines and fixes names on official maps. In theory, the responsibilities for the collection and rendering of names are shared: "The Hydrographic Department of the Admiralty is the authority on the spelling of the names of features in waters of the United Kingdom falling between the low-water mark and the hundred-fathom line"[16]. The Ordnance Survey (the British topographic service) is responsible for all other names (Aurousseau 1957). In practice, it appears that there is hardly any contact between the two authorities on matters of orthography[17]. On the topographic map for instance, one same object is called *Conwy Bay*, whereas on the hydrographic map it is rendered as *Conway Bay*.

The task of the determination and fixing of the names and their selection has been taken on for a large part by the Ordnance Survey. Their traditional leading principle is to follow local custom and usage. There are no regulations for spelling, nor does a spelling-policy exist. There only appears to be some sort of unifying influence from the Ordnance Survey on the orthography of names in the way word-elements are joined together or hyphenated.

The Ordnance Survey has delegated the responsibility for the collection of the names and for supporting evidence to its topographers. The basic principle from which the topographers depart is: "The form of spelling to be adopted is that which is considered to be most generally useful and acceptable in the locality concerned" (Harley 1975). For new names of large features, the signed approval of two locally authoritative persons is required. For other names, at least one written, documentary or visual source is needed. When more forms of spelling occur, the topographer has to submit all supporting evidence.

In the collection of names in the field, the topographer is mostly guided by the spelling used by the local authorities, at least as far as the names of administrative units and place-names are concerned. The names of administrative units - e.g. the local authorities - are laid down by law. The names of detached, prominent houses are taken from those houses. For the names of roadways, the spelling of the Ministry of Transport is used, and for river-names the Water Board is followed. The various controlling bodies are consulted for the spelling of those objects which they administer, such as nature-reserves, archeological features or other monuments of interest, reservoirs etc. Their advice is not mandatory. All advice is noted down and signed by the topographers and co-signed by the advisory bodies concerned. In all cases, the topographer notes his sources on a field-document and on a standard form on which space is reserved for a description of the type of the feature concerned, its co-ordinates, the spelling finally chosen, supporting evidence and the

signature of the topographer. These standard forms are collected to form so-called 'Object Name Books' - one for each square km. of the map 1: 1250, and one for each sheet of the map-series 1:10 000, 25 000 and 50 000. After the recording activities are completed, the names in the Object Name Book are transferred to a special form and sent to the local authority for signed approval.

Amongst the consulted, authoritative sources, the previous edition of the map is most important. Its names have already been a source of study, and their orthography has already been confirmed by a number of authorities in the accompanying Object Name Book. When spelling changes are made to names which had already been incorporated, at least the same number of authorities is needed before the new spelling is accepted. It is not the topographer who decides on the changing of names or changes in their spelling but the section chief at the main office of the Ordnance Survey at Southampton.

On the basis of field-work, a new name-model of each map-sheet is made at Southampton, which shows all names which have been added or deleted during revision activities. The topographers use this name model to check whether all their indications have been carried out correctly. It should be pointed out that (British) topographers do not receive special training in toponymy, and not at all in dealing with names occurring in linguistic minority regions. If they encounter difficulties with toponyms, they can consult the Board of Celtic Studies in Wales, or the School of Scottish Studies. The opinion of the local population belonging to these language minorities is decisive, however.

Because of the necessity to gather evidence, this procedure appeared to be too time-consuming at the end of the 1950s. For a number of years it was surmised that surveying operations could be accelerated by designating authorities responsible for each toponym category, who were to determine and fix the features' orthographies. This procedure was named the 'competent authority doctrine'. The Board of Celtic Studies and the School of Scottish Studies were also considered to belong to these competent authorities.

The spelling used by the authorities now became official. The names of features administered directly by the owner, were also determined by the owner. This competent authority doctrine proved to be a failure due to to the fact that it badly affected the names which had been carefully preserved by the Ordnance Survey for a great number of years. Names which existed for a long time were simplified by the administering bodies; names occurring in minority language regions disappeared or were anglicized, and new administrative names of woods and forests replaced the traditional names. For this reason, the former procedure was restored in 1964: the long established custom replaced the administering body where the determination of the final spelling was concerned (Seymour 1980).

The procedure described above - based on the spelling locally used, noted down in name-books stating sources and authorities - was developed in the period 1820 - 1870 (James 1875). Apart from the brief interruption described above, this is still the current procedure. 'The Report of the Ordnance Review Committee' of 1979 also continues to recommend this procedure;

"Custom and usage must be the right basis for determining names on maps.... We recommend that Ordnance Survey continues to take custom and usage as the basis of the choice of place-names but that OS should also put its provisional choice to the appropriate local authority ... for their agreement (or for the substitution of an agreed alternative) within a set time period" (Serpell 1979).

2.5 The Situation in Switzerland

Switzerland does not really fit into a study of linguistic minority groups because the four Swiss language-communities have equal rights. Nevertheless, Switzerland is described here due to its deviating procedure for the recording of names on maps.

These are not shackled into a standard language, but presented in dialect-form. Moreover, a far-reaching decentralization down to cantonal level exists which is unique in Europe. In Switzerland the 'Territorialprinzip' is in force according to which the historical home regions of the various language communities remain guaranteed (Schäppi 1971). The cantons are entitled to regulate language usage and are obliged to protect the homogeniety of the language region. They determine the cantonal administrative language and its 'territoriales und sachliches Geltungsbereich'.

The first federal topographic mapping program of the country resulted in the map 1:100 000 the 'Topographische Karte der Schweiz' surveyed under the supervision of G.H. Dufour between 1832 and 1864. In 1838, the Eidgenössisches Topographisches Bureau, the Swiss topographic service, was founded. Under the supervision of H. Siegfried, the country was mapped on the scale 1:25 000 (of populated regions) and 1:50 000 (mountain-country) in the period between 1870 and 1905. Between 1867 and 1873, the 'Generalkarte der Schweiz' followed at scale 1:25 000. The name of the agency was changed in 1900 into 'Eidgenössische Landestopographie' - ELT. In 1912, cadastral mapping started at scales 1:5 000/1:10 000, and in 1919 the ELT was empowered with the supervision of these mapping activities with the intention of basing the topographic map on these cadastral maps as much as possible.

For the benefit of the new mapping programme of the country which was decided on in 1935, an attempt was made to escape from the spelling errors transferred from the Dufour- and Siefried-maps. In order to accomplish this, federal and cantonal nomenclature-committees were formed which collected, investigated and if necessary, edited the names (Schäppi 1971). Eor their rendering, the following options existed: 1) the dialect-form, 2) the form in the standard language and 3) a form which approached or came close to the standard language form. In general, the representation of place-names is most useful when a spelling is chosen which stimulates a pronunciation by foreigners which is as far as possible in accordance with the local one. This spelling however, must not clash with the codified forms in High-German found on road signs, railway time-tables and directories. Hence, spelling forms such as *Zürich, Bülach* and *Burgdorf* are chosen instead of *Züri, Büli* and *Burdlef*.

The principles adopted with regard to the revision of names for the new mapping activities are (Grosjean 1974):
   a) all names are written as pronounced by the local inhabitants whereby the sounds are approached as much as possible by the alphabet of the standard language.
   b) generic terms are uniformly written throughout (German-speaking) Switzerland. Therefore: 'berg' instead of 'bärg', 'bäri', etc.
   c) names of larger places whose form is codified in the standard language remain unchanged.

Hubschmied notes that as an exception to category (a) there is a tendency in Ticino to 'toscanize' the names (Hubschmied 1946). Moreover, in general, fewer dialect-forms are found on the maps of French and Italian regions than in German-speaking ones due to the fact that the social prestige of the dialect in the former two is less than in the latter. Generic terms such as station, church and convent remain to be spelled in the standard-language concerned. Names of cantons, districts and municipalities are laid down in federal decrees. The names of railway- and postal stations are recorded in cantonal acts. The cantonal Vermessungsämter determine and fix the spelling of names on cadastral maps in their own cantons. The ELT also claims that same right (Schorta 1943). There are differences of opinions between these bodies with regard to the extent to which dialect forms should be transferred into the standard language. In general, the ELT prefers the standard language form when this is a generally accepted equivalent of the dialect-name.

The 'Bundesratsbeschluss über die Erhebung und Schreibweise der Lokalnamen'[18]

states that the orthography of the names on cadastral maps, collected by private surveyors, be submitted to the cantonal nomenclature-committees for approval. The 'Weisungen' of 1948[19] determine that these nomenclature-committees check the names for their 'ortsübliche Sprechform', and if necessary correct them and officially determine and fix the spelling. The orthography of all other names is determined by the ELT, in as far as areas concerned are not covered by cadastral maps, or names of larger features which are not represented on the cadastral map (Tank 1943). In practice most names on the topographic map are derived from the cadastral maps (Grundbuchübersichtpläne 1:50 000, 1:10 000).[20] These names are recorded by private surveyors on Standard forms on which space is reserved for official orthographies, pronunciation and location, the nature of the named feature and the sources used. The surveyors submit the names to the nomenclature-committees which then make a final decision. Not in all cases does the ELT adhere to the orthography on the cadastral map. This is, for example, the case when names proposed by the cantons differ too strongly from the general principles, or when no agreement is reached between the various cantons. The names of towns, municipalities, stations and bus-stops are taken from service-timetables.

Bilingualism only occurs on the map for those areas which are officially bilingual. Figure 6 illustrates this phenomenon. There is a standing distribution of the map-series at scales 1:25 000, 50 000 and 1:100 000 in sheets with French, German and Italian titles and marginal information (see figures 7-8). The legends are published separately in German, French and Italian. Bilingual marginal information no longer occurs.

Figure 6 Bilingual part of Switzerland. Detail of the Carte Nationale de la Suisse 1:100 000, sheet 36, Saane-Sarine (1975), with Murten/Morat and Lac de Morat/Murtensee (Permission of the Office Federal de Topographie, Bern, 26-7-1982).
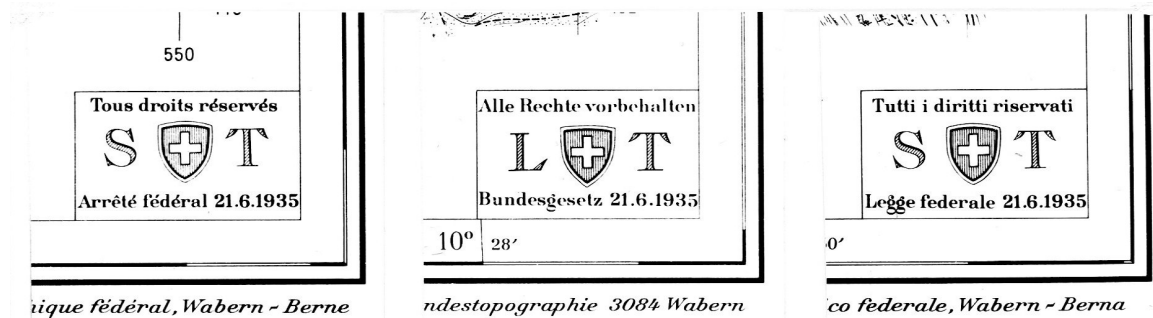
Figure 7 Detail of the marginal information on recent sheets of the Swiss topographic map series 1:25 000, from three language areas.

Romansh has been given a status as an official language only since 1938. A

number of municipalities in the Romansh-speaking regions opted at that time for Romansh forms which in 1940 were acknowledged by the federal parliament as the official forms - for instance *Sagogn* instead of *Sagens*. Other municipalities kept to the German or Italian forms in connection with tourism (e.g. *St. Moritz, Pontresina* instead of *San Murezzan* and *Puntraschigna*)[21]. A number of other municipalities were named officially bilingual (e.g. Disentis/Muster; Domat/Ems; Scuol/Schuls.

As far as geographical names outside Switzerland are concerned, Swiss topographic maps continue to follow the official names, taken from foreign topographic maps. An exception to this has been made with the publication of the sheet Glorenza, No. 1219 bis (1981) of the map-series 1:25 000. On this sheet, the names in South Tirol - a region represented in Italian only on the Italian topographic map - are given in Italian and German. Up until now, only the Italian versions were presented. The different versions of the widely-known 'Schweizerische Mittelschulatlas' too, do not represent German, French or Italian exonyms outside the respective language regions. It is only on the Alpenländer-sheet, in the German version of this atlas, that all current German exonyms are used (Imhof 1962). Private cartographic publishers in Switzerland follow the official spelling outside the country, with the exception of South-Tirolean names which are rendered bilingually. The same applies to maps produced by private publishers for the government, such as those for the Swiss railways[22].

2.6 Comparison of procedures

In the United Kingdom there is no stated spelling policy with regard to toponyms. The guiding principle is local usage and custom; local action can result in the change of names. The procedure for the recording of names has developed at an early stage and is documented since 1830 by 'Object Name Books', name-models and written authorizations. In this respect there is a large amount of freedom and there is no scientific control, as should be the case in a country governed by common law.
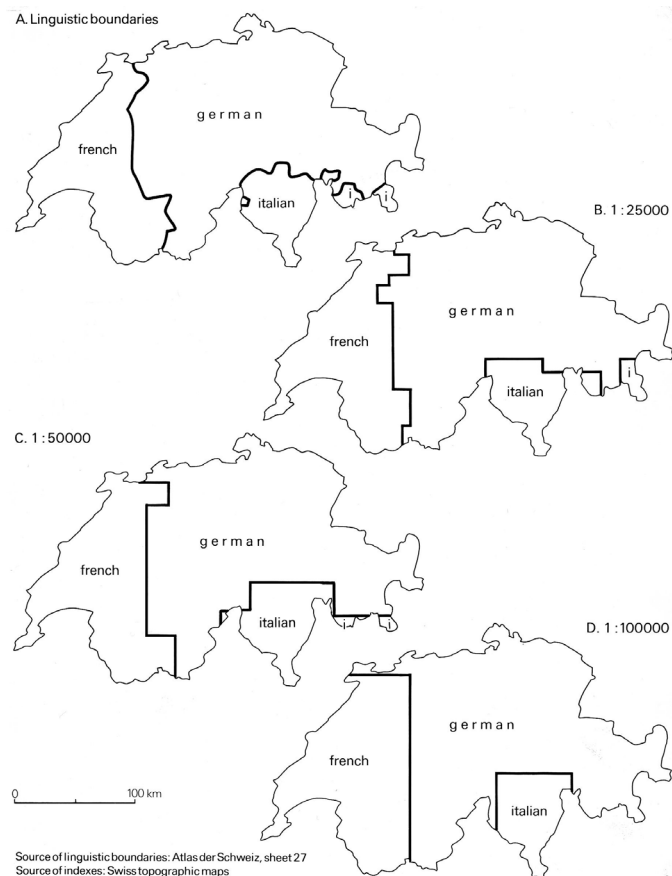
Figure 8 Map-sheets of Switzerland according to the language in which the marginal information is rendered and according to scale compared with the linguistic boundaries (A).

Sweden too, lacks a spelling-policy regarding place-names. The only limiting regulation is that recognizable name-elements in toponyms must be spelled in accordance with the official dictionary. Up till now, the topographic agency is entitled by Royal Decree to regulate the spelling of names which are not or have not been fixed by other bodies. There is a legislation in preparation according to which the authority to standardize the spelling of toponyms will be granted to the topographic service. This topographic service is guided by the advice given by the Ortnamns-arkiv at Uppsala (which has an excellent documentation service); hence, scientific control is evident.

In Belgium, the confrontation between the language communities has resulted in an intensive regulation. Municipal councils study the names collected by topographers and make additions to this. Subsequently, the names are forwarded to the French- or Dutch-speaking section of the Royal Committee for Dialectology and Toponymy (KCTD) which checks them against their view-points after which the topographic service is advised. Finally the latter agency determines and fixes the spelling. The authority of both sections is limited by the language-boundary, right across Belgium, which in turn is based on the 'Personalprinzip', i.e. the percentage of people speaking a certain language is decisive for its location. Now that this language boundary has been fixed, the 'Territorialprinzip' is being applied. According to this principle the regions in which a certain language is spoken are protected. The principles of both sections of the KCTD differ due to the fact that the Dutch-speaking one gives preference to a representation in accordance with the standard orthography while the French-speaking section prefers a reflection of the dialect-form.
Both sections, however, attach great value to the preservation of the correct etymological derivations of names. The official decision regarding the orthography/spelling of names is centralized in Brussels.

Switzerland adheres to the Territorialprinzip contrary to the so-called Personalprinzip. Beside this, there is, as in the United Kindom, a greal amount of influence from local users, but this is institutionalized in cantonal nomenclature-committees. These committees check whether the names collected by the topographers are written in the same way as they are pronounced by the local population, an approach which reflects the prestige of the local dialects.

The points discussed in this comparison are represented schematically in table 1. The situation in the Netherlands has been added for the sake of a comparison.

The fact that dialect forms are not generally recorded forebodes little good for the representation of names from other languages which are often treated in the same way. The fact that the topographic services mostly have the final decision with regard to the determination and fixing of names, and not the (advisory) scientific bodies, seems to point in the same direction.

The category of municipal names (table 1) has been specially emphasized due to the fact that these names remain longest visible after scale-reduction. The 'local use' in table 1 denotes the use by the local government, accustomed to a certain spelling of toponyms.

With this preliminary knowledge, it is now possible to analyse the attitudes by which the linguistic minorities of Western-Europe are approached toponymically on topographic maps.

Table 1   Broad survey of current procedures for determining and fixing toponym orthographies in some Western-European countries

	Authority responsible for determining and fixing orthographies		Incorporation of dialect names	Influence of local usage	Availability of legal regulations
	municipality names	all other names			
United Kingdom	Government	Top.Survey	None	Decisive	None
Sweden	Government	Top.Survey	None	None	Royal decree[b]
Belgium/Flanders	Government	Top.Survey	None	None	Royal decree
Belgium/Wallonia	Government	Top.Survey	Yes	Decisive	Royal decree
Netherlands	Government	Top.Survey[a]	None	None[c]	None
Switzerland	Canton	Cantonal place-names committee	Yes	Decisive	Federal decree

a   In the Netherlands the topographic and hydrographic surveys and the Water contr[
     survey have shared the responsibility of collecting, determining and fixing
     toponyms.
b   A law is in preparation.
c   In theory municipalities have the authorities to determine and fix the
     orthography of all toponyms within their area.

Footnotes to Chapter 2

1   Personal communication from Mr. J.Vanderstraeten, NGI, Brussels 1981.

2   Article 4, Act of 16-5-1882.

3   Edited by the Nationaal Instituut voor de Statistiek, published yearly in the Gazette.

4   Militair Geografisch Instituut - Administratieve kaart van Belgie 1:300 000, Brussels, february 1976. With municipal name-list as determined by Royal Decree of 17-9-1975 and sanctioned by the Act of 30-12-1975.

5   Atlas der onbevaarbare waterlopen. Provincial Name-ledgers of unnavigable waterways, established by the Act of 7-5-l877-

6   Revision of the Constitution, dated 24-12-1970.

7   For example the Carte de France et des Frontières 1:200 000, type 1912, sheet 2, Vlissingen (Flessingue), 1949; sheet 2 bis, Anvers (1951).

8   SFS (Svenska Författningssamling) 1927-380.

9   Svenska Akademiens Ordlista över Svenska språket. Stockholm 1950 (9th edition). This dictionary has been adjusted to the 1901 Spelling Act.

10   SFS 79-411.

11   E.g. Rikets indelningar 1981; Årsbok över regionale indelningar. I.Uppsala, etc.

12   Personal Statement by H.Ringstam, LMV, Gävle 1981.

13   SFS 1974-336, 11§p3, extended in SFS 1980-753, 11§3: "Det åligger Lantmäteriverket särskilt att ... verka för ett ändamålsenligt och vårdat ortnamnskick med befogenhet att fastställa ortnamn i den mån sidan befogenhet Icke tillkommer annan".

14   SFS 1974-1060, 22§p2.

15   Svensk Ortförteckning 1980. Utgiven av postverket och televerket. Kungsbacka 1980.

16   Information on the spelling of geographical names used by mapping and charting agencies in the United Kingdom. 1962. British Library.

17   Personal Statement by A.R.Baker, Ordnance Survey, Southampton 1977.

18   Bundesratsbeschluss über die Erhebung und Schreibweise der Lokalnamen bei Grundbuchvermessungen (22-2-1938), article 4.

19   Weisungen für die Erhebung und Schreibweise der Lokalnamen bei Grundbuch-vermessungen in der deutschsprachigen Schweiz (Bern, 27-10-1948).

20   Instruktion für die Erstellung neuer Landeskarten. Technische Vorschriften der Eidg. Landestopographie vom 9.Januar 1937, genehmigt vom Eidg. Militärdepartement am 12.Januar 1937 in Anlehnung an den Bundesratsbeschluss vom 15.August 1902 betreffend die obligatorische Schreibweise der Namen der politischen Gemeinden und in Fortführung der in den bestehenden amtlichen Kartenwerke bisher angewandten Grundsätze (mentioned in Tank 1943).

21   St.Moritz and Pontresina on the Dufour map 1:100 000, sheet XX, Sondrio (1879) and on the Landeskarte der Schweiz 1:100

000, sheet 44, Malojapass (1964). Bilingually on the Landeskarte der Schweiz 1:250 000, sheet 1257, St.Moritz (1964).

22 For instance the Eisenbahn- und Strassenkarte der Schweiz, published by Schweizerische Verkehrszentrale, Bern 1979.

3 TOPOGRAPHICAL REPRESENTATION OF TOPONYMS OF LINGUISTIC MINORITY AREAS

3.1 Introduction

After the description of the general procedures with relation to the collecting, processing and representation of geographical names on topographic maps, Chapter 3 will deal with the specific treatment of the minority names in various countries. The occurrence or absence of deviations from the standard procedures a s followed in most national states for their majorities will be discussed here for the linguistic minority areas.

First of all, a brief historical introduction will be given in which the region - also on the basis of a location-map - is demarcated, and the origin of the minority Situation is explained. Subsequently, the history of mapping is described in so far as is relevant in relation to the regions investigated. The years of survey are included, since they allow the attitudes evident from the maps to be placed within a specific period of time.

On the basis of the paragraph 'cartographical representation of toponyms', the evolution of the attitudes to minority toponyms is treated per minority-language-region up to the present. In doing so, an attempt will be made to follow the classification of the forms of distortion or restoration of the toponyms as laid down in Chapter 1.

Not in all minority regions could the evolution of the attitudes towards minority toponyms from the start of topographic mapping be determined by name-counts. This was not possible in regions where large-scale topographic mapping (1:50 000/100 000) has only recently been carried out, such as in Scandinavia, and where consequently no older maps with former spellings could be studied. The same applies for regions where no topographic maps at all were available such as Lausatia.

Beside the toponyms, the marginal Information on maps is also discussed in those cases where it is not rendered in the majority language. The treatment and discussion of the toponyms is concluded with a reference to maps published in the minority language, whether published inside or outside the country discussed. Subsequently, for the various language regions the attitude towards the irredenta is discussed, i.e. regions inhabited by members of the same language-community, outside a national state where the language in question has a majority position. Here, it is rather difficult to give a clear picture of the changes, and to describe at the same time the attitudes to that specific region, which has resulted in some inconsistency here and there. The continuous shifting of the borders in the Alsace or in Istria made a consistent treatment impossible. The German attitude with regard to the irredenta is now discussed not only in the paragraphs on Germany, but also in those that cover France (the Alsace).

In order to treat the various language regions as homogeneously as possible, a 50%-norm has been used. As a minority-language-region, those parts of a national state have been considered where 50% or more of the population speak a minority language. Due to the fact that in many states there is no census-information available on minority-language speakers, it has not always been possible to keep to this 50%-norm. In those cases, the traditional language-boundaries were retained.

The sequence of the discussions on the minorities was selected at random, and is more the result of the arbitrary order in which the study-visits of the author took place. However, afterwards it appeared to be fortunate that a start was made with Great Britain and France. This was due to the fact that in these countries the involvement of the topographic services with geographical names gained its first momentum -through the consultation of local authorities and the use of special name-forms. Also, it is Great Britain where, from 1800 onwards, the concern for minority toponyms has been most pronounced. This country could serve as a model for the treatment of all other minorities.

Not all linguistic minorities in Western Europe are dealt with. In the bordering-off discussed in Chapter 1, the limiting factors have already been mentioned - these being the geographical concentration, size, and the autochtonous character of the minority

groups. Furthermore it was stated that the concept 'minority' indicates more a sociological Situation of feeling discriminated against, than a numerical one. For these reasons, no attention has been given to the Situation in Switzerland, where the constitution also guarantees the three smaller language-communities (French, Italian and Romansh) a treatment equal to that of the German-speaking majority. In Finland, the Swedish-speaking group, which, according to the constitution has an equal rights Position, has been treated. This has taken place as a result of literature-study which suggests a form of discrimination, and in order to allow a comparison with the Finnish-speaking population in Sweden, which is not legally protected.

Since the year 1960, Flanders no longer has a minority position on the map. It is still discussed here due to the fact that this position, parallel to that in French-Flanders and Eupen-Sankt Vith, has only been amended recently. Moreover, it might serve as an example of the administrative resistances and delays which must be removed before effecting a legal equal rights position for a minority language.

Hungarian and Croatian minority-language-regions in the Austrian Burgenland will not be discussed here, since the regions in question on the map are too small to base conclusions on. The Lowland Scots in Great Britain, the Occitan group in France, the Ladins, Friulans, Piemontese and Sards in Italy have not been treated for linguistic reasons. Their toponyms do not differ sufficiently from their national languages for the non-linguistically educated to go by. In Norway, the Speakers of Bokmål and Nynorsk live too close and intermingled to derive conclusions from the map. Due to insufficient Information, Northern Ireland, Galicia and the regions in Italy inhabited by Greek-, Albanese- and Croatian-speaking minorities will not be dealt with. In Luxembourg, both German and French are spoken, but as neither of them holds a minority position, this country is not treated either. The only other countries in Western Europe without linguistic minorities are Portugal, Andorra and Iceland.

The numbers of speakers of minority languages mentioned in Chapters 3 and 4 are derived front the study by Stephens (Linguistic Minorities in Western-Europe, Llandysul 1976). That study offers the most differentiated outline. The numbers to be found there, however, are always higher than those found in other sources. None of the sources consulted presented a definition of the concept 'minority-language-speaker'.

3.2 Great Britain and Ireland

3.2.1 Introduction – mapping

As the mapping of Ireland has been a British affair until 1921,the Irish Republic will be dealt with in the same section as Great Britain. From 1921 onwards, the branch of the Ordnance Survey in Dublin became independent. The development of the topographical mapping of the British Isles is illustrated in table 2. For the location of the regions with linguistic minorities, refer to figure 9.

Table 2	Chronology of the first topographic surveys of linguistic minority areas in the British Isles			
	Great Britain	Wales	Scotland	Ireland
1: 63 360	1801–1877	1810–1841	1857–1874	1852–1862
1: 10 560	1840–1896	1860–1888	1855–1877	1833–1846
1:253 440	1859–1888	1859–1888	1890–1891	1877
1: 2 500/ 5 000	1863–1890	1863–1890[a]	1855–	1900–
1: 25 000/25 344	1930–1956	1930–1956	1930–1956[a]	–
1:126 720	1902–1912	1902–1912	1908–1910	1912–1920

a With the exception of mountain areas

Sources: Ordnance Survey maps; Harley (1975)

3.2.2. Wales

In 1971 the number of inhabitants of Wales capable of speaking Welsh, was estimated at some 540 000, i.e. some 21% of the total Welsh population (STEPHENS 1976, p. 145). The regions where the majority of the population speaks Welsh, are situated in the north and west of Wales. These concern mainly rural regions.

Official mapping of Wales on a large scale first took place in a period when the major populated places had long been integrated into the British governmental System. The Domesday-Book already shows some 25 non-Welsh placenames in Wales (Pierce 1972/73). The Act of Union of 1536 proclaimed English the official language of government in Wales, and Welsh was prohibited for use in courts up until 1942. The ensueing anglicization of place-names was intensified at a later period of time by the internal colonization. The religious revival in Wales (against the Church of England) also contributed, curiously enough, to the anglicization of place-names as a new series of ecclesiastical names were rendered in the English version on the map. Examples are: Siloh, Elim, Bethel, Saron, Carmel, Horeb etc.,
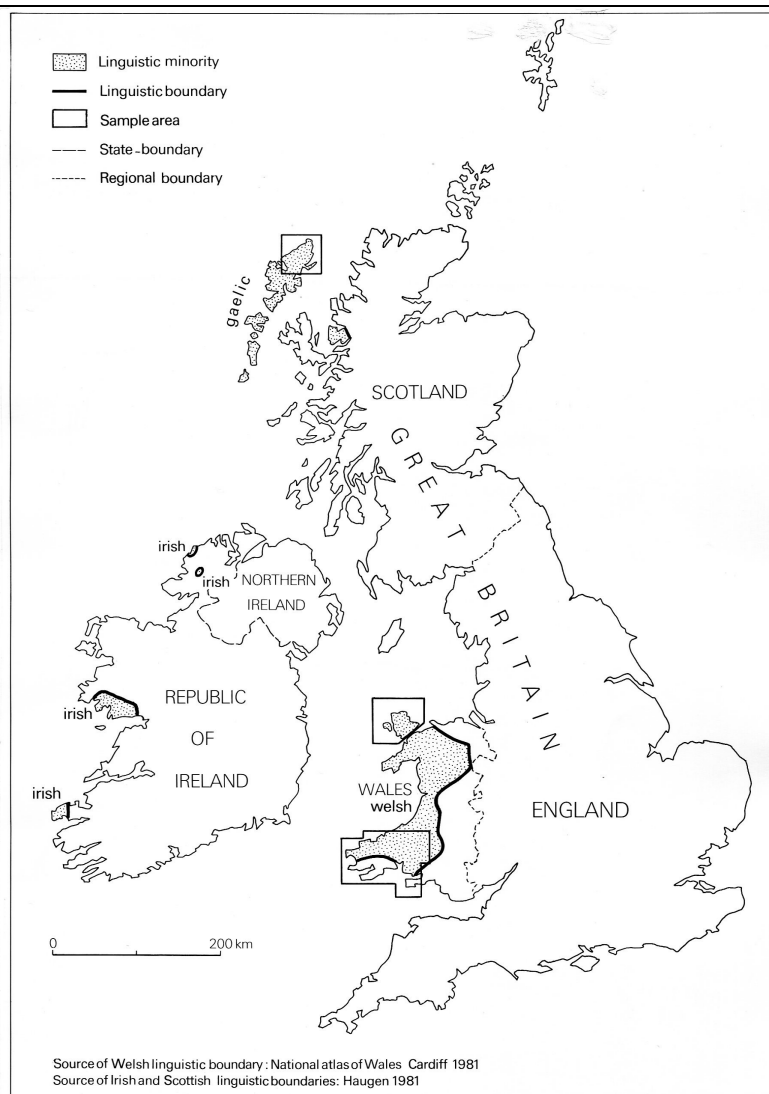
Figure 9 Linguistic minorities in Great Britain and Ireland.

The surveying and mapping activities carried out by private surveyors prior to 1810 were, in general, not characterized by concern for the correct spelling or etymology. At their best the resulting maps gave an idea of the pronunciation of the geographical names at that time. Saxton,for example, mentions in an atlas published 1576/79 *Carmarthen, Caermarthin* and *Caermarden* for one and the same place (Saxton 1579). N.Carlisle, author of a topographical dictionary published in 1811, states in that dictionary: "To illustrate the tottering Fragments of an expiring Language, or to adjust the Orthograpy which Time has unsettled, is difficult and dangerous" (Carlisle 1811, p. XVI). Aurousseau

says this somewhat more positively however, but with the same purport:

"The English attitude towards geographical names in other languages is shown by our treatment of Welsh and Irish names. We are content to use anglicized forms of the names of well-known places and geographical features in Wales and Ireland, leaving it to the Welsh and the Irish to produce maps of their own countries should they need them" (Aurousseau 1957, p.77).

The first surveys in Wales by the Board of Ordnance, later to become the Ordnance Survey, began in 1810. In 1841, the last sheets of Wales 1:63 360 were completed. Round 1810, both private as well as governmental mapmakers employed local experts for the determination of the correct orthography of toponyms. By local experts in particular the 'local gentry' was meant. In about 1810, one also initiated the guiding principle of keeping to the spelling Version which was used by the majority of the sources or by the majority of informants (Harley 1971, p.94). Apparently, the owners of local country estates did not always agree with one another.

It appeared to be of the greatest importance that the director of the Board of Ordnance at that time (1820), Col. Thomas Colby, came from Newcastle Emlyn in Wales. As such, he probably possessed some knowledge of the Welsh language, was certainly well disposed towards the Celtic languages and also led his surveying-officers in the same direction. Colby himself, indicates in the spelling of the Welsh toponyms how to link place-names up with the original meaning. He suggested hybrid Solutions which the linguists engaged in the meantime, such as L.W. Dillwynn and J.M. Traherne, dissuaded him from using. Under their influence it became practice to use the anglicized versions where these were accepted and generally understood. This is illustrated by the first edition of the map of Wales 1:63 360 dating back to 1818-1841.

In about 1820, the task of the topographers as far as toponyms were concerned, became increasingly difficult (Harley and Walters 1982). Where, formerly, proof-sheets were sent to the local gentry for approval, from then on topographers were expected to trace the meaning of the place-names themselves, as well as to ensure their correct spelling. They had to ratify the correct spelling of the names by reference to the sources on which they were based. Those origins could have been written a well as oral sources. At a later stage, that is from 1835 onwards, the Board of Ordnance used forms with special columns reserved for stating sources. These forms were bundled together to form name-books after the surveying activities had been completed. From 1839 onwards, these forms were printed (Harley and Walters, 1982). In about 1830, it became normal procedure for each surveying group to employ Welsh-speaking persons (Seymour 1980, p. 107).

When assessing the attitude then taken, there is question of the maintenance of the anglicized Version in regions with an anglicized population, and of the concern in reproducing the place-names in the most correct possible manner in regions which still had a Welsh-speaking population. With this aim in mind, Welsh-speaking topographers joined the surveying parties, and Welsh language experts assessed those names which were collected.

With the large-scale surveying and mapping of Wales for the map-series 1:10 560, in the period between 1860 and 1888, the situation changed (Seymour 1980, p.191). Hardly any Welshmen were involved in these surveying activities. This subsequently led to a great number of spelling errors which had to be corrected in the second edition of the 1:10 560 series in about 1905. In the meantime, for the one-inch map, a progressive anglicization took place. Where, in the 1831 edition of this map-series, the *name Careg Amman* was found, the 1:10 560 series published in 1891 states *Ammanford*, another example is *Cwm* (1831) and *Coomb* (1887). Then again, spelling errors disappear: *Llandeilo Abercywyn* (1831)/*Llandilo Abercowin* (1881)/*Llandeilo Abercywyn* (1974).

Despite the non-involvement of Welsh-speaking persons in this enormous job (Wales has some 1000 map-sheets for the 1:10 560 series), one can also report some progress made in the field of the processing of Welsh toponyms. In 1883, an instruction-leaflet was

published on the orthography of Welsh names accompanied by a list of words which frequently occurred as place-names elements (Stotherd 1883). The authors were Th. Rowland and R. Owen Jones, although the Ordnance Survey published the leaflet under the name of R.H. Stotherd.

In 1893, a report was published of an investigation into the manner by which the Ordnance Survey operated by a group of people named after its chairman, the Dorington Committee. This report[1] also included objections which were registered against the prevailing, defective recording of toponyms. Yet even the Dorington Committee kept to the instructions on the orthography of Welsh place-names and to the regulations such as were issued to topographers in 1874 (Ordnance Survey 1905). Regulation no. 15 states:
> "When names have assumed a corrupted form which is thoroughly established, their orthography should not be altered, even when they are known to be etymologically wrong;"

The committee maintained the opinion that when a particular spelling was generally accepted somewhere, this should be kept to and that no attempt should be made by changing the spelling to give a meaning to a name of which there was possibly sufficient evidence, and which could be different from the meaning locally accepted (Seymour 1980, p. 192). These regulations, known as the 'Dorington Rules', were accepted and also adhered to by all language experts from Wales and Scotland who, as a result of the report, were again involved in the recording activities. As a result of the recommendations included in the report, Welsh-speaking surveyors were again employed after 1892. In the revision of the map, they submitted the (new) names to the best local informants they could find. The result was subsequently submitted to Welsh language-experts, appointed by recommendation by the county councils in question (Ordnance Survey 1894). In the first half of this Century, we see, when consulting the successive editions of the map-series 1:10 560 and 1:63 360 (these are filed in the British Library in such a manner that the successive editions are to be found together with each other), both 'welshification' and anglicization trends (the sample-areas were South-West Wales and Anglesey).

The names of houses were often anglicized whereas the names of waterways were rendered in Welsh; suffixes such as -cwrt, -gleision, -hirion, change to -court or -hall. A generic name-element such as -afon- replaced -river-. Betweeen the third and fourth editions (1960/70), there is yet another wave of welshification of generics. Examples are -vale- which becomes -dyffryn-, -point- which becomes -trwyn-, and -mountain- which becomes -mynydd-.

Even before the topographical surveying activities in Wales, there had been an anglicization of Welsh names and welshification of English names. In this way, suffixes like -ton became 'welshified', hence, -tyn. As well as this, what seemed to be English versions of Welsh names were often transcriptions of the contemporary Welsh pronunciation. Therefore, it was extremely difficult to investigate whether there is a certain trend in the rendering of the names on the map (Pierce 1972/73).

In bilingual regions, the following cartographical solution is chosen: where a name has a divergent spelling in another language and it is impossible as well to establish which of them is the most generally accepted locally, both can be incorporated in the map. There is no rule which states that the place-names in a municipality with over a certain percentage of speakers of the minority language must therefore all be rendered in the minority language Version. The remarks in question in the report by Serpell on the functioning of the Ordnance Survey do not appear to be relevant as far as the compulsory sequence is concerned - the report stated: "Where both English and Welsh names are in daily use both names are given where space permits with the Welsh version first" Serpell 1979 p. 67). See also figure 10.

The maps of the Ordnance Survey show for Wales, even in the entirely Welsh-speaking regions, an abundancy of English generic terms which gives the map-content an English character. These generic terms like 'Orchard' or 'Cemetery' are only given in the English version on this series. On the second edition of the map-series 1:63 360, sheet

Caernarfon/Bangor (1890), there is still question of Welsh generic terms: 'Cromlech', 'Carn', and 'Mean hir' for, respectively, 'burial chamber', 'cairn' and 'standing-stone' in English.
Although there is much criticism from the side of the Welsh-speaking population, Sir David Serpell, who is cited above, does not consider it economically feasible to have generic terms in the English version to be changed in Welsh for maps depicting Welsh-speaking regions.

The Caernarfon & Bangor sheet[2] of the map-series 1:50 000 was examined for the nature of the names printed within the neatlines.
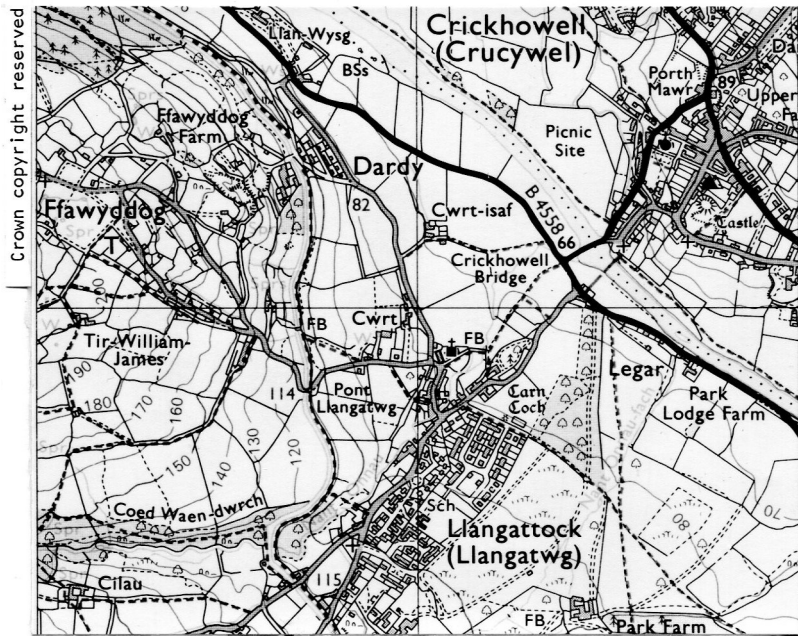
Figure 10 Bilingual toponyms in Wales. Reproduced from the 1980 Ordnance Survey 1:25 000 map, sheet SO 21/31, Abergavenny (Y Fenni), reproduced with permission of Her Majesty's Stationery Office.

Table 3   Toponym characteristics on topographic maps of the Welsh language area

	Absolute	Per cent
Welsh names	1 320	88
Welsh names with English generics	93	6
Bilingual names	6	0
English names	87	6
Total	1 506	100
English designations	422	
English abbreviations	340	
Sum total	2 268	

Source: Ordnance Survey 1:50 000, sheet 115, Caernarfon & Bangor (1974)

This resulted in the data presented in table 3; we are concerned here with a region in which 80% of the population in 1971 spoke Welsh.

Considering the report published in 1979 by Sir David Serpell, the criticism towards the Ordnance Survey had not yet died down (Serpell 1979, p. 56). There is still a continual stream of complaints about the inconsistent spelling of Welsh place-names. Obviously, it is the maintaining of the 'local usage'-principle which will inevitably lead to this (see also section 2.4). The report recommends a procedure by which the Ordnance Survey consults not only the 'local authority' on place-name orthography but also the 'Secretary

of State's Advisory Committee on Place-names in Wales'. Due to the equal rights of Welsh with English as the language of government (Welsh Language Act, 1967), it further recommends bilingual legends and bilingual marginal information on maps at scale 1:50 000 and smaller scales (Serpell 1979, p. 67/68).

The changes in the spelling now being incorporated are mainly the result of actions taken by the local authorities. In this way, the place-name *Conway* has been changed to *Conwy* by order of a decision taken by the local authority concerned.

An important event in Wales was the publication of the bilingual national atlas of Wales[3]. This is not the first cartographic publication in the Welsh language. The Welsh Office in Cardiff has been publishing cartographical material in this language for some ten years already (Tucker 1976; see also fig. 11). In Wales one is also engaged in the publication of a school-atlas, entirely in Welsh[4]. The existence of an Atlas Y Cymru, comprising topographic maps to the scale of 1:250 000 and rendered in the Welsh language, could not be confirmed. This work must be based on a gazetteer of place-names in the Welsh language.

3.2.3. Ireland

Ireland, or rather the Irish Republic has, numerically, a linguistic minority. Approximately 26% of the population speak Irish (1961 census). This is mainly due the fact that Irish is a compulsory subject in schools. These figures however, show how well-acquainted the population is with the Irish language.   Figure 9 shows that along the west-coast of the island only a few areas are found in which the proportion of Irish-speaking people is higher than 50%. The number of people that also speaks Irish in daily life is estimated by Fennel as being some 26 000 for 1980(Fennel 1981, p.32). Contrary to some other European countries where the minority language regions are considered an anomaly to be eliminated as quickly as possible, these remaining Irish areas are considered as being pilgrimage places for the Irish nationalists. This has not always been the case in Irish history, and certainly not before 1920 during the British administration.

The only proof of any official British action with regard to the Irish language is found in a passage of text quoted by De Hóir taken from an act adopted during the second half of the 17th Century:

"His Majestie taking notice of the barbarous and uncouth names, by which most of the towns and places in this Kingdom of Ireland are called, which hath occasioned much damage to diverse of his good subjects, and are very troublesome   in the use thereof, and much retards the reformation of that Kingdom,for   remedy thereof is pleased that it be enacted, and be it enacted by the authority aforesaid, that the lord lieutenant and council shall and may advise of, settle, and direct in the passing of all letters patent in that Kingdom for the future, how new and proper names more suitable to the English tongue may be inserted with an alias for all towns,lands and places in that Kingdom, that shall be granted by letters patent; which new names shall thenceforth be onely names to be used, any law, statute, custome, or usage to the contrary notwithstanding"   (De Hóir 1972/73, p.195).

However, little attention was paid to this act. In 1824, when about 30% of the population spoke Irish (the 1851 census gives some 25%), British topographers employed by the government came to Ireland to survey it. These activities were primarily intended to be used in the production of a base map for the purpose of collecting property-taxes.
However, the usual topographic information was also to be recorded and collected during these activities (Irwin 1977, p.16).
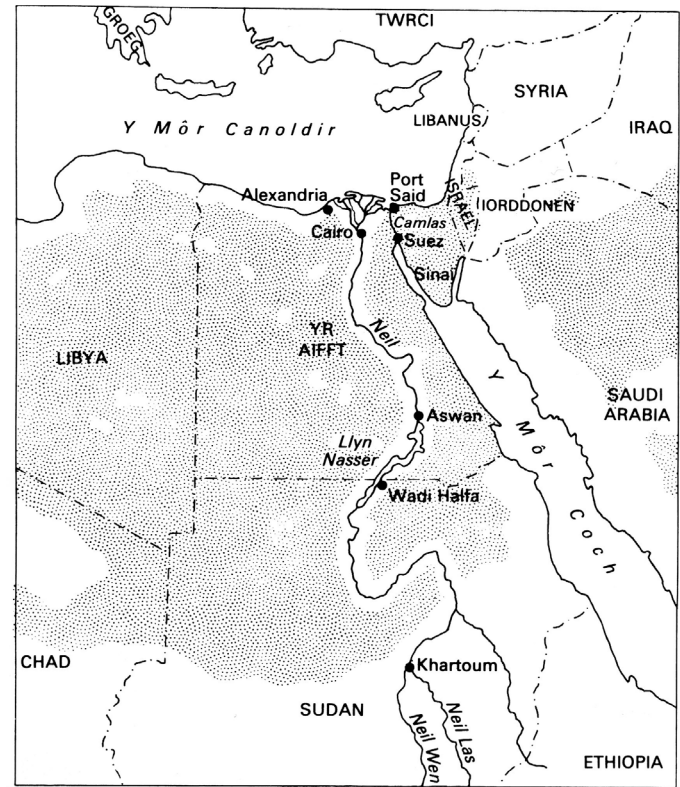
Figure 11 Detail of a Welsh language map produced by the Welsh Office (published in the Bulletin of the Society of University Cartographers vol. 10-2, 1976).

Similar actions had been initiated before by the overlords, but this time, it was the first large-scale survey ever completed (Andrews 1975, p. VII). The scale of the map was 1:10 560, and a reduction at 1:63 360 was also envisaged. The topographers recieved instructions from Colby, superintendant of the Ordnance Survey at the time, with regard to the naming of places, also with regard to the townlands, the demarcation of which was the responsibility of the Irish Government Boundary Department. Colby's surveying-officers had to note down the generally accepted spelling of all geographical names of possible divergent forms with their sources in the name-books. Colby's Instructions for the Interior Survey of Ireland to this effect read as follows (Andrews 1975, p. 311):

33. The persons employed on the Survey are to endeavour to obtain the best orthography of thenames of places by diligently consulting the best authorities within their reach.
34. The name of each place is to be inserted as it is commonly spelt,in the first column of the name book, and the various modes of spelling it used in books, writings etc. are to be inserted in the second column, with the authority placed in the third column opposite to each.
35. The Situation of the place is to be recorded in a popular manner in the fourth column of the name book.
36. A short description of the place and any remarkable circumstances relating to it are to be inserted in the fifth column of the name book.

The names collected and established by the Boundary Department had partially kept their former Irish form. This was not because of the respect the English showed for the Irish cultural heritage, but in order to guarantee the continued use of old documents in modern juridical procedures. Quite often, preference was given to the name derived from Irish above its English counterpart. The surveyors of the Boundary Department were also instructed to verify the spellings from official lists of names in the field, before the spelling was actually determined[5].

The topographers went further: their sources were the local landowners, bailifs

and rent-collectors, clerks, schoolmasters and existing maps. From these, the version was chosen (initially following indications by Colby) which was used by the majority of the sources (Andrews 1975, p. 122). If no majority could be found, then printed sources resulted in the final decision. Colby gave no indication of the etymology. He expected that, from the majority attitudes with regard to the spelling, general rules would emerge automatically. This hope appeared to be in vain. Generations of English-speaking colonists had eroded the Irish toponyms too much.

Larcom, Colby's representative in Dublin, introduced a different method in 1830. He followed an etymological attitude and recommended the selection of that name which approached most closely the original Irish name. This proves a 'well intentioned deference to the Irishness of place-names' (Andrews 1975, p. 122). At least this applied to the names of townlands, since the owners of properties remained responsible for the names of their houses and estates.

At its climax, the procedure developed by Larcom was as follows: Linguists were instructed to collect names in the field as they were pronounced by the Irish local population, and to study them in their local context. Subsequently, a number of historical spelling forms were added to the list with 'authorities'. For this purpose, even a Topographic Department was formed within the agency in Dublin, under the supervision of the Irish linguist John O'Donovan. Finally, the Irish versions of all names were noted down in a name-book together with the spelling chosen for the map. O'Donovan realized that most of the Ordnance Survey's map users were English-speaking and he consequently sought spelling forms which would spare the spelling instincts of the English. Also, the spelling of frequently occurring prefixes and suffixes were standardized. In cases where the usual spelling did not bring out the meaning of the place-names, a new spelling was designed by Larcom and O'Donovan (Seymour 1980, p. 89).

The results of O'Donovan's endeavours were not wholly accepted. The post-office services in Ireland which had already published a separate list of place-names in 1812, continued to use their own system. Of the governmental bodies, only the Valuation Office and the Census Office followed O'Donovan's example. The fact that the proposed spelling did only appear on maps which were difficult to obtain, did not increase the popularity of O'Donovan's endeavours. At the present time in Ireland, only academically educated persons use the Ordnance Survey spelling which differs somewhat from that of the post-office services. Examples are: *Dromdaleague, Killadysert* instead of *Drimoleague* and *Killdysart* (Andrews 1975, p. 126). Since the majority of the Irish population is only confronted with the spelling of the post-office services, the latter is the most current in use.

By 1846, the 1900 sheets of the map-series 1:10 560 were completed. Between 1852 and 1862, the series 1:63 360 followed. Between 1855 and 1895, an edition with contours was issued for which the names of hills and lakes were specially collected. The revised edition of the map-series 1:63 360 which appeared in 1900, gives many more place-names (Andrews 1975, p. 225). From the year 1900, a map-series to the scale of 1:2500 was produced. This map comprises fewer names than former series. In its production, the new procedure was followed to submit doubtful spellings to local experts which were generally appointed by the Royal Irish Academy. This was no improvement compared with the centralized toponymic bureau organized by Larcom (Andrews 1975, p. 284).

In 1920, Irish scientists produced a list of toponyms spelled in the Irish version. In contrast to O'Donovan, they did not need to supply an English version as well, or a version which could be pronounced by the English. These names were not published in map-form at the time. This occurred only in 1938 on a geographical map rendered entirely in Irish (Eire 1:500 000). In the meantime, the Irish department of the Ordnance Survey separated from the headquarters in Southampton and took over the responsability for the mapping of the 26 southern counties. The publication-programme of the newly formed agency comprised the series 1:126 720 (1912/18, and from the 1940s a new edition), and the 1:250 000

series. There have been no new editions of the 1:63 360 and 1:10 560 series.

In 1946, the An Coimisiún Logainmneacha (toponymic-committee) was appointed by the government in order to investigate how the anglicized Irish place-names could be restored to the original Irish forms. Its research-department, known as the Place-names Branch, became part of the Ordnance Survey in 1956. Up until 1968, this branch was engaged in the determination of the original spelling of the names of the most important topographical features. Its present aim is to determine the original versions of all names on the map as the cadastral mapping at scales 1:2500 and 1:5000 proceeds.

This had already been achieved for the counties Luimneach (Limerick) and Port Láirge (Waterford) in 1981 (O'Maolfabhail 1979, p. 175-179). This new 1:5000 map-series is bilingual and the Irish names are printed in a compact manner, with a smaller type-face beneath the much wider printed anglicized names (see also fig. 12). The marginal information is only given in English.
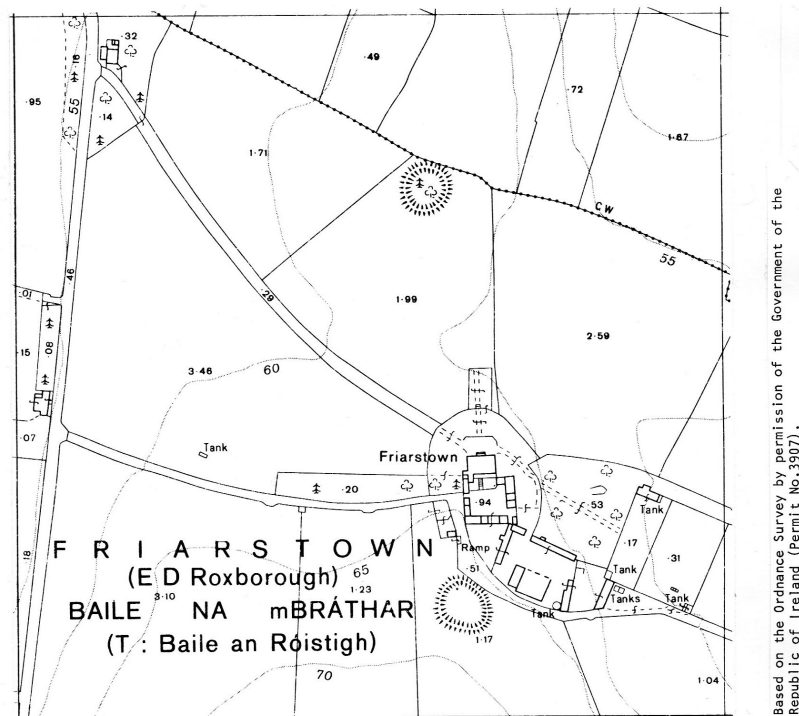
Figure 12 - Bilingual toponyms in Ireland. Detail of the base-map 1:5000 Contae Luimnigh, no.4866 (1978).

In fact, the Irish Republic is now obtaining its third series in official place-name-spellings, this time in their traditional Irish versions. We now have the gamut of these Irish forms via the forms which had been made suitable for English consumption by O'Donovan up to the entirely anglicized forms in use by the post-office services. Apart from these variants, still other forms of spelling are used by private cartographical firms (see table 4). On name-posts, several versions of names appear; the re-constructed Irish names and those of the post-office services (refer to figure 13 also).

Table 4   Toponym orthographies on maps of the Atlas of Ireland, the Ordnance Survey, Bartholomew's, the Irish Tourist Board and Fairey Surveys

Atlas of Ireland	Ordnance Survey	Bartholomew	Irish Tourist Board	Fairey Surveys
Sliabh Sneachta	Slieve Snaght	Slieve Snaght	Slieve Snacht	-
An Corrán	Corraun	Curraun Pen.	Curraun Pen.	-
An Geata Mór	An Geata Mór	Binghamstown	Binghamstown	-
Binn Ghulbain	Benbulbin	Benbulbin	Benbulben	-
Béal an Mhuirthead	Belmullet	Belmullet	Belmullet	Bellmullet
Muileann na Buaise	Bushmills	Bushmills	Bushmills	Bushmill
Na Neanna Beola	Twelve Pins	The Twelve Pins	Twelve Bens	Twelve Bens
Sléibthe Mààm Toirc	Maumturk Mts.	Maamturk Mts.	Maamturk Mts.	Maumturk Mts.
Béal Átha Seanaidh	Ballyshannon	Ballyshannon	Ballyshannon	-
-	Innishcrone	Inishcrone	Enniscrone	Inniscrone
-	Ballysadare	Ballysadare	Ballysodare	Ballisodare

Figure 13 Signpost in Northwestern Ireland, with official and traditional orthographies.

The policy of the Irish Ordnance Survey is now directed towards the bilingual indication of the geographical names on large scale maps. If no Irish versions of English toponyms exists, these are reconstructed b translation. The Irish versions of the names of townlands and parishes have been established in the An Tacht Logainmeacha (foirmeacha gwelge 1973), the Place-names Act. There also is a Post Office Act which, in 1975, prescribed to the post-office services Irish name-versions of the post-offices.

The anglicized versions of the names of administrative areas are those from the topographic map of 1830. The English form of the remaining names (except of streetnames) is not official, but it is considered as the standard for official sources (United Nations 1974). Besides the national atlas (Atlas of Ireland 1979) there is also monolingual Irish atlas-material for schools, such as an Irish edition of a school-atlas of the British publisher Collins-Longmans (O'Duinnin 1977). Wall-maps in Irish are also produced. Foreign names, apart from traditional exonyms like Londain (London), An Róimh (Rome) and Manchain (Manchester), have been revised and hibernised by the Terminological Committee of the Department of Education[6]. The Celtic language speaking regions such as Wales, Scotland, Cornwall and Brittany show Celtic names on these maps. Figure 14 gives details of two sheets of the national atlas which respectively mention the anglicized and the Irish toponyms.
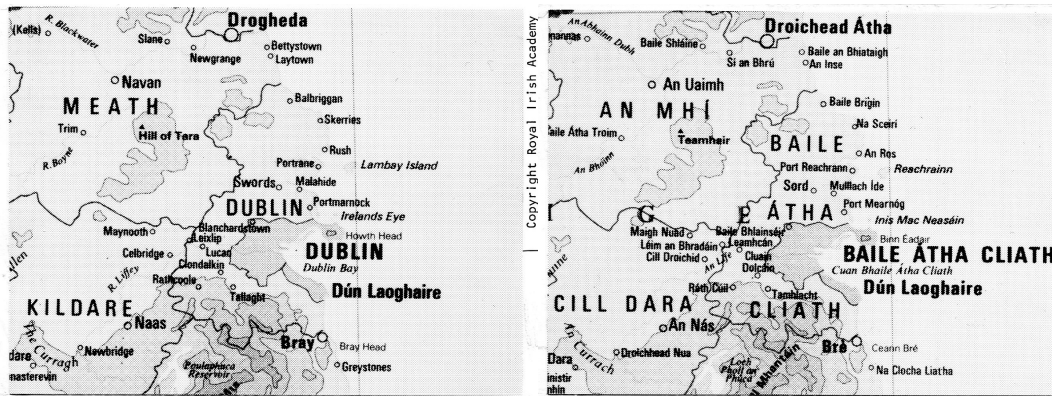
Figure 14 Details of sheets 2 and 3 of the Atlas of Ireland (Dublin 1979) prepared by the Ordnance Survey Placenames Branch, with anglicized and Irish place-names.

3.2.4 Scotland

The linguistic history of Scotland is more complex than that of Ireland or Wales. Apart from Celtic names, which are of Pict, Scottish or Welsh origin, Norwegian names are found in the south-west and north-west, and Danish names on the east-coast. In contrast with Ireland there is no ancient literature in which the original form of geographical names has been recorded. During the 1971-census, some 89 000 Speakers of the Gaelic language were listed. Apart from the Outer Hebrides, they only form a majority in the Loch Carron region on the mainland (Thomson 1981). See also figure 9.

At the time of the first topographical survey, the Lowlands had already become anglicized to a great extent. But also the toponyms in the Gaelic speaking region already had English variants (Fraser 1972, p.207/214). The first general map of Scotland published in 1595 by Mercator gives mainly coastal features, often in a phonetic Gaelic as well as in an anglicized version. The first detailed survey of the interior by William Pont in 1596 contained many place-names, but just as in the case of the first subsequent detailed survey by William Roy (1747-1755) they have been rendered in anglicized versions.

The scale of Roy's map was at 1:36 000. On the maps by the Admirality during the 19th Century, little care was taken of the names' orthography (Fraser 1972, p. 210). In the middle of the 19th century the topographers of the Ordnance Survey came to Scotland. In 1874, they completed the map-series 1:63 360. Between 1855 and 1877, they were engaged in a large-scale survey (1:10 560), and it was at that time that most field-elements were recorded for the first time with their names on the map. Initially, a not too pure Gaelic version, pronouncable by the English users, was chosen by the Ordnance Survey. During the revision of the map-series 1:10 560, which was started in Scotland in 1893, a correction of these names was desired. The problems encountered during this revision, i.e. whether or not the Gaelic names were to be spelled phonetically, whether or not Gaelic names were to be restored in their original forms and whether or not those Norwegian field-names which were initially put in a Gaelic form on the map with the greatest of enthousiasm, were to be 'de-gaelicized', were then submitted by the Ordnance Survey to a Place-names Committee under the auspices of the Royal Scottish Geographical Society, and later to the School of Scottish Studies at Edinburgh. Whereas these authorities acted as referees, the Ordnance Survey continued to take the final decision with regard to the spelling (Wilson 1891, p.257-259). It was in this spirit that the Scottish advisors declared:[7]

"For commercial reasons anglicized forms on postal addresses could not be changed. They are to be regarded, for ordinary purposes, as stereotyped."

Thus only field-names could be (possibly) changed. Fraser notes that the Gaelic names in regions where the language has become extinct are no longer used

(Fraser 1972, p. 211).

The presence of Gaelic field-names bears no relation to the current distribution of the Gaelic-speaking population. The existence of these Gaelic toponyms is only extended by the maps. The population no longer understands them and the standardization-actions taken, whether with regard to the original Gaelic versions or to the anglicized forms, appear only to be at a disadvantage to the Gaelic forms. On sheet 8, Isle of Lewis, of the O.S. map-series 1:50 000 (1960) the proportion of Gaelic place-names was determined at 83%. Gaelicized Norse toponyms were also considered Gaelic (e.g. Loch Grassavat; Loch Langavat; see also fig.15) As far as a progressive anglicization manifests itself on the map, it concerns the micro-names which change as a result of the settlement of English-speaking farmers in Gaelic-speaking regions. Most of the new names related to infra-structural or tourist-projects, also have an English character.
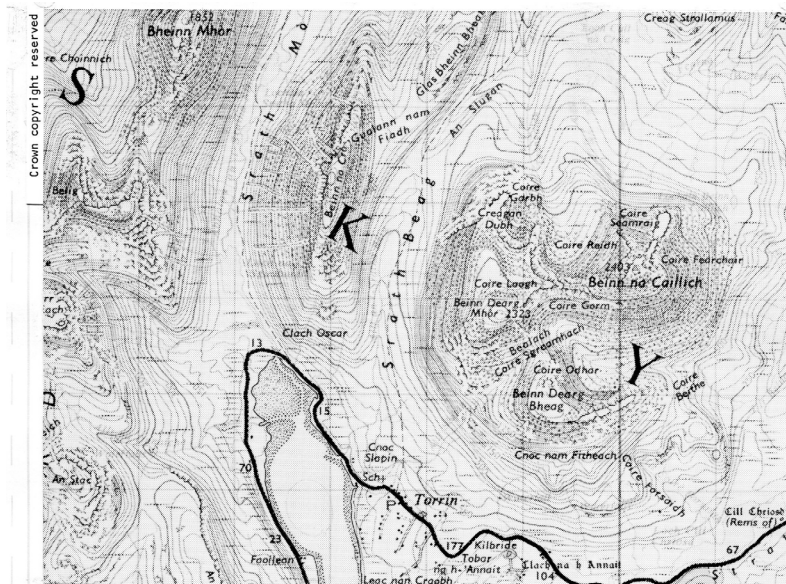
Figure 15 Gaelic toponyms in Scotland. Reproduced from the 1963 Ordnance Survey 1:63 360 map, sheet 25, Portnee (Permission of Her Majesty's Stationery Office).

In a recent inventory of the wishes of the users of topographic maps by the Ordnance Survey, contrary to Wales, there have been no objections received from Scotland with regard to the spelling of names in Scotland or with regard to the absence of marginal information rendered in Gaelic (Serpell 1979, p. 68).

In Scotland, there is no equivalent of the Welsh Language Act which could compel publishing Gaelic versions of official publications. The Scots themselves say that: "The number of exclusively Gaelic speakers is far too small to justify the expense which would be incurred in producing in Gaelic the very many Government publications" (Serpell 1979). The proportion of Welsh-speaking persons in Wales in 1971 was some 21%. In Scotland in the year, the percentage of Gaelic-speaking persons amounted to 1.8%.

3.2.5 Northern Ireland

In 1922, the Ordnance Survey of Northern Ireland in Belfast was granted the responsibility of the mapping of that region. Since that date, it has published three editions of the map-series 1:63 360, the large-scale series at scale 1:2500 and 1:10 560 have been revised and new map-sheets of the series of 1:253 440 and 1:250 000 have been issued.
The map series 1:250 000 is produced in conjunction with the Ordnance Survey in Dublin and a common grid is used (Taylor 1969, p. 89,90). The co-operation between the two agencies does not, however, extend to a common policy on place-names. In Belfast, one still sticks to the anglicized versions. On maps from the Irish

Republic town-names in Northern Ireland are rendered in the original Irish versions. It is not quite clear to what extent there is still an Irish-speaking minority in Northern Ireland. This is not enquired after in national censuses.

3.2.6   Conclusion

In Ireland, the minority situation lasted until about the year 1920. Ever since, there has been the exceptional situation that the language of the numerical minority has great prestige (as a result of its identification with the strife for independance) and is being pushed by official authorities, and therefore loses its sociological minority-status. The toponyms, re-constructed in the former minority language, were forced upon the users through the use of the topographic map.

In Scotland, where the use of the Gaelic minority language has practically disappeared on the entire mainland, no action is taken by the local population to de-anglicize the Gaelic names as a whole in so far as this has not already occurred in the case of field-names.

In Wales, the process of anglicization can be followed best of all, due to its early mapping. At present, there is again question of a welshification of field-names in the Welsh-speaking region, and of a bilingualism in a number of administrative names in bilingual regions. In Wales, bilingual legends on topographic maps are now being seriously taken into consideration. At present, Ireland as well as Wales, produce small scale maps and also atlases rendered entirely in their own language. The principle of following local-usage on the map results in inconsistent forms of spelling on the official topographic maps.

3.3   French attitudes to linguistic minorities

3.3.1 Introduction

After considering the English attitudes towards the Celtic language minorities, the French attitudes to the Breton minority will be discussed. Whereas the British and French in Africa, Asia and Oceania had develgped various transcription systems for rendering Arabic, Indian and Polynesian languages, it will be interesting to learn their attitudes to related languages nearer home. Within the boundaries of France, apart from the Bretons, the Basque, Flemish, German and Catalonian language minorities are dealt with. In parts of Savoy and the Duchy of Nice, as recently as 1866 still part of Italy, an Italian dialect is still spoken. Another Italian dialect is spoken on the Isle of Corsica. The whole population of the Langue d'Oc region could also be considered as a language minority group.

Of these language minority groups the Breton-, Dutch-, German-, Corsican-, Catalan and Basque- speaking ones will be discussed here. Occitanians and Italians in Southern France will not be dealt with, partly because the differences between Occitan and French are hard to discern. Figure 16 presents a general outline of the location of the language minority regions in France.

When comparing the French and British toponymic policies, one is struck by the strong, centralized control effectuated from Paris and by a traditional approach in France to language minorities. In entire Europe during the last century, with the exception of the Habsburg monarchy, there was little flexibility in the discriminating attitudes towards minority toponyms. In France, this attitude has persisted into this century, whilst in Britain, it has gradually changed. Bilingual signs on roads for place-names, for traffic information and for signs welcoming tourists, such as those appearing in Wales in the last few decades, are still unthinkable in France.
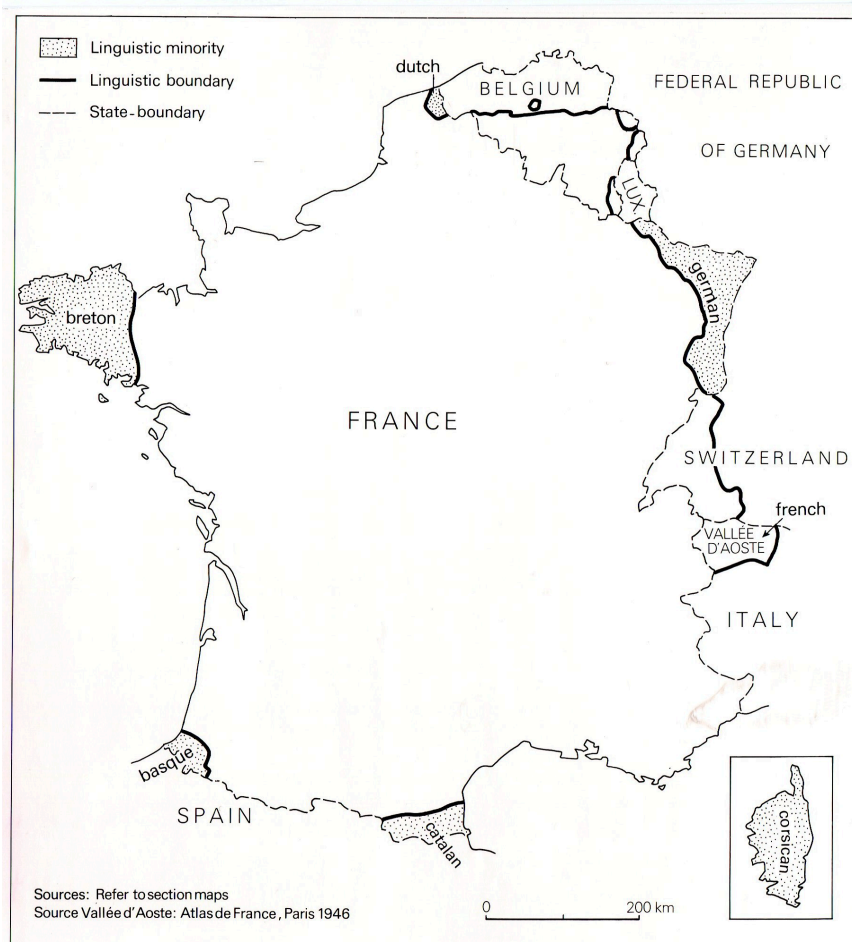
16 Linguistic minorities in France.

French mapping and the treatment of toponyms

Cassini, or rather, César François Cassini de Thury (1714-1784), started his surveys for the first semi-official topographic map of France at the scale of 1:86 400 in 1750. Although King Louis XV approved of this project, Cassini had to finance it from his own pocket. This slowed down the production because there was a continuous flow of money needed to pay the topographers. Cassini endeavoured to ease this situation by encouraging subscriptions to his map series. The topographers in his service were obliged to keep name-files, on which per parish, the names were grouped according to mapped features (Berthaut 1898). These files, 'Etats de villes, bourgs et objects dependants des paroisses', had, in principle, to be checked and countersigned by representatives of the local gentry or clergy. These name-files did not include any field-names and hardly any names of relief-features. As far as the latter is concerned, the nomenclature runs parallel to the defective relief representation. Names which were collected, were those of populated places, farms, mill-houses, castles, chapels, judicial districts ('justices'), ruins and important roads.

There are many errors in the names on Cassini's maps. Recordon explains how a few of the errors were made by the topographers, others by draughtsmen and engravers (Recordon 1947, pp. 309-321). In about 1790, the surveys of metropolitan France were completed. It was only in 1815, however, that the last of the maps were printed. From about 1790, the production of the maps was taken over by the 'Depôt de la Guerre'. The successor of the Cassini map was the 'Etat-Major'-map, published at the scale of 1:80 000 from 1818 to 1880. In 1880 the map sheets covering Corsica were published. The map sheets covering metropolitan France were completed already by 1866. From 1841 onwards, revised sheets appeared. Numerous printed instructions for the topographers of that period indicate the importance attached to a correct spelling of geographical names. From an instruction by General Pelet in 1838, it appears that names were taken primarily from cadastral

maps. Later instructions, such as by General Blondel in 1852, warned against freely copying cadastral names since the latter contained many 'cacographies' (incongruities). Also in General Pelet's instructions, name-books are mentioned, known today as 'Cahiers topographiques'. In these books, names and other special details had to be recorded. At least two educated inhabitants of the area surveyed had to ratify the spelling (Recordon 1947, pp. 314, 315). Since 1905, name-sheets have been used in the production of the 1:50 000 series. These name-sheets, called 'calques de noms' or 'calques des ecritures' (see also fig. 18), are documents on which the topographer indicated the location of a feature's name. From 1911, the 'États justicatifs des noms' have been added, these being books in which the collected names and their sources are noted down (see fig. 17). The columns in these books offer space to record the feature-names, spelled according to the cadastral map or previous topographic maps, the local government, inhabitants, a description of the nature of the named feature, and the final choice of the name's orthography.

In the production of the 'Carte de l'État-Major', assistance was obtained from the French alpinist-club in the collection of Alpine names, for which purpose a special committee was formed. In 1934, the topographic service, renamed Service Géographique de l'Armée in 1877, established a 'Commission d'Études de la Toponymie en régions montagneuses'. In 1942, the organization, now called 'Institut Géographique National' (IGN), established a so-called 'Commission de Toponymie'. In the training courses given by the 'École Nationale des Sciences Géographiques', affiliated to the IGN, courses in toponymy are also included (Deslandes 1961/63).

Working methods of the French topographers in the field

Before proceeding to the field, the name-books are already partly filled in by the topographers. The first duty of the topographer in the field, is the verification of the names, their spelling and the location and extent of the named feature. In order to achieve a certain density of names on the final map, the topographers supplement the name-books with the names of populated places, individual buildings, hydronyms and oronyms, also with names of isolated features such as road-junctions, wells and field-names ('lieux-dits'). These last names are only added when there is a low density of other names. The names collected are checked with the local population; one aims at the inclusion of current names. The regulations contain categories of people to be consulted about names. The collected names are first checked for location and spelling by the local municipality, or by persons authorized to do so. A second check is carried out by the heads of the survey parties and, if necessary, the names are submitted to official regional keepers of records and archives. As a third control, the name-books are submitted to the 'Commission de Toponymie' of the IGN (IGN 1968).

The toponymic doctrine of the IGN

There is no national committee in France which co-ordinates all toponymical studies. The IGN is therefore obliged to deal with all problems arising in connection with map-names. For this purpose, the 'Commission de Toponymie' was set up within IGN in 1942. Immediately after the Second World War, the IGN formulated the principles by which names would be represented on French topographic maps. They started with the technical consideration that the various map-scales had to maintain a minimum and maximum names density. On the 1:20 000 map scale, the aim was 6 to 8 names per sq.km and on the 1:50 000 map scale 2 names per sq.km, and so on (Recordon 1947, p. 311). Further a 'nomenclature dans toute la mesure du possible, "française"' was aimed at. The reasons given by Deslandes for this policy were that the maps should be suitable for all French people and not just for the local population, and that the maps depicting French national territory would be seen as a national product by other countries. Only French orthographies could satisfy all needs. France had only one language and this had to be used on maps. Maps with names in the local dialect could be made by local toponymists when there was a need (Deslandes 1947).

Figure 17A Frontispiece of the État justicatif des noms, i.e. the inventory and account of the collected toponyms, IGN.

Figure 17B Completed form of the État justicatif des noms
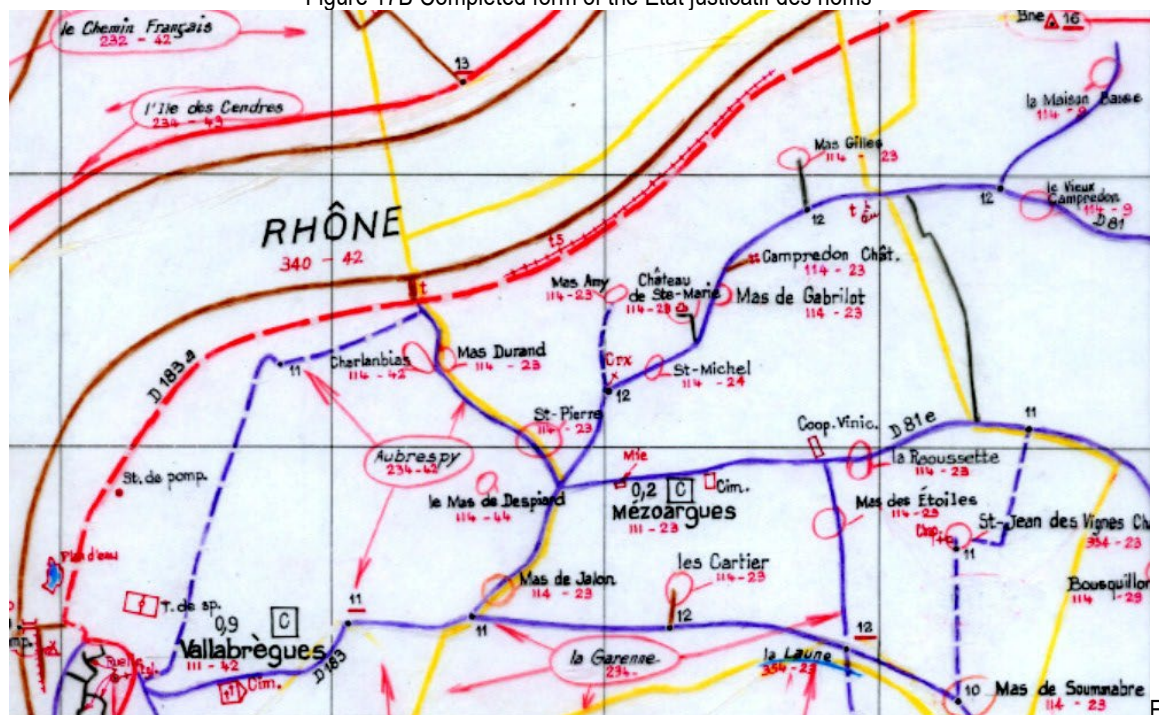
Figure 18 Calque des écritures, IGN. Designation of both scope and character of the collected toponyms. Reproduced with the permission of the Institut Géographique National. This example has been taken from the Nîmes region.

The manner in which the nomenclature in French had to appear was also indicated by Deslandes. A translation of all names into classical French was not necessary -

an unobtrusive frenchification was desired i.e. the so-called "Francisation discrete". The above considerations resulted in the following conclusions: 1) the French orthography should be used where it could be reconciled with local word-forms and speech. The local population had to be able to recognize names which had been changed slightly. Only letter combinations or individual letters from classical French were allowed to be used in the name-transcriptions. 2) Any official spelling decided upon had to be respected. Thus, in the annually published population census lists issued by the INSEE (National Statistics Institute), the spelling of municipality-names became officially recorded. This orthography is adhered to on the map. 3) Moreover, 'etymological transcriptions' were to be chosen where the original meaning of the names was, where possible, negotiated in the transposition of the spelling. Finally, 4) a cautious frenchification of dialect names was deemed necessary. Nothing appears about other languages spoken in the Republic in the instructions. Authors outside IGN as Rostaing also ignore linguistic minorities, at least if still in existence after 1400 A.D. (Rostaing 1974).

Since Deslandes (1947), the IGN doctrine regarding names has been revised. According to Pégorier, in 1971 it comprised the following regulations (Pégorier 1971): 1) the spelling of the officially recorded municipality-names is to be accepted integrally. Owing to the absence of other responsible organizations, the IGN has assumed the responsibility of determining and fixing the spelling of toponyms on its maps. To this end, a special committee has been established to formulate instructions. 2) In the case of several variants of a toponym, the topographer must decide upon one particular version. In this decision, he must be guided by the consideration that the name should correspond with current local usage. This contrasts with earlier considerations whereby the etymology played an important role. The function of the name is only that of indicating a feature. This advocates against any change - both against a strict frenchification as against an adaptation to dialects or minority languages. 3) In deciding upon a certain orthography of a name, the variant chosen must fit local pronunciation best.

According to Ramondou, the Commission de Toponymie now uses the following principles (1981): 1) Respect for the traditional orthography of the toponym when still in use. It is first established as to which dialect area the toponym belongs, and the spelling is adjusted to that dialect. The background to this is that the toponymy must be so rendered that the original users of that name, that is the local population, will understand and accept it. "Il n'est question ni de franciser ni de dialectiser des formes connues. La toponymie doit etre aussi proche que possible de l'usage local" (Ramondou 1981). However, a more frenchified orthography is used if the traditional way of spelling is no longer current. 2) Whenever possible, the selected spelling should conform with the etymological origins of the name. 3) The decision to revise the spelling of a toponym is only taken out of real necessity and when approval has been obtained from the local population.

Below, the developments perceived in the spelling of toponyms in language minority regions will be presented. Successively Brittany (the differences between the French and British attitudes regarding their Celtic minorities will be discussed), French-Flanders (where successive stages in the frenchification of names are apparent), the Alsace(where the frenchification of names is dependant on successive map-scales), Corsica, Roussillon and the Basque Provinces will be dealt with. Both Brittany and the Basque Provinces have typical settlement-structures which influence toponym categories. In Brittany, the rural population lives mainly in hamlets, and in the Basque Provinces in isolated farmsteads. These forms of habitation result in few place names suitable for inclusion in the smaller scale maps. In Roussillon and on Corsica, the languages are cognate to French and therefore easily translated. With regard to the Corsican names, the Institut Géographique National has, since 1960, repeatedly revised its ideas.
In order to give an overall view of the maps available for research into place-names, a table is set out below of the first editions of various topographic map series for the language minority regions in France (see table 5).

	France	Brittany	Fr.Fland.	Alsace	Corsica	Roussill.	Basque Pr.
1: 86 400	1750-1815	1790-1815	1758	1760-1770	-	1770-1780	1770-1780
1: 80 000	1818-1880	1850	1832-1835	1835-1839	1864-1880	1850-1866	1851-1859
1:100 000 [d]	1879-1915	1891-1905	1885-1893	1920-1922 [b]	1790-1824 [a]	1896	1893
1: 50 000	1922-1980	1962-1980	1936-1945	1920-1922	1958-1980	1936-1971	1950-1968
1: 25 000	1921-1980	1960-1980	1940-1947	1928-1937 [c]	1958-1980	1969-1972	1953-1969

a   Tranchot 1:100 000
b   Also: Karte des Deutschen Reichs 1:100 000 (1895-1901)
c   Also: Messtischblätter Königliche Preussische Landesaufnahme 1:25 000 (1899-1902)
d   Carte de l'Intérieur
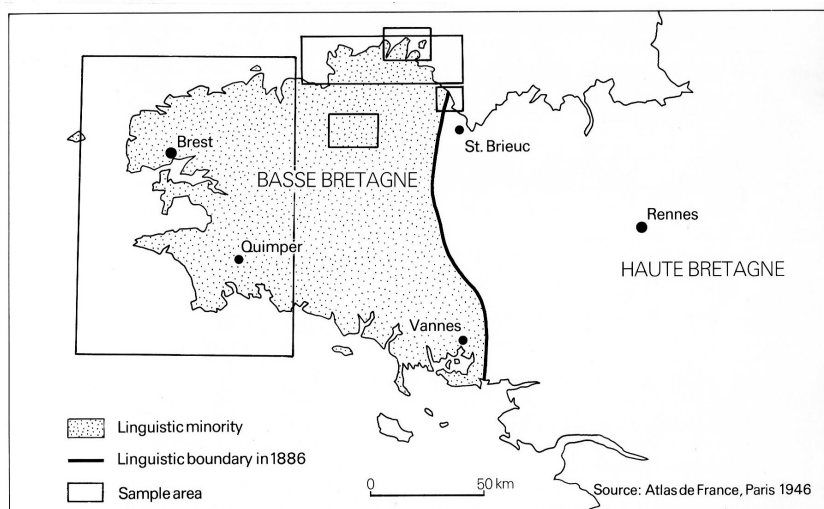
Figure 19 Situation of the language-boundary and of the sample-areas in Brittany

3.3.2 Brittany

Armorica, which suffered badly at the hands of sea-pirates in the 3rd and 4th centuries A.D, has had a strong influx of Celts from the British Isles beginning in the 5th Century A.D. This immigration was weakest in the South-East, the Vannetais, which maintained its Gallic-Frankish character the longest (Lexikon des Mittelalters 11,3, 1982, p. 615). Due to the immigration into this region, which got the name Britannia Minor (as opposed to Britannia Major), the Celtic language was maintained. From the names on the map, it can be seen that the outermost border of where the Celtic language has survived, is the line Mont Saint Michel-Dol-Montfort-Redon-Saint Nazaire. West of this boundary line, all names which ended with the Latin "-acum" have had their ending abbreviated to "-ac". Elsewhere in Northern France, these endings have been changed to "-é" or "-y" (Rostaing 1974, p.119). The language boundary has since shifted westwards. The present one, as shown in figure 19, is also the boundary between the regions Upper and Lower Brittany. According to Stephens, Lower Brittany has, at present, a population of some one and half million, of which 44% still speak Breton. Of the children, the figure is only 8%, the result of almost a thousand years of development (Stephens 1976, p.363). Breton has not been used as the administrative language since 1084. The region has not been independent since 1514, and in 1532 the Treaty of Vannes was signed unifying Brittany with France; in 1539 French was ordained to be the only language permissible in proclamations. In Upper Brittany, French became the legal language in 1579, and in Lower Brittany by about 1640.

Just as in other regions in France with minority language groups, the revolution of 1789 brought about a deterioration in the language situation. On the 21st of October 1793, state schools were established all over the region, and French was declared to be the only language to be permitted for use in education. This was also the rule for local government. The province was divided into three 'départements' while all privileges were suspended. During the German occupation, education in Breton was permitted starting from 1941, but this came to an end in 1944.

The cartographical representation of toponyms

Just as it applies to all language minorities in France, with the exception of the militarily vulnerable regions in the north and east, the national mapping in Brittany has also consistently been slow to take place. Cassini's map was only surveyed here in about 1790, and published in 1815. The Carte de l'État-Major, which began in 1818, did not include Brittany until about 1850. The first new surveys for the benefit of the Carte de France 1:50 000 type 1922, date back to the 1960s.

In order to investigate changes on large-scale maps, two regions on either side of the current language boundary have been selected on the northern coast of Brittany. These are: the area around Tréguier represented on sheet 156 of Cassini (1789) and on sheet VIII-14, Tréguier, of the Carte de France au 1:50.000 (1969) and, on the French-speaking side of the language boundary, the area of St.Quay-Portrieux found on sheet 156 of Cassini (1790), and on sheet IX-16, St.Quay-Portrieux, Carte de France au 1:50 000 (1966). The results of the comparison of these maps are given in table 6.

Table 6   Changes in toponyms on official maps of Brittany, 1789-1980 (per cent)

	Tréguier 1789-1969 large scale	St. Quay 1790-1966 large scale	North Coast 1790-1960 town names	W. Brittany 1919-1980 small scale
Unchanged names	56	52	52	83
Frenchified names	4	2	36	1
Translated names	1	–	–	–
New French names	–	2	–	1
Bretonized names	15	7	–	6
Uncategorized names	24	37	12	9
Total number[a]: per cent	100	100	100	100
absolute	177	82	44	694

a   Total number of names in sample region retrieved on modern maps

By frenchification is understood, the addition of accents and the substitution of -ai, -o and -ar by -ay, -au, and -ard. Bretonized names were considered to be those in which "min" became "men", -ch was changed into -c'h- and (e)au in o and "Ker" was substituted for "Quer", and "plou" for "plo". The heading 'uncategorized names', comprises those names which have been unsystematically changed, having more the character of correcting writing errors, such as -u to -n, -in to -m- and -t- to -l-. Among the new French names are: *Vieux Bourg* instead *of Vieux Quimerch*, and *Lothey* for *Landremel*. To the translations belong *La Croix Neuve* for *Croas Nevez*, *Bois le Roche* for *Coat an Roc'h*.

The results for these large-scale maps do not necessarily apply to all categories of names; names of populated places are therefore studied separately. For this purpose, the spelling of a number of names of larger populated places on the northern coast on Cassini's maps, are compared with the current 1:50 000 maps. Because the changes in the names appearing on the map may be influenced by the map scale, it is for this reason that not only the large-scale 1:50 000 maps are examined, but also the names on small-scale map series. Therefore, sheet 21, Brest, of the series Carte de France 1:200 000 (1919) is compared with sheet 13, Brest, of the series Carte Touristique 1:100 000 (1980). In comparing the results shown in table 6, it appears there has been definitely no further frenchification of names in the period 1919-1980. The changes between the mapping by Cassini and the current maps affected mainly the names of larger populated places where pronunciation has been clarified with the use of accents. The percentage of spelling improvements under the heading 'uncategorized names' for the small-scale maps in table 6 is large. Apart from the inclusion of accents, there is hardly any question of obvious frenchification. It is remarkable that, among the bretonized names, none of these are of the larger populated places. The spelling of these names was legally fixed at an earlier stage.

The names of islands, capes, banks, bays, and, in general, coastal features are an exception to the rule. These coastal names have been frenchified to quite a strong degree. During their surveying, little account was taken of the Breton language (Dyevre 1948). The revision of the nautical charts of Brittany around 1950, was preceded by an inquiry after the names used by the Breton sailors with the intention of rectifying the resulting possible incorrect, or incomprehensible spellings (Falc'hun 1948). Falc'hun, formerly professor in Breton at Rennes, and an authority in the field of the Breton language and its toponyms, preferred bilingual names to be included in the nautical charts and, through a more rational manner of spelling, to achieve a correct pronunciation of the names. He also advocated the rectification of translation-errors, but realized himself that through long tradition and usage, faulty transcriptions of names could not be put right, especially on documents such as nautical charts, which are concerned with safe navigation.

To assess the influence of scale, the number of names in various categories were compared, between the 1:50 000 series (sheet Belle Isle en Terre, VII-16, 1967), the 1:100 000-series (sheet 14, St.Brieuc-Morlaix, 1976) and the Michelin Road Map at the scale of 1:200 000 (sheet 230, 1979). The result of this comparison is given in table 7. It appears that on the smaller scales the percentage of French names and ecclesiastical names (also French!) is higher; it increases in total from 12% to 28%. The proportion of Breton names decreases slightly from 83% to 66%. On an even smaller scale map, the Carte touristique 1:250 000, the proportion of generic-terms increases again, as the names of all kinds of features of interest to visitors, such as 'menhirs', 'alignements', beauty spots and view-points, are added to this map.

Table 7   Influence of the scale on the ratio of frenchified vs 'bretonized' toponyms (per cent)

	Belle Isle en Terre 1:50 000	St.Brieux/Mor-laix 1:100 000	Michelin map 1:200 000
Breton names	83	80	66
Breton names with French generics	3	3	3
Ecclesiastical names (in French)	4	8	13
French names (eccl. names excluded)	8	8	15
Uncategorized names	2	1	3
Total number: per cent	100	100	100
absolute	956	427	86
French designations	83	4	1

In analyzing the distribution of frenchified names in Brittany, it appears that they are primarily defined by the infrastructure in the military, ecclesiastical and traffic engineering fields. Around the medieval castles, small 'islands' of French toponyms are found (names of woods, parks, mills etc.) and this is also the case around church properties. As far as the military infrastructure from the 19th and the beginning of the 20th century is concerned, a large amount of French generic-terms and names of fortresses are to be found especially on the map at the scale 1:200 000. Many road-junctions and railway-stations are named in French. In recent town-developments, French names are preferred for new districts: Cité Belair, Cité du Polygone etc. All generic-terms, in French 'designations topographiques', are rendered in French.

A comparison between Wales and Brittany

During the first topographical survey of Wales in 1830, much attention was given to the rendering of geographical names.During the second survey, at a large scale, in about 1880, no Welsh-speaking staff were employed. Though numerous corrections were made at a later stage, the manner in which many names have been recorded was final. In this century, a trend can be discerned towards the 'welshification' of generic-terms in toponyms and an 'anglicization' of the names of private properties. A religious revival in the last century led to the adoption of many new ecclesiastical

names, mostly written in English, such as Hebron, Sion and Bethesda. At present in Wales, there are signs of a return to a Welsh orthography, and of the appearance of bilingual names. English and Welsh versions of the same name are placed beneath each other (see figure 10). Though the mapping of the 1880s produced a number of topographical designations in Welsh, these are no longer included on contemporary maps.

Recently, in Brittany as elsewhere in France (Ramondou 1981), a trend might be observed to correct the spelling transcribed into French of language minority toponyms. There is no question of a return to the Breton spelling, although an attempt is being made nowadays to standardize it[8] (a reversion to the official spelling of one of the non-French languages is to be found only on Corsica). Neither are bilingual names, such as Quimper-Kemper, adopted on maps. Compared with Wales, the proportion of ecclesiastical names, originating in medieval times, is remarkably large. It appears, from the exclusively Breton names of farms, that hardly any (French) internal colonization took place in Brittany. Both in Wales and in Brittany, the names of the larger features are rendered in the majority language - for example, Black Mountains, Bristol Channel, Cardiff and Swansea in Wales and Montagne Noire, Iroise, Baie d'Audierne, Vannes and Quimper in Brittany.

Breton linguists urged the IGN, when the mapping of Brittany at a scale of 1:50 000 started in the early 1960s, to be consulted, possibly by way of nominating a 'Commission de toponymie bretonne' (Falc'hun 1958, pp. 413-421). The guiding principle of one of their proponents, Falc'hun, was the selection of those forms of spelling which would guarantee an accurate pronunciation and interpretation of the Breton names. Because most map-users would pronounce these toponyms in a French manner, the spelling would have to be adjusted to the rules of contemporary French orthography. The prevailing opinion of Breton linguists was, that the introduction of the official Breton spelling on maps would demand too many modifications.

It has not been investigated to what degree the specific settlement pattern of Brittany has influenced toponymie developments. Undoubtedly the relatively dense agrarian population, distributed over a large number of hamlets (écarts), has functioned as a shield against rapid frenchification. The 'départements' in Brittany have the largest density of hamlets of France. The départements of Finisterre and Morbihan do have 30-40 hamlets per sq.km. One-seventh of all 'écarts' in France are found in Brittany.

3.3.3   French-Flanders

The boundary which separates the Dutch-speaking community in Northern France from its French-speaking neighbours has been shifting northwards ever since the Middle Ages, although at present it seems to be stable. The location of this boundary at the time of the first topographic surveys is relevant to this study. Around 1750 it must have coincided with the course of the rivers Aa and Leie. The area bounded by these rivers and the present Franco-Belgian border i.e. the former districts of Belle, Broekburg, Kassel and Sint Winoksbergen (in French respectively Bailleul, Broucbourg, Cassel and Bergues) has been a part of France since the reign of King Louis XIV: Broucbourg since the Peace-treaty of the Pyrenees (1659), Bergues since the Treaty of Aix la Chapelle (1668); Bailleul and Cassel since the Peace-treaty of Nijmegen (1678). Dutch is a minority language in this area and the status of the Dutch-speaking population here has gradually deteriorated. In 1789 French-Flanders became part of the 'Département Nord'. Privileges were abolished by the central government in Paris; in 1853, education in Dutch was officially prohibited. In 1975 Stephens estimated the number of Dutch-speaking people at about 90 000 (Stephens 1976, p. 358), which most likely is an exaggeration. See figure 35 for the language boundary location.

Cartographical representation of the toponyms

A large-scale map series of the area does not exist in Dutch. To trace the attitude of

the French government towards the Dutch-speaking minority, the orthography of the names on maps in the Grand Atlas of Blaeu (Vol. 4, 1663) has been compared with that of subsequent French topographic maps and commercial series. Blaeu's maps are at scales between 1:100 000 and 1:140 000. About 80% of the names on these maps are in Dutch. They were compared with the names on the maps by Cassini and De Ferraris both at a scale of 1:86 400, with the 'Carte de l 'État-Major' 1:80 000, the 'Carte de France' series 1:25 000, 50 000, 100 000 and 1:250 000, and with the names on the 'Carte Michelin' at scale 1:200 000. For the study of French-Flanders out of Cassini 's maps the sheets 5, St. Omer (1758) and 6, Dunkercke, (1759) were chosen. They were compared with corresponding sheets of later map-series. The map of the Austrian Netherlands by the Comte de Ferraris, using the same triangulation-network, scale and projection as Cassini, was published between 1770-1777 by order of the Austrian overlords[9]. The orthography of the place-names on this map is practically the same as on Cassini's. The operation was carried out by French surveyors while the map was delineated by French engravers in the same style as Cassini's. The sheets Dunkerque and St. Omer of the 'Carte de l 'État-Major' date respectively from 1832 and 1835. The map sheets 1:25 000 and 1:50 000 from the 'Carte de France' series originated in the period 1936-46 while the sheets from the 'Carte de France' 1:100 000 (Dunkerque and St. Omer) date from the period 1954-59; the 'Carte Touristique' 1:250 000 dates from 1974 and sheet 51 of the 'Carte Michelin' 1:200 000 was published in 1970 (12th ed.).

Comparison of names on Blaeu's maps with those on the modern topographic maps gives the following results (see table 8):

Table 8   Changes in toponyms on maps of French-Flanders from Blaeu (1663) to modern French topographic maps, approx. 1960 (per cent)

	1:25/50 000	1:100 000	1:200 000	1:250 000
Unchanged Dutch names	35	28	39	41
Frenchified names	32			
Translated names	22	72	61	59
New French names	6			
Unchanged French names	5			
Total number[a]: per cent	100	100	100	100
absolute	273			

a   Total number of names from Blaeu retrieved on 1:25/50 000 maps.

The 'unchanged Dutch names' listed in table 8 are still spelled in 17th century orthography. Letters or combinations of letters, such as "y" (now i or ij), "ck" or "c" (now k), "gh" (g), "ae" (aa), "i" (ij), "x" (ks) are regarded as outdated, compared with current Dutch spelling. In the same way, the French orthography of Dutch toponyms in Belgium maintains the former Dutch spelling.

Names are considered to be frenchified when Dutch sounds have been transcribed in the French alphabet, or when orthographies have been adapted to the French pronunciation. Examples of the first aspect are the Substitution of "q" and "cqu" for "ck" and "k" (e.g. *Bambeke - Bambeque*) or "i" for "y" (e.g. *Craywyck - Craywick*) and the addition of the article. Examples of adaptations are to be found in *Grevelingen - Gravelines*, and *Speerlicke - Eperlecque*, *Predembourg* for *Pre(d)enburg*, and *Balemberg* for *Balenbergen*. Accents and diaereses have to clarify the pronunciation in French. Thus, *Arneke* becomes *Arnèke* and *Quaat Yper* becomes *Quaëdypre*. Additional generic designations also fall within this category, as long as they are not abbreviated. Amongst the names translated, a distinction can be made between translations of the entire name, and the translations of the generic-elements or of additional adjectives such as 'large', 'old' or 'northern'. Examples of the former are: *Doulieu* for *Zoeterstede*, *Belle Crois Fme.* for *Schone Cruise Heer.* Examples of the latter are: *Gde. Synthe* for *Groot Sinte*, *Mont de Boeschepe* for *Boeschepeberg*. It is often difficult to discern between translated or untranslated names, or between a translation and an added generic designation in French. The "fme" for instance in

Fme. Vanhoofe, is an abbreviation of the French 'ferme' (farm) and as such is considered a topographic designation. Names preceded by such abbreviations have not been considered as translations.

The category 'new French names' comprises mainly names of bridges and watercourses. The many wars and inundations which have harassed this region in the past, apparently have resulted in new names for reconstructed features. *Duinkerksvaart* became *Canal de Bergues*, possibly owing to the fact that another, new canal was given the name *Canal de Dunkerque à Furnes*. The category 'unchanged French names' comprises mainly names of ecclesiastical institutions and castles. Some names on Blaeu's maps do not occur on current French maps. These are mainly names of small features such as mills, chapels as well as older regional names which have fallen into disuse as a result of new administrative divisions, and old names for roads which are indicated by numbers on modern French maps.

Stages of frenchification

When comparing the names of Blaeu with those of Cassini, the État-Major, the Carte de France as well as with the various tourist maps it appears that frenchification of the toponyms of French-Flanders was effectuated in stages. Cassini did not render the "ck" and the "k" sound as "qu". On his maps one still finds the names *Dunkercke*, *Bambeke*, (see also fig. 20) and *Morbeke*. Only with the État-Major do we find that they have become *Dunkerque, Bambeque* and *Morbeque*. In a number of cases, Cassini gives both the French and the Dutch name: examples are: *Waterquoye ou Le trou d'eau*; *Catsberg ou Mont des Chats; Fieberen ou Fletre*. A caesura in the frenchification process is found between the Carte de l'État-Major and more recent maps. The third stage is characterized by the addition of name-elements and diacritical signs. On the Carte de France at scales 1:50 000 and 1:25 000, we find *Loon Plage* instead of *Loon*; *St.Georges sur l'Aa* instead of *St. Georges*; and *Cappelle-la-Grande* instead of *Cappelle*. Apart from this, many generic designations are added on these large-scale maps. On maps intended for a greater category of users as tourist-maps, accents and diaereses are added. Examples are: *Rexpoëde, Quaëdypre*, (see fig 20), *Boëseghem , Oxelaëre, Caëstre, Météren, Boeschèpe* and *Téteghem*.

Toponyms on contemporary maps

The study of the changes of toponyms started from the names given by Blaeu. However, research could also have been based on contemporary maps as not all of Blaeu's toponyms have been retrieved while a number of features which Blaeu did not distinguish are named on modern maps. Moreover names of new features have appeared. Table 8 gives the distribution of modern toponyms over various types of distortion. The smaller the scale, the higher the proportion of Dutch names. This does not comply with the general rule that larger features are frenchified sooner, because smaller scales can only contain larger features and consequently will present relatively more frenchified names. A possible reason of this deflection is the lack of space on the map because of which (French) generic designations are omitted. Another factor is the purpose of the map; road maps show relatively more names of populated places and this category is least of all frenchified. On the Carte de France 1:50 000 (sheet XXIII-3, Cassel, 1941) of 411 toponyms in French-Flanders 30% are still Dutch. On the map 1:1 million, the 'Carte du Monde au Millionième' sheet Paris dated 1930, of the 17 names in French-Flanders 7 are in Dutch.

Attitudes from Belgium and the Netherlands

As far as French-Flanders is concerned, Belgian topographic maps 1:25 000 and 1:50 000 integrally follow their French sister editions. On small-scale Belgian editions, such as those at scales 1:250 000 and 1:500 000, the frenchified versions of originally Dutch toponyms are adopted. Commercial Belgian and Dutch maps

intended for educational purposes show different views. The educational material of the Dutch Publishing Company Wolters-Noordhoff gives the French orthography with the Dutch versions in parentheses (Ormeling 1976). The same publisher, however, renders only the Dutch orthography in editions intended to be used in the Dutch-speaking part of Belgium. Other Belgian editions in Dutch follow the same pattern (Goossens 1970). Here one finds names like *Duinkerke(n)*[10], *Rijs(s)el*[10], *Robeke, Toerkonje, Konen, Belle, Hazebroek, St. Omaars, St. Pol, St. Winoksbergen, Kassel* and *Steenvoorde* for French-Flanders, instead of their frenchified variants.
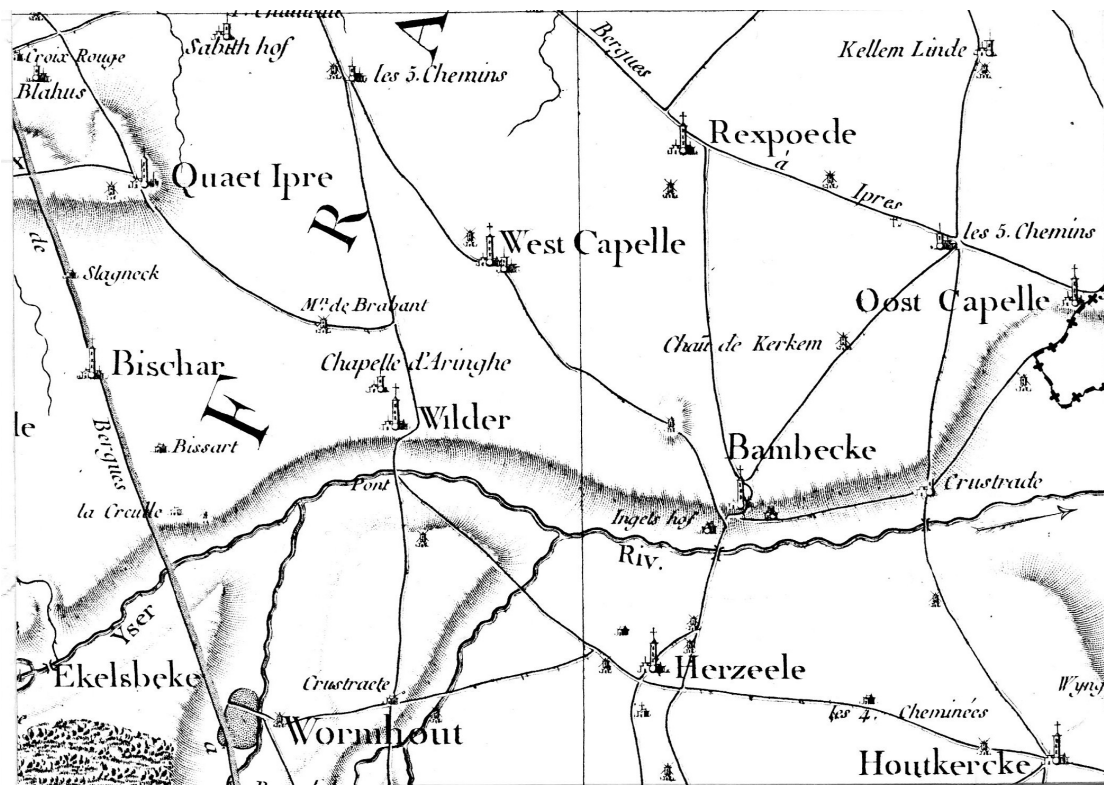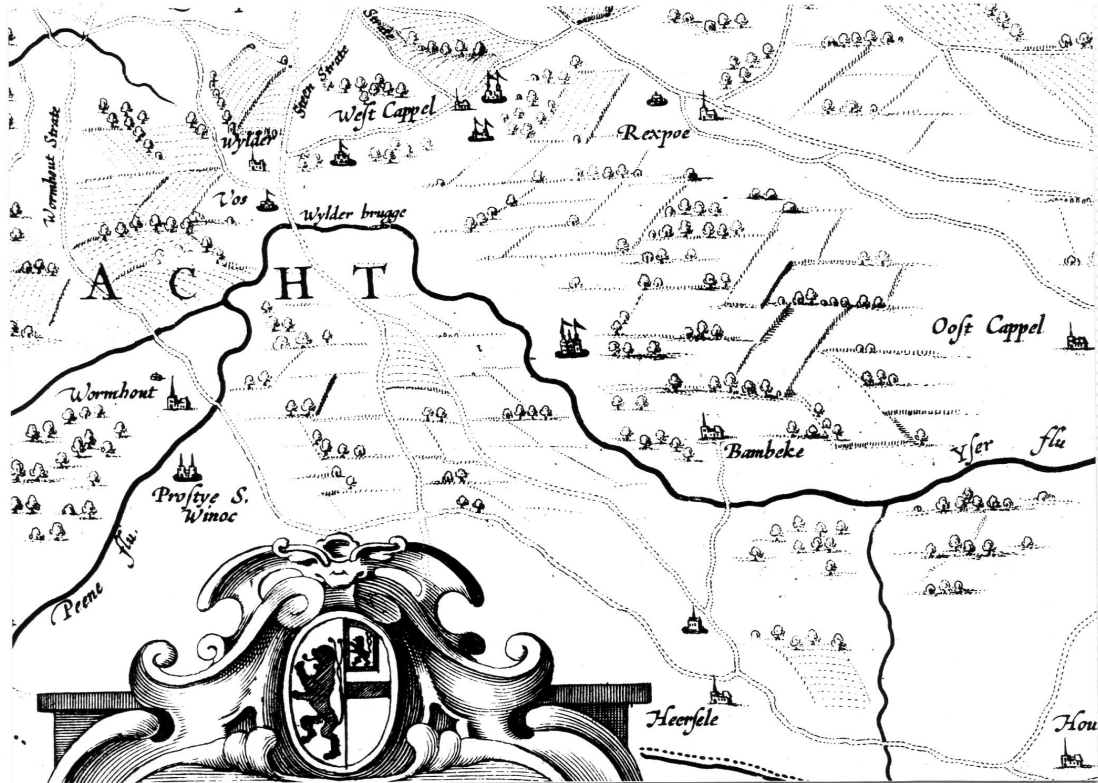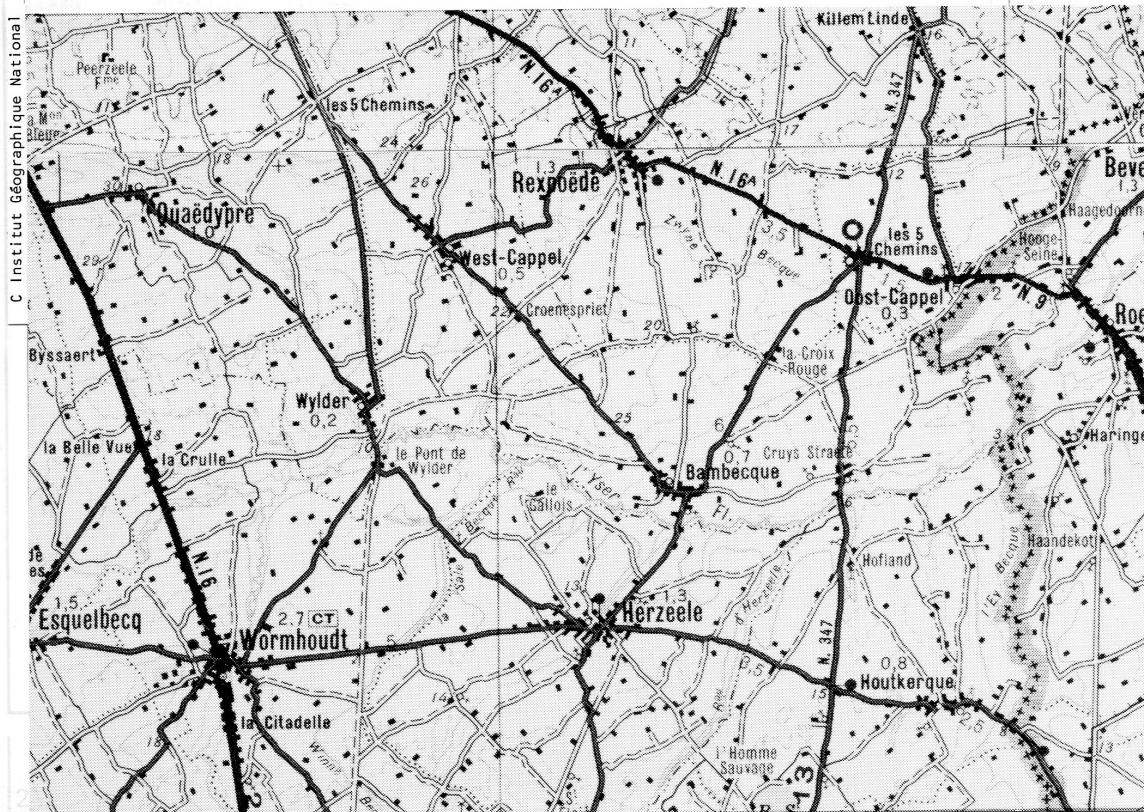
Figure 20 French-Flanders according to Blaeu (1650), De Ferraris (1780) and the Carte de France 1:100 000 (1970), reproduced with permission of the Institut Géographique National.

3.3.4 Alsace-Lorraine

Introduction

The major part of the Alsace was ceded to France in 1648. Only a few cities were acquired later, e.g. Strassburg/Strasbourg, which surrendered in 1681, and Mülhausen/Mulhouse, which was a part of the Swiss Confederacy until 1798. It was not until 1789 that the regional privileges expired, and that the government was centralized in Paris. In 1870, when the region had been ceded to Germany, the re-integration was gradually taken up. This resulted in the fact that in 1910, 95% of the population of the Alsace and 74% of the inhabitants of Lorraine, gave German as their mother-tongue (Verdoodt 1968). In 1918 the area reverted to France. In 1940, the roles were reversed again. In 1942, the Alsace was officially incorporated into the German Reich and a powerful germanization-process was initiated. In 1944, after the liberation of France, all these measures were again withdrawn; German newspapers were prohibited and the use of German in schools was forbidden again. Only a few newspapers were allowed to be published in two languages. The use of German toponyms was officially banned (Van der Plank 1974). It was only in the 1960s that tuition in German was tentatively introduced. Of the 1.5 million inhabitants of the 'départements' Bas-Rhin and Haut-Rhin in 1975 1.3 million spoke a German dialect (Stephens 1976, p. 311). For an illustration of this region, refer to figure 21.
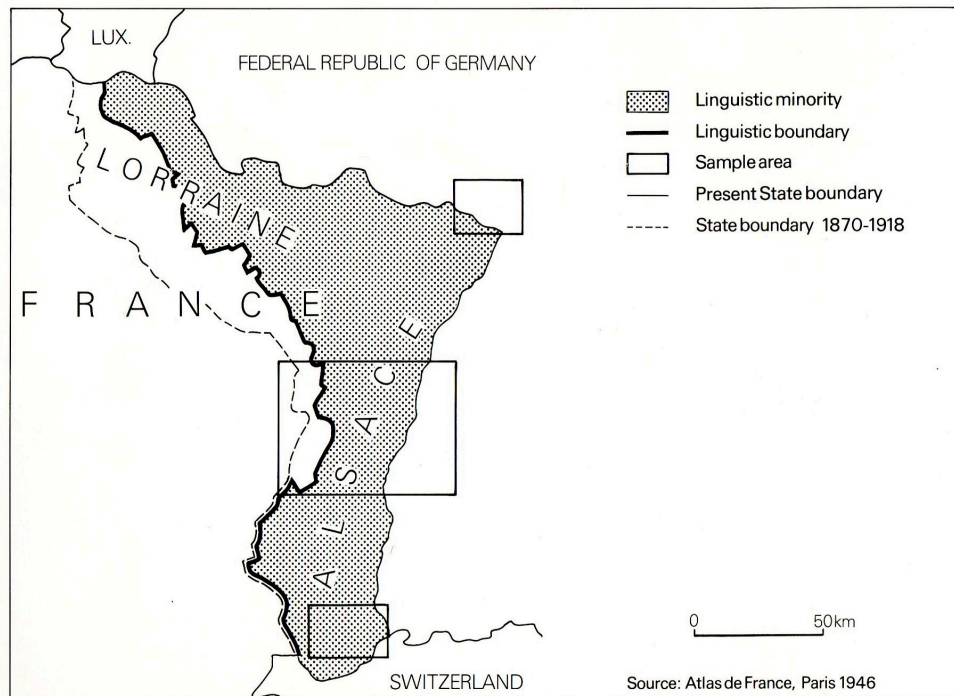
Figure 21 Situation of the language-boundary and of the sample-areas in Alsace-Lorraine.

The cartographical representation of the toponyms

During the first systematic large scale mapping of the Alsace by Cassini in 1760-70, mainly the names of populated places and of rivers were recorded as well as the names of forests and woods. This recording included a fair number of errors. In the case of the Alsace, examples are: *Heligesden* instead of *Heiligenstein*, *Strundweiler* instead of *Stundweiler, Berstest* instead of *Berstett*, etc. As the topographic mapping by Cassini had taken place some 100 years after the French conquest many terrain-elements constructed by the French appeared on this map with their French names. Cassini renders many names phonetically in the French spelling; on the 'Carte de l'État-Major' which succeeded his map, there is question of a progressive frenchification. Name-elements such as -weiler, and -weier are rendered by Cassini as -wiler and -weyr/weir; on the 'Carte de l'État-Major' as -viller or -ville and -wihr. Only in this century do we find name-elements added as is the case in French-Flanders. Thus, here too a certain phasing in the frenchification process can be distinguished. The Carte de l'État-Major was produced for the Alsace in the period 1835-39; during the period 1881-1886, ten years after the cession of this region to Germany, the second edition was published. As for the names, it is completely identical to the preceding edition, except for the addition of several German name-versions indicating the larger features. In 1870, the region passed to German rule; during the period between 1870 and 1919, the following German map-series were issued: a) a map-series 1:25 000 in conformance with the 'Preussische Messtischblätter'; a number of sheets of this series dating from the period between 1887 and 1912 have been analysed. For some of these sheets a second edition appeared; b) the map-series 1:100 000, a continuation of the Übersichtskarte des Deutschen Reiches; c) the Übersichtskarte des Deutschen Reiches 1:200 000, which, as far as the Alsace is concerned, dates back to the period 1899-1902. On these German editions it appears that all additions in French have been removed; several traditional spelling forms with "c" or "ck", "tz", such as are also found in Belgium, feil a victim to this ardour. In the small French-speaking area around Metz, most of the accents and articles of existing French names have not been retained on the maps: the names themselves, however, were left unaltered.

The French attitude towards the cession of the region was also expressed on maps.The area was not considered as being part of Germany, and is indicated as Alsace-Lorraine. After 1919, this name was immediately dropped again in favour of the names of the two 'départements'.

The map-sheets continued to be named after the largest populated places in the Alsace, even in cases where these map sheets still contained French national territory (in that case, it is common practice to name the sheets after the largest towns under the sovereignty of the governments concerned). The same applies to the French map-series 1:100 000, published 1895-1901 by the 'Service de la Carte du Ministère de l'Intérieur'. Here too, the map-sheets are named after the towns in the Alsace though also in some cases, German versions are added, such as on sheet XXIV-II, Thionville; *Cattenom (Kattenhofen)* and *Thionville (Diedenhofen)*. This principle is illustrated on figure 22. Neither did the French educational and commercial map material, acquiesce in the cession of the Alsace. Hence, Vidal de la Blache (1894) gives French toponyms for the Alsace in his Atlas General (1894) and also otherwise represents it as if it were (temporarily) occupied territory.
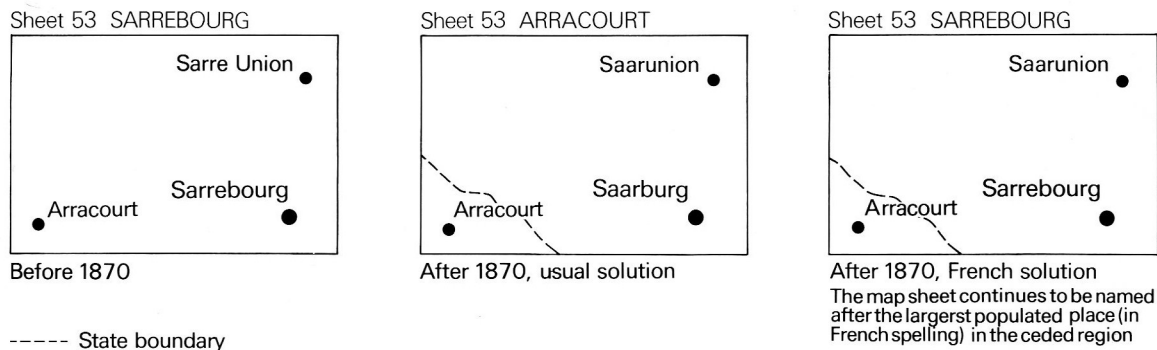
Figure 22 Boundary-shift of 1870 in North-East France reflected on the sheet-titles. Example taken from sheet 53 of the Carte de l'État-Major   1:80 000.

Alinhac indicates that in 1919, when this territory was regained by France, it was considered necessary to quickly produce French maps of this region. The resulting map was the 'Carte d' Alsace-Lorraine' 1:50 000, based on the German map-series 1:25 000. (Alinhac 1962):

"La toponymie a été établie d'apres le 1:80.000 antérieur à 1870 et complété par les documents d'archives de la même époque, en tenant compte des desirs de changement de nom ou d'orthographie exprimés par certains communes."

This map was published between 1920 and 1922, and it succeeded to avoid many errors and frenchified spellings which are found on the Cassini-map and the Carte de l'État-Major.
On German maps of the period 1919-1940, this frenchification is not taken to heart. The German names in the Alsace were simply retained and for Lorraine, their number even increased11. After the Second World War, the spelling of 1920-22 was again applied to the French maps. However, some changes appeared which were characterized by additional words and accents. On the tourist-editions of the French topographic maps on the scales of 1:100 000 and 1:250 000, and on the Carte Michelin, these aditions are most pronounced. A detail of the Carte Michelin (fig.23) shows the names *Soultzbach les Bains, Husseren les Chateaux* and *Herrlisheim près Colmar* instead of *Sulzbach, Häusern*, and *Herrlisheim*.

In order to investigate the changes between 1900 and 1960, or between the German and French periods, German map-sheets at scale 1:200 000 and the Carte Michelin at the same scale have been compared for the Alsace. This comparison resulted in the following categories:
  1. Unchanged names. These were particularly place-names.
  2. Frenchified names. This referred mainly to transcriptions into French of German toponyms.
  With these transcriptions, the following spelling-changes occur:

nb	becomes mb	u becomes ou	ü becomes u
ei	,, i	ee ,, ée	z ,, tz
k	,, c	el ,, le	ö ,, oe
ä	,, ae	au ,, ou	hoffen,, hofen

  The addition of articles is also considered frenchification (e.g. *Wanzenau-Le Wantzenau*) as well as adaptations such as *Oberehnheim* which becomes *Obernay*.
  3. Translations. These occur among hagionyms and among added generic-terms or

designations. In this way, *Kloster St. Markus* and *St. Kreuz* are translated into *St. Marc (Couvent)* and *Ste. Croix aux Mines*. No acount is taken of the actual meaning of the generic terms in the German toponyms: *Hohwald* changes to *Fôret de Hohwald*! This results in a combination of French and German generic elements.

4. New names. It is probably for political reasons that *L'Allemand Rombach* (Cassini) is changed via the stages of *Deutsch Rumbach* (1900) into *Rombach le Franc* on recent maps.

5. Bilingual names. These appear sporadically. Cassini gives Richenveir as well as Reichenwegr; Ribeauville as well as Ribeauviller. On the German maps of the period between 1870 and 1919, one finds Diedelshausen (Bonhomme). Michelin gives bilingual versions for some oronyms: Petit Balon (Kahlenwann), Vieil Armand (Hartmannswillerkopf). One cosmetic correction must also be mentioned: the German name *Schweinheim* becomes *Schwenheim* on the French topographic map. According to Belen'kaya, these often occur in Eastern Europe (Belen'kaya 1974).

Table 9 Changes in toponyms on maps of the Alsace from Cassini (1760) and from the German Messtischblätter (1900) to modern French topographic maps (per cent)

	Central Alsace: Cassini compared with French topographical map 1:200 000	Altkirch Region: Messtischblätter compared with French topographical map 1:20 000
Unchanged names	57	21
Frenchified names	41	59
Translated names	2	17
Uncategorized names	–	3
Total	100	100
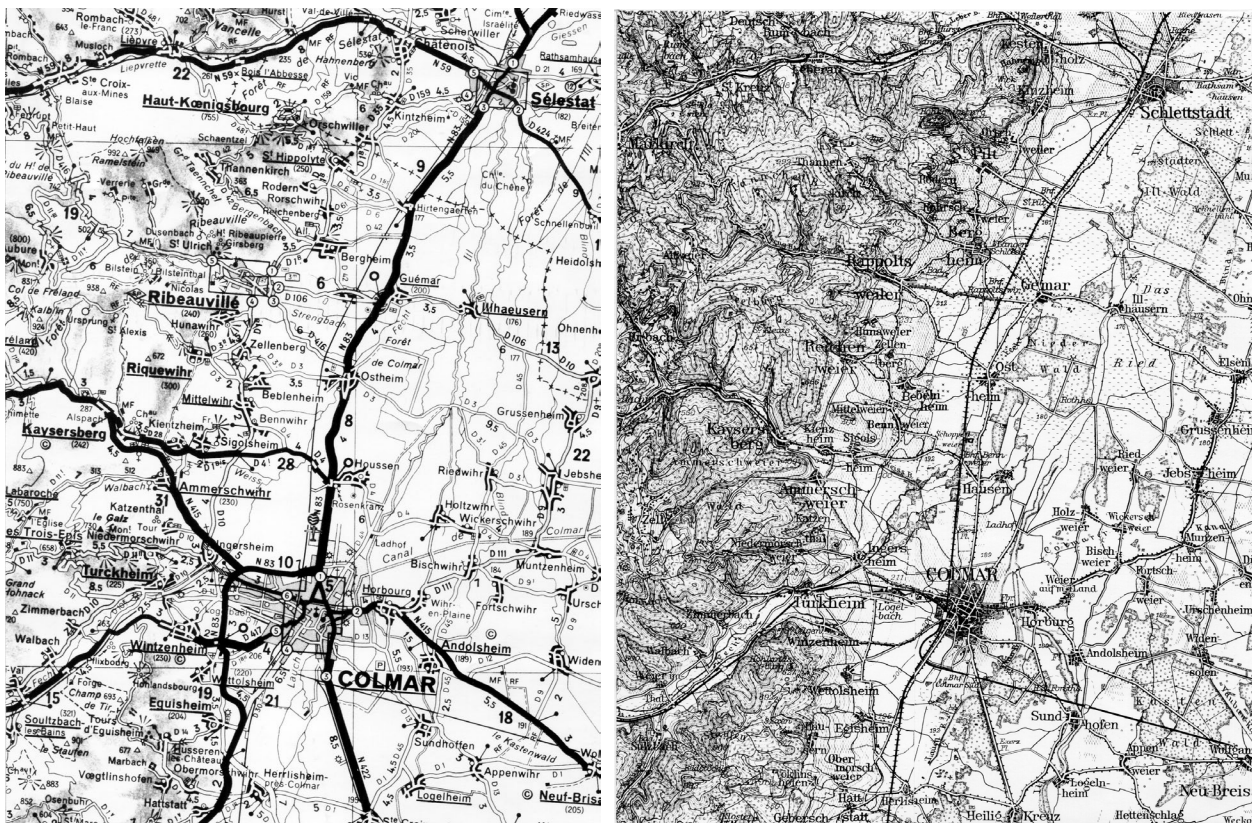
Figure 23 Comparison of German and French small-scale maps of the Alsace: Topographische Übersichtskarte des Deutschen Reiches 1:200 000, Blatt 169 (1899) and Carte Michelin 1:200 000, no.62 (1969).

When comparing a section of sheet 162 of Cassini's map, on which 243 names were recorded, with modern French topographic maps (see table 9), the following ratio between the various kinds of modifications has been determined. Names that could not be traced were not

included in the calculation. Of the names that have been retained on the scale of 1:200 000, 57% are changed. However, if modern maps are used as a starting-point, the ratio would be different. On the Carte Michelin 1:200 000, 45% of the names are rendered in the original German spelling for the same sample-area. On larger scales of the topographic map, more than 70% of the names have not been rendered in the original German version. This is chiefly a result of the addition of articles and of generic-terms, and of the frenchification of sounds and letter-combinations.

Another aspect of these large-scale maps is the French preference for dialect-forms in minority-areas. The regulations of the French topographers warn against their standardization[12];
"Cette multitude de parlers locaux a fait naître autant de graphies qu'il serait arbitraire de normaliser; cela tendrait en effet à créer un alsacien standard tres voisin de l'allemand."   _

Figure 24 Comparison of German and French large-scale maps of the Alsace: Kgl.Preussische Landesaufnahme 1:25 000, Blatt 3693, Hirsingen, 1866, and Carte de France 1:20 000, XXXVII-21, 5/6, Altkirch, 1937 (Permission of the Institut Géographique National).

Nevertheless, the standardization of dialect-forms is stimulated by the glossary contained in the above mentioned regulations. It translates dialect-forms such as Grub, Hub, Kaul, Lutzel (small), Rogg, Ros etc. In order to quantify the changes on large-scale maps, the toponyms which appear on the four sheets of the Carte de France 1:20 000, sheet Altkirch (1937)[13], have been compared to the 300 toponyms of the Prussian Messtischblätter (1887) of the sample-area. The results of this comparison are also included in table 9. Actually, the French map of 1937 did include 65% more names, but these did not distinguish themselves from the rest of the names (see fig. 24). Sheet Altkirch, nr. 37-21 of the series Carte de France 1:50 000 (1940) contains 38% unchanged German names.

Subsequently, the smaller the scale becomes, the more the proportion of German toponyms increases to finally diminish again. The reason is that the proportion of names of populated places on smaller scales initially increases and it is precisely with this category of names that the frenchification is least pronounced. However, it did occur in the case of larger towns which will be retained longest on the smallest scales. On atlas-maps at scale 1:5 million, place-names such as Strasbourg, Mulhouse, are kept and perhaps also Haguenau or Saverne. Drawn in one single graph, this scale-dependence of the proportion of the original toponyms is represented as follows (see fig. 25).

The following is an explanation of the graph: on large-scale maps the proportion of field-names is great, and it is exactly with these names that the French have the habit of adding generic-terms and articles. Figure 24 illustrates this with the names of farmhouses and fields such as le Herrenneuweiher, le Sennrucken, le Bach (Ruisseau). Of the names of populated places, a smaller percentage has been frenchified. The smaller the scale, the greater the proportion of names of this category and consequently, that of German names. This continues up to a certain point, i.e. until the scale becomes too small to render all populated places. Almost all the larger settlements have a frenchified name, and on strongly generalized maps only these larger settlements will be retained.

In numerical comparisons, the result is obscured due to the fact that different kinds of features

are incorporated on maps by topographic services of different countries. In this way, fortresses are indicated on French maps, whereas drilling grounds and military barracks are not; on German maps the situation is reversed.
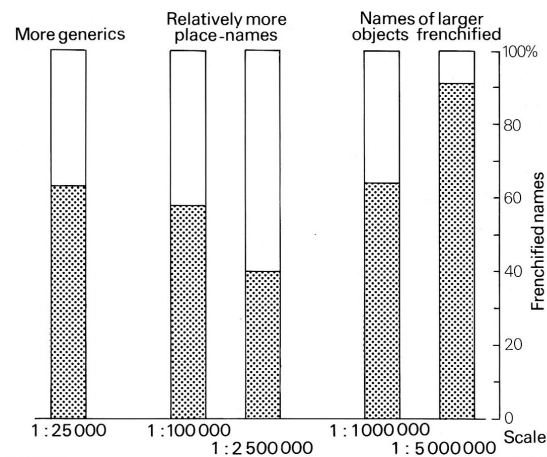
Figure 25 Scale-dependence of the percentage of frenchified names on the French topographic maps of the Alsace.

The image of the Alsace on current German maps and atlasses.

On topographic maps, the treatment of toponyms of the Alsace depends largely on the scale and on the publishing body. On small scale NATO-editions, such as the 1:250 000-series and the map at scale 1:1 million of the 'Institut für Angewandte Geodäsie', French toponyms are adopted. On a large-scale map, published by the federal province (Bundesland) of Baden-Württemberg, only French names are included in the Alsace, while Rheinland-Pfalz adds the German versions in parentheses. In German school-atlasses, the proportion of German names in the Alsace strongly varies, which is summarized in table 10.

There appear to be a good deal of differences among the atlases themselves; it is not yet clear how these can be explained. Figure 26 cartographically represents the various points of view as evident from these German school-atlases. The Deutsche Generalkarte, a road-map, may serve as an example of the remaining commercial cartographic products in the FRG. The Alsace-toponyms on this map have been entirely copied from French maps as far as the spelling is concerned.

Table 10   Rendering of toponyms from Alsace-Lorraine in German school-atlases (1970-1976)

	Percentage of German (non-frenchified) names per region	
	Alsace	Lorraine
Atlas Unsere Welt, 1970	100	80
Westermann Schulatlas, 1970	100	80
Harms Atlas, 1970; List Atlas, 1975	100	75
Alexander Atlas 1976	90	10
Diercke Atlas, 1974	40	10

Place names are:
▲ French and frenchified
● German
△ French (German)
○ German (French)

Sources: Harms Atlas Deutschland und die Welt, München 1971
List Grosser Weltatlas, München, 1975

Source: Alexander Weltatlas, Stuttgart 1976

0   50 km

Sources: Atlas Unsere Welt, Berlin 1970
Westermann Schulatlas, Braunschweig 1970

Source: Diercke Weltatlas, Braunschweig 1974
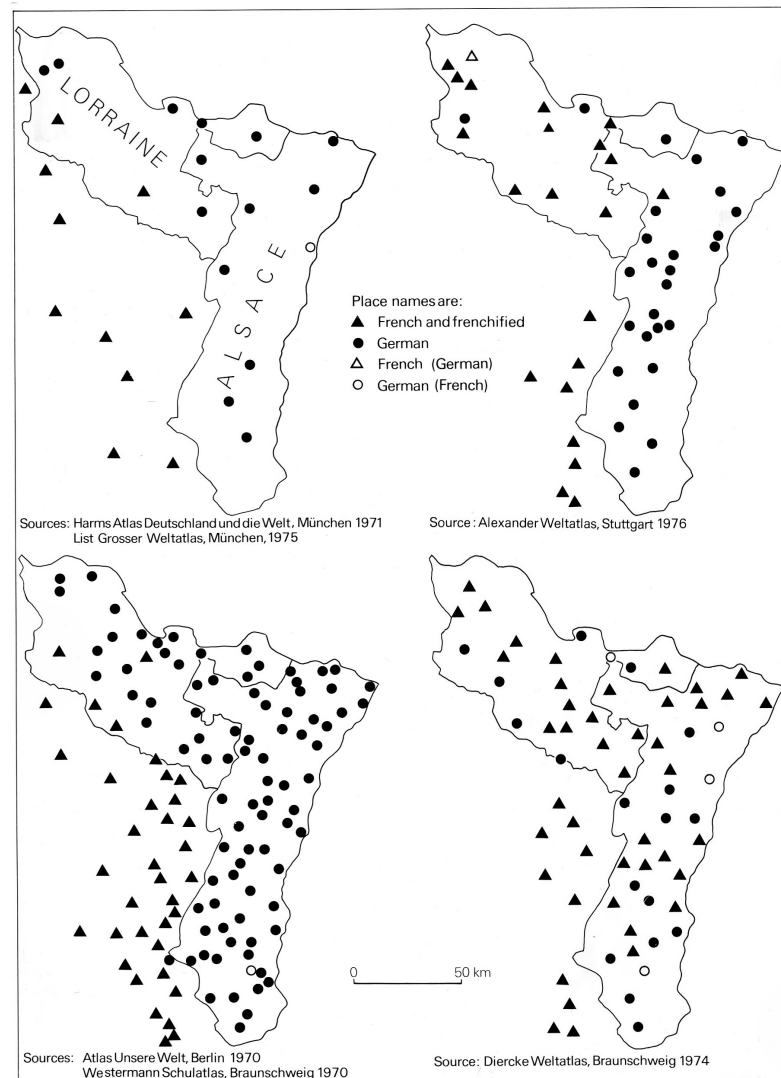
Figure 26   Attitudes to place-names in Alsace-Lorraine in current German school-atlasses.

Figure 26 Attitudes to place-names in Alsace-Lorraine in current german school-atlasses.

3.3.5 Corsica

In 1768 Corsica was purchased by France from Genoa, although the latter only exercized a nominal authority; after a number of vain attempts the island was finally conquered by France. Until the Second World War, the Corsican language had been considered an Italian dialect related to that of Tuscany. After the Second World War, and the Italian occupation of 1942-43, Corsican began to be considered as a separate language belonging to the Romance language-group together with Sardinian and Catalan. In 1975, the number of inhabitants of Corsica amounted to approximately 220 000. At a rough estimate, 200 000 of them spoke the Corsican language (Stephens 1976, p. 328).

The first detailed topographic survey of the island can be considered as a continuation of the survey by Cassini. After a preliminary phase in 1774, under the supervision of Tranchot, the survey of the island had been carried out between 1790 and 1791. The map based on this survey was not published until 182414. Its result is one of the most magnificent copper-engraved maps of the 19th century of which the plastic relief representation must be particularly admired (see fig. 27).

The cartographical representation of toponyms.

Tranchots map is special for other reasons as well; it is the only map of a part of France

depicting a linguistic minority region in which justice has been done to its language. There is hardly question of any frenchification, not even in the generic-terms, which are explained in a separate list printed on the map (see fig. 28). Another striking aspect is the representation of pronuncation-rules and of the remark:

"La langue Italienne est celle qu'on parle en Corse: elle est composée de 22 lettres qui se prononcent comme en Français, excepté les lettres c,g,h,q,u,z que l'on prononce tche, dge, acca, cou, ou, dseta; les syllabes qu'elles forment s'expriment ainsi:...."

It is the map of an Italian-speaking region, which also links up with former maps rendered in the Italian language.
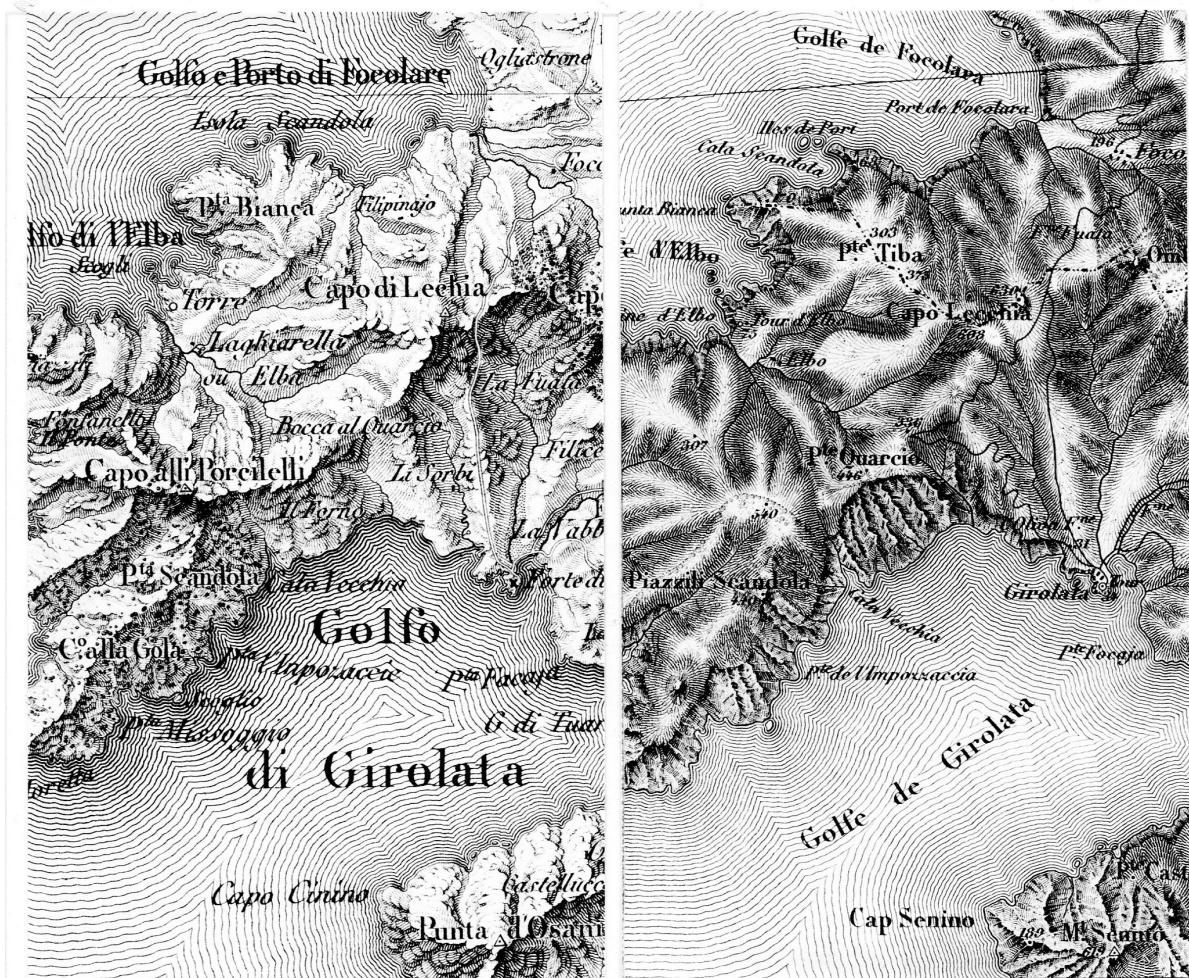
Figure 27 Comparison of the Carte topographique de l'Ile de Corse 1:100 000 by Tranchot (1824) with the Carte de l΄État-Major 1:80 000, sheet 262, Vico (1875).

On Tranchot's map, one only finds French names for administrative entities (districts, cantons, municipalities) and for some of the larger features: Golfe d'Ajaccio, Golfe de Porto (*Ajaccio* is still found as *Aiazzo* on 17th century maps by Seutter or Ottens). Furthermore, the orthography is Italian with the exception of a few explanatory texts. Hence, we find Italian generic terms and also hagionyms: Capo, punta, monte, cima, golfo, bocca, bosco, San (-to) Giovanni, Santa Maria.

REGLES DE PRONONCIATION POUR LES NOMS DE LA CARTE.

SIGNIFICATION FRANÇAISE
de plusieurs noms de la Carte, susceptibles d'être traduits.

Figure 28 Detail of the Carte topographique de l'Ile de Corse by Tranchot (1824), with glossary and pronunciation-rules.

The second survey of the island was organized for the Carte de l'État-Major 1:80 000. And once again, the island lags behind. The surveys began in the north of France in 1832; the field-work on Corsica only started in 1864 (with sheet no. 259, Luri). It was published just before the Franco-Prussian War. The remaining sheets of Corsica appeared during the period 1870-1880. With the sheet Corte, no. 263, the Carte de L'État-Major was completed in 1880, and it was the first time that Corsica had been mapped for the same series as Metropolitan France. This Carte de l'État-Major was later published at a larger scale, i.e. 1:50 000. It was only after 1958 that the island was surveyed anew for the 1:50 000-map (type 1922); the arrears have amply been made up for since.

The Carte de l'État-Major (see fig. 27), does not adhere to the same linguistic principles as its predecessor. Although the scale is larger, this 1:80 000-map does not even include half the number of geographical names of the Tranchot-map. Among the remaining names, generic terms and, occasionally, hagionyms have been frenchified.Examples are:
Bocca della Croce is changed to Col de la Croix
Torre di Turghio   "   Tour de Turghio
Punta al Ciuttone   "   Pointe de Ciuttone
S. Giovanni   "   Eglise Saint Jean

This frenchification is not complete, but concepts such as 'fiume','monte', 'bocca',

'golfo', 'punta', 'porto' and "torre" have generally been translated. The abbreviations for mill, chapel, spring and brook have also been translated into French. The concept 'capo' (top/cape)appears most often in mountainious Corsica with its indented coast-line. It is not translated, and the prepositions and articles that follow continue also to be rendered in Italian: Capo alla Forcella, Capo dello Vitullo etc. When comparing the numbers of translated and non-translated generic-terms and hagionyms, two-thirds happen to be rendered in French, and one-third in Italian. The names of populated places are practically spelled identical to those on Tranchot's map. The 1:200 000 map on the contrary, published about 1900 and based on the Carte de l'État-Major, only names larger features, and has an entirely French character. This also applied to the sheets of the 1:250 000-map published in 1966, and to the small-scale representation of the island in French school-atlases. For a summary of these developments, see also table 11.

	Tranchot (1790) compared to Carte de l'État-Major (1880)	Carte de l'État-Major (1880) compared to Carte de France 1:50 000 (1980)
Unchanged names	48	21
Frenchified names	-	2
Translated names	39	2
New French names	-	2
'Corsisized' names	-	65
Uncategorized names	13	8
Number of names examined: per cent	100	100
absolute	67	65

^a See figure 27.

In 1958, a start was made with the large-scale mapping of the island for the 1:25 000 and 1:50 000 series. During this operation the toponymic views fluctuated rapidly; four periods can be distinguished (IGN 1978). The first one was characterized by a rigorous frenchification. The first five sheets published in 1958, of eastern and southern parts of the Island, are rendered in this manner with entirely French generic-terms (e.g. *Mont, Cap, Port, Golfe* etc.). In 1964, a further five sheets were produced that showed Italian versions of most generics (e.g. *Monte, Capo, Porto, Golfo*) next to French generics like 'ruisseau' and 'riviere'. These sheets depict the central part of the island. The suffix -o and the letter "j", (instead of the French "ye"/"dye") were used for all names with the exception of those of municipalities, of which the spelling has been officially determined and fixed (see also fig. 29).
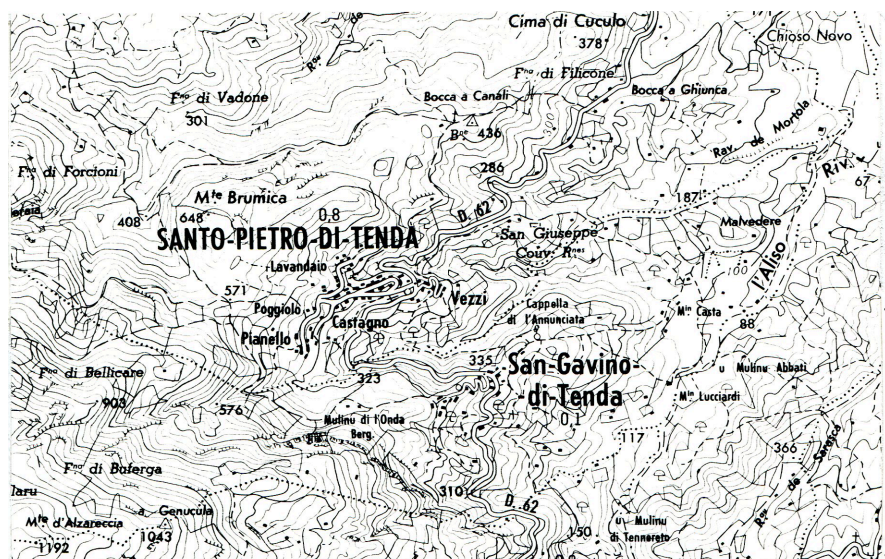
In 1969, the recording of toponyms was re-started, now in accordance with the principle that Corsican is an independant language with its proper orthography. The suffix -o changes to -u; in the case of the French "ye" and "dye" these were changed to "j" and "ghi". The four sheets which appeared in 1969 for West Corsica gave the generic terms *Monte, Capu, Portu, Golfu*, and Corsican articles instead of Italian ones. *Capo dello Vitullo* changed to *Capu diu Vitullu* and *Capo alla Quercetto* to *Capu au Quercetu*.
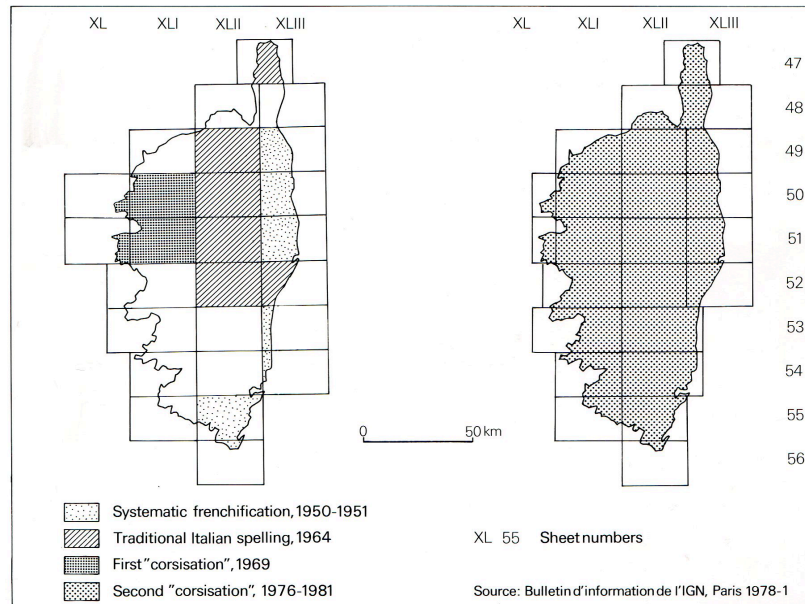
Figure 30 The mapping of Corsica for the Carte de France 1:50 000, in phases with varying attitudes towards spelling.

At that particular moment the activities were interrupted for the publication of the tourist-map 1:100 000 (1967-1968). As can be seen from figure 30, only part of the island had been re-mapped at the time and for half the island only the Édition Noire, that is revised enlargements of last century's Carte de l'État-Major 1:80 000, were available. For the names of the tourist-map 1:100 000, it was decided that a linguistically homogeneous document should be used as basis and as such only the Tranchot-map could be considered (IGN 1978). In 1976, the remaining sheets of the 1:50 000 series were recorded in a further extended Corsican spelling. All articles were now rendered in Corsican and the French dye"/"ye" was re-introduced in the form of "ghj" instead of "ghi". With these changes the fourth period of the production of the 1:50 000-map began. Up until 1981, new editions of the sheets surveyed in 1958 and 1964 were issued also in the Corsican spelling. The orthography of the generic terms was standardized. In 1976, the orthography of the names on the tourist-map had not yet been adapted to this new point of view[15].

Moreover, this map contains a number of conspicuous, non-Corsican additions such as 'Village de vacances', 'alignements' , 'stue menhir', 'tour', 'église', 'plage', which resulted in a strenghtening of its French character.

In 1981, the 1:50 000-series, rendered according to these new toponymic principles, was completed. The 'corsisation' of the toponyms was extended as far as possible. Only legally protected municipality-names were excluded from this process. The Corsicans themselves speak of *Aiacciu* and *Corti* instead of *Ajaccio* and *Corte*, though the latter are rendered on the map. The generic-terms have now been

standardized as well as the use of the Corsican article. Traditional, locally accepted forms have been preferred to dialect-forms (IGN 1978).

In table 11 the differences are listed between the Carte de l'État-Major and the latest edition of the 1:50 000-map for the region illustrated in figure 27 (Carte de France, XLI-50, Galeria, 1979). This eventful spelling-history (see also fig. 30) has resulted in the fact that each map-series represented toponyms in different ways and when comparing the spelling of toponyms on successive map-series, the following progression can be observed: *Capo all'Argentella* (Tranchot) - *Sommet de l'Argentelle* (État-Major), *Capo di l'Argentella* (1:100 000, 1969), *Sommet de l'Argentella* (1:50 000, 1969) and *Capu di l'Argentella* (1:50 000, 1977).

Other maps partly comply with this develoment in official mapping as the Carte Michelin, which has been "corsicized" when comparing the editions of 1960 and 1974 of sheet 90 depicting Corsica (e.g.*Pointe St.Cyprien* becomes *Punta San Cipriano, Punta al Cerchio* becomes *Punta di Cerchio, l'Uomo di Cagna* becomes *l'Omo di Cagna, Mt. Melese* becomes *Mte. Milese* and *Cap de Feno* becomes *Capo di Feno*).
No maps with Corsican text have been found, or with 'corsicized' municipality-names. Neither have maps or regions ouside of Corsica been rendered in Corsican. Maps and atlases from Italy keep to the orthography used by the IGN.

3.3.6   Roussillon

Roussillon and Cerdagne came under French rule in 1659 at the Peace-treaty of the Pyrenees. Figure 31 gives an idea of the language as it was spoken in the region at that time: Catalan. At present, Catalan is still spoken in Roussillon and in 1975 by an estimated 60% of the population, i.e. 260 000 inhabitants (Stephens 1976, p. 309). On the map by Sanson dated 1660, shown in figure 31, the toponyms, with the exception of the capital of Perpinya (to which the French version Perpignan has been added) show a spelling which diverges from the French (Sanson 1660). These toponyms from Roussillon proper have been compared with versions on subsequent maps. In figure 31, a detail of the Carte Michelin[16] has been selected for this purpose and it is evident from this that all names have been frenchified. In order to assess the tempo and the nature of this frenchification, the names by Sanson have been compared with those on the map by Cassini (surveyed in the period 1770-1780), with the Carte de l'État-Major (1850-1866), with the map-series 1:50 000 (coastal region recorded 1936-1941 interior 1964-1971) and with the map-series 1:100 000 (1969). Apart from this, the development since the Carte de l'État-Major (1850) has been examined in order to assess what happened on a local level during the past 100 years.
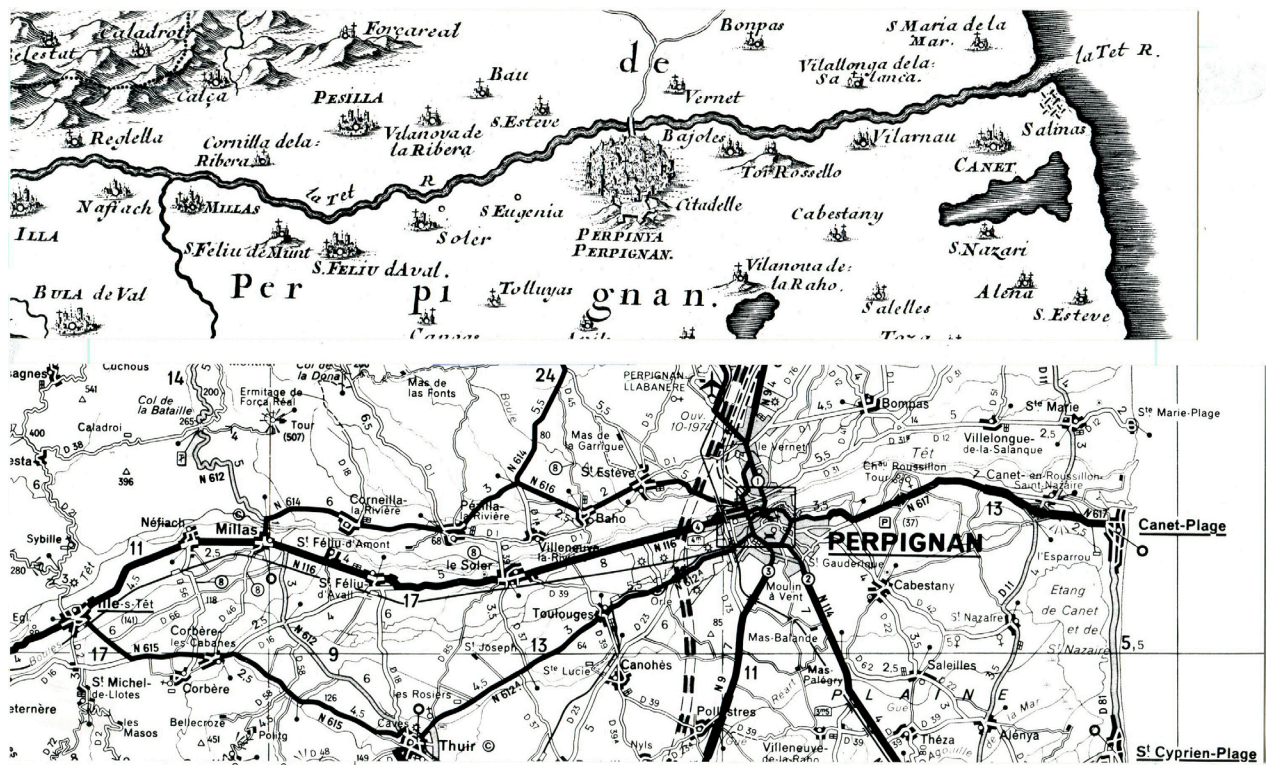
Figure 31 The lower course of the river Tet in 1660 (Sanson) and 1970 (Carte Michelin no 86). The toponyms now have been frenchified.

The cartographical representation of toponyms.

On the map by Cassini, 78% of the 144 geographical names found within the sample-area on Sanson's map (see fig. 67) have been frenchified. In most cases it concerns modifications of suffixes or transcriptions: the ending –a changed to -e or -es, -ella to -eille, the letter "u" was substituted by "ou". Apart from this, all names that could be easily understood were translated: *Vilalonga* became *Villelongue, Clusa* became *l'Écluse, la Roca became la Roque*; this also included hagionyms. This development has been summarized in table 12. In a similar investigation by Guiter, the results are slightly different (Guiter 1972, p. 90-97). He only investigated municipality-names while he dealt with entire Roussillon. Guiter's results have been analysed by the present author and are also indicated in table 12.
The conclusion from the 17% of names which, according to Guiter remained unchanged, must be identical as from the 14% unchanged names found by the author. A rather complete frenchification of the names recorded by Sanson occured. Furthermore, Cassini's map contains even more frenchified names than Sanson's.

	Sanson (1660) compared to Cassini (1770)	Cassini (1660) compared to modern French maps (1960)	Changes 1660-1970 according to Guiter
Unchanged Catalan names	6 ⎫ 20	⎫ 10	17
'Catalanized names'	14 ⎭	⎭	0
Frenchified names	47 ⎫ 78	⎫ 88	67
Names translated into French	31 ⎭	⎭	14
New French names	0	0	2
Names not recovered	2	2	0
Total	100	100	100

Source: Guiter 1972, pp.90-97

When comparing the map by Cassini with the present maps, the changes are less conspicuous. Some names are again spelled in Catalan (Banulls changed via Bagnols to Banyuls). However, only half of the 14% unchanged names and of the 6% 'catalanized' names (found on Cassini's map in comparison with Sanson's) are retained on modern maps (e.g. Camelas, Llupia, Banyuls dels Aspres, Claira, Montner, Codalet, Escaro, Oms). Most names have been changed by the additions of accents or name-elements, such as in the case of *Vernet* which became *Vernet les Bains*. The addition of accents began in about 1900 (they are first found on the Carte de France series 1:100 000 (1896) and on the 1:200 000 series dated 1900). The addition of name-elements occurred gradually. Recently changes have been fostered by the fusion of municipalities by which the names of the former entities are joined together. In this way, the name *Ria-Sirach-Urbanya* was formed from the place-names *Arria, Sirac and Urbana*, all of them already recorded by Sanson. Other examples are: *Argeles* which became *Argèles sur Mer*; *Canet* which became *Canet en Roussillon* etc. These additions also have a frenchifying effect.

The central course of the River Tet and the surroundings of Valmanya have been studied on maps in order to analyse the changes in the micro-toponymy. On the present 1:50 000-scale map[17], 70% of the names used by Cassini (sheet 146) could be retrieved. More than half of these names have been changed. There is no question of frenchification here however, but rather of a more correct representation of previously recorded names combined with a progressive standardization. Examples are: *St. Martial* (Cassini) - *St. Marçal* (Etat-Major) - *St. Marsal* (1:50 000 map, dated 1970); *St. Pierre* (Cassini) - *Mas des Freres* (État-Major) and *Mas des Flares* (1:50 000). Prefixes of farm-names have been standardized to "mas", "can", and "en". Hence, the name *Tillet* became *en Tillet* on one map and on another map it became *Mas d'en Tillet*. Apparently, the introduction of these prefixes is dependent on the region itself. In the neighbourhood of Valmanya for instance, they are already found on the Carte de l'État-Major, and near the central course of the River Tet only since about 1970.

Official Spanish maps of this region show only frenchified place-names. On older maps, all names have been completely castilianized[18]. An example of the various name-versions is given below:

Catalan version	Spanish Version	French version
Rosseló	Rosselon	Roussilon
Perpinyà	Perpiñan	Perpignan
Vilafranca	Villafranca	Villefranche

Salses	Salces	Salses
Cerdanya	Cerdaña	Cerdagne

Spanish school-atlases give the same Impression. Until 1974 no modern maps of Catalonia or Roussillon were published in Catalan. Paragraph 3-13 mentions the publication of Spanish atlases which did contain Catalan names even for Roussillon. The only atlas of Roussillon found rendered in Catalan is the 'Atlas de Catalunya-Nord' by J. Becat dated 1977. This atlas included bilingual map-commentaries and the toponyms used were entirely Catalan, restored on the basis of field-work and thorough documentation. His opinion of the procedures adhered to by the IGN was not at all flattering:
"....,les cartes de l'IGN offrant de multiples examples de versions successives et aberrantes d'un même nom" (Becat 1977).

3.3.7   The French Basque Provinces

The part of France inhabited by the Basques includes the provinces of Soule, Basse-Navarre and Labourd; all three of them are situated in the departement Pyrenees Atlantiques. This region has some 200 000 inhabitants of which about 90 000 still spoke Basque in 1975 (Stephens 1976, p. 317). This region was allocated to France by the Peace-treaty of the Pyrenees in 1659. Traditionally, the Basques are considered as the original inhabitants of the region between the Pyrenees and the River Garonne; according to Lemoine, this view should be re-considered: the Basque colonization did not take place until about 600 AD and it has never extended further than the region still inhabited by the Basques. Lemoine states that the occupation must have taken place with the consent of the local overlords also, because of the fact that only the poor grounds were occupied and because the borderline follows a regular course. The region around Bayonne has never been colonized and the Basques would never have crossed the River Adour (Lemoine 1977, p.176).

The Basques form a population of farmers and shepherds and all Basque toponyms are related to agriculture and animal husbandry. Among the Basque toponyms feudal names and regional names are not included. The most important towns in the region such as St.Jean Pied de Port, Hasparren, St. Palais, Mauleon, Bayonne and Biarritz do not have Basque names (Lemoine 1977, p. 185).

The first maps of this region were surveyed by Boisseau, in the period 1635-1642 (De Dainville 1962). Howver, not this map was used as the starting-point of an analysis but instead the map by Guillaume de l'Isle (1750). The latter was compared with the maps by Robert de Vaugondy (1753), by Cassini (recorded here 1770-1780), with the Carte de l'État-Major (surveyed in 1856, published from 1856-1869), the Carte de France 1:200 000 (the sheets 69 and 70, based on the revisions of the Carte de l' État-Major dated 1900), the 1:100 000 map (1893) and finally, the sheets of the 1:50 000 map-series dated 1950-1968. The Carte de l'État-Major was difficult to read due to its dark relief-representation.

The cartographical representation of toponyms

There is no special development apparent from the comparison of these maps, or it would have to be the French fashion of adding all the old names together at the fusion of municipalities. This resulted in cartographical howlers such as "Commune d'Autevielle-St. Martin-Bideren" or "Commune de Lacarry-Arkan-Charitte de Haut".

In so far as the maps by Cassini and the État-Major are legible in this mountainous territory, there is no striking estrangement from, or approach to the proper Basque spelling of names. This applies to names on all levels, i.e. from cities to farmsteads. Therefore, a quantitative analysis is practically of no use for the Basque language-region.

There are no old manuscripts in the Basque language on the basis of which the representation of toponyms on maps could be assessed. However, the 'Euzkalzaindia', i.e. the Academy of the Basque language in Bilbao, did design an official spelling, the Euzkara batua. The spelling propagated by this academy complies mainly with the Spanish pronunciation of the letters of the alphabet and it has found no favour in the eyes of the French topographic authorities. A kind of transcription-system has been devised by the Commission de Toponymie of the IGN, by which the Basque language is transcribed on French maps; for example "u", y- (at beginning of word), "au", "k", "x", become "ou", j-, "aou", "x", c/q/c, "tch".

The Basque language region is especially interesting due to the geographical factors: the agrarian way of life and the isolated habitat. If one studies the Carte de France 1:50 000 (see figure 32) one finds only Basque names, although transcribed into French. According to Lemoine, the extent of the Basque vocabulary of toponyms is rather limited. There are no more than 200 words which continually re-appear, and this includes terms such as 'etche' (house), 'berri' (new), 'iri' (town), 'mendi' (mountain), and 'buru'/'bourou' (top).
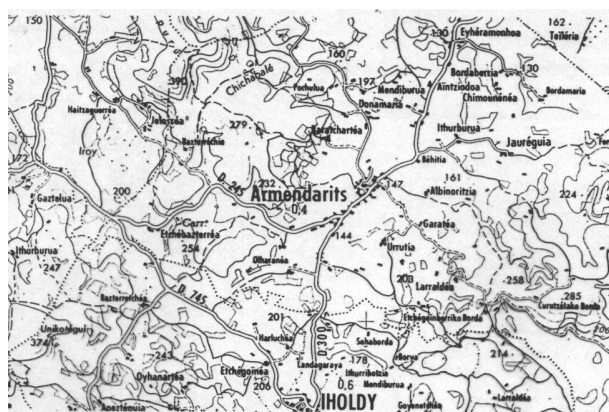
Figure 32 Detail of the map 1:50000 of the Basque Provinces. Carte de France 1:50000, sheet XI1-47, Iholdy, 1967 (Permission of the Institut Géographique National).

Figure 33 The Basque provinces at the scale 1:5 million. Reproduced from the Deutsche Weltkarte, sheet 2, Europa-Süd, Kart.Inst.Mayer/Bibl.Institut, Mannheim (1966).

When the scale of the map decreases, the image evoked by the names changes. Because of the generalization and the inevitable selection of the larger features to be retained, the image of a Basque-region changes into that of a French one (see figure 33). At the scale of 1:2 million, the percentage of French names is already some 65%, at the scale of 1:5 million, most maps only reproduce the names Biarritz, Bayonne, St.Jean de Luz, Cambo-les Bains and Mauleon-Licharre; Hendaye is the only name of Basque origin of these five names. This results in a proportion of Basque names of some 20%. On the 1:10 million map only the toponym Biarritz has been retained and consequently in this area the percentage of French names has increased to 100%.

It may seem trivial to work with percentages here, but also in the case of other

minorities, the same image seems to repeat itself again and again i.e. a relatively small number of minority names on the small scales and a relatively large number on the large scales. This tendency becomes more evident by transforming figures into percentages. It depends on the geographical characteristics of the region concerned, to which scale the percentage of minority names is highest. In the case of the Alsace with its many towns and villages, this occurred at the scale of 1:200 000. In Brittany with its hamlets, this occurred rather at the scale of 1:100 000 and in the Basque Provinces, with their dispersed farmsteads, the proportion of minority names is highest at the scale of 1:50 000. This scale effect is illustrated in figure 34.

Maps entirely rendered in the Basque spelling have not been found. Apparently, maps in Basque of the French Basque Provinces or of any other part of the world have not been published in France.
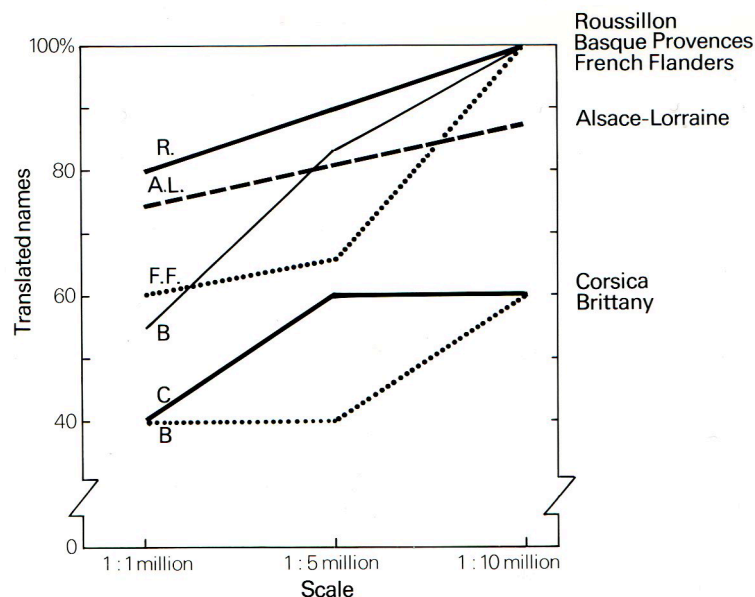
Figure 34 The influence of the map-scale on the number of frenchified toponyms. A tentative comparison between the various l i n g u i s t i c minority areas in France.

3.3.8   Comparison of the minority regions in France.

When comparing the treatment of the toponyms in the six linguistic minority regions in France, one apparently has to deal with a static situation in Brittany and the Basque Provinces, a situation in which, at least from about 1790 to 1970, the names did not change but remained in their usual French transcription. In the Alsace, French-Flanders and Roussillon, place-names have been frenchified or translated to a great degree in the same period. The ratio of frenchifications to translations in French-Flanders and Roussillon is about equal, but in the Alsace, most changes in the place-names are frenchifications. Initially, between the years 1790 and 1870, a strong frenchification took place on Corsica which, for the last 20 years, has been reversed. In French-Flanders and the Alsace, frenchification continues, on one hand in order to simplify the pronunciation of the place-names for the French, and on the other hand, due to the fact that new French names are chosen for various infra-structural artefacts and urban-developments.

No attempt is made to comply to the official spelling of the standard-language in question in the choice of names for the different minority regions: neither is High-German used for names in the Alsace, nor Dutch
for place-names in French-Flanders, nor Italian for Corsican names nor even Catalan for the names occurring in Roussillon. The official spelling developed in

Spain for the Basque language is not adhered to. According to internal IGN-instructions the incorrectly spelled Breton names are to be adapted to new Breton spelling standards. But the main principles continue to be:
" la toponymie devant être aussi proche que possible de l'usage local" and "la commission de toponymie a pour principe de respecter la forme usuelle actuelle d'un toponyme" (Ramondou 1981, p. 3).

3.4   Belgium

3.4.1   Introduction

At present, Belgium has a German language minority located in the 'Eastern Cantons' (see fig. 35). Within the territory of present Belgium, the Dutch-speaking population has for a long time been taken up in a social minority position, although numerically a majority[19]. This has resulted on maps in a preference for, or even a monopoly of the French language for toponyms and marginal information. This situation has only changed in about 1960 on the topographic map and an equal-rights-position of the languages has been attained. Before investigating the attitudes taken cartographically towards the German-speaking minority, the struggle of the Dutch-speaking population in Flanders to ensure equal rights will be described.
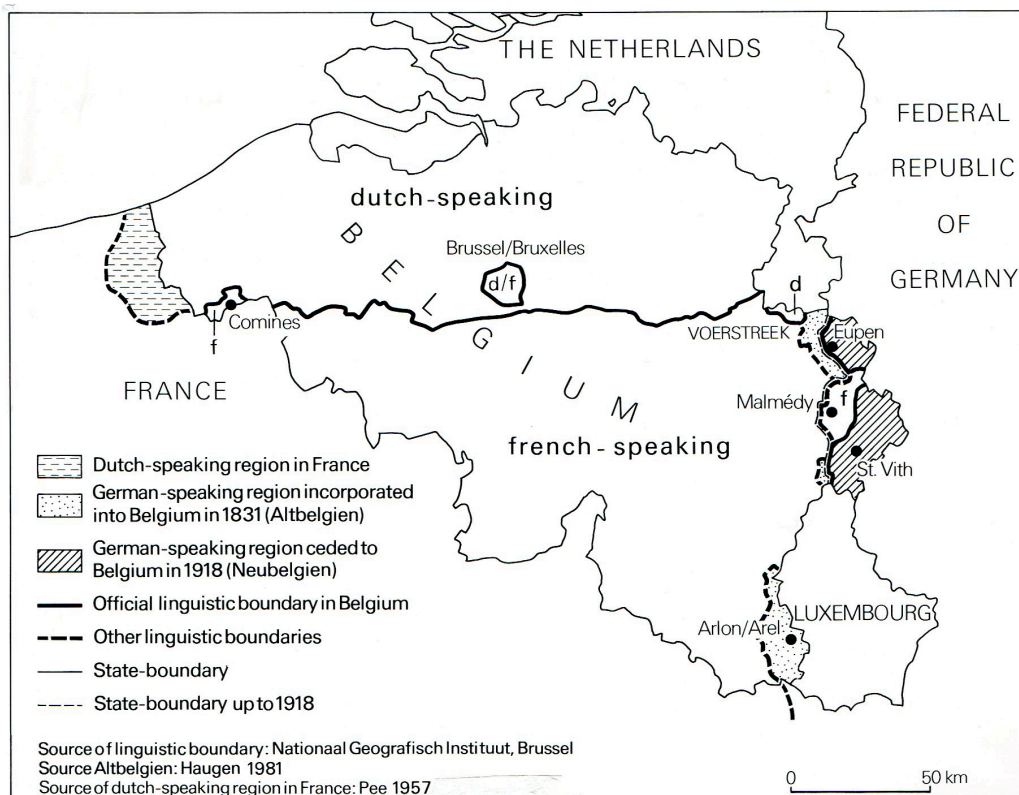
Figure 35 Linguistic minorities in Belgium and Northern France.

3.4.2   Flanders

The first surveys of the Dutch-speaking regions of Belgium were carried out by members of the Dutch-speaking community. On the maps of both Van der Beke (1338) and Van Deventer/Mercator[20] (1540) Dutch toponyms can be found. As early as the year 1710, the publisher Frick of Brussels produced a map-series in French at the scale 1:135 000. This series was a compilation of military source-material collected in the Southern Netherlands during the Spanish War of Succession. The

nature of this material can be derived from Frick's map: apparently the mapping activities were carried out by French-speaking surveyors since the place-names were translated into French as much as possible. Even the generic terms are rendered in French (e.g. *Montaigu* instead of *Scherpenheuvel*).
De Flou's judgement of these maps, as sources for the orthography of toponyms, is unfavourable (De Flou 1929); he quotes the Count de Neny, who in 1769 wrote:

"Il conviendra de veiller attentivement à ce que les noms des lieux soient bien rendus. Il y a, à cet égard, des fautes impardonnables dans toutes les cartes rédigées par les Français."

This statement was written down at the occasion of the design of the De Ferraris-map, the first systematic large scale mapping of the entire Southern Netherlands. In 1713, the Southern Netherlands came to the Austrian Habsburgs, and by order of the Empress Maria Theresia, colonel De Ferraris mapped the whole country to scale 1:11 520 on 275 map-sheets between the years 1770-1777. The map was topographically surveyed and toponymically recorded in the field[21]. The reduction to the scale of 1:86 400 was also delineated by French engravers at Paris with the same symbols and geometrical basis as the Cassini-map.

After the French period, in the new Kingdom of the Netherlands in 1814, a Topographie Service was founded with Krayenhoff as its first director. This service was split up into two different departments in 1815. The second department, under the supervision of the Director of Military Reconnaissance, was charged with the mapping of the Southern Netherlands (Van der Linden 1973). The existing cadastral plans and the 'Carte de Cabinet' by De Ferraris made up the principal source material (Hens-Vercauteren 1973).

Initially (1816-1818), the mapping in the Dutch-speaking part resulted in many French names, including French abbreviations and generic terms. E.g. *Kortrijk* on sheet 42 of the Military Reconnaissance-map is called *Courtray*. However, there is hardly any system in the frenchification. On sheet 12, Nieuport, the 'Kanaal van Nieuwpoort naar Oostende' is mentioned; on sheet 15, Ostende, the 'Canal d'Ostende à Bruges'. The legend too, is alternatively Dutch and French. It appears that in 1824, a more systematic procedure was developed. On sheet 56, Audenaerde (1824), it is clear that account has been taken of the language boundary which runs through the region depicted: to the north of the boundary, Dutch generic terms such as 'Bosch' and 'Molen' are found, and to the south French equivalents like 'Bois', 'Moulin' and 'Hameau'.

During the Dutch period (about 1820) ledgers were produced of the public highways. The cadastral mapping which commenced in 1808 was completed in 1835, and in Belgian Limburg and Luxembourg in 1843. The many complaints uttered by Dutch-speaking Belgian toponymists, that the cadastral names collected by French-speaking topographers comprised many errors, even accentuated as the names were copied by non-Dutch-speaking cartographers, are documented extensively in the literature[22]. Also, during the Dutch period, many Napoleonic maps of Belgium were copied as was the case with many name-lists.

Table 13   Chronology of the first publication of printed topographic maps of German linguistic minority areas in Belgium

	Belgium	Arel/Arlon	Eupen/Sankt Vith
1: 86 400	1777	1777	1777
1: 20 000	1840-1883	1869	1925
1: 40 000	1862-1883	1883	1920-1921
1:100 000	1906-1923	1908	1922
1: 25 000	1949-1970	1967	1956-1964[a]
1: 50 000	1952-1954	1954	1954

a   Messtischblätter Königliche Preussische Landesaufnahme 1887-1910

The mapping-operations of the Depôt de la Guerre, founded after Belgium's independence in 1830, are indicated in table 13. Because the language of government was French in the entire country after 1830, all maps are also rendered in French. The many revisions of the map-series mentioned continued to maintain this French character. This is shown in figure 36, a detail of the topographic map 1:40 000, sheet Malines (1936). When viewing this map, the user will not really get the impression of being in the middle of a Dutch-speaking area. Yet Dutch was obligatory in public administration in Flanders since 1882, and the country became officially bilingual with the introduction of the Equal Rights Act in 1898. In 1878, the name of the Belgian topographic service was changed into 'Institut Cartographique Militaire'. Since 1947, its name was rendered bilingually and in 1976 its activities took on a more national character as the service was transformed into the 'Nationaal Geografisch Instituut' (NGI).

From 1886 onwards, when the 'Commission de l'Orthographie'(Place-names Committee) was set up as part of the 'Commission Centrale de Statistiques' an attempt was made to standardize the spelling of municipality-names in the Dutch-speaking region according to the generally accepted spelling of the Dutch language. Initially, this had little effect at all. In 1926, the Committee for Toponymy and Dialectology (KCTD) was founded. The list of municipality-names in Dutch drafted by this committee was published in the official Gazette, for the first time in June 1929. It took until 1937 before they were generally accepted and declared compulsory for all government departments (Van de Wijer 1967, p.142). During the period 1932-1938, the Dutch language became recognized and generally acknowledged as the only official language in administration in Flanders. In 1949, Belgium began to publish a new series of maps 1: 25 000 in which finally attention was paid to this approved list of municipality-names. This list was changed and again officially accepted in 1954, after the Dutch-language spelling-reform.

From 1949, the effect of the officially established language boundary of 1932 was noticeable on the map (see also fig. 37) with Dutch names and abbreviations to the north of the boundary and French ones to the south. In Chapter 2 it was mentioned that the adoption of equal rights was only completely effectuated in the second edition of the map-series 1:25 000 (1970-1980). On the topographic map-series 1:100 000 published 1951-1965, the language boundary is respected, but even here, the abbreviations - considered as map-symbols - are only given in French.

3.4.3   The German linguistic minority in the 'Eastern Cantons' of Belgium

In 1919, after the First World War, the three cantons Eupen, Malmedy and Sankt Vith were allotted to Belgium, as well as the border-zone of Welkenraedt. Of the

population of these regions, that of Malmedy was to a large extent French-speaking while both other cantons were German-speaking. Inhabitants of the latter two are known as 'Neubelgier'. In 1970, they were estimated at some 62 000 (Stephens 1976, p.44). The language boundary, i.e the boundary between the two cantons Eupen and Sankt Vith and the rest of the Belgian province of Liège, is indicated on figure 35. During the formation of the Belgian state in 1830, another German-speaking region had been incorporated - the region of Arel, now called Arlon and designated in Dutch by the name Aarlen. The German-speaking population of Arel/Arlon and surroundings are commonly known as the 'Altbelgier'. Their number in this region has now strongly decreased.
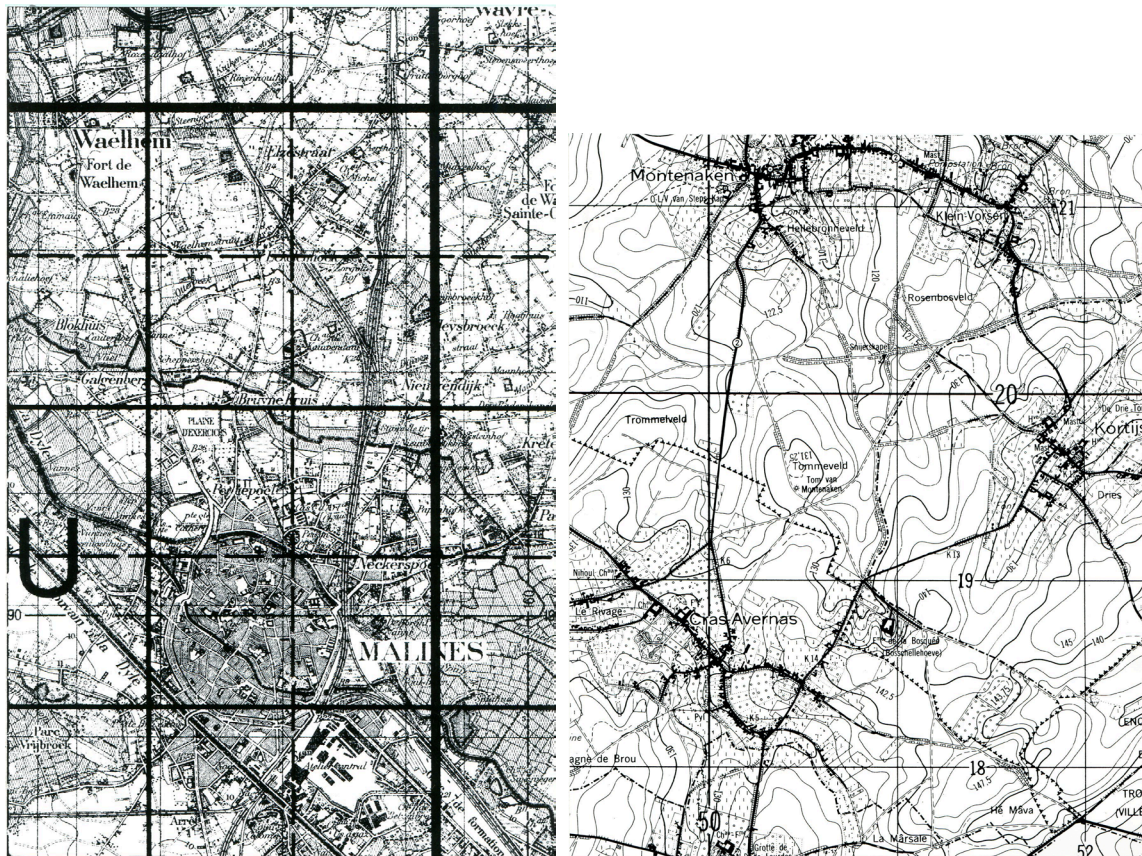
Figure 36 Frenchified toponyms in a Dutch language area. Detail from the Carte de Belgique 1:40 000, fourth ed., sheet 23, Malines,1936 (Permission of the Nationaal Geografisch Instituut van België).
Figure 37 The linguistic frontier in Belgium. The upper part of the map shows abbreviations and designations in Dutch (Mast, Pompstation, Kap., Hve., Bron, O.L.V. van Steps); the lower part of the map shows abbreviations and designations in French (Pyl., Chap., Fme., Sce., N.D. de Lourdes) and a bilingual area shows both (Bosschellehoeve/ Fme. de la Bosquée). Detail reproduced from Belgium 1:25 000, sheet 41, 1/2, 1962 (Permission of the Nationaal Geografisch Instituut van België).

In 1920, the German language was banned from education and administration in the eastern cantons and replaced by French. From 1940 to 1944, the entire region, including Malmédy, was re-integrated into Germany. In 1944, after its restitution to Belgium, half the population of the eastern cantons still spoke German (Stephens 1976, p. 46). It took a number of years before the post-war situation became normalized but during the 1960s this was eventually achieved. In the canton of Malmédy, as well as in 15 municipalities which belonged to Belgium before 1918, the German language obtained an official minority-status, which meant linguistic facilities for the German-speaking inhabitants[23]. Further, the cantons Eupen and Sankt Vith were acknowledged as German-language-regions. German became the language in education and administration again, whereas linguistic facilities were offered to the French-speaking population of that region. In 1971, the Regionalization Act was proclaimed, and in 1973, a 'Kulturelle Rat für die

Ostkantone' was set up, an official body that advises on cultural matters. After 1944, the region of Arel/Arlon received no minority-facilities for its German-speaking inhabitants.

The cartographical representation of the toponyms in the Eastern Cantons.

The first large-scale map of the region is the one surveyed by Col. De Ferraris between 1770 and 1777 at scale 1:11 520. This manuscript-map, the 'Carte de Cabinet', gives, as well as its printed reduction, the 'Nouvelle Carte chorographique des Pays-Bas Autrichiens, y compris les principautés de Liège et de Stavelot' (1777), an image that is conspicuous due to its many adaptations to the French language: e.g. *Deidemberg* instead of *Deidenberg, Butgembach* instead of *Bütchenbach, Nider Emmels*, instead of *Nieder Emmels*, etc. Furthermore, all generic terms are rendered in French, as well as many toponyms of smaller features such as inns, cadastral-lots and chapels. The same applies to the map of Tranchot surveyed during the period 1804-1813, depicting at scale 1:20 000 the eastern border of the region studied here.

The map-series of the 'Preussische Landesaufname' 1: 25 000 of the region Eupen-Malmedy published 1887-1910, has been compared with the topographic map-series of Belgium 1:25 000 (first edition, surveyed 1956 - 1962). The result is summarized in tables 14 and 15.

Table 14 indicates what has happened to the names which were rendered already on the former German maps. In table 15 the names of the current Belgian map are analysed. The Belgian map is much more detailed and comprises 513 names which did not appear on the German map.

This comparison is possibly due to the fact that all features mentioned on former German maps are also rendered on the Belgian maps (with the exception of two, i.e. two farms named Waterloo and Sedan!). The Belgian map comprises, next to geographical names, also generic designations. Of the latter, 1845 designations have been added to the maps for the region of Eupen-Malmedy, either in full or abbreviated, and all rendered in French. The legends of the Belgian maps, dated 1956-1962, are in Dutch a well as in French and English.

Table 14   Changes in toponyms of the Eupen-Malmédy-Sankt Vith area from the Messtischblätter of the Königliche Preussische Landesaufnahme to Belgian topographic maps

	Absolute	Per cent
Unchanged German names	629	82
Rectified German names	53	7
Frenchified names	16	2
Names translated into French	9	1
Rectified French names	40	5
New French names	5	1
Uncategorized names	19	2
Total	771	100

Table 15 Character of the new names added to the Belgian topographic maps of the Eupen-Malmédy-Sankt Vith area, as compared to the Messtischblätter of the Königliche Preussische Landesaufnahme

	Absolute	Per cent
German names of features first named	419	82
French names of features first named	76	15
German names with French generics added	16	3
Uncategorized names	2	0
Total	513	100

Examples of the frenchification of names in table 14 are*: Stoubach, Roetgen*, and *Renastène* instead of *Stubach, Rötgen*, and *Reinhardstein*. Examples of the translations into French are: *Mon Antône, Petite Rur*, and *Saint-Vith* for *Bei Antönchen, Kleine Roer* and *Sankt-Vith*.

The corrections in the German spelling are mainly at the cost of dialect-forms (cognate to Dutch). Examples are: *(Kleine)Roer* which becomes *Rur; Geul*, which becomes *Göhl*. The French additions to German names refer mainly to generic designations ('ferme' for 'farmhouse'). New prestige-features are always named in French: Barrage de la Vesdre (though the river is still called Weser (Vesdre) on the map), Lac d'Eupen; Foret communale de Rocherath. Interesting is the phenomenon by which, by shifting of names, bilingualism occurs. Figure 38 shows how the new settlement-name Champagne (Gringertz) evolved from the settlement-name Champagne and the field-name Gringertz.
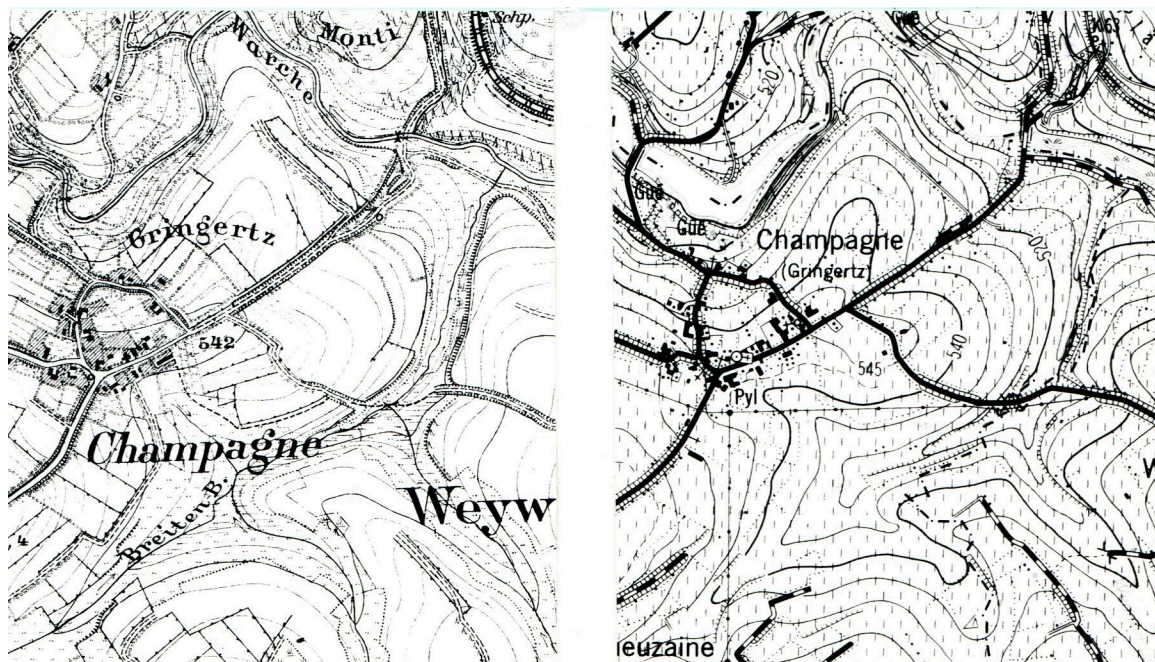
Figure 38 The emergence of bilingual place-names. To the left a detail from the Kgl. Preussische Landesaufnahme 1:25 000, sheet 3206, Malmedy (1895). To the right a detail reproduced from Belgium 1:25 000, sheet 50, 7/8, Butgenbach-Bullange (1967). Reproduced with permission of the Nationaal Geografisch Instituut van België.

Although several new features on the present Belgian maps of Eupen-Malmédy are rendered in French, the new French names take up less than 10%of the toponyms (in the German survey from 1887-1910 many French names appeared). Due to the generic terms and the designations the present map looks entirely frenchified. In 1970, the Statute was proclaimed by which German was designated the third

official language in Belgium. The maps that were published after 1970 have changed with relation to the place-names. As far as the topographic map-series 1:50 000 is concerned24 the following differences have been noted between the series published before and after 1970. On the 1963 edition, the municipality-names in the cantons of Eupen and Sankt Vith are rendered in French, generic terms and abbreviations included. Many regional names too are rendered in a version which does not correspond with the official German spelling. On the 1977 edition, the municipality-names are rendered in German as well as the generic terms, but not the abbreviations. See also figure 39 with details of map-series from before and after 1970. Newly named features such as the Lac d' Eupen and Lac de la Gileppe are still only rendered in French on the map. The legend of the 1977-map is in French, English and Dutch: French and Dutch as the two national languages, and English as a result of a NATO-standardization - agreement. The same applies to the marginal information.

Figure 39 Comparison of mapped toponyms of the Sankt Vith area before and after the German linguistic minority obtained equal rights. Detail of sheet 56, Vielsalm; from, to the left, a detail from the Carte topographique de Belgique M 735 1:50.000 (1950), and to the right, Belgium 1:50.000 M 736 (1977). (Permission of the Nationaal Geografisch Instituut van België).

These NATO-agreements do not apply to maps at scale 1:25 000 (M 834). In the second edition of the series 1:25 000 (1970-80), the marginal information,   legends

and titles are germanized next to the changes indicated above for the map-series 1:50 000. For the title, see figure 40. Only the abbreviations are still rendered in French, and not all regional names have been checked yet for their correct(German) orthography. It seems to be the intention of the NGI to translate the abbreviations into German for the 3rd edition. Only the French-speaking department of the Royal Committee for Toponymy and Dialectology advises the NGI on these German names. As far as those toponyms in the region Arel/Arlon are concerned which are still spelled in German, according to an oral agreement with the local toponymic committee, these names will be spelled in future in conformance with the rules applied in the Grand Duchy of Luxembourg, so as to achieve conformity in the spelling of toponyms on both sides of the border[25].

BELGIQUE – BELGIË – BELGIEN 1 : 25.000

BELGIË – BELGIQUE – BELGIUM 1 : 25.000

Figure 40 Title of the Belgian topographic map-series 1:25 000 for map sheets of the German linguistic minority area (at the top) and for other map sheets.

The reprentation of the Eastern Cantons on German maps.

No German maps and atlases are published especially for use in education for this German-language Community. However, cartographic material from the Federal Republic of Germany can be used instead. The representation of the region on German maps is as follows: On the topographic map 1:50 000 of the federal state Nordrhein-Westfalen, the official toponyms of Eupen and Sankt Vith are entirely adopted. The federal state Rheinland-Pfalz gives the official spelling first in the case of municipility-names, and adds the German version of the name in parentheses; e.g. Saint-Vith (Sankt-Vith); Amblève (Amel) etc. The same procedure is followed for all other names if necessary.

It is rather difficult to assess the official attitude of the Federal Republic of Germany towards names from atlases alone, since their small-scale maps comprise hardly any names in these economically unimportant areas.

3.4.4   Conclusion

In the paragraphs on Flanders it is indicated that from 1882, when the public administration was compelled to use Dutch as the official language, it took until 1960 before the Dutch language and Dutch names were completely incorporated on maps. In the case of the German-speaking region of Eupen-Sankt Vith, which since 1919 has been allocated to Belgium, the situation of equal language rights on the map has not yet been completely achieved even though this seems to proceed at a much quicker pace lately. Since the recognition of German as one of the three official languages in 1970, the map series 1:25 000 is almost completely germanized for the regions of Eupen and Sankt Vith, apart from the abbreviations which are presently under review. However, the region is still under the competency of the French section of the Royal Committee for Toponymy and Dialectology (KCTD).

3.5   The attitude with regard to Frisian geographical names in the Netherlands

3.5.1   Introduction

In the Dutch province of Fryslân/Friesland, according to a census held in 1967, 400

000 people still use Frisian in colloquial speech; that is 87% of the provincial population (Pietersen 1969). The boundaries of the Frisian language-region are indicated on figure 41. The boundary is derived from the map-sheet 'Dialects and onomastics' in the Atlas of the Netherlands (1963-1978).

It has been investigated how, from the beginning of mapping activities in Friesland, the geographical names in this region have been represented. It appears that the topographic surveys initiated by the government complied with the language used in government. From the beginning of the 16th century, the Frisian language was non-existent in administration (Fockema Andreae 1959). During the reign of emperor Charles V (1515-1555) the administration language became Dutch. This was continued in 1580 when the provinces of the United Netherlands became sovereign. On the maps of friesland one finds names that are practically all 'dutchfied', i.e. rendered in a Dutch manner.

Table 16   Chronology of the first publication of printed topographic map series of Friesland

	Netherlands	Friesland
1:115 200	1809-1823	1813-1822
1: 50 000	1850-1864	1860-1864
1:200 000	1867-1868	1867-1868
1: 25 000	1880-1935	1828-1932[a]

a   Southwest Friesland was mapped in 1904
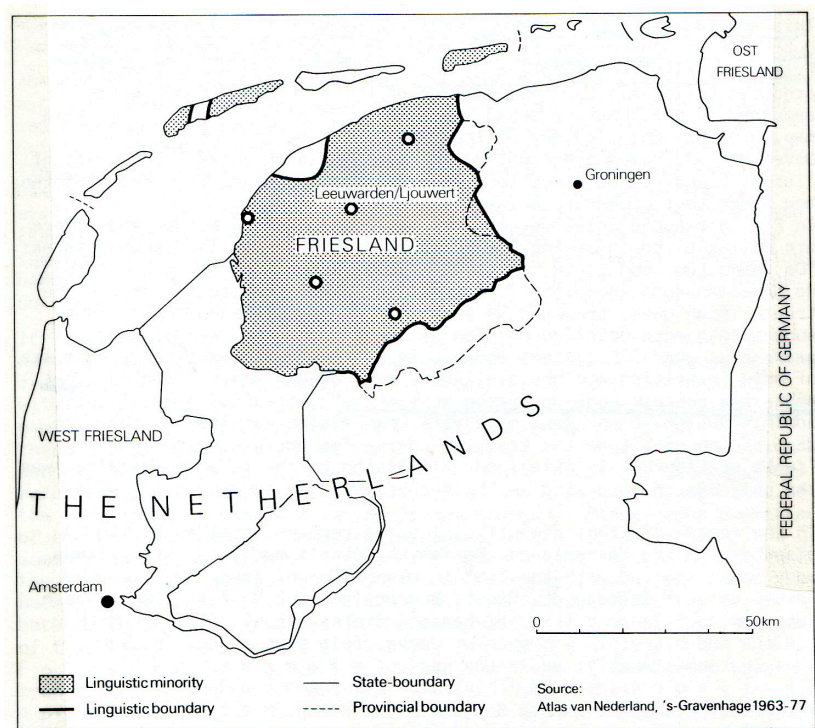
Figure 41 The Frisian linguistic minority in the Netherlands.

For this study, the mapping of Friesland is assumed to have started in 1545. It was in that year that Jacob van Deventer produced the provincial map of Friesland (Van 't Hoff 1941). This map has served as a starting point of the historical development of the spelling of Frisian toponyms. The intermediate stages of this development are: 2) the map of Friesland by Metius and Freitag incorporated both in the Mercator-Hondius-Janssonius atlas[26] (1629) and Blaeu's Grand Atlas (1633); 3) the maps of Bernardus Schotanus van Sterringa dated 1709-1712; 4) the Municipal Atlas of the Netherlands by Kuyper (1865-1869), and 5) the 'Nieuwe Atlas van de Provincie Friesland' by Eekhoff, 1849-59 (Koeman 1963). The modern sheets of the

topographic map 1:25 000 serve as a terminal stage of this development[27]. The dates of the first edition of the various map-series of the 'Topografische Dienst' (the topographic agency in the Netherlands) are listed in table 16.

3.5.2 The cartographical representation of the toponyms

It appears that, as far as there is question of divergent Dutch versions of Frisian toponyms, these are already found to a great extent on the map made for Henry of Bavaria, bishop of Utrecht, in 1524, and on the map by Van Deventer (1545). The place-names rendered by Van Deventer for the Frisian-speaking area have been presented in their divergent Dutch versions, if such versions existed, as was the case for 65% of the toponyms on this map.

This attitude has continued up until the present topographic map. The Dutch orthography of the Frisian names is to be found on all maps of Friesland, with the exception of only two. These two are a recently produced bilingual map[28] and the map of Friesland by Sibrandis Leo recorded in the Theatrum Orbis Terrarum by Ortelius in 1579[29]. On this map, probably compiled during the same period as the one by Van Deventer, all names are rendered in Frisian except a few Dutch names of 'large' towns. These exceptions are: IJlst, Harlingen, Franicker, Sloten and Sneek (but Liewerdt, Bolsart in Frisian).

In P.H. Witkamp's atlas dated 1865, on the map of the Netherlands there are bilingual toponyms for the province of Friesland. The legend states: "De namen tusschen () in Friesland zijn de werkelijke Friesche, terwijl de Nederlandsche voorafgaan" (transl. "The names in parentheses are the true Frisian ones, preceded by those in Dutch") (Witkamp 1865). In a subsequent, more detailed edition by the same author, the separate provincial map of Friesland shows only Dutch place-names (Witkamp 1873). Other examples of maps in Frisian are not available. As Fockema Andreae states (1959): "het ambtelijk gebruik kent de Friese vormen niet" (transl.: "the official administration is not aquainted with the Frisian versions"). This was despite the fact that the training course for surveyors in Frentsjer/Franeker in Friesland, affiliated to the local university, was the only one of this kind in the Netherlands for 150 years.

In the course of time, the official usage changed here, as it did elsewhere in the Netherlands. On Van Deventer's maps, one still finds many names spelled with the "ae" in places where, later "aa" is used (examples are: Bolswaerdt, Gaest, Baerdt) and the "oi" in places where later an "oo" is used (e.g. Oisterzee, Oisterwierum). Although both Hondius and Blaeu, in a number of cases, fall back on the Frisian spelling occasionally, as in the case of *Minnaem, Smallebregge, Metselwier* and *Oldehaske*,instead of *Menaldum, Smallebrug, Metslawier* and *Oldehassche*, they do give, in general, the same versions as does Van Deventer. Christiaan Sgrooten does likewise with his atlas (Fockema Andreae & Van 't Hoff 1961 p.1). When comparing the spelling on the maps of Hondius and Blaeu with that of Schotanus many "c"s appear to have been transferred to "k"s. Between Schotanus (1712) and Eekhoff (1859) the changes are more pronounced. Eekhoff involved all teachers in the province by means of a questionnaire to find out the correct spelling of place-names for his provincial atlas (Rentenaar 1970, p. 67).

In his time, a trend was discernible towards the simplification of the spelling. In cases were the present topographic map uses orthographies such as *Zürich, Cornwerd, Wijckel, Drachten* and *Marssum*, Eekhoff and Kuyper use *Zurig, Kornwerd, Wijkel, Dragten* and *Marsen*. Furthermore on maps by Eekhoff and Kuyper, word-elements such as -clooster, old-, and -huysen change to -klooster, oud- and -huizen. Instead of *Oldwolde*, they give *Oudwoude*, and -swage changes to -zwaag. Most of the remaining "ck"s change to "k"s. Instead of *Finckum, Dockum, Giekerck* and *Nijkerck*, they give *Finkum, Dokkum, Giekerk* and *Nijkerk*.

This spelling conforms to a large extent to that of the first edition of the topographic map at scale 1:50 000 (1850-1864).

The present regulations of the Dutch mapping services differ in extent with regard to the Frisian toponyms. The Dutch topographic service for instance, prescribed, until recently, in detailed instructions how Frisian names were to be transformed into Dutch (Topografische Dienst, 1968). The Cadastral Service issued regulations for the large-scale base-map of the Netherlands stating that, in the case of bilingual street-names, the first, i.e. Dutch name, was to be rendered on the map (Kadaster 1978). However, the result, regardless of the length of the regulations, remained the same: an exclusion of all Frisian geographical names, except in the case of farm-names and untranslatable field-names. On the hydrographical map, there are no Frisian names at all.

It is difficult to assess what has happened to the original Frisian names since there are no large-scale maps in the Frisian language dating from the 16th or 17th Century. All indications for what has happened within the framework of this study must be based on the comparison of names on topographic maps with modern Frisian names. The sources for these names are the bilingual map of Friesland at scale 1:100 00028, a council resolution (dated 20.1.1981) of the municipality of Idaarderadeel referring to the topographic map 1:25 000, and a list of place-names of the 'Nammejouwingskommisje van de Fryske Akademy' (Place-names committee of the Frisian Academy) compiled in manuscript in 1981[30]. Table 17 summarizes the differences between the names on the topographic map and the Frisian versions according to the sources previously mentioned. Because many names are translated as well as 'dutchified', the ratios between these two categories in the table are only indicative. Examples of translated names are: *Oudkerk* for *Aldtsjerk* and *Folkertsloot* for *Folkertsleat.* Examples of names transcribed in a Dutch manner are: *Appelscha* for *Appelskea, Boornbergum* for *Boarnburgum* and *Katlijk* for *Ketlik.* In cases when there is question of both translation and dutchification, toponyms have been categorized with the latter. It was not possible to assess whether a number of Frisian versions already existed at the moment when the Dutch equivalents were introduced. The Frisian name *Ofslûtdik* for example could be a Frisian translation of a Dutch name (*Afsluitdijk*).

Table 17 Modifications of Frisian toponyms rendered on topographic maps according to various sources (per cent)

	Kaart van Friesland 1:100 000	Nammejouwings-kommisje	Municipality of Idaarderadeel
Frisian names	23	22	27
'Dutchified' names	48	60	33
Names translated into Dutch	28	17	30
New Frisian names	1	1	7
Uncategorized names	0	0	3
Total number: per cent	100	100	100
absolute	948	414	175

In the collection and registration of Dutch versions of Frisian names, many errors hav been made. Due to a misunderstanding or mis-interpreting of a collected name, incorrect Dutch versions emerged. Kalma (1949) illustrates this in the following example: the Wynsleat (Wind-ditch) to the south of Drylts/IJlst is given as Wijnsloot (Wine-ditch) on the topographic map31. The Sûrdyk (Southern dyke) beneath Turns/Tirns is found rendered on the map as Zuurdijk (Sour-dyke)32. On the minute-plans of the Frisian cadastral maps, produced in the first decades of the 19th Century, all Frisian names that could be translated have been changed into Dutch. At the end of the 1960s, Frisian names appeared on cadastral maps because in a number of Frisian municipalities, exclusively Frisian street-names are

presented on street-signs. Figure 42 illustrates this trend.
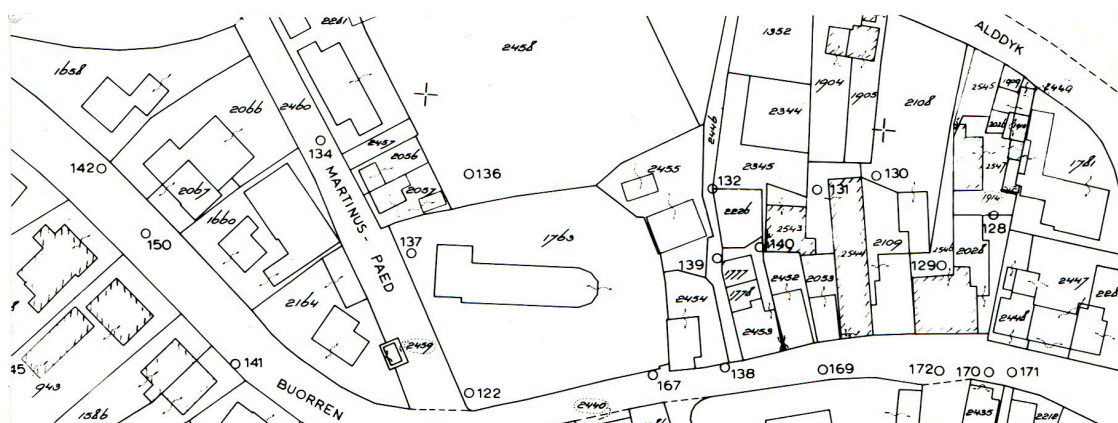
Figure 42 Detail of a cadastral map of Friesland with F r i s i a n toponyms (Permission Dienst van het Kadaster, the Netherlands, 22-7-1982).

3.5.3 Attempts to re-introduce Frisian names

After the Dutch language had been used as the language in public administration and education for three centuries, a movement was initiated aiming at the official recognition of Frisian. Equal rights have been gradually acquired in education in the present century. This began with the amendment to the Primary Education Act of 1937 which permits one hour of tuition in Frisian per week. The so-called 'Cals Act' of 1954 permits the use of Frisian as a teaching medium in the lower grades of primary schools. The 1955 Primary Education Act introduces Frisian as an optional subject, and with the revision of this act of 1974, Frisian became a compulsory subject for all schools in Friesland and was permitted as teaching medium in all grades. In administration, one is more conservative, even though the Frisian language is gradually gaining ground in this field as well. As far as toponyms are concerned, this is reflected as follows: In 1952, street-signs in Frisian were permitted and in 1958/59, place-names signs designating built-up areas became bilingual. The municipal councils obtained the power to decide on these matters (Pietersen 1969 p.109). These changes in sign-boards are not, however, reflected on the map, even though, in the meantime, in many places street-signs have become rendered only in Frisian (Beetstra 1980). When comparing the Postal-code directory (PTT 1977) with the current topographic map available in 1979, the differences are striking. At Stiens for example, in the Postal-code directory one reads *Nylansdyk, Stienzer Hegedyk, Skilwei, Haerewei, Aldlansdyk, Sleachtedyk* (diacritical signs are not used in the Postal-code directory). On the topographic map on the other hand, one finds the same features rendered in Dutch: e.g. *Nieuwelandsdijk, Stienzer Hogedijk, Schilweg, Herendijk, Oudlandsdijk* and *Slagtedijk*[33].

In 1979, the Dutch topographic service amended the regulations on dutchification of Frisian names (Topografische Dienst 1979a). Topographers now have to record the names as they appear on the street-signs. As far as the names of populated places are concerned, the Frisian version is added in a smaller type-face in parentheses in cases in which a place-name sign only gives the Frisian version. Where names of municipalities and waterways and field-names are concerned, one continues to opt for the Dutch version. In the case of polder-names, the dutchified version is chosen, unless the official name is only known in Frisian.

When, on official maps, a change has taken place to the advantage of the Frisian names, this is accomplished by way of administrative action. In Friesland, as

elsewhere in the Netherlands, municipal councils determine and fix the spelling of all geographical names in their territory. In Idaarderadeel municipality this right has been exercised with the special aim in mind to change the names on the map. The resulting enactments are reported to the topographic service (its effect can be seen in fig. 43). Other municipalities are expected to follow.

On the basis of amendments of by-laws of polder-boards approved by the provincial government, the Water-Control map of the Netherlands 1:50 000 started to include a number of Frisian names. Examples are: *Zwarte Haan* which became *Swarte Harne*[34]; and Eastergoa's Sédiken, Noardlik Westergoa and Sud-Winninghe (all Frisian now).

Who determines the orthography of these Frisian names? In 1858, the Royal Academy of Sciences and Letters did not discuss the spelling of Frisian names. It was left to Dirks, a member of the Academy, to decide; Dirks was also a member of the Frisian Society (Rentenaar 1970). The names which he supplied for Friesland, however, appeared to conform with those found in the atlas by Eekhoff (1849-1859). It also appears that the Dutch delegation of the Dutch-Belgian Vocabulary-committee, from its report to the Minister of Education and Sciences (1973), still leaves the spelling of the Frisian version of place-names to Frisian authorities. A traditional spelling of Frisian exists, the so-called Akademy-Stavering of 1945 based on the Selskips-Stavering of 1879. In 1980, the provincial government of Friesland adopted a new Frisian orthography which implies an adaptation of the Frisian toponyms[35]. This re-editing of names was commissioned to the so-called 'Toponymisk Wurkforban/Namme-jouwingskommisje' of the "Fryske Akademy' (Miedema 1975), and was completed in manuscript-form in 1981[30].

Figure 43 - Partial restoration of Frisian toponyms in the Netherlands: Detail of the topographic map 1:25,000, sheet ll A, Grouw, from 1970 (to the left) and 1982 (Permission of Topografische Dienst, the Netherlands, 22-7-1982

Topographic map-series and water-control map-series have a function in regional management. While on these maps a gradual increase of Frisian names can be observed, on maps with a national function this has not yet been achieved. In commercial publications such as school-atlases and tourist-maps, there is still no bilingualism, let alone the exclusive use of Frisian names, except the bilingual Map of Friesland previously mentioned. With the Post-office services this is different: since 1980 town-names are allowed to be spelled in Frisian on post-office giro-

cards upon request of the account-holders. Whether this is also possible with the street-names is presently under study. The Netherlands Railways do not use Frisian names, neither on maps of the railway-network nor in time-tables and guides, train-tickets or at railway-stations.

As far as the world outside Friesland is concerned, the Frisian population has to rely on Dutch publications. There are no national or international maps in Frisian. Inversely, no foreign maps use Frisian names, whether exclusively or in bilingual versions. Frisian names do not seem to be able to break through the barrier of the Dutch language to reach foreign countries. This is evident from gazetteers of the Netherlands published elsewhere[36]. The only way to achieve foreign recognition lies in the incorporation of Frisian names in an official gazetteer of the Netherlands, but this had not yet been effectuated (Topografische Dienst 1979b).

3.5.4   Conclusion.

The potential of Dutch laws to present an opening for the restoration of Frisian names has only been realized recently by Frisian municipal councils. This discovery, combined with the mitigated 'dutchification'-policy of the topographic Service will result in the increased appearance of place-names in Frisian on maps. In the first instance, they only seem to be the names of roadways and names of farmsteads. In the case of place-names, the Dutch Version is still used.

3.6   Germany

3.6.1   Introduction

In the territory, occupied today by the Federal Republic of Germany and the German Democratic Republic, the following linguistic minorities exist: Frisians and Danes in Schleswig-Holstein and Sorbs in Lausitz/Lausatia. Within the area that was part of the German Reich in the period 1870-1918 there were also French-speaking minorities around Metz and Malmédy and Polish and Lithuanian minorities along the eastern border (see fig. 44).

3.6.2.   The cartographical rendering of toponyms 1870-1918

The years of production of the various topographic map series are listed in table 18. Surveying and mapping was the responsibility of the various German Länder or states; it was only after 1935 that the 'Reichsamt für Landesaufnahme' took over the cartographic activities (Krauss e.a. 1969).
Since 1871 lists of officially fixed toponyms are published in the "Gemeinde- und Wohnplatzver-zeichnisse' of the states or 'Länder' by the 'Landesdienststellen' appointed for this purpose. From this period, no official guidelines on the spelling of toponyms have been found. The map-material indicates that, in the territories with Danish and Frisian minorities, toponyms were germanized as much as possible; to such an extent that instead of the customary local toponyms, their German equivalents (sometimes existing for many centuries) were incorporated on the map. The toponyms in territories with a French-speaking minority usually remained unaltered, Slav and Baltic toponyms were germanized. The linguistic minorities previously mentioned, will be treated separately below.

	German Empire	Malmédy	Metz	Schleswig	Lausatia
1: 25 000	1825-1955	1887-1910	1880-1882	1880-1895	1874-1884
1:100 000	1878-1910	1897	1884	1880-1881	1908-1910
1:200 000	1894-1914	1900	1899-1902	1906	1907-1909
1: 50 000	1957-1963	-	-	1962-1963	-

Sources: Published maps; Krauss e.a. 1969
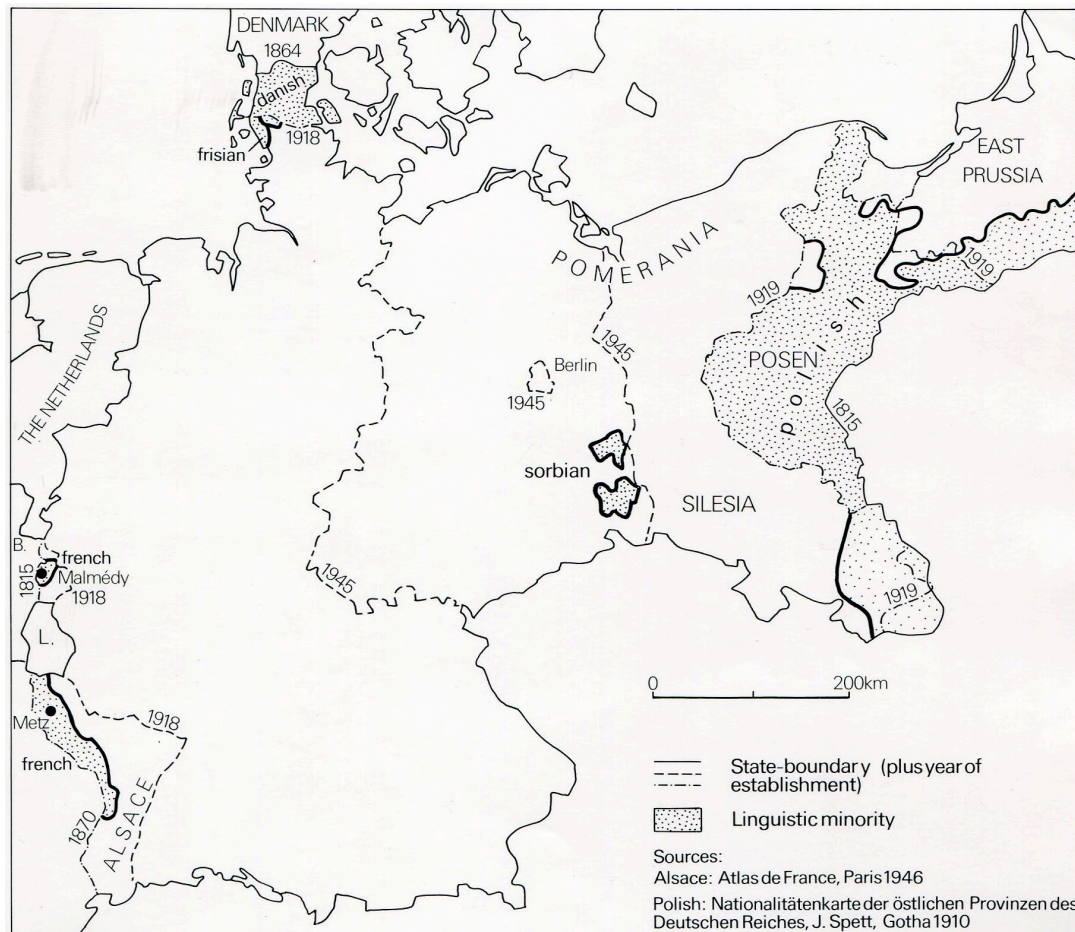
Figure 44 Linguistic minorities in the former German Empire.

After 1871, the strategically important French-speaking area around Metz was incorporated into Germany. On German topographic maps 1:25 000[37] from 1880, the articles and accents of the French names disappeared. Other geographical names were not affected. However, all generic terms on the map are German, also in French-speaking territory. The surroundings of Malmédy were represented in the same way on this map-series.

In France, regular large-scale maps of Alsace-Lorraine were not produced before 1870. In order to trace the German influence, it is therefore necessary to compare the toponyms on the German maps with those on the French maps of a later period. For this purpose, the Carte de France 1:20 000 from 1926[38] has been chosen. When compared, the following pairs of names were found:

German maps up to 1918   French maps from 1918 onwards

Servigny bei St.Barbe   Servigny-lès-Ste.Barbe
Wald von Failly   Bois de Failly

Amitie   L'Amitié
Petites Tappes   Les Petites Tappes

During the First World War, on German maps, toponyms were germanized in the
French-speaking part of Lorraine. Immediately after this war, however, these forms
were discontinued (Gradmann 1927, p.360). For the French toponyms in the
Malmédy area see paragraph 3.4.3. The paragraphs on Denmark (3.7) describe in
more detail how, on the map-series 1:25 000 and 1:100 000 published after 1864,
German forms were chosen for the majority of the Danish and Frisian toponyms
(90%). In the course of the centuries, German versions had arisen to replace Slav
and Baltic toponyms. These consisted mainly of adaptations to German
orthography and suffixes, of the Slav and Baltic sounds. Often prefixes - like
Wendisch - were used to distinguish villages with the same names.

3.6.3   Changing policies between 1918 and 1945

As a result of the First World War and the plebiscites that followed, various regions
were detached from the German Reich and joined other states. This loss led to a
wave of germanizations of non-German names within the Reich.

The granting or fixing of toponyms had become a 'Hoheitsrecht' of the Länder since
1903, which means that changes in toponyms, proposed by the local authorities,
had to be ratified by the state-authorities. This Hoheitsrecht enabled the
government to play a directing role in the process of germanization.

The first agency that officially expressed itself on the germanization of toponyms
was the 'Zentralkommission für wissenschaftliche Landeskunde von Deutschland'.
In 1927 it made the following proposition in the 'Grundsätze für die Beibehaltung
Deutscher Ortsnamen', stating that: "when German native Speakers use a name-
form or spelling for a foreign geographical feature different from the official
orthography, the former is to be used in German publications" (Gradmann 1927).
Examples of this nationalist attitude after 1918 can, for instance, be found on the
'Topographische Übersichtskarte des Deutschen Reiches' 1:200 000[39]. In its edition
of 1901 French toponyms are used in the so-called "Voerstreek", conformable to
Belgian topographic map of this period (e.g *Fouron St. Martin, Altembrouck,
Remersdael, Fouron St. Pierre*). On the editions published after 1918 these
toponyms were germanized (*St.Martinsvuren, Altembruck, Remerstal,
St.Petersvuren*). The surroundings of Arel/Arlon in East Belgium, where the
German language was still used at that time, were given the same treatment. On
the 'Übersichtskarte von Mitteleuropa' 1:300 000[40] one finds French names
(*Hondelange, Autelbas, Guirsch, Longeau*)on the 1909 edition while on those
published after the First World War, German versions (*Hondelingen, Nieder-Elter,
Girsch and Langwasser*) had replaced them.

Within the German Reich, the name-changes began to occur in East Prussia. As a
reaction to the plebiscites germanizations became apparent in this province from
1920 to 1934, initiated by the local population. In this period, 287 village-names
were changed (Kirrinnis 1942). After 1933 the German government became aware
of the political value of toponyms. Now the state started to display an active names-
policy, whereas it had exercized only a controlling influence since 1903. There was
a 'Neuschöpfung' of German toponyms.

In Silesia this process started in 1933. In many cases germanized Slav suffixes
were replaced by German-sounding ones. *Klein-Nädlitz* e.g. became *Nädlau* and
Gross-Nädlitz was replaced by *Nädlingen*. The prefix 'Wendisch' was removed from
the toponyms in Mecklenburg after 1938. This also occurred in Pomerania and
Brandenburg. The 'Schriftbild' of toponyms was adapted to that of the German
language.

The regulations with regard to exonyms, as described by Gradmann, were also

adopted by the 'Reichsamt für Landesaufnahme' in 1938. The 'Mitteilungen des Reichsamts für Landesaufnahme' of that year[4] state that, on official maps, the German geographical names in use in 1914 were to be retained for territories ceded after 1918. If space on the map permitted, locally official versions could be added in parentheses.

In 1938 another wave of germanizations inundated East Prussia. Now for the first time geographical names of other features than populated places, like hydronyms and names of regions and field-names, were also changed. Examples, according to Kirrinnis (1942),are indicated below. The present names are added in the last column.

Before 1938	1938-1944	After 1945	
Ragaine	Ragnit	Njeman	(Russian)
Pillkallen	Schlossberg	Dobrovol'sk	„
Stallupönen	Ebenrode	Nesterow	„
Eydtkuhnen	Eydtkau	Tskalow	„
Darkelunen	Angerapp	Osjorsk	„
Bialla	Gehlenburg	Biaia Piska (Polish)	

After the incorporation of the Sudetenland in 1938 the Czech toponyms were germanized. This also happened in the protectorate Bohemia and Moravia. German exonyms were introduced as the official toponyms. If German name variants did not exist, Czech names were spelled in the German manner. Existing German name-versions were also modified. In this way *Dobran* (Czech *Dobřany*) in the Reichsgau Sudetenland became *Wiesengrund* (Breu 1960, p. 108). In Slovakia existing German toponyms were mentioned first on the map: Tyrnau(Trnava), Bösing (Pezinok)[42].

After 1939, the toponyms from 1918 were re-established in occupied Polish territory. Several new names were introduced, like *Litzmannstadt* to replace *Łodz* and *Gotenhafen* for *Gdynia (Gdingen)*. On the first edition of the 'Karte des Deutschen Reiches' 1:100 000, appearing after the occupation of Poland[43], German names were overprinted in brown. Among these transformations there are adaptations to the German language and germanizations (e.g. *Opalenica* becomes *Opalenitza*) as well as translations (*Wlk.-Wies* is translated into *Grossdorf*) and new toponyms (the new name for *Wiktorowo* is *Bismarcksfelde*). See also figure 45 (Tatham 1978).
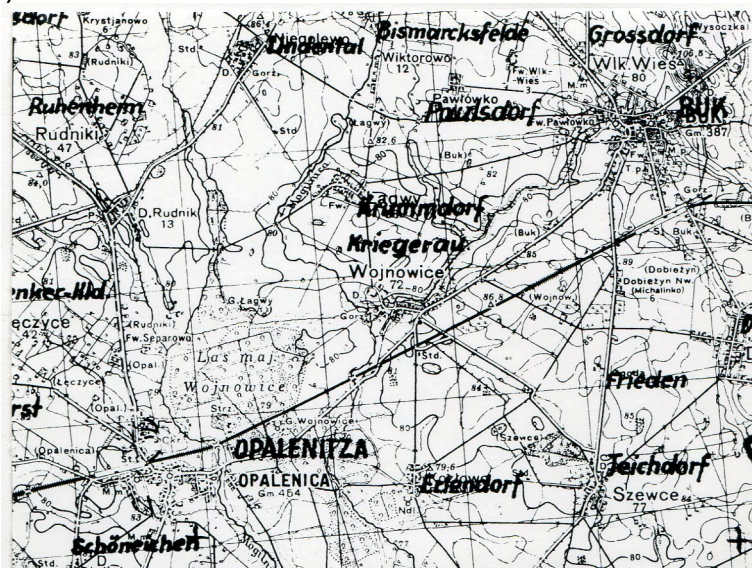

Figure 45 Superimposed German toponyms on Polish maps: Detail of Einheitsblatt 68, Posen, Karte des Deutschen Reiches 1:100 000 (from Tatham,Cartographic Journal 1978).

After 1940, Eupen-Malmédy, Luxembourg and Alsace-Lorraine were incorporated; Eupen-Malmédy now included the municipalities Montzen, Sippenaken, Hergenrath and Homburg. In all of these territories the German spelling of the toponyms was restored, at least in cases where this had not already occurred.

In the French-speaking territory around Metz however, the Germans went even farther than in the period of 1870-1918. Toponyms like *Chateau-Salins,Dieuze, Marsal* and *Sarrelouis*, that had remained unaltered from 1870 to 1918, were now changed into *Salzburgen, Duss, Salzmar* and *Saarlautern* respectively[44].

Also on German maps of the territories of German Allies, like Hungary and Romania, German name-versions are mentioned first[45]. Some examples are:

Hungary	Romania
Odenburg (Sopron)	Thorenburg (Turda)
Raab (Györ)	Blasendorf (Blai)
Ungarisch Altenburg (Magyarovar)	Karlsburg (Alba-Iulia)
Steinamanger (Szombathely)	Mierschall (Ocna Mureşului)

3.6.4   The Federal Republic of Germany

After 1945, two linguistic minorities remain in this 'Nachfolgestaat' of the German Reich: the Frisian and the Danish. Only the latter has a somewhat official status.

According to the Toponymic Guidelines[46] toponyms are to be written on the map in the same way as they occur in the 'Ortsnamenverzeichnisse' of the various federal states. The states determine and fix the orthographies of the municipality-names in their territories. Names of other populated places are fixed either by the municipal council, or by 'Verwaltungsakt' of the federal state. There is no authority competent to determine and fix the spelling of the remaining geographical names. 'The Ständige Ausschuss für Geographische Namen' (St.A.G.N.) however, does possess a regulating function in this matter. With regard to the FRG it has, among others, furnished the material for the 'Duden', the most important reference work for the spelling (Duden 1966).

The 'Institut für Angewandte Geodäsie' (IFAG), the institute responsible for the production of small-scale topographic maps of the entire Federal Republic, follows the spelling used by the federal states on their 1:50 000 sheets. Generally speaking, very few dialect forms are found on the maps. The toponyms are still being transformed in High German as much as possible. In Nordrhein-Westfalen and Niedersachsen this tendency is the strongest. Neither dialect names, nor toponyms of the language-minorities Frisian and Danish are to be found in the gazetteer published by the IFAG in 1981, that comprises all toponyms occurring on the Übersichtskarte 1:500 000 within the borders of the FRG (IFAG 1981). Being official NATO-maps the topographic maps on the scales 1:50 000 and 1:250 000 are subject to the NATO-regulations, which includes the maintaining of the official local names. These regulations do not apply to the rest of the topographic map-series.

Cartographical representation of the toponyms of the linguistic minority areas

The location of the linguistic minorities in the Federal Republic of Germany is indicated on figure 49. The estimated numbers in question vary somewhat, but those of the Danes do not exceed 50 000 and the Frisian linguistic minority is estimated at 10 000 persons (Stephens 1976, p. 421, 432). The cartographic policy with respect to the toponyms has not changed here since 1864. The toponyms are still recorded on the maps in their German versions. This goes for the Danish as well as for the Frisian toponyms. Merely a zone along the Danish border is now considered as official bilingual German-Danish territory. This is not reflected on the

maps, where all geographical names are only rendered in German, also in this borderland. In practice, the Frisian language has merely the status of a dialect.

By comparison with a map produced by the North Frisians, on which the original Frisian toponyms are mentioned beside the German ones[47], it appears that a negligable part of the toponyms has remained unaltered on current German maps (the same applies for the period of Danish administration until 1864 with the mere difference that the toponyms were 'danicized' then).

As far as could be checked, most of the toponyms changed were germanized, that is to say that they were provided with German suffixes, whereas a small part was translated (this comparison is only based on the map with the restored Frisian toponyms).

When comparing the old Danish with the present German maps[48], most of the toponyms appear to have been changed. In order to assess this change, the toponyms in three sample areas have been compared: the surroundings of the town Slesvig/Schleswig, the peninsula Svansen/Schwansen and a zone south of the German-Danish border. The Danish toponyms of the border-zone have been derived from recent Danish maps[49]. For the result, refer to table 19. Around Schleswig and on Schwansen many German toponyms already existed. In the more rural border-zone, the proportion of German names is much smaller. The following transformations have been considered as germanizations: "ks" is changed in "x", "k" in "ck", "g" in "k",-sted in -stedt, -skov in -sch(a)u, "y" in "ü" and finally "v" becomes "w".

Table 19   Changes of toponyms on maps of Schleswig after its incorporation into Germany (per cent)

	Schleswig city region	Schwansen peninsula	Zone south of present border
Unchanged Danish names	9	24	29
Germanized names	46	44	61
Names translated into German	23	13	9
Unchanged German names	15	19	1
New German names	7	0	0
Total: per cent	100	100	100
absolute	141	100	122

Sources: Old Danish and current German maps of Schleswig

Representation of the toponyms in territories that were formerly part of the German Reich and that at present no longer belong to the 'Nachfolgestaaten'.

In South-Jutland only German toponyms are found on the German map 1:200 000[50] that has been printed in 1951. On the subsequent editions from 1963/1968[51] we still deal with the old German names in Danish territory, but now some Danish names have been added in parentheses. This has been reversed on the 1976 edition. We now only find Danish toponyms with some German versions added in parentheses, for instance:

1963(CC 1510)	1968(CC 1518)	1976(CC 1510)	1976(CC 1518)
Röm (Römö)		Rømø	
Sönderland		Sønderland	
Hoyer	Hoyer (Höjer)	Højer	Højer (Hoyer)
	Apenrade (Åbenrå)		Åbenrå (Apenrade)
	Tondern (Tönder)		Tønder (Tondern)
	Alsen (Als)		Als (Alsen)

The German sheets of the Joint Operations Graphic Chart 1:250 000, a NATO-map[52] only comprise Danish toponyms in Denmark.

In the provisional gazetteer of the Federal Republic, of which a temporary edition has appeared for Niedersachsen[53], some space had been left blank for a category of 'Zweitnamen'. Despite the possibility to introduce toponyms in the minority languages here, no use has been made of it.

At present, the Belgian topographic map is the source for the spelling of the German topographic maps for Eupen-Malmedy, also in the now officially bilingual (German-French) part of Belgium around Eupen and Sankt Vith. However there is a certain delay. Just like immediately after the war, when people needed time to introduce the new French versions on the maps, it now took several years before the German maps introduced the German toponyms, that are now official again, for German-speaking Belgium. The third edition of the map 1:100 000 of the FRG (1975) mentions *Kelmis* again in stead of *La Calamine*[54].

For Luxembourg, the old German toponyms appear on the first edition of the German map 1:200 000 (until 1914 German was the official language of Luxembourg). This led to protests of the government of Luxembourg to the Federal Republic[55] and therefore, on the second edition, the toponyms have been rendered according to the official spelling of Luxembourg. On the German map 1:100 000, this has been stated in the map-margin as follows: "Die Schreibweise der Ortsnamen im Luxemburgischen Teil dieses Blattes ist dem 'Annuaire Officiel 1967', alle übrigen Namen der Karte 1:20 000 von Luxemburg entnommen". This results in the following differences between the successive editions:

1:200 000, CC 6302, Trier (1970)	1:200 000, CC 6302, Trier, (1977)
Luxemburg (Luxembourg)	Luxembourg (Luxemburg)
Bartringen	Bertrange
Schüttringen	Schuttrange
Fels (Larochette)	Larochette (Fels)

Since the first edition of the map 1: 50 000, the Luxembourg toponyms are spelled according to the 'Annuaire officiel' 1955.

On the first post-war edition of the 'Topographische Übersichtskarte' 1:200 000 (1968/69), one finds exclusively German names on the map for Alsace-Lorraine. French names have only been added in parentheses for the larger features. The Joint Operations Graphic Chart 1:250 000 only presents French toponyms (see fig. 46 for the map 1:200 000).

On German maps of the border-area between Bavaria and Czechoslovakia, the Czech versions of the names of populated places on Czech territory are recorded first, followed by the former German versions in parentheses. Often, the remaining features are rendered in German. Probably as a result of inaccessability of large-scale Czechoslovakian topographic maps, the new Czech names of these features cannot be established.

In accordance with the 'Richtlinien für die Schreibweise von Orts- und Landschaftsnamen in deutschen Karten und Textveröffentlichungen'[56] published in the 'Bundesgesetzblatt', all populated places which belonged to the German Reich on the 31st of December 1937, have to be rendered in the spelling in use at that time. If necessary, new name-versions in territories now governed by other states

could be added in parentheses. On legal grounds, the representation of non-German names was considered a formal cession, in anticipation of a peace treaty. Elsewhere in Europe, generally accepted German place-name versions were to be rendered also, with the possible addition of the local version. These regulations were tacitly abolished, probably when normalization-treaties were being concluded with the Eastern European states. Among the German exonyms, a distinction can be made between the names of places still inhabited by German-speaking minorities which have been founded by Germans and therefore provided with a German name, and other exonyms. On official maps, it will be much easier to replace this last category by the locally official toponymy. More resistance is shown against the abandoning of German place-names in the first category. Moreover this resistance is geographically differentiated in the Federal Republic of Germany. After about 1960, divergent German name-versions are no longer rendered on official German maps depicting parts of France, Belgium or Luxembourg. However, this still remains to be the case on maps depicting parts of Poland or Czechoslovakia[57].

Here again, we are confronted with the phenomenon that changes in opinions pervade at a later stage to derived small-scale maps than to larger scale maps. The 'Übersichtskarte von Mitteleuropa' 1:300 000 (1964) still gives many German name-versions outside the national border. On sheet K48 of this series[58] one finds names like *Mülhausen, Hüningen, Masmünster*, and *Gebweiler, for Mulhouse, Huningue, Marmoutier* and *Guebwiller*. Sheet K49, Strassburg (1955) shows *Markirch, Neu Breisach* and *Reichenweier* for *Ste. Marie-aux-Mines, Neuf Brisach* and *Riquewihr*. The fact that not all 'Landesvermessungsämter' in the FRG do follow the same name-policy with regard to foreign toponyms, further complicates the matter. At the scale of 1:100 000, Baden-Württemberg adds only the divergent German name-versions to names outside the national boundaries. Saarland and Rheinland-Pfalz do so for practically all municipality-names.
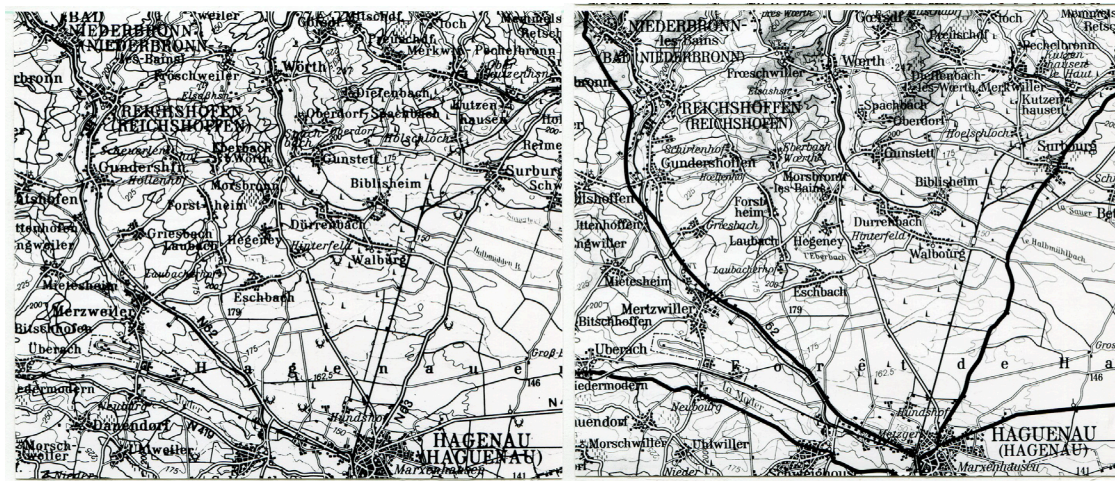

Figure 46 Change from German exonyms to official toponyms on German topographic maps of the Alsace. Details from Topographische Übersichtskarte 1:200 000 from 1968 (top) and 1977, sheet CC7110, Mannheim (Permission of Institut für Angewandte Geodäsie, Frankfurt am Main, Nr.33/82, 16-8-1982).

Nordrhein-Westfalen renders practically no divergent German municipality-names whatsoever, whereas it presents only German versions for other features. In figure 47, the differences are indicated between the territory mapped by Rheinland-Pfalz and by Baden-Württemberg. These sheets appeared during the same period.
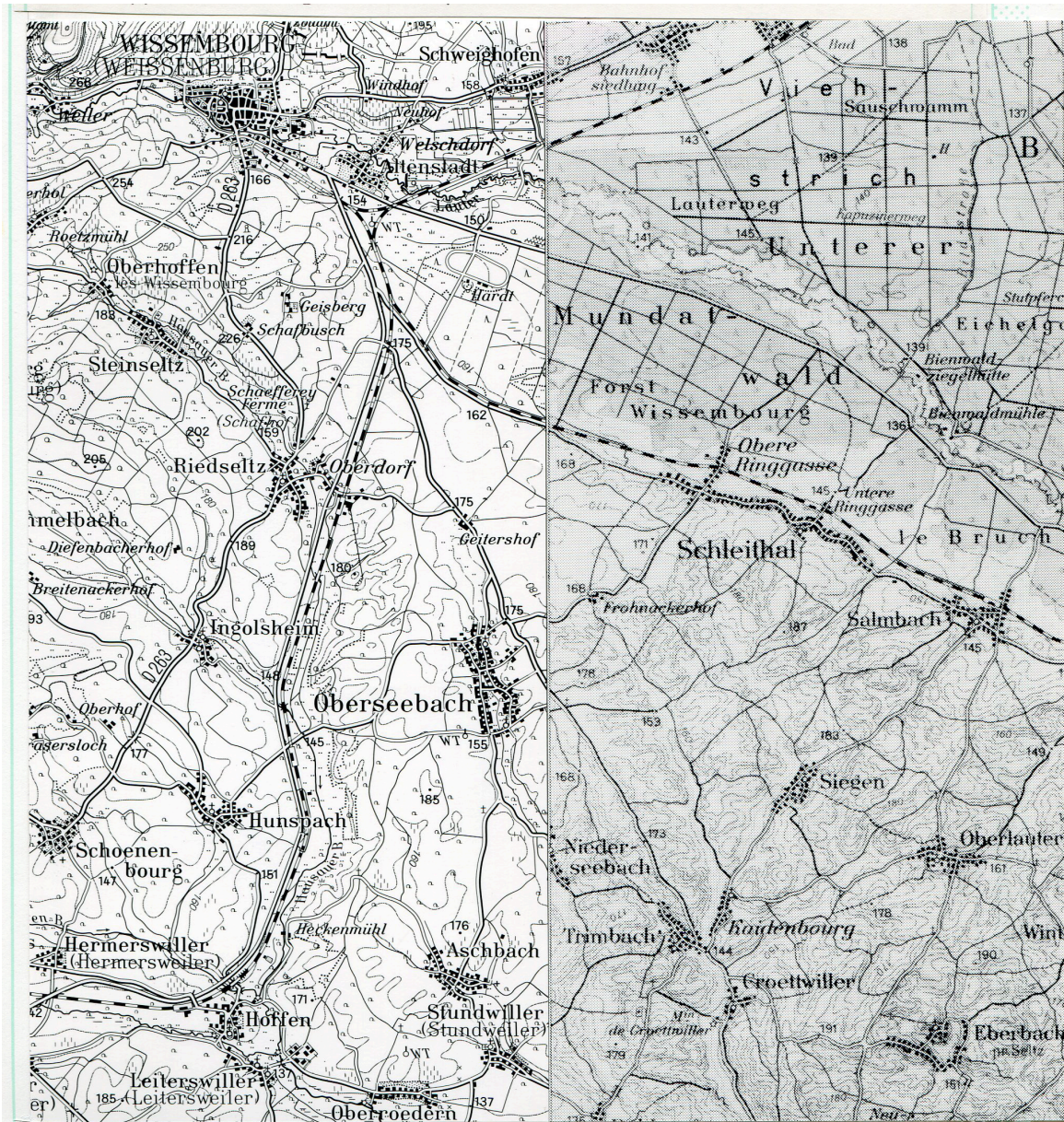
Figure 47 Differences in attitudes towards foreign toponyms between state topographic services in the Federal Republic of Germany. Details from the Topographische Karte 1:100 000, sheet C 7110, Bad Bergzabern, Landesvermessungsamt Rheinland-Pfalz, 1968 (to the left) and sheet C 7114, Karlsruhe, Landesvermessungsamt Baden-Württemberg, 1971 (Permission from the publishers, AZ.:5/11/103).

5. The German Democratic Republic

German is the only official language in the GDR. In those parts of the 'Bezirke' Cottbus and Dresden, which are inhabited by citizens with the Sorb 'nationality', the Sorbian language is acknowledged as being locally official. On German maps from before the Second World War the Sorbian language was not acknowledged.

In the GDR, no central authority exists, which determines 'hoheitsrechtlich' the spellings of place-names. This has led to variations in name versions in use by different authorities. Therefore
in 1966 the 'Kommission für die Schreibweise geographischer Namen in kartographischen Erzeugnissen der DDR' (founded in 1960 as an advisory body for institutions engaged in the field of cartography) has published general directives[59]. The guidelines and accompanying name-lists are compulsory for all cartographic products of the GDR and are recommended to other institutions rendering toponyms. According to these directives, dialect-names on maps may not be changed and dialect-forms of recognizable generic terms in toponyms may not be standardized.

The Sorbs

In about 800 A.D., the territory of the GDR was inhabited by Slav-people. The Slav population disappeared for the major part, due to colonization and conguests. Certain groups of Slavs, namely the Sorbs, have been able to maintain themselves in Lausatia, although diminishing in numbers. In 1868 their number was still estimated at 166 000. The GDR claims that, at present, there are still 70 000 native speakers of the Sorbian language. West-German sources estimate their number at 50 000 (Stephens 1976, p.415). The constitution of the GDR guarantees the Sorbs the use of their mother-tongue. Geographical names on maps and city-plans in territories also inhabited by Sorbs, are to be rendered in German as well as in Sorbian, as is indicated in the 'Instruktion für die Schreibweise geographischer Namen in kartographischen Erzeugnisse der DDR'[60]. Section 40 of the Constitution of the GDR states the same (Haack 1972, p. 374). This regulation applies also to a number of 'Kreise' in the Bezirke Cottbus and Dresden, which are indicated on figure 48. Beside this, this obligation also applies to city-plans and large-scale topographic maps (>1:50 000) and to administrative and other thematic maps on a smaller scale, on the condition that sufficient space is available. The Sorbian names are to be spelled with all the usual diacritical marks. These names are printed beneath the German names in a somewhat smaller type-face. The Sorbian names are not included in the above mentioned 'Allgemeine Richtlinie'. However, they can be found in the 'Ortsnamenverzeichnis der zweisprachige Kreise der Bezirke Dresden and Cottbus' (Rachel & Noack 1969). The Ortsnamenverzeichnis also contains a list of Sorbian exonyms for other places in the GDR. Special Sorbian atlases for schools do not exist.
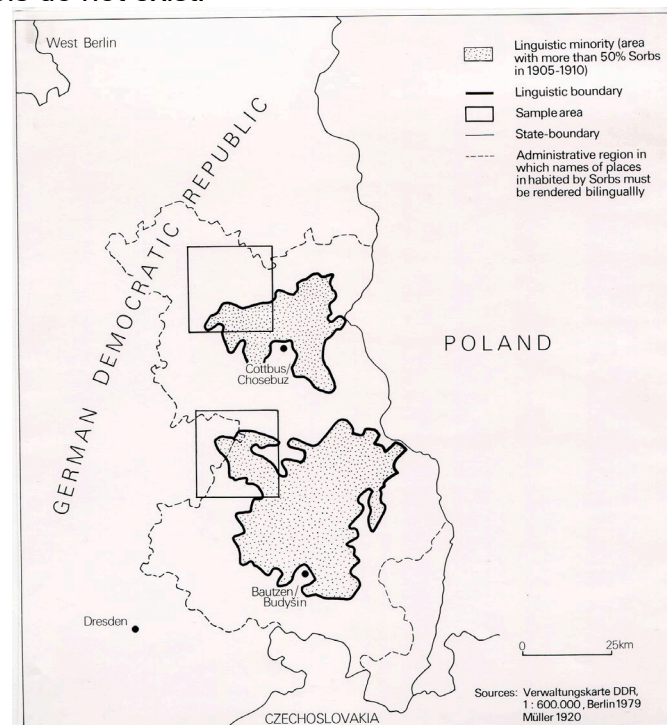

Figure 48 The Sorbian l i n g u i s t i c minority in the German Democratic Republic.

Cartographical representation of toponyms

As a part of both Saxony and Prussia, Lausatia has been mapped on a large-scale in the 19th Century. In the Sorbian language region on the Prussian Messtischblätter[61], Sorbian names are found in the German spelling. Between the two World Wars, these names have disappeared for a major part. In order to analyse these changes, the Messtischblätter published in about 1900, have been compared with American military maps[62] of Lausatia, whose contents were identical to the second edition of the Messtischblätter of about 1940.

As topographic map series 1:25 000 and 1:50000 of the GDR are not accessible to the public, the only way to trace the reactions of the GDR to the germanizations of before the Second World War, is to compare the pre-war map-material with the 'Verkehrskarte' and the 'Verwaltungskarte' of the GDR 1:600 000[63] which are available. As mentioned above, according to the Constitution, the maps at scales ≥1:50 000 ought to be bilingual for the Sorbian-speaking region. The only representative of such a map is the city-plan of Bautzen[64]. The names of the larger cities in the 'Kreise' inhabited by Sorbian native speakers are rendered in both languages on the Verwaltungskarte of the GDR. It even contains a separate index of all Sorbian names in this region and their German equivalents.

On the Messtischblätter of the former kingdom of Prussia, most Lausatian towns have a Slav name, rendered in the German spelling or in a form adapted to German. In the period preceding or during the second topographic survey (1933-1941 for Lausatia), many of the regional names, field- and rivernames have been germanized. The sheets Straupitz, Lieberose, Burg and Werben show the following examples:

1900-1910	1933-1941	1900-1910	1933-1941
Bsennitza	Nord-Fliess	Gr.Mutnitza	Grosses-Fliess
Schrbenza	Kleines-Fliess	Milanka-Fliess	Eschen-Fliess
Patschowina	Grosses-Fliess	Wiessanka	Kirscht-Fliess
Gniela	Sandgraben	Neraschoe	Jäger-Fliess

As far as it was possible to retrace them, these germanizations are still being maintained on the maps 1:200 000 of the GDR. Concerning the names of populated places the situation is more diversified, as illustrated below:

Sorbian according to the Verwal-tungskarte	1:25 000 1900-1918	1:25 000 1933-1941	Verkehrkarte 1:200 000 1964
-	Dlugy	Fleissdorf	Fleissdorf
Blun	Bluno	Blunau	Bluno
Zabrad	Sabradt	Wolfsfurt	Sabrodt
Čelno	Tzchelln	Nelkenberg	Tzchelln
Wusoka	Weissagk	Märkisch Heide	Weissagk
Tsesojce	Tzschacksdorf	Schacksdorf	Gr.Schacksdorf
Roggozno	Roggosna	Roggosen	Roggosen

However, these are only exceptions. Most toponyms have not been changed since 1900. Until 1940, the names of the smaller features have been germanized. What happened to these names after 1945 could not be checked. Examples are listed below:

1900-1918	1933-1941	1900-1918	1933-1941
Pretznicka	Waldrand	Dubraucke	Eichwege
Wossinka	Erlengrund	Smarso	Rodetal
Struga	Wellenbach	Pinkanwa Wiesen	Wiesen Tranitz
Golischa Teig	Heide Teig	Vorwerk Gollitza	Wiesen Vorwerk
F.Kopschenz	F. Grenzmühle	Schmuckatz lauch	Törfteig

Moreover many Slav-sounding names have disappeared from the map between 1900/1918 and 1933/1941, without being replaced by other names.

On Polish maps of the GDR[65], a larger concentration of bilingual toponyms is found in Lausatia. Their spelling does not always correspond with the Sorbian versions on the Verwaltungskarte.

Comparison between Sorbs and Slovenians

Both Austria and the GDR have a Slav minority. These minorities live either contiguous to or close to a sovereign state with an official Slav language. The language of the Austrian Slovenians is also spoken on the other side of the Yugoslav border; this is not the case with the Sorbs.

Cartographically, the positions of the Slovenians in the Habsburg Monarchy before 1918 was better than that of the Sorbs. The Slovene names at least appeared on the official maps in their proper spelling. After 1918, neither of the minorities, cartographically, received any attention. In Austria only germanized names apppeared on the map; in Germany Slav-sounding names were even replaced by new German ones. Further, both language communities strongly declined in numbers. In 1883, 102 000 Slovenians lived in present Austrian Carinthia. In 1971, the estimates varied from 22 000 to 50 000. In 1868, some 166 000 Sorbs were counted; in 1970 estimates varied from 50 000 to 70 000.

After the Second World War, the rights_of the linguistic minorities were legally recognised in both Austria and the GDR. In the GDR, this resulted cartographically in the obligation to provide maps on scales larger than, or equal to 1:50 000 of Sorb-territory with Sorbian names as well. Due to lack of large-scale material from the GDR this could only be ascertained on the city-plan of Bautzen and on the Verwaltungskarte. The same regulation obliges Austria to adopt Slovene name-versions in Slovene-speaking regions. However, this stipulation has not been effectuated until now, and for this reason in practice the result does not differ much from that of the GDR.

3.6.6   Conclusion

Before 1918, the German attitude towards non-German toponyms was diversified; French toponyms were adopted; Frisian, Danish and Slav toponyms appeared on the maps in germanized forms. In the period 1918-1940 German-sounding names were introduced in the Slav regions. After 1945 in the Federal Republic of Germany, germanized names in Schleswig were maintained. In the German Democratic Republic the official policy is to render names in Sorbian regions in both German and Sorbian versions. Unfortunately, topographic maps on which this could be checked were not accessible to the author.

3.7   Denmark

3.7.1   Introduction

Within the Danish national state, there are three linguistic minorities: the inhabitants of the Faroes (47 000 inh.), of Greenland (48 000) and the German-speaking population (20 000) in Southern Jutland i.e. the northern part of the former duchy of

Schleswig (Stephens 1976, pp. 235,246,252; Van der Plank 1974, p. 55).
From 1953, Greenland, after being considered a colony for a great number of years, was promoted to the status of province with its own parliamentary representative. Since 1980, it obtained internal autonomy. The inhabitants of Greenland (Kalaallit Nunaat), the Inuit, speak their own language, Kalaat Dlisut. The capital of Greenland is Nuuk (Godthåb).

From the year 1035, the Føroyar/Faroe Islands were a Norwegian province. In 1380 A.D, together with Norway, the islands fell to the Danish Crown. In 1814 however, when Norway and Sweden were united, the islands remained Danish together with Iceland and Greenland. The internal autonomy was abolished, and the region was relegated to the status of a Danish province. From the year 1851, it was represented in Danish parliament. In 1938, Faroese was recognized as the official language of the islands after its use was already permitted by the post-office services from as early as 1920. In 1923, a provision was introduced stating that all Danish laws first had to be approved by the local parliament (the Løgting) before they could be enforced. In 1948, self-government of the islands was promulgated by law.
Schleswig's population originally was partly Danish and partly Frisian-speaking. However, since the Middle Ages, it was strongly influenced by the Germans. German became the language of the towns and of the educated. In the countryside, the language boundary gradually shifted northwards as well. After 1848, the government in Copenhagen issued a series of decrees to secure the position of the Danish language. In 1864, Schleswig (together with Holstein) was taken by the German Confederation from the Danish Crown. In 1866, the region fell to Prussia. When at the 1920 plebiscite Northern Schleswig was again allocated to Denmark, it had a German-orientated minority (not necessarily the same as a German-speaking minority - refer to Van der Plank 1974, p. 53) of some 40 000 people, or 15% of the population of Northern Schleswig.

Since the 1955-'Bonner Erklärung', there has been an arrangement between the Federal Republic of Germany and Denmark regarding their mutual minorities. The German-speaking minority in Denmark is estimated at some 8% of the Northern Schleswig population (Van der Plank 1974, p. 55). There is no question of a coherent German-speaking region to the north of the border. The population is concentrated mainly in the larger settlements. See also figure 49.
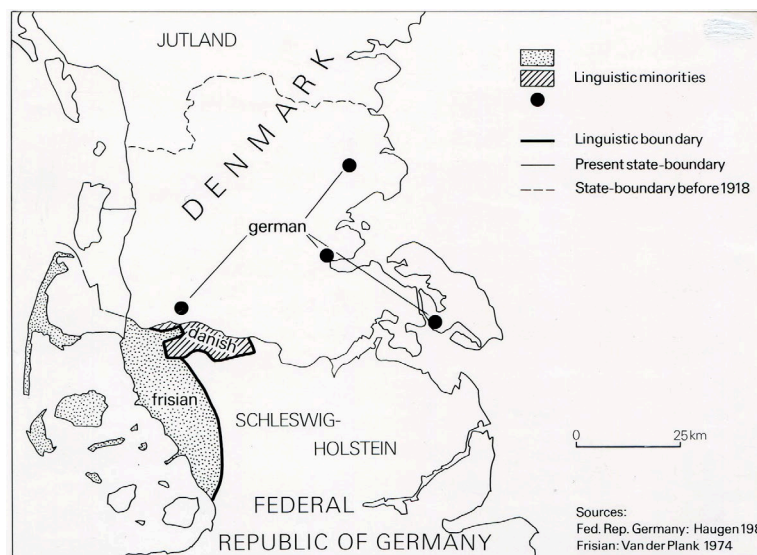

Figure 49 The linguistic minorities in Northern Germany and Southern Denmark.

3.7.2 Mapping history

The first systematic, country-wide topographic mapping operation in Denmark was carried out on the initiative of the Royal Academy of Sciences and Arts, the 'Videnskabernes Selskab'. In the period 1757-1820, surveys were carried out under the supervision of this body. From 1769-1842, the first map-series were published at scales varying between 1:40 000 and 1:240 000. In the year 1843, its mapping activities were taken over by the topographical department of the General Staff and in 1928 a fusion between that department and 'Den Danske Gradmåling'resulted in the present 'Geodaetisk Institut'. The map-publication program of this service is summarized in table 20.

Table 20	Denmark	Southern Jutland	Faroe Islands	Greenland
1: 20 000	1846-1877	1920-1925	1897-1901	-
1: 40 000	1870-1888	1930-1937	-	-
1:100 000	1889-1897	1920-1931	1916	-
1:200 000	1932	1932	1934	-
1:250 000	-	-	-	1936-1990
1: 25 000	1957-1978	1968-1977	-	-
1: 50 000	1959-1980	1971-1977	-	-

Table 20 Chronology of the first publication of printed topographic map-series of linguistic minority areas in Denmark

Table 20 Chronology of the first publication of printed topographic map-series of linguistic minority areas in Denmark

3.7.3 General principles with regard to the toponyms

Since 1910, there has been a place-names committee in Denmark, the so-called 'Stedsnavneudvalget', which from 1932 publishes lists of Danish toponyms authorized by the government (Wohlert 1978). These lists, published per province (Amt) or combination of provinces were completed in 1969 (including the Faroes and excluding Greenland). In 1967, it was decided to carry out revision activities, as a large number of new names had been added since. The first volume of the revised lists (Fortegnelse over Stednavne i amterne øst for Lillebaelt), appeared in 1978. The second and last volume is still in a preparatory stage (Jylland). The lists comprise the orthography of names of populated places (up to the smallest entity, i.e. a combination of two small buildings or one farmstead with a certain minimum in surface area or production) and, to a much smaller extent, field names. All field-names have been taken from the 1:100 000 map-series and from the 'Land-register' (i.e. the Cadaster). When a name appears on the map, this does not necessarily mean to say that it is official. This is only the case if it has been derived from an authorized list. Members of the place-names committee represent the Ministry of Culture, the Institute of Onomastics, the Post-office Services, the Geodaetisk Institut, local authorities and the state-archives. Its principles are based on 1) maintaining the official orthography for recognizable elements of place-names; 2) the use of letters or letter-combinations which are generally accepted in the Danish language (therefore, no "aa", and "x", "ph", "th" or "c" but the letter "a" and combination "ks", and the "f", "t" and "k"); and 3) the equal spelling of place-names which are etymologically identical. In cases where, in the spelling of place-names, the letter "e" is in current usage for representing a long vowel, this is permitted. The authorization of the name-lists is presently granted by the Ministry of Culture. The name-lists are compulsory standards for all government bodies, also for the Central Bureau of Statistics and the Hydrographic Service (the latter was represented in the place-names committee for a number of years). Since recently, these lists are also obligatory for municipal authorities. The latter however, do not always conform to these lists, sometimes due to economical reasons (Faxe instead of Fakse due to the presence of the FAXE-brewery is one example).

3.7.4 Føroyar/Faroes

During the first recording of the names on the Faroes for the benefit of the topographic map between 1895-1899, account was taken of the Faroese spelling, which was already standardized as early as 1854. The map-series 1:20 000 was published between 1897 and 1901. Revised editions followed in the years 1941-1943 and 1972-1974. As far as the toponyms are concerned, these three editions are practically identical; the first edition is quite exceptional however as far as the marginal information in concerned (see fig. 50). It contains pronunciation rules for the sounds of the Faroese language and also includes a glossary. On all three editions important names on the map are rendered bilingually – the Danish version precedes the Faroese names which are added in parentheses. This is still the case on the 1972-edition (see fig. 51). The titles of the map-series, legends and marginal Information are rendered in Danish. An earlier commercial edition included a bilingual legend.

Figure 50 Part of the glossary and pronunciation rules on the first topographic map-series of the Faroe Islands. Details from Danmark/Faerøerne 1:20 000, sheet F 12, Kollefjord (1900).

Figure 51 Bilingual toponyms on Faroe Island maps. Detail from Faerøerne 1:20 000 sheet M 27, Kollefjord, 1979

The opinion on the Faroes as far as the treatment of the toponyms by the Danish is concerned is unfavourable:

"Place names were previously written in Danicised forms, and often grotesquely maltreated. This is now completely changed, all official maps being printed with purely faroese names" (Poulsen 1981, p. 148).

A different publishing policy is followed for the derived, small-scale map-series. The first edition of the 1:100 000-map series (1916) is completely Danish, including the toponyms. The second edition (1932) is published separately in both Danish and Faroese; the legends in both series are bilingual. The same solution was chosen for the third edition in 1945. The fourth edition, dated 1975, has a mixed Danish/Faroese title: 'Danmark 1:100 000 - Føroyar'. The legend is rendered in three languages (that of the Faroese first, then Danish followed by English) and all names are only rendered in Faroese. The same applies to the last edition published in 1978 (see fig. 52).
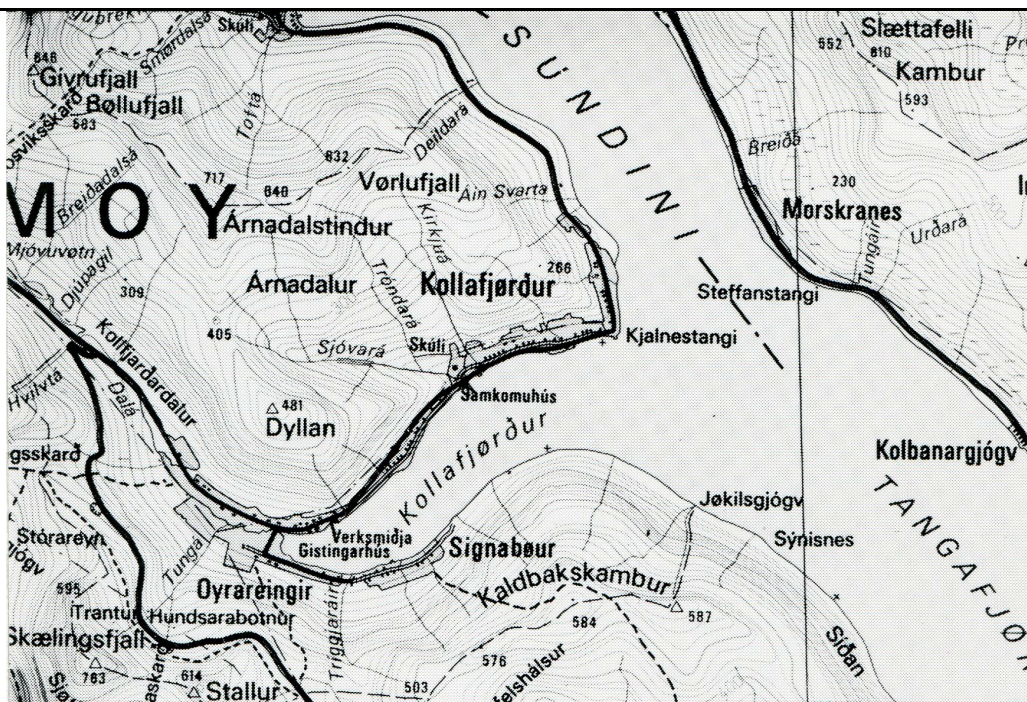
Figure 52 Monolingual Faroese toponyms on small-scale maps. Detail from Danmark 1:100 000 - Føroyar, 1978 (Permission (A.372/82) of Geodaetisk Institut Denmark)

The derived map 1:200 000 follows the 1:100 000-map with a difference in time: the first edition of 1934 has a Danish title and Danish names but a bilingual legend, as does the 1946-edition. The third edition, dated 1957, and the one of 1959, were published separately in Danish and Faroese. Since the fifth edition (1972) the map has only been rendered in Faroese including the map-title, while the legend is rendered in three languages. The map-sheet 'Kongeriket Danmark' 1:500 000 (1975), only gives Danish names for the Faroes.
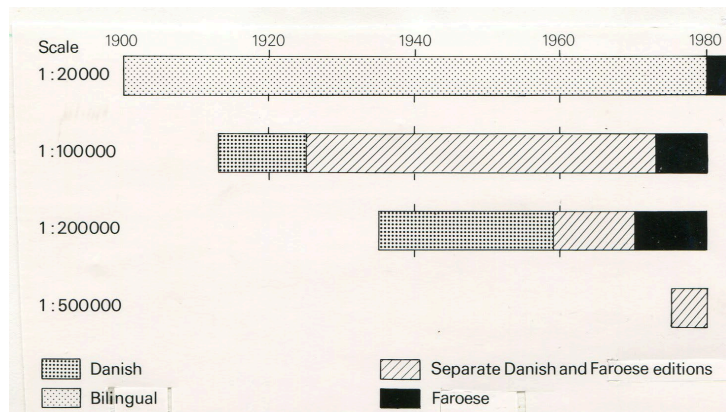
Figure 53 The 'delayed adaptation' phenomenon. The representation of Faroe Island names on different scales.

Figure 53 illustrates that, only when a map at a larger scale is completed, new small-scale derived maps will follow the trends that have been adhered to on the larger scale map. On the map-series 1:200 000, separate Danish and Faroese editions were only introduced when this had already been effectuated for the 1:100 000 series. New map-series always started with a Danish version first, of which later two separate editions in Faroese and Danish were published, followed finally by one single Faroese edition. The only exception to this rule is the exclusively Faroese edition of the 1:200 000 map, published before the 1:100 000 series reached that stage. This phenomenon of the 'delayed adaptation' is conspicuous also in the mapping of Corsica; for the first contemporary edition of the 1:100 000 series the IGN fell back on the last document homogeneously edited regarding toponyms i.e. the map by Tranchot dated 1800! Only when the 1:50 000 series had been completed according to new orthographie rules, was the 1:100 000-map adapted to the new orthography. The fact that small-scale maps are based on large-scale maps - also in relation to the names - results in a delayed adaptation of names on small-scale map-series.

The new base-map of the Faroes which is to be published in the 1980s will only include Faroese toponyms. The legend will be in three languages[66]. The list with the official spelling of toponyms on the Faroes has been published by the Danish place-names committee, supported by the Faroese Academy. It was published separately in Danish and Faroese[67]. Thematic maps of the Faroe Islands are published with a Danish/Faroese/English legend, and with Faroese place-names[68].

3.7.5 Kalaalit Nuunaat/Greenland

Greenland[69] is probably the first on which the legend was also rendered in the minority language. The most important features represented on this map-series have a Danish name to which in some cases an Inuit-name is added in parentheses.
There is a special place-names committee for Greenland, which, contrary to Denmark, is not supported by a separate place-names institute or an academy. However, assistance is provided by the chair in the Inuit-languages in Copenhagen. This committee consists of representatives of the Danish topographic service, the hydrographic Service and the Inuit Institute at Nuuk/Godthåb. During the 1970s, a spelling-reform was introduced which abolished all accents and diacritical marks from the Inuit language. All place-names are now being adapted to this new spelling. The Inuit Institute collects toponyms in the field, after which their spelling is determined by the place-names committee. Sometimes names are established in two versions so that both appear on the map such as is the case with Nuuk/Godthåb.

It is the Intention of the Geodaetisk Institute at Copenhagen, from 1981 onwards, to give preference to the Inuit-names (on the map-sheets of the series 1:250 000 of Northern Greenland to be produced before 1990) and

possibly, to decrease the prominent character of the Danish names. Marginal information is presented in Danish, English, and the Inuit language. On the existing sheets of the map-series 1:250 000, the Danish language is given preference. On atlases of the area the new Inuit-spelling is being introduced beside the Danish names and in this process names in the former Inuit orthography become obsolete[70].

3.7.6   Southern Jutland/Northern Schleswig

Since the German-speaking population of Southern Jutland does not inhabit a coherent geographical region, but is mainly concentrated in the larger towns - where, however, they do not form a majority either -a representation of place-names in German is not being considered. The Danish territory which was German between the years 1864 and 1918, and which is called Northern Schleswig by the Germans and Southern Jutland by the Danes, was already provided with German names on former German maps[71]. The map-sheet Sylt/Tonder, published in 1805 by the Videnskabernes Selskab[72] gives the Danish versions of all toponyms; the sheet depicting the more southerly part of the Hertugdömmet Schleswig (sic!) of 1825, comprises however mainly German names[73] (see fig. 54a).
After the 1848 troubles, nationalist sentiments began to awaken in Denmark. Its cartographical reflection is visible on the map-series published in 1851-1854[74] (see fig. 54b). Most of the German name-versions of the 1825-map are found to be danicized, especially to the north of the River Schlei. In both cases, no account has been taken of Frisian names - they are either danicized or germanized.

1825	1851/54
Friedrichsort	Frederiksort
Eckernföhrde	Ekernförde
Schwansen	Svansen
Eiderstedt	Ejdersted
Scherrebek	Skjaerbaek

After 1864, Schleswig fell to the German Confederation; in 1880 the region was mapped for the 'Preussische Messtischblätter' and the 'Übersichtskarte des Deutschen Reiches' series 1:100 000 and 1:200 000 (1906). These maps show an advanced germanization of place-names, in comparison with the Danish maps of 1850, for example Glücksburg instead of Lyksborg, Neukirchen instead of Nykirke, Rothenburg instead of Rödebro etc.. Laur (1960) states that the German-Danish language boundary had actually shifted towards its present location during the last century and that after 1864 there was certainly no question of an increasing, intensified 'Eindeutschung'. On the Messtischblätter, it seemed that even a number of germanizations have been undone (Laur 1960, p.142). According to Laur this process rather concerned the registration of German name-versions that had gradually evolved since the Middle Ages, especially under the influence of the centuries old German-speaking administration. This germanization mostly affected the town-names. The names of cadastral-lots and field-names in the country remained Danish for a much longer period of time.

Further, Laur states that the cadastral names in Northern Schleswig were predominantly Danish, in Central Schleswig for 50% Danish, and in Southern Schleswig only for a small part. However, Laur ignores the completely German character of both urban and rural names on the maps from the period between 1864 and 1918, even in Northern Schleswig. Compared with later Danish maps, only an average of some 10% of the names on the Messtischblätter were unchanged[75]. Cartographically, the Danes did not acquiesce in the cession of

Figure 54 'Danification' of Schleswig's toponyms between 1825 and 1857. Details from Kart over den sydlige Deel at Hertugdömmet Schleswig samt öen Femern, 1:120 000, Kong.Vid.Selskab 1825 (above) and from Slesvigs Fastland, 1:120 000, udgivet af Generalstaben 1857.

the area. On small-scale maps with an overlap over the southern border, the Danish names remained to be used in entire Schleswig[76].

In 1920, Northern Schleswig rejoined Denmark. Central and Southern Schleswig remained part of Germany. After 1920, the Danish maps continued to use Danish name-versions for German Schleswig[77]. In 1948, the Geodaetisk Institut re-enforced the decision to use Danish names for German Schleswig.

This decision was amended in the beginning of the 1960s, in adherence to the UN-propagated endeavours to standardize geographical names. On the map of Denmark 1:500 000[78] (1979) all names in German Schleswig are rendered in German. Commercial cartographic publishers in Denmark follow this trend as well.

3.7.7   Conclusion

Due to the mixed German-Danish population of Schleswig, before 1864 a German minority emerged , after 1864 a Danish one, and since 1918 both a German and a Danish one. Before 1848, the names on the map were mostly spelled in German, from 1848-1864 in Danish; they were then germanized after 1864 and danicized in the north after 1920, despite the existence of a German-speaking population in the northern towns and of a rural Danish-speaking population in the south.
Initially, on the maps of both the Faroes and Greenland the minority languages held a subordinate position. The trend of giving preference to these languages has resulted in maps of the Faroe Islands being rendered completely in Faroese. In Greenland, one is presently giving preference on the map to the names in the new Inuit spelling.

3.8   Norway

3.8.1   Introduction - Mapping

The best-known language minority in Norway is that of the Same or Lapps, of which approx. 20 000 are living in the far north of the country (Stephens 1976, p. 600). Furthermore, from a toponymical point of view, Norway is also interesting because of the consequences of a centuries old Danish domination. From the year 1397 till 1814, the country was linked in a personal union with Denmark. From 1550, the administration was run by Danish civil-servants. Norwegian was ousted by Danish as written-language and the official language became a sort of Norse-pronounced Danish, interspersed with Norwegian and Low-German expressions and words. From the year 1814 onwards, the Norwegians have been engaged in the removal of Danish forms in their language. Norwegian was preserved in dialect-form only. In about 1850, Ivar Aasen constructed a new Norwegian language on the basis of West Norwegian dialects, the so-called Landsmål or Nynorsk which, in 1885, was granted equal rights to the 'danicised' official language called Riksmål or Bokmål. Both languages have become normalized by way of spelling- and language-regulations. Nowadays, Nynorsk is mostly used in Western Norway and in rural regions. Bokmål is spoken in the urban centers and in the east of the country. After an initially strong position, the Nynorsk language was only taught at 15% of the primary schools round about 1971. In table 21, an outline is given of the most important map-series which Norges Geografiske Oppmaling, the Norwegian topographic service, has published since its foundation in 1867.

Table 21   Chronology of the first publication of printed topographic map-series of linguistic minority areas in Norway

	Norway	Lapland
1: 100 000	1878–1966	1893–1948
1:1 000 000	1931–1948	1948
1: 50 000	1958–1986	1958–1982

3.8.2   Regulations for the spelling of toponyms

The following options were open during the last Century for the standardization of the spelling of place-names (Hovda 1978, p. 129): standardization on the basis of Old Norse; standardization on the basis of Nynorsk, and on the basis

of local pronunciation ('orthophonous spelling'). In 1886 the committee appointed for the revision of place-names used in the cadaster reverted to the first approach. To achieve this, Old Norse name-versions were collected and published from 1886 onwards by 0. Rygh. This revision of the cadastral names was being carried out when the Norwegian parliament became interested in the name-versions in Northern Norway (Nordland and Tromsø) and approved incorporation of divergent dialect-forms based on Bokmål[79]. A Royal Decree of 1908 compelled the Ministry of Defence to maintain administrative names in Northern Norway in the local dialect and to render them in the Landsmål-spelling on the map - "i stedets dialekt med landsmaalets retskrivning" (Hovda 1978, p. 127). In 1913, this principle was adopted for all successive regulations concerning the standardization of place-names. In 1917, the government fixed the spelling of all municipality-names. In 1919, the same was done for the names of all post-offices and railway-stations. The determination of the spelling of street-names remained the right of the municipal councils. In 1929, the regulations were extended and in 1933, they were declared mandatory for all official cartographic publications.

The last amended regulations date from 1957[80]. According to these regulations, the so-called 'Føresegner om skrivemåten av Stadnamn', the following was to be carried out:
        a) place-names are to be rendered in accordance with the local Norwegian pronunciation, as far as this is possible, but in such a manner that church and civil administrative names are rendered in their official forms. However, it is not the intention that all dialect-forms are to be followed. Generic terms, appelatives and suffixes are to a certain extent to be standardized throughout the country.
        b) All names for which exceptions do not apply, are to be spelled in Nynorsk.
These regulations apply to all official series. The topographic service determines the orthography of the name of every farmstead, in co-operation with the special name-consultants, who, from the year 1879 onwards were affiliated to the agency.

The Norwegian hydrographic service operates in the same manner for its charts. In doubtful cases, the problems related to the spelling of names are submitted to the Ministry of Church and Education which then makes a decision. Apart from this there are also special name-consultants for the Sami or Lapp names.

No spelling regulations were available for the old 'Rektangelkart'. The rules mentioned above, dating from 1913, were applied to the production of the 'Gradteigkart' 1:100 000 for Northern Norway. Because the regulations have since become amended several times, there is little unity in the Norwegian topographic maps with relation to names. The first map-series to cover the entire country and which was produced in accordance with the same spelling-standards, was the International Map of the World on the Millionth Scale. The map-series M 711 at scale 1:50 000 was edited mainly in accordance with the 1957 regulations, while the south of Norway (Vestmark, Telemark and Agder) was treated according to the 1933-regulations. The names in this region are being prepared now for a new edition of this map-series. As soon as the remaining part of Nordland will have been mapped, the M 711 series will also be lettered in a uniform manner. With the exception of *Trondheim* which in about 1913 was still rendered as *Trondhjem* on topographic maps, the spelling of names of the larger Norwegian municipalities is non-controversial. The name of the country itself does exist in two versions, i.e. Norge (rendered in Bokmål) and Noreg (Nynorsk) respectively. Refer to figure 55.
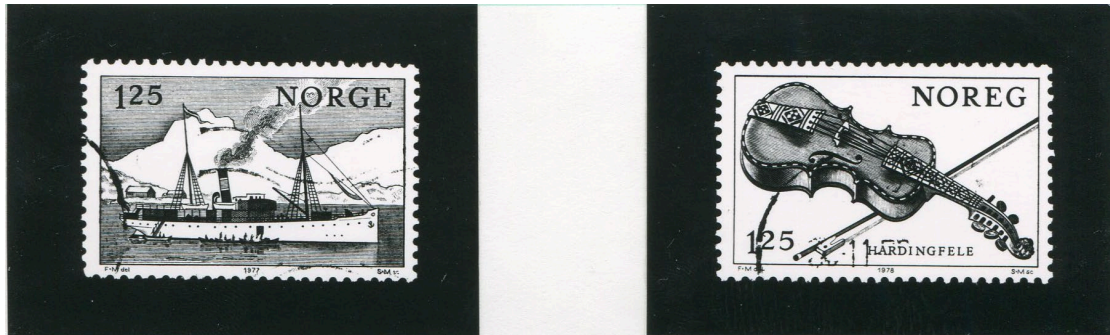
Figure 55 Norwegian postage stamps with the country's name in Bokmål (to the left) and in Nynorsk.

3.8.3   The Same or Lapps

Of the estimated 20 000 Same or Lapps, about 10 000 still speak the Sami language (Stephans 1976, p. 600). About 500 of those belong to the Lule-Same and the rest to the Northern-Same. For their distribution, refer to figure 57. Since the introduction of the Education-Act in 1898, Norwegian has been the only language in education. Now, since 1974, the three lower classes of primary schools in Sami-speaking areas are taught in the Sami language (Van Marken 1981, p. 32). The Same live mainly in the province of Finnmark. In the Norwegian language 'Finn' is the name for a Same or Lapp; the Finns are called 'Kvaener' by the Norwegians. Although the province of Finnmark is well-aquainted with Finnish immigration, and the Finnish linguistic minority in this region has not yet become assimilated, only few Finnish toponyms are to be found on the map[81].

The Sami toponyms on the map have been rather distorted in the past. According to Qvigstad (1938), the Norwegian topographic service has translated as many Sami names as possible into Norwegian in cases where no Norwegian versions existed. Subsequently, the service presented the Norwegian names first on its maps with the Sami names in parentheses. This is why it is not possible to investigate whether the Norwegian names on the maps were locally used or whether they were introduced by the topographers themselves. Since 1960, the Northern-Sami and the Lule-Sami names on the map-series M 711 are spelled in accordance with the ' 1948-spelling'[82] in which i. a. the difference between the "a" and "å" disappeared. The Ministry for Church and Education agreed in 1979 on the new proposals for the spelling of Northern-Sami (refer to paragraph 3.9). This agreement was adopted by Norges Geografiske Oppmåling, in accordance with a resolution accepted during the Second Conference on the Standardization of Geographical Names of the United Nations at London in 1972 (UN 1974). In 1981, the first map-sheet at scale
1:50 000 appeared (sheet 1431-IV, Narvik) on which the Sami names were rendered in the new spelling. The map-legends appeared not only in the Norwegian language, but also in Sami.

Due to the duration of the revision-cycle, it will take up to 10 or 15 years before the new Northern-Sami spelling will appear on all sheets of the map-series 1:50 000. A Norwegian paper to the above mentioned Conference, (UN 1974) stated that regions are being demarcated within which only purely Sami names may be rendered. The new orthography has also been applied to the names on maps of the Lule-Same region, in expectation of an internationally standardized Lule-Sami spelling. As far as the Southern-Sami spelling is concerned, the new spelling is not applied in Norway. There are two special name-consultants - one for the Southern-Sami, and one for other Sami languages. For the application of the new Northern-Sami spelling, see figure 56.
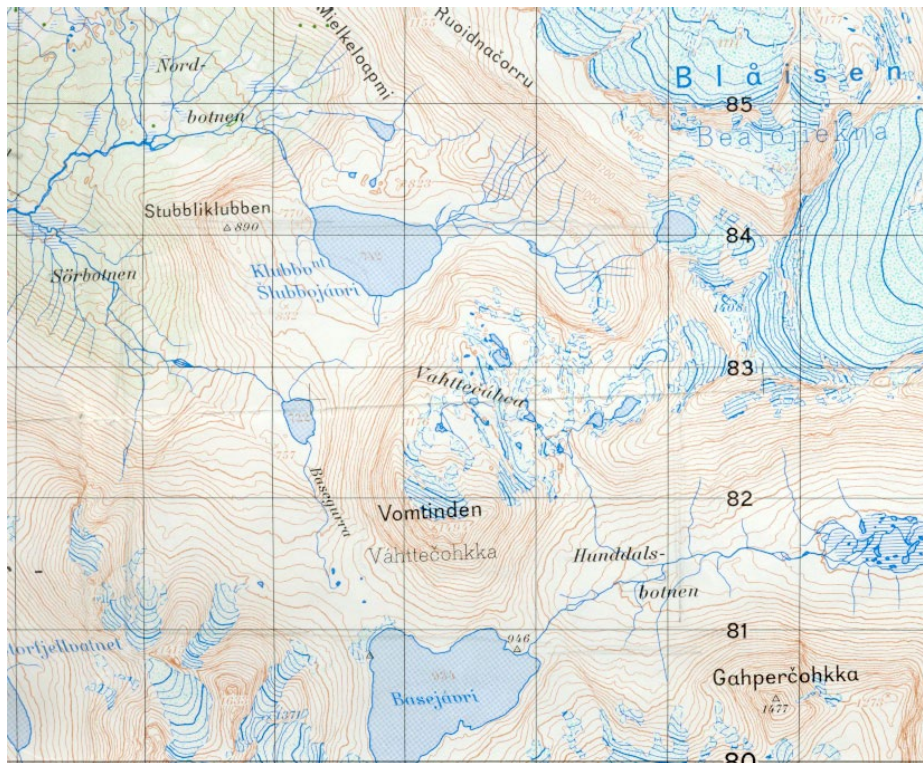
Figure 56 Detail from the first map with new North Sami (Lappish) orthography: Norge/Norway 1:50 000, sheet 1431 IV, Narvik (1981). Copyright Norges geografiske oppmåling.

It is interesting to observe that the Same population is locally active with regard to place-name spelling. The municipal council of Kautokeino for example, has officially changed the name of the municipality into Guavdogeaidnu. This decision has since been adopted by the Ministry for Church and Education. Due to the nomadic character of the Same way of life, it is not easy to correlate their exclusive habitat with the place-names on the map such as has been done with most of the other linguistic minorities in this study. The Narvik sheet of the series 1:50 000, in the coastal area, shows 14% Sami names and 10% bilingual names. The Rostadalen sheet (1632-IV, 1960) in the mountainous interior, has 62% Sami and 21% bilingual names. The Sami names refer especially to valleys and mountain peaks, rivers and lakes in the interior of northern Norway. The populated coastal areas show Norwegian or 'norsificated' names. An average of 50% Sami or bilingual names is estimated for maps of the interior of Finnmark and Troms provinces in Northern Norway.

The density of names is much lower in the interior where feature-names occupy more space consequently. On the map sheet Bardu (1:50 000, 1432-1, 1981) with 500 toponyms the 9 Sami and 34 bilingual toponyms cover 22% of the map area. In bilingual names the Sami versions are rendered in a lighter typeface than the Norwegian versions (see also fig. 56). In this study it is the number of (distorted) toponyms that has been used in determining the attitudes towards minority languages. The typefaces in which the names have been set or the area they cover on the map will also influence the visibility or conspicuousness of the mapped minorities. Their proper study would require additional, psychophysical research in the relative, visual attraction of map-names.

3.8.4   The 'Kvaener'

Apart from the approximate immigration periods and the trek-routes followed from the 17th century onwards (Eriksen 1968), no information has been found on the number of Finns who have emigrated to Northern Norway. Nor is there any Information on the proportion of the population which still speaks Finnish. As illustrated above, several hundreds of Finnish toponyms are found in Ost-Finnmark on the Økonomisk Kartverk (Jernsletten, Bertelsen 1976). Owing to

lack of further information on the Kvaener, this subject has not been investigated any further.

3.8.5 Conclusion

After an initial period of 'norsification', one is now engaged in the restoration of the Sami names in a number of specially demarcated regions. Also, the introduction of the new Northern-Sami spelling will contribute towards a reconstruction of corrupted Sami forms.

3.9 Sweden

3.9.1 Introduction – mapping

In Sweden, there are a number of Sami-speaking minorities, which, linguistically, cannot be classified together, as the languages of the Northern-, Lule and Southern-Same diverge as much as do Swedish and German for example. In total, we are concerned here with some 10 000 people[83]. Beside this, along the Torne-älv, the border-line with Finland, there are some 40 000 Finnish-speaking people[84]. They are descendants of Finns who had come to this region before the separation of Finland and Sweden in 1809. Sweden has been faced with more Finnish migrations, during the 17th and 20th centuries. The most recent one has not resulted in geographical concentrations of exclusively Finnish-speaking inhabitants. It mainly concerns the migration to Swedish cities. The Finns who migrated to Sweden during the 17th Century are now completely assimilated (refer to fig. 57). While initially the language-rights of the Torne-Finns were respected, Swedish became the compulsory language in administration and education after 1880. In Finland, Swedish is an official language.
The 'Statens Lantmäteriverk' (LMV), the Swedish topographic service which was founded in 1974 as a fusion between the 'Rikets Allmänna Kartverk' and the 'Kungliga Landmäteristyrelsen' (the cadaster), has published the following maps series (refer to table 22).

Table 22	Chronology of the first publication of printed topographic map-series of linguistic minority areas in Sweden		
	Sweden	Lapland	Torne-älv area
1:100 000/200 000[a]	1860-1924	1886-1899	1888-1891
1: 50 000/100 000[a]	1954-1979	1961-1978	1965-1976
1: 10 000/ 20 000[a,b]	1937-1978	1970-1978[b]	1947-1978
1:250 000	1972-1980	1978-1980	1977-1979

a   The smallest scale in Northern Sweden
b   Not for mountain areas

3.9.2 The Same or Lapps

The estimated 10 000 representatives of the original inhabitants of Northern Scandinavia in Sweden are divided into Northern-, Lule-, and Southern-Same. The first two groups are also found in Norway and Finland, whereas the last two groups only in Sweden and in Norway. Their distribution-area is closely related to reindeer-herding. In Sweden, this borderline is partly determined by the so-called 'Ødlingsgrenze' of 1867. It is the borderline of the area in which no Swedish colonists are allowed to settle and where the Same population has special rights and obligations with regard to reindeer-herding. The Same are also permitted to rear their herds in a number of concessional-regions to the south-east of this borderline.

Due to the Swedish and Finnish immigration and colonization, the Same population has been forced back to the north-west where they lead a nomadic life and form no homogeneous group geographically. In cases where they have left their original homelands before the official topographical surveying, their names will have been lost or have been handed down in Swedish or Finnish versions. The Swedish topographers were also faced with the problem that deviating topographic descriptions used in the Same culture did not fit into the system of the Swedish topographic map. When naming features, the Same concentrate more on the usefulness of a feature than on its actual physical properties. Features which are not important for their way of living, such as glaciers, have not been named. In so far as they are recognizable, Sami names are rendered in a special Swedish spelling. This spelling was developed on the basis of the pronunciation of Lule-Sami in 1962 at Luleå, during a congress in which linguists, representatives of the Swedish Tourist Board, the topographic service, the Ortnams Arkiv of Uppsala and of the Sami people participated. The chosen spelling had no diacritical signs that did not occur in Swedish, which meant that the Sami names could also be printed and written in Sweden.
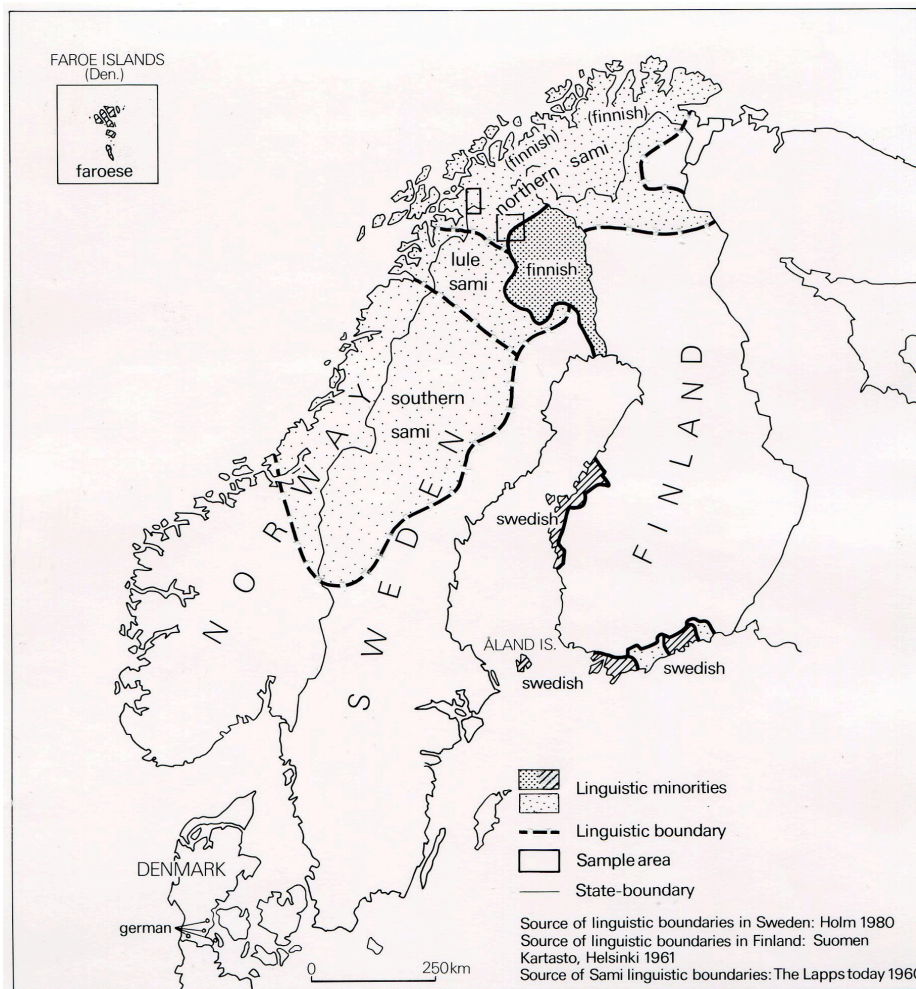
Figure 57 Linguistic minorities in Scandinavia.

This resulted in a Swedish orthography of the Sami names that differed from that in Norway and Finland. In cases where the Swedes used the "tj", the Norwegians use the "č" for the same sound and the Finns the "ć". In 1978, a congress of the Council of the Northern-Same[85] from the three countries reached an agreement on a new, common orthography. The governments of Norway, Sweden and Finland agreed to introduce this orthography on their topographic maps from 1981 onwards[86]. This agreement was the result of the United Nations recommendations of 1972, formulated during the second Conference on the Standardization of Geographical Names at London87.

During this conference, it was stated (using the Same as an example) that a uniform spelling should be introduced for a minority language spoken within the territories of more than one national state. This uniform spelling should be established in consultation with the language-group in question and the national governments concerned (UN 1974)[87]. The Lule- and Southern-Same in Sweden prefer the use of the old Swedish spelling, until the Lule-Same from Norway and Sweden have agreed on a common spelling of their language. The name-changes resulting from the new spelling of Northern-Same were to be introduced on the map in 1981. In that year, the first experimental sheets 1:100 000 were published of the region round the Kebnekaise-mountain. This was done in two versions - one with the new Northern-Sami orthography throughout and one with the Northern-Sami orthography for Northern-Sami names and the traditional Swedish-Sami orthography for the Lule-Sami names. In both cases, traditional 'swedicized' names are represented in the original Sami-version: one example is *Giev'dne Gai'si* instead of *Kebnekaise*, the highest mountain in Sweden. Where the first letters of the names vary too much in the new spelling, both versions will be given on the map, with the Sami-names first. A strong increase of Sami names is found on the latest edition of the topographic map in Sweden[88]. Since 1968, Swedish-Sami and Finnish-Sami bilingual toponyms also appear on the map. In a number of regions in Northern Sweden, the percentage of Sami names was already very high. On sheet 26H, Jäkkvik, of the topographic map 1:100 000[89] (1970) it was already some 75% (of the 498 toponyms 19% were Swedish, 1% was bilingual and 5% were uncategorized; the map-sheet contained also 65 Swedish designations). Those Sami names are mainly rendered in a Swedish transcription. They will change considerably when the new Northern-Sami spelling is adopted. Figure 58 shows bilingual Finnish-Sami names in Finland and, on both sides of the Finnish-Swedish border, different versions of the name *Karesuando*. Figure 59 shows bilingual Swedish-Sami names.
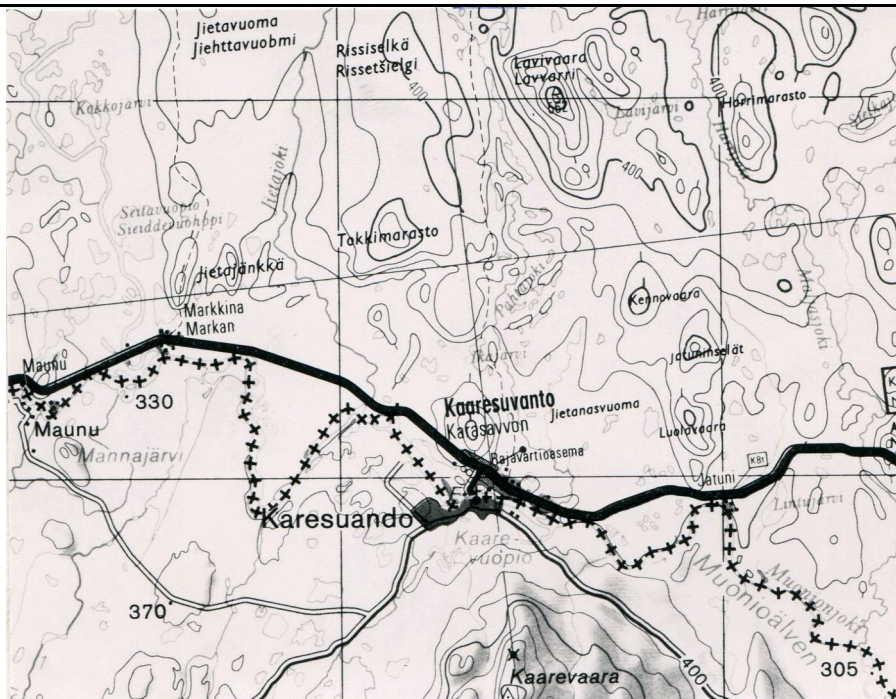

Figure 58 Difference between Swedish and Finnish orthography of Finnish names; Finnish-Sami bilingual toponyms. Detail Oversiktkarta 1:250 000, sheet 553, Vittangi (1978), on the Swedish-Finnish border (Permission of National Land Survey of Sweden, permission number 82.0148).
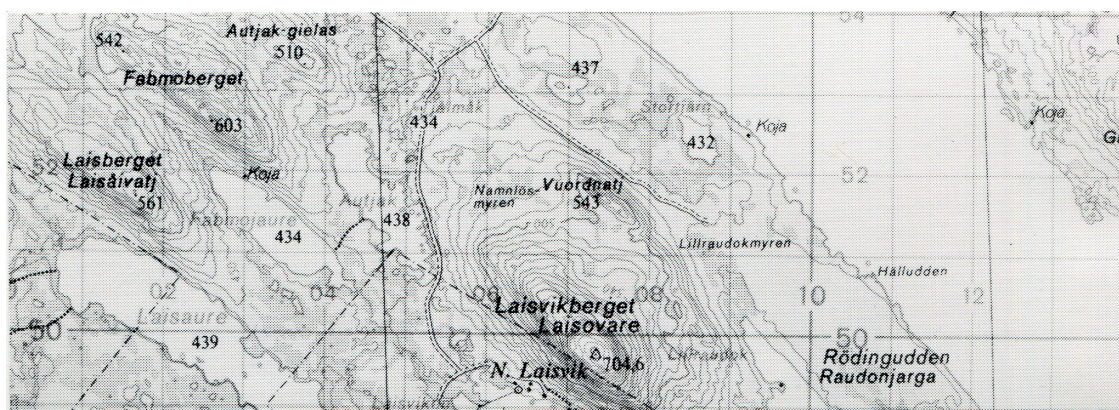
Figure 59 Swedish-Sami bilingual toponyms. Detail Topografisk karta över Sverige 1:100 000, Fältkarta 26H, Jäkkvik 1970 (National Land Survey of Sweden, permission number 82.0148).

3.9.3 The Torne-Finns

Although Sweden has a group of some 230 000 Finns, most of them are only recent immigrants living in the larger Swedish conurbations. On old maps of Central Sweden dating from the beginning of this century[90] the old Finnish colonies are still rendered in a Finnish spelling. Now that these groups have been assimilated, their place-names are rendered in Swedish (Rostvik 1980)[91]. The one region with a current concentration of an exlusively Finnish-speaking population is the area along the borderline-river with Finland, i.e. the Torne-älv. In 1809, when the border between Sweden and Finland was drawn along this particular river, the Finnish-speaking inhabitants were incorporated into Sweden. Initially, they maintained their language-rights, but after 1880 the Swedish language was declared compulsory in education and in government. Tolerance decreased further when, after 1919, the Finnish aspirations of a so-called Greater-Finland caused the Swedish authorities to emphasize the Swedish character of the border-region. As in many minority regions in Europe it was forbidden here to use the minority language in schools. This was the case in the period between the two World Wars and even shortly thereafter[92]. The 40 000 Finnish-speaking inhabitants of the Torne-älv area comprise some 0.5% of the Swedish population, and the Swedish-speaking inhabitants in Finland, some 6.6%. The latter group now has equal language-rights after a previously dominant position. Where they form more than 10% of the population, they have the right to use their own language in public life, and where they form the majority, the Swedish version of toponyms is used. Such a legal position does not exist for the Torne-Finns.

This can hardly be read from the geographical names however. Apart from generic terms such as 'älv', settlements-names and field-names of the region are rendered in Finnish. No bilingual Finnish-Swedish names are presented. The preference for spelling-forms in the Finnish dialect above the orthography of Standard Finnish - even though dialect-names might not be distinguishable from Swedish transcriptions of Finnish names - reminds us of procedures applied elsewhere in Europe, such as the Alsace. In this respect, one comes across the generic 'järv' in the names on the Swedish side of the Torne-älv instead of 'järvi'. When comparing the Toponymic Guidelines of Sweden[86] and Finland[93] it appears that the generic terms in Finnish names are standardized much more so on Finnish than on Swedish map.

Generics according to Sweden's Toponymic Guidelines	Generics according to Finland's Toponymic Guidelines	English translation
järv/järvi	järvi	lake
mäg/mäk/mäki	mäki	hill
so	suo	swamp/marsh

suanto	suvanto	stagnant water
ala/alanen	alai/alinen	lower/nether
itä/itänen	itä/itinen	east/eastern
peni	pieni	small

Hence, there are differences between the Finnish names on Swedish and on Finnish maps. According to Finland's Toponymic Guidelines[93] there are no essential differences between the vocabulary of the Swedish-speaking Finns and the Swedes. On the Øversiktkarta of Sweden 1:250 000, sheet 552 (Överkalix, edition 1, 1977) the number of names that are Finnish have been determined. Here, it concerns a region inhabited by the Torne-Finns. There were some 92% Finnish names and some 8% Swedish names.

3.9.4 The rendering of names outside the Swedish national border

Maps of the neighbouring states are copied for the reperesentation of non-Swedish areas for the map-series 1:50 000 and 1:100 000. The spelling of the names in non-Swedish areas on smaller scale topographic maps is adopted entirely from those countries. On small-scale general maps such as the map Nordeuropa 1:2 million[94]. In principle, no exonyms are given for foreign countries. Exceptions are traditional Swedish versions of monolingual Finnish town-names as *Tampere* (*Tammerfors*) and *Oulu* (*Uleåborg*) and, in parentheses, the former Finnish and Swedish names of towns in Karelia which during the Second World War became part of the Soviet Union and changed their name; examples are: *Pečenga* (*Petsamo), Priozersk* (*Keksholm*), *Borodinskoje* (*Ihantala*). On commercial cartographic products such as the Nordisk Skolatlas[95], more Swedish name-versions are to be found in Finland.

3.9.5 Conclusion

With regard to the Sami names, a restoration of the original forms is envisaged in a new spelling which has been accepted by the three Scandinavian countries for Northern-Sami. It is not clear to what extent the experiments in this field will be officially endorsed. The Finnish names in Sweden are not as strongly standardized as they are in Finland.

3.10   Finland

3.10.1   Introduction

In Finland there are two linguistic minorities, the Swedish-speaking population and the Sami-(Lapp) speaking population. In 1970 the Swedish-speaking population made up 6.6% of the total (303 400 inhab.) and the Sami-speaking population 0.05% (2300) (Stephens 1976, p. 291). Their distribution is indicated on figure 57.

Finland was conquered by the Swedes in 1155; they colonized the west and south-coast and the Åland Islands. Initially, Finnish remained the language used in administration. From the reign of Gustav Adolf (1523-1560), who aimed at a centrally organized government, Finnish was gradually neglected as such. In 1809, Finland was taken over by Russia. As an autonomous grand-duchy, this country continued to be governed by Swedish-speaking civil-servants. In 1863 by order of Czar Alexander II, Finnish was granted the same rights as Swedish as an official language of Finland. In 1917, Finland became independant of Russia. In the national constitution of 1919, it was stated that the Swedish-speaking group was not considered a national minority, but an integral part of the nation. Finnish and Swedish were to be the national languages of the republic according to article 14 of the constitution. Consequently the official Gazette has been published since in both languages. Although officially not a linguistic minority, in practice the postion of Swedish seems to be different (Reuter 1981).

The linguistic status of the municipalities is established every ten years by the government on the basis of the population-census results. According to the language-act of 1922, a municipality is monolingual when less than 10% of its inhabitants speak a second language. In 1962 another condition was added, stating that such a minority should not exceed 5000 persons. These thresholds have been lowered to 6% and 3000 persons since (Atlas of Finland 1981). The linguistic status (monolingual Finnish, bilingual with a Finnish majority, bilingual with a Swedish majority or monolingual Swedish) determines, among other things, the language to be used by the authorities in correspondence, official documents and on sign-posts.

In contrast with Switzerland, where the 'territorial principle' is applied, compelling non-native Speakers to use the locally established language in education and official correspondence, Finland follows a 'personal principle', according to which the ratio between the numbers of speakers of the various languages is decisive in linguistic matters. However, this does not apply to the Åland Islands.

The Åland Islands are located between Finland en Sweden in the Gulf of Bothnia. The language of the 21 000 inhabitants (1971) is Swedish (96%). Because the islands were united with the district of Åbo (Turku in present Finland) by the Swedes in 1634, with Finland they came under the Russian administration in 1809. In 1920 the islands became autonomous and demilitarized under the condition that the Swedish character of the region be upheld (Stephens 1976, p. 287). According to the Autonomy-Act of 1951, Swedish is the sole language in the archipelago's administration and education.

3.10.2 Mapping history

Although topographic mapping of Finland started as early as 1770 and was continued by the Russians after the war of 1808-1809, only the southern part of the country had been mapped at scales 1:21 000 and 1:42 000 at the country's independence in 1917. The accuracy of both the planimetric and altitudinal representation were deemed insufficient however (Lygtikainen 1976). The toponyms on the map were Swedish-orientated. This can be illustrated by the map of South-East Finland 1:84 000[96] (1863), containing Russian transcriptions of the Swedish names *Vyborg* and *Villmanstrand*, which, in Finnish Version are *Viipuri* and *Lappeenranta*. In 1919, the Maanmittaushallitus, the topographic service of Finland, started with a new mapping programme. The results of their endeavours are presented in table 23.

Table 23 Chronology of the first publication of printed topographic map-series of linguistic minority areas in Finland

	Finland	Åland Isles	Southern and Southwestern Finland	Lapland
1: 21 000	-	-	1870-1907	-
1: 42 000	-	1908-1917	-	-
1:100 000	1917-1954	1931	1917-1954	1929-1950
1: 20 000	1925-1977	1925-1965	1927-1970	1959-1975
1: 50 000	1964-	1970-1982	1964-1983	1972-1983

3.10.3 General principles with regard to the orthography of toponyms

There are no specific laws regulating the spelling of place-names in Finland except for administrative names, which are laid down in the various national laws. The right and the responsibility to make normative recommendations for such names belongs to the Finnish research-centre for domestic languages, at its onomastics department for Finnish geographical names, and at its Swedish-language department for Swedish toponyms.

Decisions on municipality names are made by the Finnish government. The Ministry of Home Affairs determines the names of the town-developments planned.

The national post-office service is entitled to determine the names of post-offices; the national railways service establishes the names of railway stations, and the 'Tie-ja Vesirakennushallitus' (Public Works Department) determines the spellings of the names on sign-posts and road-signs. Maanmittaushallitus determines the orthographies of the names of villages, farmsteads, and of cadastral-lots. Assisted by the advisory bodies mentioned above, Maanmittaushallitus is primarily responsible for the standardization of place-names. This is also indicated in the guidelines for topographers mentioned by Närhi (1978).

On Finnish cartographic products, the Finnish-speaking areas in Sweden are rendered with Finnish exonyms, divergent from those on Swedish maps: *Haaparanta, Korpilompolo, Kaaresuanto, Jällivaara for Haparanda, Korpilombolo, Karesuando* and *Gellivare* (Oppikoulun Kartasto, Porvoo, 1963).

3.10.4 The Swedish minority

Because the topographic mapping activities of Finland have only recently been accelerated, it is not possible to analyse the development of the rendering of geographical names. In general, one can say that the small-scale map-series (1:250 000 and 400 000) comprise bilingual Finnish/Swedish marginal information. The larger-scale maps (1:20 000 to 1:100 000) comprise marginal information in the language of the region.
The marginal Information for maps covering bilingual areas is bilingual, outside these regions it is rendered in one language only. Within the neatlines, the maps meticulously follow the established language- boundaries; on the Swedish-speaking side, the names on the map are in Swedish, and likewise for the Finnish-speaking side. In the bilingual regions, the names used by the majority are given first. In the Swedish language region, original Swedish names dating from the colonization-period, and Swedish translations or adaptations of Finnish names are found. In the Finnish language region, Finnish translations (e.g. Uusikaupunki for Nystadt) and adaptations (e.g Helsinki for Helsingfors) of originally Swedish names occur as well. The titles of sheets taken from bilingual towns, are mostly rendered in Finnish[97]. Tourist editions of the map 1:50 000, are also provided with Swedish marginal Information for monolingual Finnish, or for Finnish-Sami-speaking regions[98].

3.10.5 Finnish Lapland

In Northern Finland, there are three nomadic groups of Same, the Northern-Same(1500), the Inari-Same (400) and the Skolt-Same (400) who are also found in Karelia. Only in the border-town Utsjoki, do the Same (periodically) form a majority. Contrary to the Swedish-speaking inhabitants, they are not protected by any language-acts. Education is only given in Finnish, except in the townships Enontekiö, Inari and Utsjoki where the Sami language is taught as well.

On the topographic maps of the districts of Enontekiö, Inari and Utsjoki, Northern-Sami names are always given together with Finnish names. Inari-Sami names are represented next to Finnish ones in the municipality of Inari. There are no name-versions rendered in the Skolt-Sami language on Finnish topographic maps.
In the case of Northern-Sami names, in the future, the joint new spelling established in 1979 by the Nordisk Sameråd, will be introduced[93]. The report that was submitted by Finland to the 3rd Conference on the Standardization of Geographical Names (UN 1981) mentions the existence of a 'Board for the Sami-language', which gives linguistic advice on Sami-names in Finland: "Efforts are made in the practical maintenance of names to protect Lappish names by following the same principles used in those communes where Swedish is spoken as a minority language"(UN 1981). This means that Sami names can be rendered on the map, beneath the Finnish names.

3.10.6 Conclusion

The regions which fall under the responsibility of the Swedish or Finnish sections of the Research centre for domestic languages are determined on the basis of the language-boundary which is liable to change under the influence of national census-results. This situation differs strongly from that of Sweden, where the Torne-Finns have no influence on the orthography of their toponyms. In practice however, these differences are only slight; in the Torne-älv region the place-names are also Finnish, even though perhaps less standardized as far as their generics and suffixes are concerned. Topographic designations are only in Swedish, as are the legends. Of course, there is also a large numerical difference: 40 000 Torne-Finns in Sweden against 300 000 Swedish-speaking people in Finland. The Sami toponyms, probably the original names of the region, are now always accompanied by Finnish names, which strengthens the Finnish character of the maps.

3.11   Austria

3.11.1   Introduction

Austria has three protected linguistic minorities geographically concentrated in areas predominantly populated by these groups; the Slovenians in Carinthia, and the Croatians and Hungarians in Burgenland. The latter inhabit only two villages, whereas the Croatians are distributed over 27 isolated municipalities. Only the Slovenians inhabit one coherent region (see figure 62). Since, from a cartographic point of view, it is only the Slovenian minority which is of interest, it will be discussed accordingly. It is rather difficult to give an indication of the extent of the Slovene-speaking population. As their willingness to co-operate in censuses is not overwhelming, estimations vary from 22 000 to 45 000 (Stephens 1976, p.4). The situation prior to 1919, is of great interest to this study as the Habsburg monarchy formed a conglomeration of nationalities, and followed a tolerant language-policy cartographically.

3.11.2   Mapping history

The first national survey of the Habsburg monarchy took place in the period 1764 - 1780 at the scale of 1:28 000, with the exception of the Austrian Netherlands, Tirol and Lombardy. These mapping activities were initiated by Field-Marshall Daun. It was a purely military enterprise, and the map was only produced in manuscript-form. These surveys are known as the 'Josephinische Landesaufnahme'. The second survey, the 'Franziszeische Landesaufnahme' (1806 - 1869) also comprises manuscript-maps to the scale of 1:28 800. Derived maps on smaller scales were published and are listed in table 24. During the Napoleonic period, a cartographic agency was founded by the French in Milan. Under the name 'Istituto Geografico Militare', it produced topographic maps of Northern Italy from 1813 onwards under Austrian supervision.

Table 24 Chronology of the topographic surveys of the Slovene linguistic minority area in the Habsburg Empire and in Austria

	Habsburg Empire/Austria after 1918	Carinthia	Küstenland[a]
Franziszeīsche Landesaufnahme 1:144 000/288 000	1806-1866	1830-1831	1834-1843
Franzisko-Josephinische Landes-aufnahme/Spezialkarte 1:75 000	1873-1889	1876-1882	1880-1881
Generalkarte von Mitteleuropa 1:200 000	1889-1916	1893-1895	1893-1895
Österreich 1:50 000	1929-1978	1933-1957	-

a   Present Italian-Yugoslav border zone

In 1839 the Institute was moved to Vienna and affiliated to the existing Vienna bureau of the 'Generalquartiermeisterstab' to form the 'Kaiserlich-Königliches Militärgeographisches Institut'. In 1921, this Militärgeographisches Institut re-continued its activities as 'Bundesvermessungsamt' to be incorporated in 1923 into the 'Bundesamt für Eich- und Vermessungswesen'.

Apart from the official mapping of the country, topographical mapping activities were exercised from 1865 by the 'Österreichische Alpenverein', known from 1873 as the 'Deutsche und Österreichische Alpenverein'. The two partners separated again in 1945. The background of this private mapping operation was, that the scale of the 'Spezialkarte' 1:75 000 was considered too small for mountaineering. Moreover, initially, the Spezialkarte did not include a suitable relief representation. When, in 1890, the relief-representation on the Spezialkarte was improved, a tradition had already grown to make maps independently. The maps of the Alpenverein made use of the improved base-maps in order to develop the terrain-representation. The names on the maps of the Alpenverein are renowned for their careful documentation (Finsterwalder 1935).

3.11.3   Toponymic attitudes in the Habsburg monarchy

On the first survey, the 'Josephinische Aufnahme', the place-names are mostly rendered in German only. In regions inhabited by Slav people, only the names of mountains are sometimes rendered in Slav, and in regions with a large proportion of Italian-speaking inhabitants, the Italian names have been retained. On the second survey, the 'Franziszeische Aufnahme' carried out in Carinthia in 1830, we find alternately a more correct German transcription of the Slav names, or Slav names correctly rendered in their own alphabet added to the German names, depending on the topographer in question.

In the part of the sample area around Völkermarkt in Carinthia, which was surveyed in 1830/31 for the Franziszeische Aufnahme by Lt. Franz von Scheibenhof, the Slav versions are rendered in the Slav spelling, in parentheses behind the German toponyms99. The other half of the sample area was surveyed by Oberleutnant v. Kubanyi in 1830/31100 and shows no Slav name-versions. When comparing the 170 names found recorded by them with the first survey, in 10 cases Slav name-versions were added whereas one German name (Weissenbach) had been replaced by a Slav name (Biela Bach). On the third survey, the 'Franzisko-Josephinische Aufnahme' at scale 1:75 000, this phenomenon was more widespread: 21 Slav names have been added in parentheses on this survey. The relevant maps were produced between 1905 and 1913. Either during, or just after the First World War, this attitude started to change. After 1918, possibly under the influence of plebiscites, these Slav name-versions were deleted from the map (see fig.60).

Perpendicular to the trend described above, i.e. to include Slovene names next to German or to germanized versions, a different phenomenon became apparent in Carinthia: the gradual germanization of Slovene names.

The germanization of the names has both geographical and thematic components. The thematic component relates to the fact that names of populated places are more readily germanized than the other geographical names, such as those of mountains or rivers and regions. When, in a Carinthian valley, all names of populated places have already been germanized, the names of the mountains around that valley might still be rendered in Slovene, though perhaps in a German transcription. The geographical component of the germanization relates to the fact that it has gradually shifted eastwards, in the first instance for names of populated places, and secondly, at a later stage for other name-categories.

On the maps of the Josephinische Aufnahme, most names to the east of Völkermarkt are still Slav. On the maps of the Franziszeische Aufnahme, they have already been germanized. On the Josephinische Aufnahme, mountain-names to the east are in Slav versions. On the Franziszeische Aufnahme, they do not appear at all, and on the Franzisko-Josephinische Aufnahme, they have been germanized also farther east. A similar eastward shift can also be observed when comparing the Franzisko-Josephinische Aufnahme of 1881 with the modern map series 1:50 000 for the sample area. This phenomenon proceeds independently of the trend to germanize larger features first. It has only been discerned in the case of Carinthia.
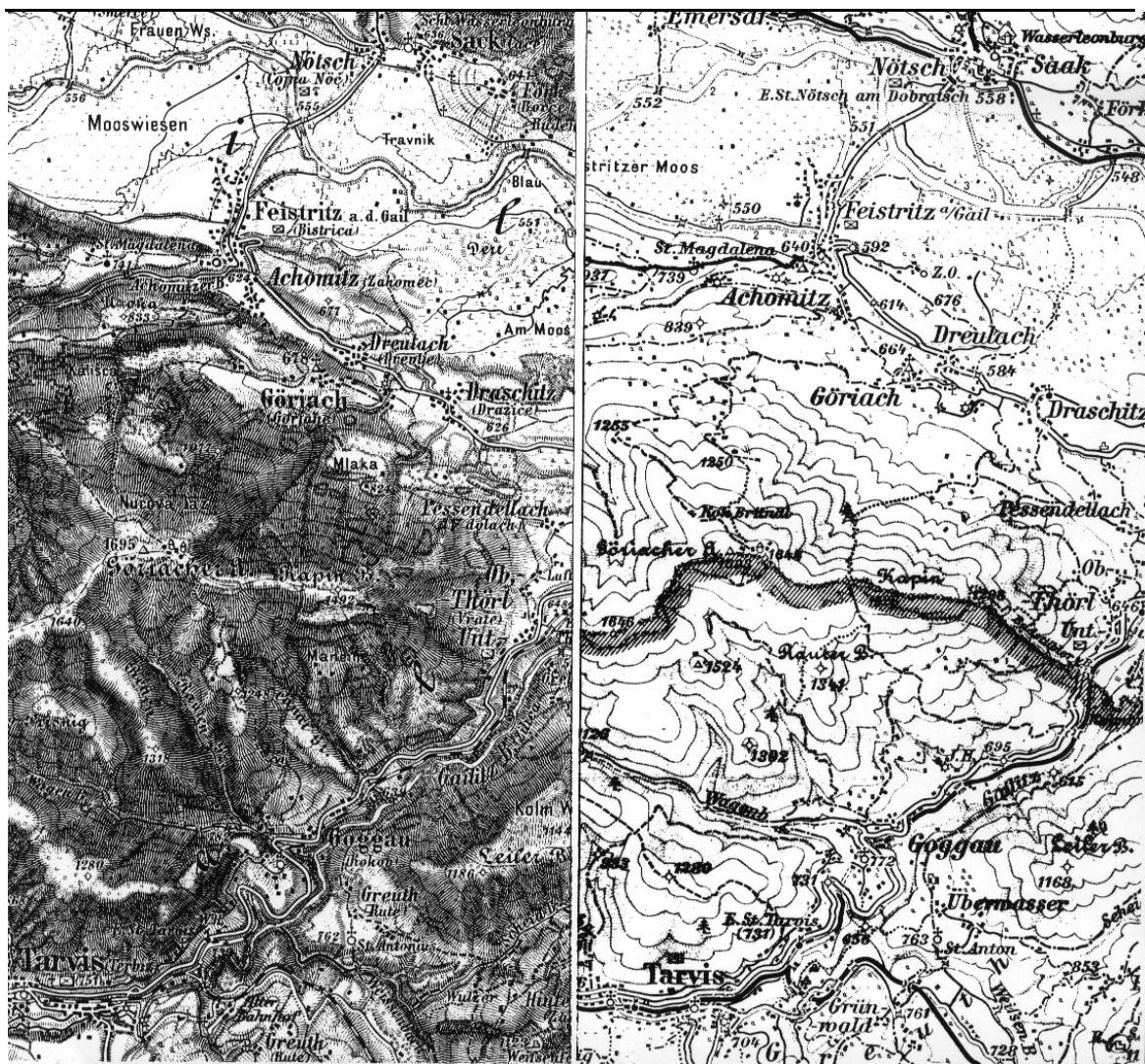
Figure 60 Elimination of Slovene toponyms in Carinthia after the First World War. Details from Spezialkarte 1:75 000, Tarvis 1882 (to the left) and 1925.

During the period between 1870 and 1918, it appears, at least in the western part of the Habsburg monarchy, that there was an almost ideal nationality-policy on the map:

1) in the map-legends, the German, Hungarian and Italian languages were used (no Slav languages as yet). An example of this is the legend of the 'Generalkarte von Mitteleuropa' 1:200 000.

2) Habsburg cartographers followed a 'Roman Alphabet Rule' avant la lettre: In Slovenia and Poland, Slovene and Polish names were written in their respective alphabets. Diacritical marks in the Croatian, Slovene and Polish names were retained.

"Werden lateinischen Lettern in der betreffende Sprache angewendet, so erfolgt in den Karten des Militär-geographischen Institutes die Schreibung nach der nationalen Orthographie" (Von Steeb 1897, p.61).

3) Transcription-systems were developed for the non-Roman alphabets (e.g. for Russian, Bulgarian, Serbian, Macedonian, Greek and Turkish).

4) An attempt was made to stimulate a correct pronunciation of national alphabets such as the Croatian one. To achieve this, pronunciation rules were added to the maps. To the map-series 1:200 000 even a glossary was added. See also figure 61.

5) Sometimes two or even three different name-versions were used to indicate one and the same geographical feature. For this purpose, a system of preference-rules had been developed for multilingual areas. Examples are: *Adrianopel* (*Edirne, Odrin*); *Rodosto* (*Tekfür Dagi, Tekirdag*).

However, the sequence of the names might vary. The sheet 32° 45°, Pola[101], of the Generalkarte at scale 1:200 000, shows for example Kraljevica (Portore) and Bakar (Buccari) which is Croatian-Italian beside Fiume (Rieka), Abbazia (Opatija) which is Italian-Croatian. Before 1918, German versions were placed first on the map, even in the Hungarian part of the country. A possible explanation is that, right up until 1918, the command-language in the army was German (Breu 1960, p.103). The Italian toponyms were regarded as 'lexikalisch Deutsch', because of the cultural prestige of Italian.

It was only from 1880 onwards, that Croatian names began to appear on the map instead of, or next to Italian names. Generally, the orthography of these geographical names followed the spelling of regional gazetteers which were often published in two or more languages.

Die Schreibweise ist im allgemeinen die kroatische.

Im Bulgarischen sind die dumpfen Laute Ж und Ъ vor l und r nicht gegeben, sonst aber mit ö umschrieben.

Das nach i auslautende j wurde ausgelassen.

Im Türkischen werden die Umlaute ö und ü wie im Deutschen ausgesprochen.

Im Griechischen sind Δ und Θ mit Ẕ und Ṣ gegeben.

Figure 61 Toponymic Information from the margin of the Generalkarte 1:200 000 von Mitteleuropa, sheet 44°42°, Adrianopel (1915).

The tolerant attitude towards the linguistic minorities in the period between 1870 and 1918, is not only apparent on maps, but also from the regional gazetteers, the 'Special-Orts-Repertorien der im Österreichische Reichsrathe vertretene Königreiche und Länder', published by the 'K.K. Statistischen Central-Commission', for example in the gazetteer of Carinthia published in Vienna in 1894[102]. This publication is entirely bilingual and thus surpasses the maps, on which the legends have not yet been translated into Slovene or Croatia.

In the transcription-systems that had been developed, only that Roman alphabet was used that was best adapted to the language to be transcribed. This means that the transcription of Russian and Ruthenian, the Polish alphabet was used (Bielawski 1897) and for the Balkan-languages, the Croatian-alphabet. The

Croatian-alphabet is strongly phonetic and entirely suitable for the representation of Serbian, Bulgarien and Macedonian. Together, these language communities comprised two thirds of the population of the Balkans. For this reason, Albanese, Turkish and Greek were represented in the Croatian-alphabet as well. The latter is also a very compact alphabet which is a great advantage for map-use. For the transcription of the Greek delta and theta, two additional letters were needed, the "z" and the "ş" (Levačic 1897, p.67).

3.11.4   Current directives

The general directives used in determining the orthography of toponyms in present Austria have been extensively reported on in the Toponymic Guidelines for Cartography-Austria[103], in the 'Technische Weisungen' no. 2, 4, and 5 of the Abteilung L2 - Topographie of the Bundesamt für Eich- und Vermessungswesen[104], and in the Geographisches Namenbuch Österreichs (Breu 1975). These guidelines have all been compiled by Dr. Breu, the Austrian chairman of the UN-Group of Experts on the Standardization of Geographical Names. They were intended to serve as an example or standard for the other member-states of the United Nations and have been followed as such.

Because Austria is a Federal State, there is no national place-names authority to standardize the spelling. This right is reserved to the various 'Bundesländer'. However, there is a central committee, the 'Abteilung für Ortsnamenkunde' of the Österreichische Geographische Gesellschaft, which co-ordinates the activities of all authorities involved. The Bundesländer determine and fix the spelling of the municipality-names. They are often assisted by nomenclature-committees. The place-names thus standardized are published by the 'Österreichisches Statistisches Zentralamt'[105]. The municipal councils determine the orthography of the geographical names of the features within their own area, in so far as this does not clash with the rights of property-owners. The owners of 'bauliche Einzelobjekte', such as country-houses, cottages, farms or factories determine the spelling of the names of those features themselves.

The Bundesamt für Eich- und Vermessungswesen bases the spelling of names of populated places on the publications by the Österreichisches Statistisches Zentralamt. The spelling of other names is based on sources such as the cadaster and the inventories of the rights of use of lakes and rivers (Wasserbuch). The spelling generally follows the regulations of Duden dictionary (1966). The spelling of hydronyms is taken from the publications of the Hydrographisches Zentralamt. The procedure described above applies to all Bundesländer with the exception of Vorarlberg. Here, the Nomenclature committee is authorized to determine all names instead of the municipal councils. The municipal councils have this right only in the case of names of 'Verkehrsflächenbezeichnungen' (traffic-engineering features). Vorarlberg also differs from the others in that its dialect takes up a more important position in the spelling of geographical names. Outside of Vorarlberg, if dialect and standard language use different versions of the same word, the version in the official standard language is used; untranslatable dialect-forms are standardized. Topographers are assisted here by a list of standardized generic-terms in dialect-form compiled at the Bundesamt für Eich- und Vermessungswesen by Breu106.

3.11.5   The Slovene language minority

As indicated above, bilingual South Carinthia was rendered on the map bilingually until the First World War (German names first and Slovene names in parentheses). In 1918 still, the 'Ortsverzeichnis von Kärnten' was published in a bilingual edition. The addition of Slovene name-versions was abolished after the First World War in the period in which, by plebiscites, parts of the Austrian heritage-lands had to be ceded by the republic. Since then, Slovenian activists have been engaged in the restoration of the linguistic rights of the Slovene linguistic minority. Since the Second World War, these activists have overcome a

number of juridical obstacles in this endeavour, without any effect on official maps, however.

Art. 7, pt.3 of the Austrian State Treaty of 1955 enacted official bilingualism (amtliche Zweisprachigkeit) for 'Verwaltungs- and Gerichtsbezirke' with a Slovenian, Croatian or mixed population for topographic descriptions and signs. The 'Volkengruppengesetz'[107] of 1976 states in Abschnitt (section) 1 § 2 part 2, that in regions where more than 25% of the population consists of Austrian citizens with a non-German mother-tongue and 'Volkstum', topographic descriptions and signs were to be rendered in two languages (in this case in both German and Slovene). This was not compulsory for the designation of places situated outside the regions mentioned. This was worked out in the form of a by-law by the federal government from May 1977[108] by which the Slovene names of 91 populated places were determined in 8 municipalities in Carinthia where more than 25% of the population consists of Slovene-speaking people (see fig. 62). This was re-confirmed on the basis of the results of the 1971-population-census. However, it has not yet led to the representation of Slovene names, nor even to bilingual designations in the Ortsnamenverzeichnis or on the topographic map which, as far as the spelling of place-names is concerned, is based on the Ortsnamenverzeichnis.
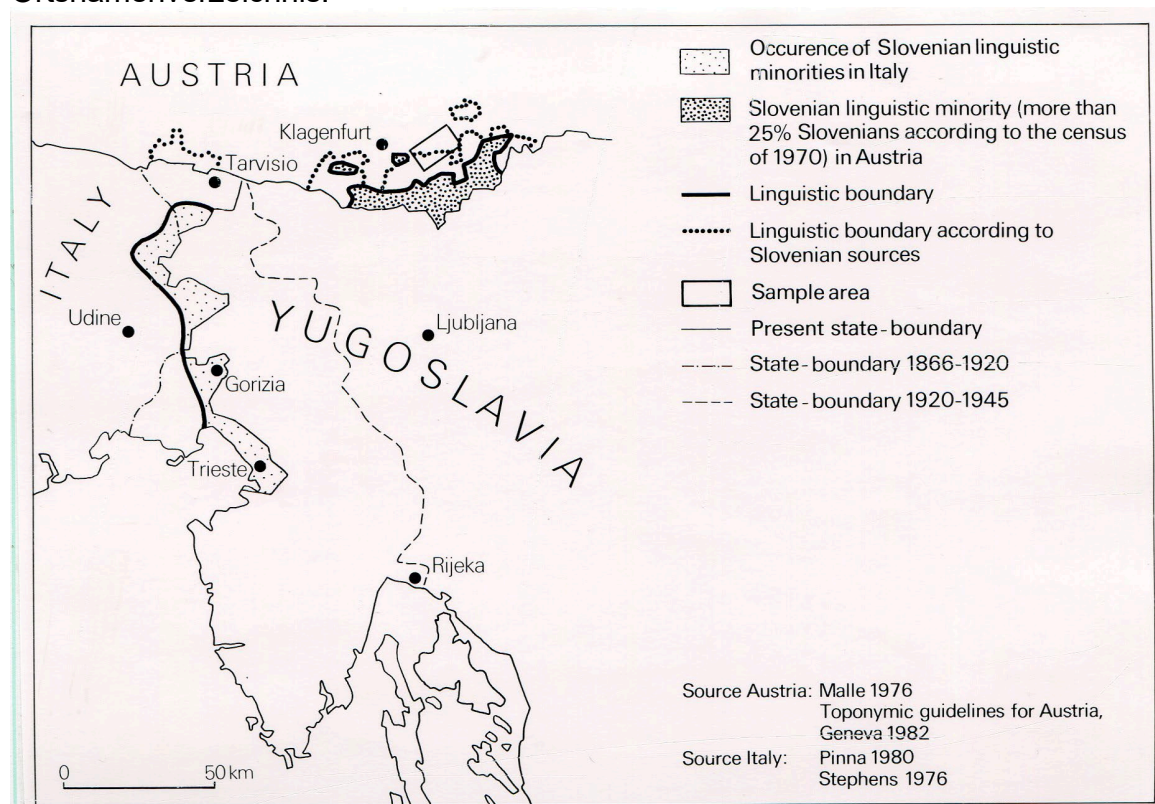
Figure 62 Slovene linguistic minorities in Austria and Italy.

As far as field-names are concerned, Slovene versions are found on the map; however, these are rendered in a German transcription with the exception of compound names which consist of separate generic and specific parts. In those cases, an original Slovene orthography is chosen. As far as could be ascertained, the Slovenians have never protested against the German orthography of their names on the map[109].They did object however to the substitution of Slovene names by German names (i.e. translations or new names). The fact that no Slovene names are included in the official Ortsnamenverzeichnis, is primarily a municipal affair, because municipal councils supply the names. At the proposal of a municipal council, the 'Landtag' of Carinthia is entitled to change the names of

municipalities (refer to the 'Landesgesetzblatt von Kärnten', 4-1-1966, par. 3).

The names on the map of the part of Carinthia largely populated by Slovenians have been examined on the basis of the recent map-sheet Arnoldstein 1:50 000[110] and compared with the Spezialkarte (1882) 1:75 000[111].
The present percentage of Slovene names rendered in the Slovene spelling is small, and is estimated at some 6% (refer to table 25). In 1882, the percentage of Slovene or bilingual names was estimated at some 38%. The current Slovene names refer mainly to cadastral-lots.

Table 25 Changes in toponyms on topographic maps of Carinthia 1882-1956

	Spezialkarte 1:75 000 (1882)	Österreich 1:50 000 (1956)
Slovene names	19	11
Bilingual names	51	0
Other names	61	123
Names not retrieved	51	46
Total	182	180

It has not been investigated what occurred to the 'uncategorized names' in table 25, i.e. whether these have been germanized or translated. Kranzmayer (1933) states that the name-pairs in Carinthia comprise 40% Slovene names with their translation in German and 49% Slovene names and their germanized versions; 1% consists of Slovene names paired to new German names. The remaining 9% consists of original German names with their Slovene translations. The scale of the map from which these data were compiled is not mentioned. In figure 62, the official boundary of the Slovene language region in Carinthia is indicated. Its location is contested by the Slovene minority.

3.11.6   Austrian attitudes towards former parts of the Habsburg monarchy

In Austrian school-atlases names of towns which, before 1918, had an official German name, and probably still harbour a number of German-speaking inhabitants, but no longer are part of an officially German-speaking country, are rendered in German. If there is sufficient space, the current, official name is added in parentheses (Breu 1970). On the maps of Austria and of parts of Austria in the Österreichische Mittelschulatlas[112], in Yugoslav, Hungarian, Italian and Czech border-regions, the German versions of names are given. On road-maps of Austria such as those by the publishers Mair and Freytag-Berndt & Artaria, German versions are added in parentheses for the most important towns in Yugoslavia, Hungary and Czechoslovakia. In South Tirol, mainly German names are given.
On Austrian topographic maps 1:50 000 the former official German names of larger populated places in the border-regions of Yugoslavia, Italy, Czechoslovakia and Hungary are added in parentheses (e.g. sheet 211, Windisch Bleiberg, 1957): Bled (Veldes); Tržič (Neumarkt); (sheet 200, Arnoldstein, 1954) Tarvisio (Tarvis); Oltreacqua (Oberwasser),(sheet 205, Sankt Paul im Lavanttal, 1969) Ravne na koroskem (Gutenstein); Dravograd (Unterdrauburg); (sheet 1, Neuhaus 1977) Jindrichuv Hradec (Neuhaus). In this last case, it is particularly exceptional that the sheet is named after a place outside Austria.

3.11.7   Conclusion

In the former Habsburg monarchy, it was the rule that toponyms were represented bilingually in regions with minority languages. After 1918, when the new state became largely German-speaking, this rule no longer applied. All non-German versions of the bilingual toponyms were abolished. Despite the legal Obligation to this extent, 'Amtliche Zweisprachigkeit' (official bilingualism) has not been achieved on the topographic maps of the areas inhabited by the Slovene minority.

3.12 Italy

3.12.1 Introduction and mapping

The Italian national state came into existence in the period between 1859 and 1861 as a result of the war between the Kingdom of Sardinia (assisted by France) and the Habsburg monarchy. This resulted in the Union between the Kingdom of Sardinia, the Kingdom of the Two Sicilies, the north of the Papal State and the Duchies of Tuscany, Parma and Modena and of Lombardy, which had been handed over by the Habsburg monarchy. In 1866 Venice was added to this new Kingdom of Italy. In 1860, in exchange for the French support in the war with the Austrians, Sardinia ceded the regions of Savoia and Nizza to France. The French-speaking Aosta-Valley remained under the rule of Sardinia and was thus absorbed into a larger, Italian-speaking state. In 1870, the rest of the Papal State was annexed by the Kingdom of Italy. After 1918, South Tirol and parts of modern Yugoslavia were incorporated. In 1945, the major part of Istria and the Italian enclaves along the Dalmatian coast were ceded to Yugoslavia. For the location of the linguistic minority-areas see figures 16, 62 and 63.

In the Aosta-valley and the Alto-Adige, the Italian name for Südtirol/South Tirol, the minority languages i.e. French and German are officially protected. A similar recognition does not exist for Slovene in the regions (such as the Natisone-valley) close to the Yugoslav border. As far as toponyms are concerned, Alto-Adige is officially bilingual; the same is the case with the city of Aosta. In the Aosta-valley, toponyms are rendered in the French-Provençal dialect[113].

The topographic mapping of the territory of modern Italy began with the surveying of the 'Carta Generale de Stati de S.A.R. di Savoia', in 1680, and was carried out by Borgonio at the scale of 1:179 000. More than a century later, the 'Carte générale du théatre de la guerre en Italie' followed, surveyed by French 'Ingenieurs militaires' and published between 1801 and 1802 at the scale of 1:256 000 (Berthaut 1902). From 1815 until 1839, Northern Italy was surveyed by Habsburg topographers at the scale of 1:28 000 between 1833 and 1838, their 'Topographische Karte des Lombardisch-Venezianischen Königreiches' was issued at the scale of 1:86 400. From 1852 to 1869, the Sardinians produced the 'Carta topografica degli Stati in terra ferma di S.M.il Re di Sardegna' at the scale of 1:50 000.

In 1861, the kingdom of Italy was proclaimed, and the topographic services of the different states were merged into the 'R.Istituto Geografico Militare" in Florence. The publishing-programme of this agency is summarized in table 26 below, together with the two preceding map-series.

Table 26   Chronology of topographic surveys of linguistic minority areas in Italy

	Italy	Vallée d'Aoste	South Tirol	Valle del Natisone/Triest
1: 50 000[a]	1852–1869[a]	1856–1869	–	–
1: 50 000	1876–1907	1881–1884	1885[b]	1891–1929
1:100 000	1879–1912	1885–1888	1891–1905[b]/1929	1895–1905/1928
1: 25 000	1882–1931	1882	1882–1888[b]/1922	1891–1895/1934
1: 50 000	1964–	–	1964–1970	1964–1967

a   Only for the Kingdom of Sardinia on mainland Italy
b   Only marginal parts of South Tirol
c   Published after the Second World War

3.12.2   South Tirol

In 1919, South Tirol was allocated to Italy at the Peace-conference of Saint-Germain en Laye. An old wish of the Italiens had now been fulfilled; as early as the 1840s Mazzini said: "L'Italia fino al Brennero". During the fourteen preceding centuries present South Tirol was part of the German-speaking world - first under

the rule of the bishops of Trient/Trento and later under the rule of the Counts of Tirol (since 1363, the Habsburgs). During the 19th century the region obtained, together with North Tirol and Trentino, the status of 'crownland' within the Habsburg monarchy, which implied a large extent of self-government. This involved a separate (bilingual) parliament in Innsbruck. The language of the local and regional administration of North and South Tirol was German at that time; in Trentino this was Italian. See figure 63 for the boundaries of this crownland.

In 1919, the number of German-speaking people in South Tirol (the region is now officially called Alto-Adige/Tiroler Etschland) was estimated at some 233 000, against 7 000 Italian-speaking people. The former made up 97% of the total population (Bernauer 1965). Not hindered by any minority-agreement, after 1921, the Italians soon took up the cultural assimilation. In 1923, German was prohibited in administration, schools were italianized as well as public notices (including place-name signs) and Christian and surnames of the entire population. Due to an active immigration-policy in 1939 86 000 Italian-speaking people lived in the region which made up some 25% of the total population; 48 000 of them lived in the town of Bozen/Bolzano (Stephens 1976, p. 522). During the Second World War, 50 000 German-speaking inhabitants were evacuated to the north (Heim ins Reich) and in 1945, the German-speaking part formed 66% of the total population (Stephens 1976, p.526).
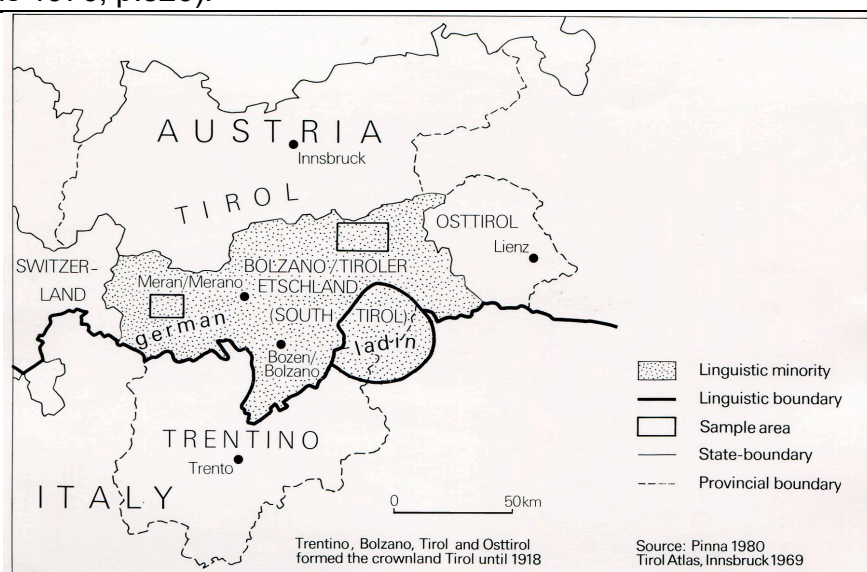
Figure 63 Linguistic minorities in South Tirol.

As a result of the peace-treaty of Paris in 1947, South Tirol was again allocated to Italy; Austria was entrusted by this treaty with the supervision of the German-speaking minority. According to this agreement, and also according to the Statute of Trentino/Alto Adige of 1948, the German language was again permitted for tuition in primary and secondary education, and it again acquired the same political rights as Italian. Most measures agreed upon in 1947/48, were however not carried out until 1970. In 1972, a new autonomy-statute was introduced which had to secure the rights of the various language groups (Stephens 1976, p. 528, 530). The use of German in official administration was again permitted, and all official documents had to appear in both German and Italian; judicial and civil-servant positions had to be assigned on the basis of the numerical ratio between the language groups. Moreover, the provincial supervision was extended over radio and television and over cultural affairs (the provincial boundaries coincide with those of South Tirol). In November 1981, a census was held in South Tirol in which each head of a family had to state to which language group he wished to belong. The results of this census are not yet known. In 1971, the German-speaking part comprised some 60% of the population, but in the countryside, this figure was some 90%; the Italian-speaking part was concentrated within the eitles of Meran/Merano and Bozen/Bolzano (Stephens 1976).

P. Anich and B. Hueber mapped Tirol between 1760 and 1764 by order of

Empress Maria Theresia. Anich's 'Atlas Tiroliensis' which was published in 1774 in Vienna at the scale of 1:103 800, had been rendered in Italian for "Welsch Tirol" and in German for German-speaking Tirol. In the second large-scale survey of the Habsburg monarchy, the 'Franziszeische Landesaufnahme' (1806-1869), maps of Tirol were published at the scale of 1:144 000, based on a 'Militäraufnahme' at scale 1:28 800. From 1833 to 1838, the 'I.R. Istituto Geografico Militare' in Milan published the 'Topographische Karte des Lombardisch-Venezianischen Königreiches' at the scale of 1:86 400. In Italian-speaking territory (Trento), this map only gave Italian toponyms; in German-speaking territory only German toponyms (e.g. Meran, Bozen). The generic name-elements were mostly Italian, even for South Tirol (e.g. *Valle di Tauffers* instead of *Tauferer Tal*; on the current Italian topographic maps, it is called *Valle di Túres*. For the third, or 'Franzisko-Josephinische Landesaufnahme' which took place between 1869 and 1887, the scale of the survey was 1:25 000, and the scale of the actual publication 1:75 000. From 1884 onwards, this map has been published in revised editions. The transition from the German-speaking to the Italian rule is quickly reflected on the map. The only large-scale map available in 1919 for Tirol, was the 'Spezialkarte' at scale 1:75 000, which was rendered entirely in German. On these maps (the first edition dated 1873-89, revised edition 1889-1912, 4th Landesaufnahme 1912-1916) only the names in the Ladin-region of the Val Gardena and the Val Badia form an exception. In these valleys, only non-German names are found such as Gardenazza, Corvara and Colfosco. The more southerly situated region of Trentino is rendered entirely with Italian names.
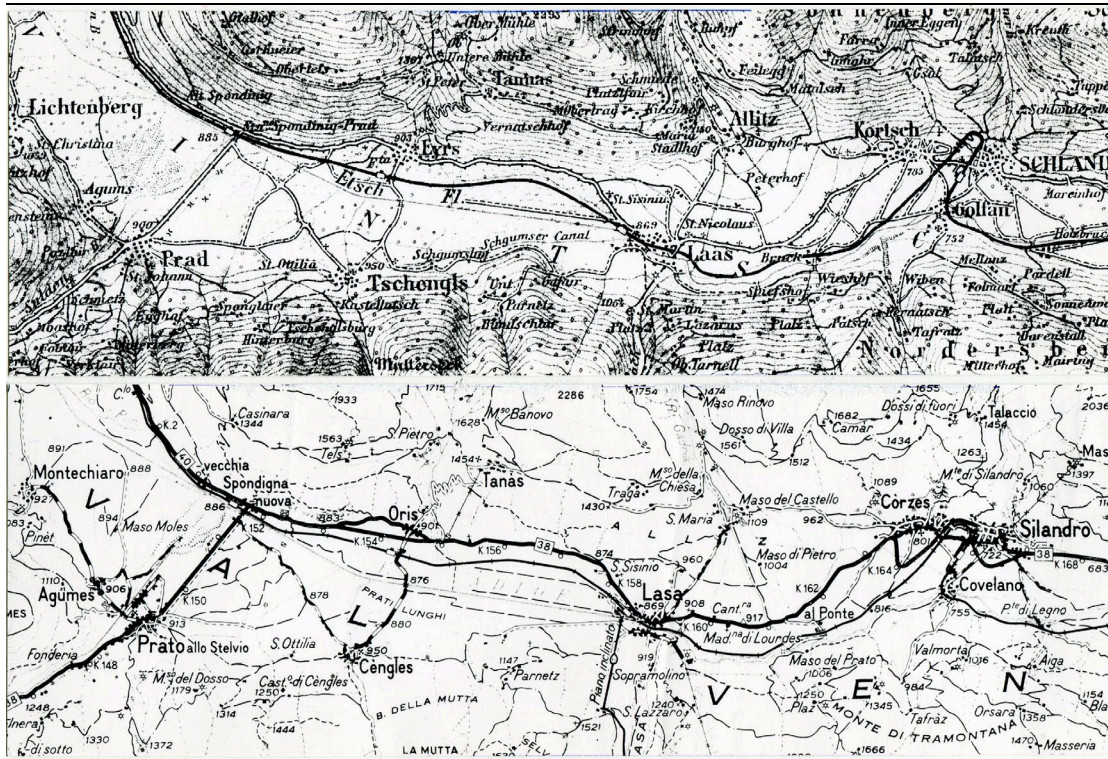
Figure 64 The Vintschgau/Val Venosta on Italian maps from 1908 and 1967,with German and Italian toponyms respectively. Details from the Carta d'Italia 1:100 000 (Permission of the Istituto Geografico Militare, no.1818, 9-8-1982).

Until 1919, the Italian topographic maps depicted South Tirol exclusively in the German language (see fig. 64); after 1919, however, this quickly changed, and from that moment onwards maps were published which tried to emphasize the Italian character of the region. The figures 64a and 64b, both sections of Italian maps of South Tirol dating from 1908 and 1967 respectively, illustrate to what extent the character of a map can be altered by changing of the names.
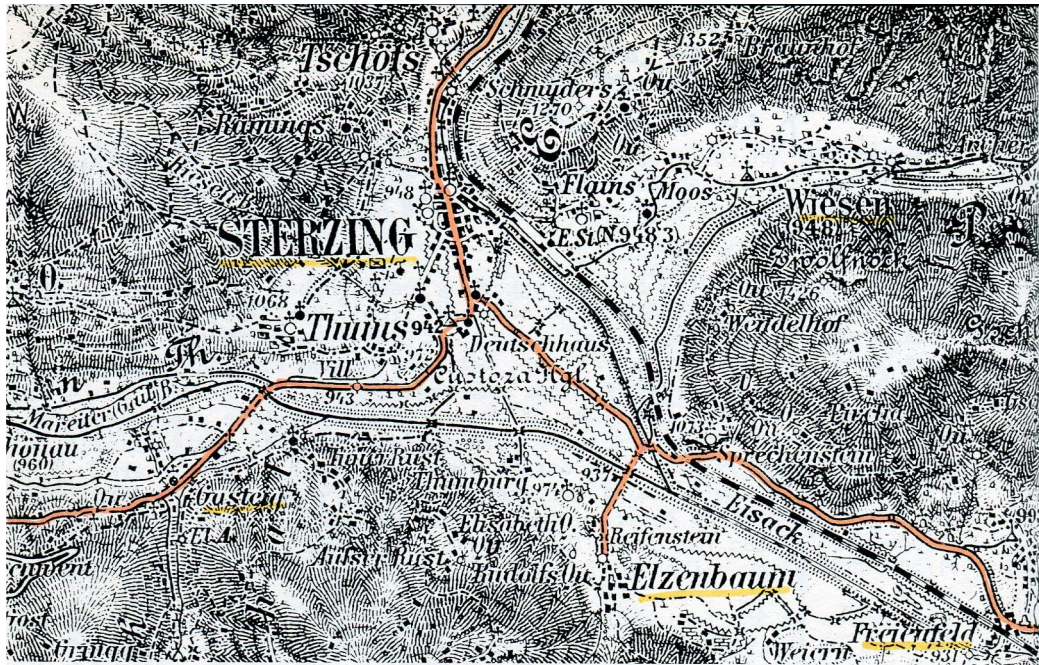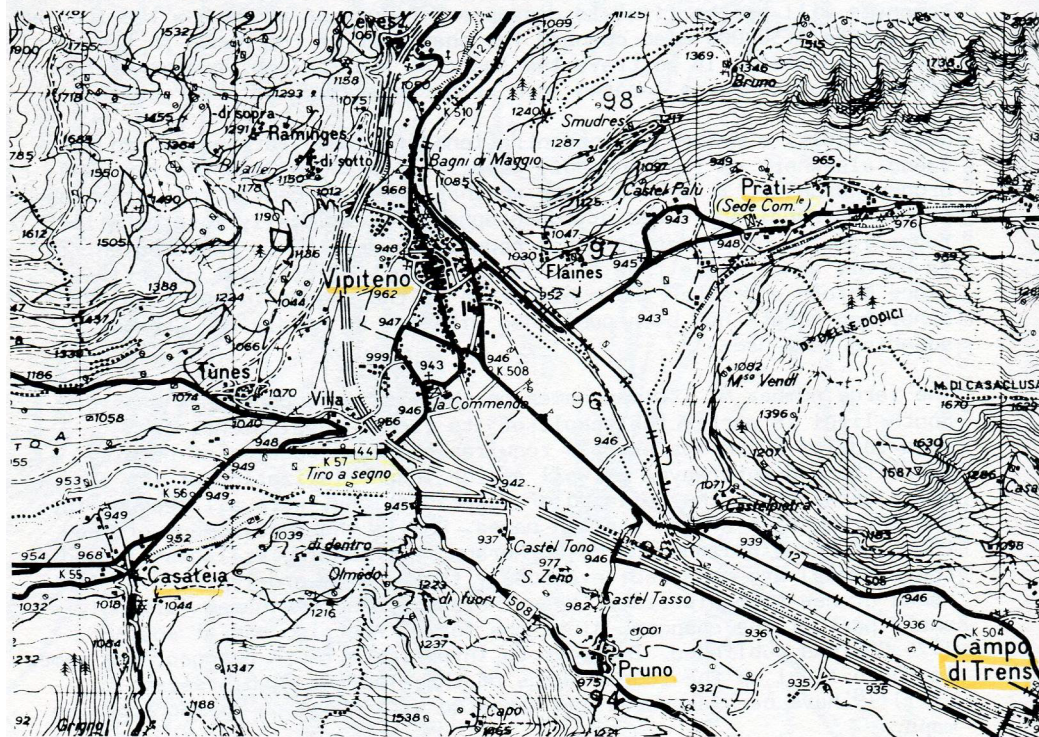
Figure 65A Sterzing/Vipiteno. Detail from the Spezialkarte 1:75 000 (enlarged to 1:50 000), sheet 18-IV, Sterzing und Franzenfeste (1914). Austrian map with German toponyms.

Figure 65B Sterzing/Vipiteno. Italian map with Italian toponyms. Detail from the Carta d'Italia 1:50 000, sheet 007, Vipiteno (1970). (Permission of the Istituto Geografico Militare, no 1818, 9-8-1982).

The current edition of the Carta topografica d'Italia 1:50 000 presents Italian names only. Figure 65b illustrates the region around Sterzing/Vipiteno in about 1960; it appears that on this larger scale too, all toponyms are Italian. All names of populated places, all river-and mountain-names have italianized forms. All new features like reservoirs, highway-interchanges and new town-developments (such as Dobbiaco Nuovo next to Toblach/Dobbiaco) bear Italian names. For a region where the rural population is for 90% German-speaking, and uses German names for the designation of their topographic features, this is indeed a strange representation of toponyms. The German versions of the place-names are shown

in figure 65a, derived from the Austrian topographic maps 1:75 000, published in 1880. Figure 65c shows the same region at the same scale, and dates from the same period as the Italian topographic map in figure 65b. It is a detail of the current Austrian topographic map 1:50 000 (1956). Here, the number of German names is greater than on the former map at the scale of 1:75 000. In two-thirds of the cases, Italian equivalents have been added to the names of populated places on this recent map; field-names and hydronyms are only given in German.

In Austria after 1919, the cartographic reaction has not always been the same towards the italianization of South Tirol. Until 1955, the topographic map of Austria at scale 1:50 000[114] rendered the names of populated places in Italian first, with the German versions added in parentheses. In the case of other name-categories, one did not go to the same lenghts as with the names of populated places; this was probably due to the fact that these names were not available in italianized versions. Since 1956[115], the German names of populated places are rendered first, which is illustrated by the map-sheet Sterzing/Vipiteno on figure 65. On the Austrian topographic map series   1:200 000 this procedure is also followed. The current chorographical map of Austria 1:500 000, gives all names in South Tirol in the German versions only.

The degree of italianization of the toponyms on Italian topographic maps depends on the scale used. As was previously mentioned, the names of populated places and of natural features have been italianized, whereas the names of farms and small terrain-features sometimes continue to be rendered in German. On smaller scales however, these categories of toponyms will be the first to disappear. Figure 66 shows how the Italian map series 1:50 000 also changed the character of the names in the rural areas completely. It portrays the Austrian and Italian Version of the Pfunders/Fundres-area located in a tributary-valley of the Pustertal.

Nevertheless, a number of concentrations of German farm-names can be found elsewhere on Italian maps, especially between Bozen/Bolzano and Bruneck/Brunico. It is not clear whether these concentrations are caused by the personal attitudes of topographers, by a locally more detailed recording, or by a greater rural population density in that region. It is hardly conceivable that this is the result of official directives, since before and after the publication of the sheets in question[116] other map-sheets had been published with no, or hardly any German-sounding farm-names[117].

The large number of Italian names on the Italian topographic maps of South Tirol is partly the result of its recent development. The mass-tourism which for example requires the construction of hotels, ski-lifts and motorways, as well as the industrialization of the area which resulted in the building of power stations, were all reasons for the introduction of new Italian names. Due to the development of the towns of Bozen/Bolzano and Meran/Merano, surrounding villages (including their names) are absorbed; eventually their names are replaced by the names of new-town-districts. Nevertheless, these new names form only a small part of the changes, since the former Austrian map at scale 1:75 000 was published. In order to investigate those changes, the names in South Tirol on the tourist-maps of the 'Touring Club Italiano' (TCI)[118] have been assessed and compared with those on former Austrian maps.
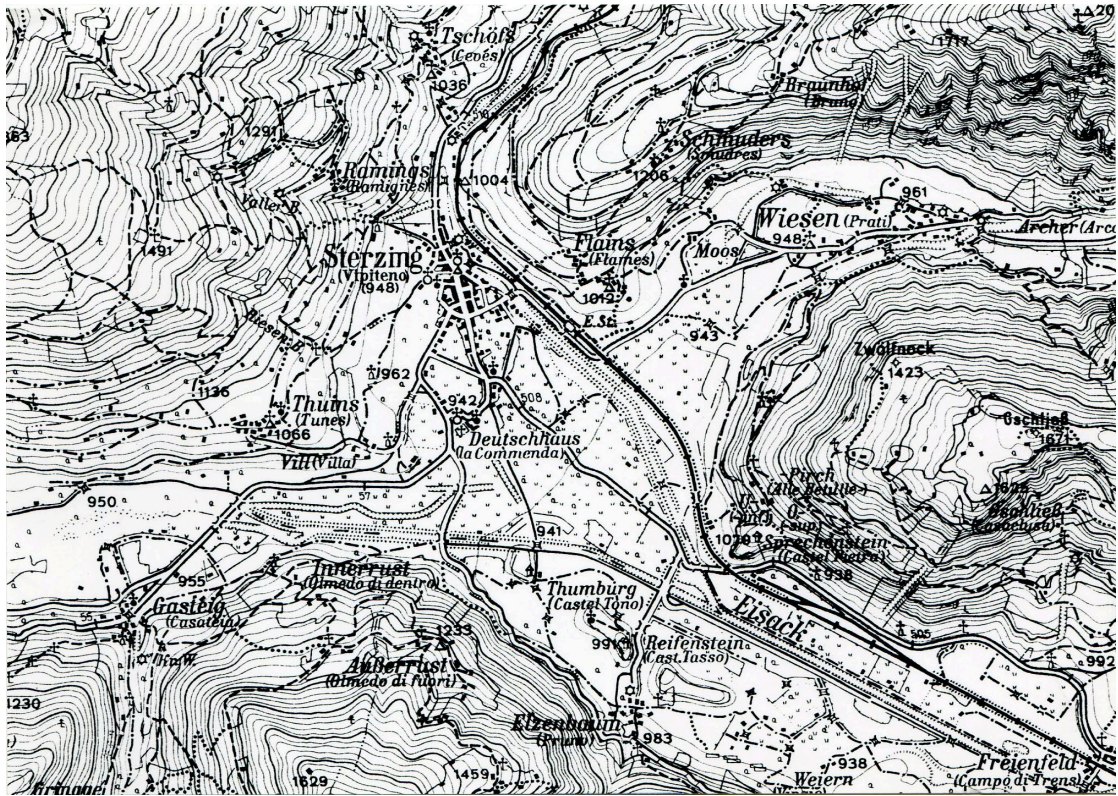
Figure 65C Sterzing/Vipiteno. Austrian map with bilingual toponyms. Detail from Österreichische Karte 1:50 000, sheet 175, Sterzing (1956), reproduced with permission of the Bundesamt für Eich- und Vermessungswesen,Z1.L 62 089/82).

Of the 920 names which can be found on the TCI-maps of South Tirol, only 3% are related to features which did not yet exist in 1880, or at least were not presented on maps at that time. Only 4% of the names have remained unchanged. What has happened to the remaining 93% of the names has been analysed on the basis of a categorization in: translated names (e.g. *Lichtenberg-Montechiaro*; *Elfer Spitze-Cima Undici*); names adapted to Italian, which includes both transcriptions to the Italian alphabet and adaptations to the morphological characteristics of Italian (e.g. *Schluder Spitze-Punta Sluder; Tschirland-Cirlano; Greinwalden-Grimaldo*) and, finally, new names, i.e. the category of those current names which are not clearly related to former German versions (e.g. *Schlütter Hütte-Rifugio Genova; Mühlbach-Rio di Pusteria*). In a number of cases, the new names have been clearly chosen in order to rid of less desired forms; in this way, *Deutschhaus* became *la Commenda; Deutschnofen* and *Welschnofen* became *Nova Ponente* and *Nova Levante* respectively. In a number of cases, the TCI-map only gave the modern Italian versions. These have been traced on the old Austrian map, compared with the German equivalents and then subsequently categorized. The outcome of this analysis is summarized in table 27.
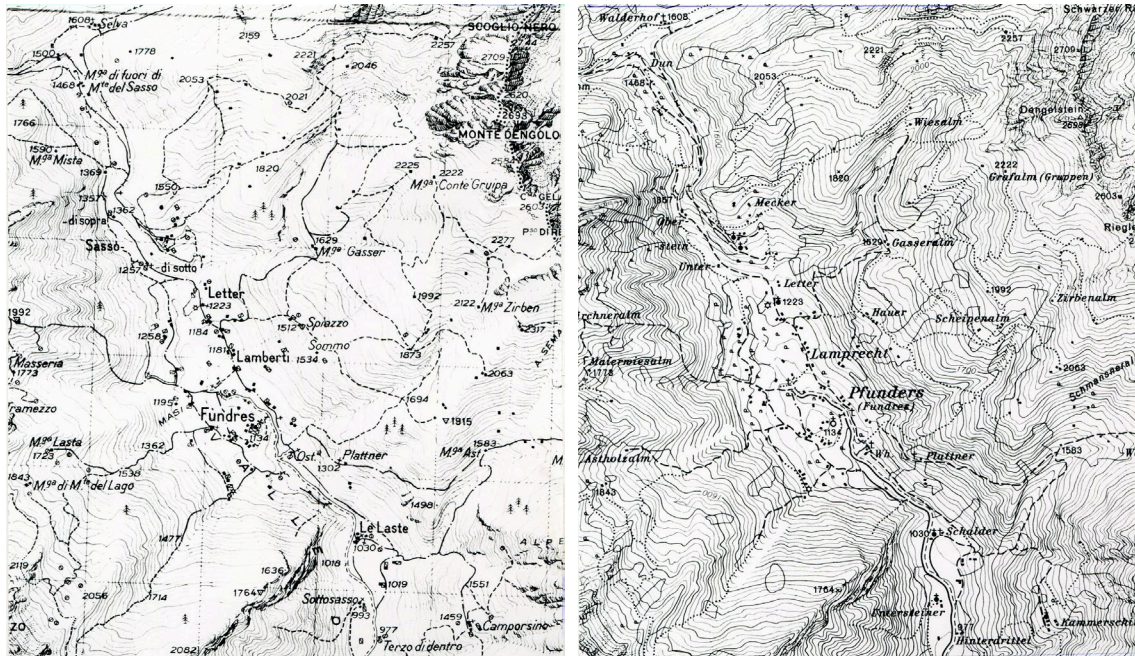
Figure 66A Italian changes in rural toponymy. The Pfunders/Fundres area on the Carta d'Italia 1:50 000, sheet 008, Campo Turres, 1970 (Permission of the Istituto Geografico Militare, no.l8l8, 9-8-1982).
Figure 66B Italian changes in rural toponymy. The same area as in figure 66A, now on the Österreichische karte 1:50 000, sheet 176, Mühlbach, 1964 (Permission of the Bundesamt für Eich- und Vermessungswesen, Z1.L 62 089/82).

Table 27   Changes of toponyms of South Tirol on modern Italian maps, as compared with Austrian maps published before 1918

	Absolute	Per cent
Unchanged names	40	4
Italianized names	415	45
Names translated into Italian	262	29
New Italian names	169	18
Names for new features	34	4

Sources: Spezialkarte 1:75 000 (1873-1889); Atlante Automobilistico, Italia Settentrionale (1969), Milano: Touring Club Italiano

Where feasible, names have been translated entirely into Italian. In practically all other cases, the spelling has been italianized (one may not always speak of romanization since there are still a number of ancient bilingual forms, see also § 1-6). The results refer to a map at the scale of 1:200 000. On larger scales, the percentage of the names which remain unchanged, such as the names of farms and of small terrain-features, will increase. On the TCI-maps used in this analysis in 90% of the cases both the Italian and the German version were given. The 'Atlante Stradale' by Agostini, with maps on the scale of 1:250 000, only adds the German version in parentheses in 35% of the cases[119]. As stated above, this has not been effectuated at all on any of the official Italian topographic maps, and the same applies to Italian school-atlases (Bonapace, Motta 1975).

The new autonomy-statute of 1972 (Stephens 1976, p. 528) has had no repercussion on the topographic maps although it included the clause that official documents had now to be rendered in both languages. Topographic maps dating from 1976 still include as few German versions of toponyms as maps published before 1972, i.e. none at all[120]. South Tirol is now supplied with German-language cartographic material from Austria. South Tirolean editions of Austrian school-atlases are also published[12l]. Moreover, at Innsbruck, one is presently engaged in the compilation of a regional atlas, the Tirol Atlas[122]. Since this atlas deals with both North and South Tirol as one entity, and also maps a large number of themes for both regions, it emphasizes cartographically the historical unity of this old

county.

Commercial maps published in Austria after 1920, continued to render only German versions of names for South Tirol. This also applies to the editions of the '(Deutsch)-Österreichische Alpenverein[123]. After 1945, the German and Austrian Alpinist Societies started to include Italian names on their maps as well[124]. The commercial publications by Freytag-Berndt only give German names with the exception of a few names of valleys and populated places to which the Italian version has been added in a smaller type-face[125].

3.12.3 The Aosta-valley

At the time of the formation of the Kingdom of Italy in 1860, an agreement was reached between France and the Kingdom of Sardinia that the latter would cede the regions of Savoia and Nizza to France, on the condition that the inhabitants agreed by plebiscite. In this way these two French-speaking regions were ceded to France, which however, was not interested in the Aosta-valley which was also French-speaking. This region then became part of a greater Italian-speaking kingdom instead of the smaller Sardinian state. This had consequences for the language situation. The regulations for the surveying of the 1:50 000 map of Piemonte in 1841, voice a clearly liberal attitude[126].

"..., non se dovevano tradurre in questa lingua (italiana) i nomi propri de 'luoghi situati al di là delle Alpi, ove la lingua francese è la dominante".

A prosaic reason for this tolerance was that it would be easier to communicate when consulting the map locally. It was for the same reason that the German names in the Val de Gressoney and the Val Sesia were also left unchanged (an attitude completely different from that in South Tirol after 1920). In 1880, the French language ceased to be permitted in courts of law. In 1883, the subsidy for education in the French language was withdrawn and education in French was finally forbidden in 1923. Toponyms too, were gradually italianized; in 1939, the last 32 French municipality-names were re-christened with Italian names (Heraud 1961, p. 21).

After the Second World War, the region attempted to become part of France, but in vain. The attempts were met to an extent by the Italians who granted the Aostans a certain degree of autonomy and in the Statute of the Aosta-valley, French was given equal rights to Italian[127].
In the meantime, the composition of the population had changed after the industrialization of the region instigated by Mussolini. In 1901 of the   83 500 inhabitants, only some 8% spoke Italian. In 1971, this percentage had increased to over 50 whereas the number of French-speakers amounted to some 70 000 (Stephens 1976, p.508, 514), both the speakers of standard French and of Franco-Provençal and their dialects. These two groups do not agree on the course to be followed in maintaining their language. On the maps of the Aosta-valley published in about 1860 by the Kingdom of Sardinia, all names are found in their original French versions[128]. On the Carta d'Italia at scale 1:100 000 which was published of the Aosta-valley in 1885/6, 1906 and 1921, the first two editions show only French names, whereas the 1921-edition gave some italianized names. The map-series 1:50 000, shows a similar picture. Sheets of the Carta d'Italia series 1:25 000 from the period between the two world-wars comprise more translations. Amongst these are for example the translations of *Villeneuve* into *Villanova Baltea*, *Petit Poignon* into *Piccolo Poignon* and *St. Martin* into *S. Martino di Corlean*[129].

After the Second World War this trend was reversed and again only the traditional French names are to be found on the official Italian maps, with the exception of the name of the region's capital which is called *Aosta* instead of *Aoste*, and of *Val d'Aosta* instead of *Vallée d'Aoste*. Moreover, many Italian generic name-elements were added. On the map sheet Aosta of the 1:50 000 series, 76% of the names

was French. The map-sheet Mont-Blanc of the same series, published 1960, gave a proportion of 50%. On the basis of these two maps the proportion of French names has been fixed roughly at 60%. This is in strong contrast to South Tirol, where the German language is also given equal rights by law, but where the names in the German-speaking region are only found in the Italian version. The French topographic map-material copies Italian topographic maps regarding names in the Aosta-valley. French school-atlases such as the Atlas Bordas[130] give Aoste (1953) or Aoste (Aosta) (1973).

3.12.4   The Slovene-speaking regions in the north-east

In north-eastern Italy, near to the Yugoslav border, there are a few areas with Slovene-speaking minorities: the area around Tarvis/Tarvisio, the Valle del Natisone, the surroundings of Gorizia and Trieste. Of these regions, only the Valle del Natisone was Italian before 1918. The remaining regions became Italian after the treaty of Rapallo in 1920, and this has been perpetuated after the Second World War. In the province of Trieste in 1961, some 26 000 Slovene-speaking people were recorded, i.e. 10% of the population. Only in two towns, *Sgonico* and *San Dorligo della Valle* did they form a majority. On the Austrian Spezialkarte 1:75 000 dating from 1917, sheet 23-IX, Triest and sheet 22-IX, Görz/Gradica (1918), these places were still called *Zgonik* and *Dolina*. The entire interior of the province of Triest was then still rendered in Slovene or German. In the province of Gorizia too, the Slovenians formed in 1961 some 10% of the population; in the province of Udine, their number was estimated at 21 000 (Stephens 1976, p.537). The Slovenian minority in the provinces of Gorizia and Trieste is legally protected to a certain extent, which it is not in Udine (Stephens 1976, p.539; Valussi 1980). On the maps that were published before 1918 the varied composition of the population has been taken into account in the case of toponyms. On sheet 21-IX, 22-IX and 23-1X[131] of the Spezialkarte at scale 1:75 000, which depicts the Habsburg monarchy, bilingual names are found which also do justice to the Slovenians (see also figure 60). This was discontinued after 1918. Hence, the Italian maps only gave Italian names and despite the recent attempts to improve the linguistic situation for the Slovenian minority, this continued to the present day. This also applies to commercial maps such as atlases and road-maps. On Yugoslav maps, the Slav names in regions with a Slovenian population in Italy are added in parentheses: e.g. Trieste (Trst), Monfalcone (Tržič), Gorizia (Gorica) and Udine (Videm)[132].

The census-statistics only give Italian toponyms for this region, whereas, in the case of South Tirol, bilingual names are given, and for the Aosta-valley only French names[113]. The adjacent regions of Slovenia and Croatia, under Italian domination from 1920 to 1944, are rendered in Italian on the present official topographic maps. Local names are placed in parentheses here (e.g. Carta d'Italia 1:50 000, sheet 088, Gorizia (1967): Salcano (Solkan), Vertoiba in Camposanti (Vrtojba). On commercial maps, such as those of the Touring Club Italiano, sometimes the Yugoslav versions are given with the Italian versions underneath[133]. However, sometimes the official views are adhered to[134].

3.12.5   Conclusion

Cartographically, in Italy minorities are treated unequally. The French-speaking minority in the Aosta-valley is done justice to as far as toponyms are concerned, but not the German-speaking minority in South Tirol, which finds itself in the same legal situation. The Slovenian minority which inhabits a less coherent region is not

legally protected.

3.13   Spain

3.13.1   Introduction

What once started as a personal union between sovereign states has gradually evolved via the stage of regional autonomy and provincial privileges into one centralized kingdom with one official language, i.e. Castilian. The union between Castilia and Aragon dates back to 1479, and in 1512-15, Navarra became Spanish. The Basque Provinces of Guipuzcoa, Vizcaya and Alava were already acquired by Castilia in the period 1200 - 1379. Galicia which was united with Leon, finally fell to Castilia in the year 1230.

In 1704, during the Spanish War of Succession, the central government in Madrid abolished all Catalan privileges, and closed down all Catalan universities. In Galicia too, and in the Basque Provinces, revolts were the reason for the withdrawal of existing Privileges, even though they were partly restored now and again.
From 1913 - 1923 in Catalonia, a limited degree of internal self-government was possible under the name of Mancomunitat de Catalunya. This was again abolished in 1923 by Primo de Rivera. When Spain became a republic in 1931, more room for regionalism was created. In 1932, Catalonia acquired an extensive regional autonomy. A similar status was gained by the Basque Provinces in 1936, and the autonomy of Galicia was being negotiated by the republican government at the time when the region was occupied by the troops of Franco. The civil war, 1936 - 1939, resulted in the loss of all regional autonomy and in the repression of all non-Castilian cultural manifestations. It was only in the 1950s that the strict regulations against the use of "regional languages' were somewhat lifted. After the death of Franco in 1975, the restoration of regional autonomy was accelerated. One of the first moves by King Juan Carlos, on the day of his inauguration (22-11-1975) was the signing of a decree that permitted the public use of languages other than Castilian (Stephens 1976, p. 661). As early as 30-5-1975, a decree had been passed permitting the tuition of regional languages in primary schools. In October 1976, Catalonia obtained a provisional statute for regional autonomy which became definite on October 27, 1979. On the same day, the statute for regional self-government for the Basque Provinces was proclaimed. Galicia obtained its autonomy in March 1981 (for the location of the minority regions studied, refer to fig. 67).

3.13.2   Mapping

The first topographic maps of Spain were produced during the Napoleonic period. This resulted in the 'Mapa general de Espana y Portugal' 1:228 000 in 63 sheets, published in Paris in 1821. The first reasonably large-scale map-series which was printed in Spain was the Atlas de Espana[135] by Coello.

Table 28	Chronology of topographic surveys of linguistic minority areas in Spain		
	Spain	Catalonia	Basque Provinces
1: 50 000	1875-1963	1923-1936	1923-1936
1: 50 000 2nd ed.	1926-	1950-1960	1950-1960
1:100 000	1952-1967	1954-1964	1956-1966
1:200 000	1886-1921	1886-1916	1902-1920

a   Mapa de Mando. Cartografia Militar de España

In 1853, the cadastral survey of the country commenced and in 1869 the 'Institute Geografico y Estadistico' was founded which later was renamed 'Instituto Geografico y Catastral' (the civil topographic service). In 1870, this Institute was charged by royal decree to produce a topographic map-series 1:50 000 (Stavenhagen 1904, p.254). The production of this agency and of the 'Servicio Geografico del Ejerjito', which produces military maps, is shown in table 28.
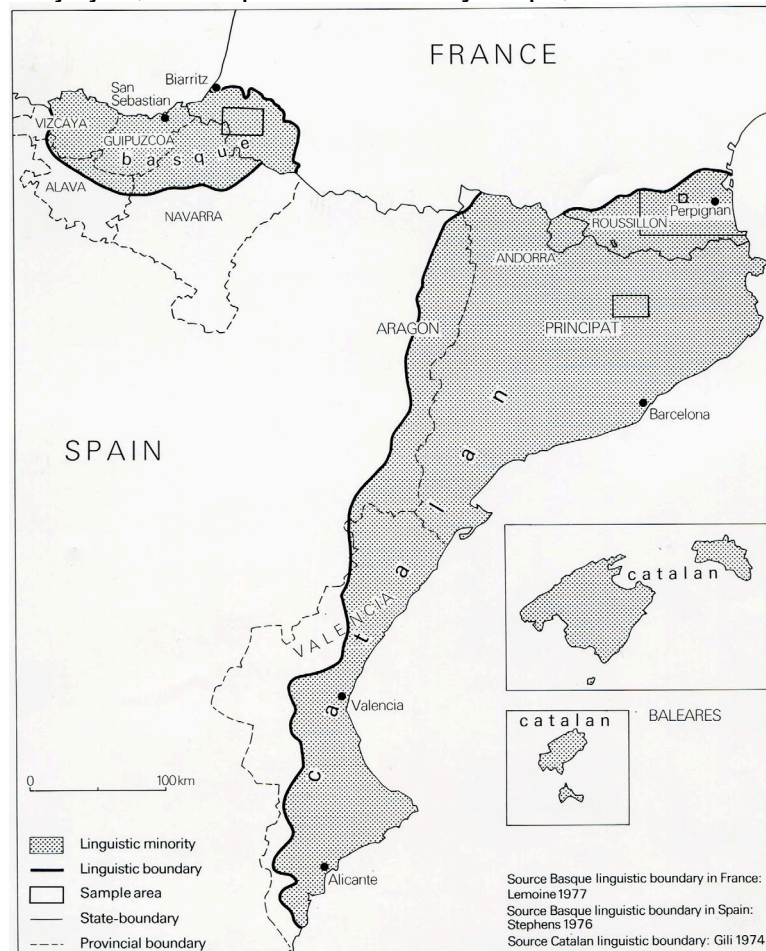
Figure 67 Situation of linguistic minorities and sample-areas in North-eastern Spain and Southern France.

3.13.3   Toponymic instructions

The general Image presented by the maps published until 1969, is one of an entirely Castilian-speaking country. From Coello onwards, practically all names on the official maps are Castilian. By 1969, new ideas had been developed on the representation of the names from non-Castilian languages[136]. These ideas were chrystallized into internal instructions by the Instituto Geografico y Catastral[137]. Officially, the 'Comision Española de Nombres Geograficos' is responsible for the standardization of Spanish toponyms. Because, in practice, this commission does

not have the disposal of the required facilities, the mapping services such as the Instituto Geografico y Catastral, the Servicio Geografico del Ejerjito and the 'Instituto Hidrografico de la Marina' collect these names, each for their own purposes.
Their activities are not co-ordinated, even though the results are compared with each other.

In the current instructions, the word 'language' is not used for Basque or Catalan; both languages are regarded as 'dialecto' or 'idioma local'. The instructions are based on the principle that names should be represented according to the orthography of the local language. Names of important features continue, at least for the time being, to be 'castilianized' (spelled in the Castilian manner). Simple toponyms are also noted down according to the official Basque or Catalan orthography, and the same applies to the specific part of the compound toponyms. Generics which cannot be abbreviated and/or are detached from the specific name-constituents, are castilianized. If the local idiom diverges to such an extent from the Castilian version, that the meaning of the generic name-elements is not quite clear, then the latter is translated into Castilian. The local version is added in parentheses beneath the Castilian version. This is often the case with Basque names. Since 1969 in the regional languages, letters not used in Castilian can be applied; for example the "g". Separate designations, explanatory texts on the map and marginal information are all rendered in Castilian.
The main rule is that non-Castilian names are represented according to their own orthography. Due to the explanatory texts and abbreviations, the character of the map remains Castilian, however.

3.13.4   Catalonia

Apart from Roussillon and Cerdagne in France, and Alghero on Sardinia, Catalan is spoken along the Spanish east-coast from Alicante up to the Pyrenees and on the Balearic Islands (see figure 67). The Catalan-speaking area on the Spanish mainland is divided into Catalunya Vella or Principat, and Catalunya Nova (Valencia and Alicante). The Catalan-speaking population is estimated at some 5 million people in 1975 (Stephens 1976, p.105).

During the Middle Ages, Catalonia had its own cartographic tradition and produced maps in Catalan. However, the maps of the region dating from between the 18th and 19th Century are rendered in Castilian. A forerunner is the map by Huygh Allard[138] (1680 - 1700). The latter contains names such as *Leeyda, Girona, Roses, Vilafranca* for Catalonian towns, which on the map of Spain in the same atlas are written *as Lerida, Gerona, Rosas* and *Villafranca*, that is castilianized.

During the 19th Century, there was a newly developed interest for the Catalan language. In 1862, the first Catalan newspaper appeared, and Catalan literature began to flourish. In 1907, the 'Institut d'Estudis Catalans' was founded, and in 1913, a limited degree of autonomy was granted, the 'Mancomunitat de Catalunya' (Stephens 1976, p.613). This also had some cartographical effect. During this period, a regional branch of the topographic service operated in Catalonia under the name of ' Servei Geografic de (la Mancomunitat de) Catalunya'. This agency produced a map of Catalonia 1:100 000 under the supervision of E. Brossa[139]. This map was rendered entirely in Catalan. In 1913, the Institut d'Estudis Catalans also published 'Normes ortografiques', which were also applied in the production of this

particular map-series. This production was transferred to Madrid and in actual fact stopped when Primo de Rivera centralized all cartographical activities in 1923. The greatest part of Catalonia was mapped for the benefit of the Mapa nacional topografico 1:50 000 between 1928 - 1934, with the exception of the north-east, which was completed between 1939 - 1945. In the period between 1949 and 1952, a second edition of the Catalonian sheets of the series1:50 000 followed. Both editions were rendered entirely in Castilian.

During the administration of the Mancomunitat, private cartographic publishers also produced maps in Catalan, expecially the Centre Excursionista de Catalunya, and the Club Excursionista de Gracia. The publications of Ribas I Virgili (1930) on these maps strongly emphasize the correct Catalan orthography. The revision of the toponyms of the above-mentioned Mapa topografico de Catalunya at scale 1:100 000 by the "Secció de Filologia' of the Institut d'Estudis Catalans was considered by Ribas as "moltes garanties d'exactitud". The importance of this edition in the Catalan language is expressed in Ribas' foreword;

"Pero, el mapa més esperançador per a nosaltres, malgrat d'esser format amb poc treballs propis de camp i de reduir-se als límits arbitraris de la petita Catalunya administrativa, es el de la Mancomunitat, a escala de 1:100 000, per les seves altes qualitats d'execució i d'una manera especial per esser fet en la nostra llengua."

The sheets of the Mapa Nacional Topografico 1:50 000 of Catalonia that appeared before 1930, evoked a less positive reaction: "Pero, sobre tot, ens hem de doldre de que la toponimia contingui tants i greus errors" (Ribas i Virgili 1930, p.9). Objections against the 'Carte de France' 1:50 000 in so far this map depicts Catalan-speaking regions, are that the toponyms in Roussillon and Cerdagne are strongly frenchified.

In 1938, after the conquest by Franco of Catalonia, a repression of the Catalan cultural identity followed resulting in the prohibition of the Catalan language in administration, in education and in mass-media. By order of the ministry of May 1938, the registrar's offices were compelled to castilianize Christian names and surnames (Héraud 1966). Some 80 books per year were allowed to appear in Catalan in the period 1947 - 1961 and it was only in 1961, that it became again possible to publish in the Catalan language unimpeded. In 1974, the four Catalan provinces of Barcelona, Gerona (Girona), Lerida (Lleida) and Tarragona published a Mapa de Catalunya at the scale of 1:200 000 which was also rendered in the Catalan language. This map could not be traced for the purpose of this study. In 1976, an agreement was reached on the restoration of self-government in Catalonia, the so-called Generalitat. On the 25th of October 1976, a law was passed by which regional languages were protected and were allowed for use in education and in mass-media. According to this law, Catalan and Castilian obtained the same rights in Catalonia. The first modern atlas with Catalan names was the Atlas Grafic de Catalunya dated 1977[140], which contains toponyms in Catalan, in Catalonia as well as in Roussillon (see fig. 68). In the accompanying text, emphasis is laid on the problems which occur in the 'restoration' of toponyms; they must be divested of influences of recent, industrial and touristic developments and municipal fusions. Figure 68 compares a detail of the Spanish topographic map with a detail from the previously mentioned Atlas Gràfic de Catalunya. From the comparison it appears that some 75% of the names have been changed. Next to this atlas, regional atlases were published for the Balearic Islands and Valencia, both in a bilingual edition. To commemorate the linguistic work of the Centre Excursionista de Catalunya (founded in 1876), a topographic map-sheet was

published in
1976 which was rendered in Catalan[141].

In October 1979, the Catalonians approved the final autonomy-statute, by referendum. The powers thus transferred to the regional authority as a result of this are especially related to education and culture. From 1980 onwards, a scientific atlas - the Atlas Socio-economic de Catalunya - is issued in Catalan. In 1981, the first school-atlas rendered in Catalan, the Atlas Basic de Catalunya[142] was published. It was indicated in the paragraph on toponymic instructions, that for the names of less important features, regulations exist which ensure that the spelling in the regional languages is applied. In Catalonia at present, there is a movement which tries to obtain official recognition for municipality names in the Catalan version along legal channels. In 1975, one already wrote:

"Asimismo, diverses Ayuntamientos han promovido expedientes que han sido aprobados por el Ministerio de la Gobernacion, para ajustar oficialmente el nombre de sus poblaciones a la gráfia correcta" (Cabesa i Valls et al.   1975).
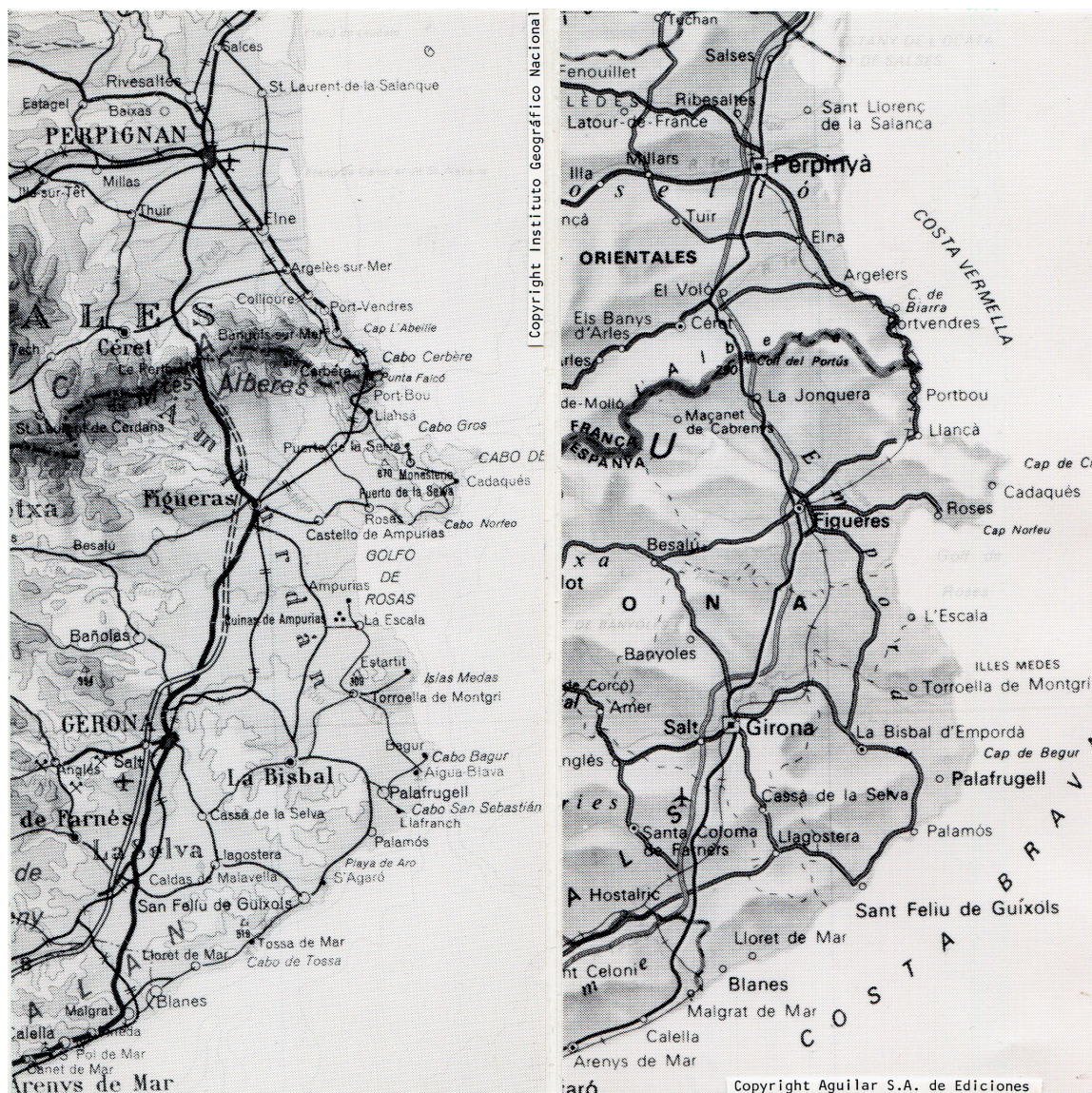
Figure 88 Catalan toponyms according to official Spanish maps and commercial atlases. Left, detail from Peninsula Iberica 1:1 million, Instituto Geografico y Catastral (1978). Right, detail from Atlas Gràfic de Catalunya (1977), Madrid: Aguilar.

In 1969 toponymic instructions have influenced toponyms on topographic maps of

Catalonia. A comparison of toponyms on maps published before and after 1969 shows them to be strongly catalanized (see table 29).

Table 29	Changes in toponyms on maps of Catalonia published before and after 1969 (per cent)		
	Puigreig 1:50 000 1951-1975	Gava 1:25 000 1949-1975	Girona 1:25 000 1950-1975
Unchanged names	75	43	50
'Catalanized' names	25	56	46
Catalan version added (bilingual)	-	1	4
Total number[a]: per cent	100	100	100
absolute	741	93	273
Designations in Castilian[b]	55	63	251

a   Total number of names in sample areas retrieved on modern maps
b   Designations in Castilian not rendered on recently published maps

The map-sheet Puigreig of the 1:50 000 series already had a relatively high proportion of originally Catalan names in 1951. On its 1975 edition generics like 'torrente', 'fonte', 'molino' are still in Castilian, as are the municipality names. The overall percentage of Catalan names is estimated at 75% for this sheet.
The differences between the Castilian and Catalan toponyms are mainly found in the suffixes (-as, -gas, in Catalan -es and -gues), letter-combinations or letters (in Castilian ñ, j, ch, in Catalan ny, g, c or tx), final-consonants such as the "r" and the "t" (Catalan: *Montfalco, Sant, Cellers* and in Castilian *Monfalco, San, Selles*), and translations of hagionyms: *Sant Cebria dels Alls*, in Castilian *San Cipria dels Alls* (Guiter 1976).

3.13.5   Andorra

The only region where Catalan is the official language in administration is Andorra, or Valls d'Andorra, the official name of this independent state. Andorra publishes its own maps to the scales 1:10 000 and 1:50 000[143] on which both marginal information and toponyms are rendered in Catalan. Maps in Catalan were published as early as the beginning of the 20th Century for this region, and were produced by Catalan tourist associations.

The French and Spanish topographic services, which both map the region as an extension of their national territory, adopt the Catalan toponyms. On the French maps[144], the accents are not adopted however, or either adapted to the French Version (Andorra: *Pic Negre, Anyós, Entremesaigües*; France: *Pic Nègre, Anyos, Entremesaigues*). On the Spanish maps[145] many Castilian generic terms are reproduced (sierra, puerto instead of serra and port) and often the letter "v" is chosen when rendering the "b" sound (e.g. Andorra: *Aubinya, Bixessarri*; Spain: *Auvinya, Vixesarri*).

3.13.6   The Basque Provinces

The four Basque Provinces in Spain had a population of some 2 million in 1970; the number of Basque-speaking inhabitants is estimated at some 500 000 (Stephens 1976, p.643). After initially being part of the kingdom of Navarra, the western Basque Provinces were gradually acquired by Castilia (1200 - 1379),

although they retained a large degree of autonomy until 1841. From October 1936 until August 1937, the Basque Provinces regained their autonomy and, within the Spanish state, the Basque Republic was proclaimed. This was sanctioned by the Spanish republican government three months after the outbreak of the civil war. The statute regulating the autonomy, did not include Navarra, which, at that time, was no longer Basque-speaking; but only the three provinces of Alava, Guipuzcoa and Vizcaya. After the subjection of the region by the government of Franco in 1937, all privileges were abolished. The prohibition of the use of the Basque language in administration, education and mass-media, continued to be in force until the 1950s.

The character of the names on the topographic map 1:200 000[146] of the provinces of Guipuzcoa and Vizcaya has been investigated for this study. The results are summarized in table 30. The category of Basque names also includes Spanish transcriptions in which e.g. the Basque letter "k" has been changed in Spanish into "qu" or "c" (e.g. *Irizketa-Irizqueta*, and *Gernika-Guernica*).

Table 30   Toponym characteristics on the Guipuzcoa and Vizcaya sheets of the Mapa Militar Itinerario 1:200 000

	Absolute	Per cent
Basque names	495	54
Basque names with Spanish generics added	124	13
Bilingual Spanish-Basque names	28	3
Ecclesiastical names (San José, Monasterio de ..)	103	11
Spanish names (without ecclesiastical names)	171	19
Total	921	100
Uncategorized names	139	
Spanish designations	12	

Source: Mapa Militar Itinerario (1969-1970)

The designations and the generic name-elements are Castilian (see also fig. 69). The effect of the new instructions of 1969, mentioned above, could not be investigated yet on maps. The first edition of the topographic map at scale 1:50 000 of the Basque Provinces was produced in the period between 1940 and 1944, the second in the period between 1950 and 1954. Both editions are identical as far as the names are concerned.

It was only with the production of the Atlas Grafico del Pais Vasco (bilingüe)[147] that a first start was made to effectuate bilingualism on the map. It contains a number of names both in Castilian and in Euzkara Batua, the modern unified Basque language. However, only a mere 0.5% of the names are rendered in this manner. It was not possible to check whether the names which were not translated were purely Basque or not.

3.13.7   Conclusion

On the map, Catalan names have been castilianized. It is now possible to reverse this castilianization for the category of non-official names. However, there are still insufficient maps available to evaluate the outcome of the new attitude. Even in the case of official names, an attempt is being made to 're-catalanize' them along legal channels. The extent to which Basque names have been changed in the official Spanish surveys is difficult to assess, due to the absence of maps in Basque. Especially the ecclesiastical and infra-structural names (such as Pasajes de San Pedro) have a non-Basque character.
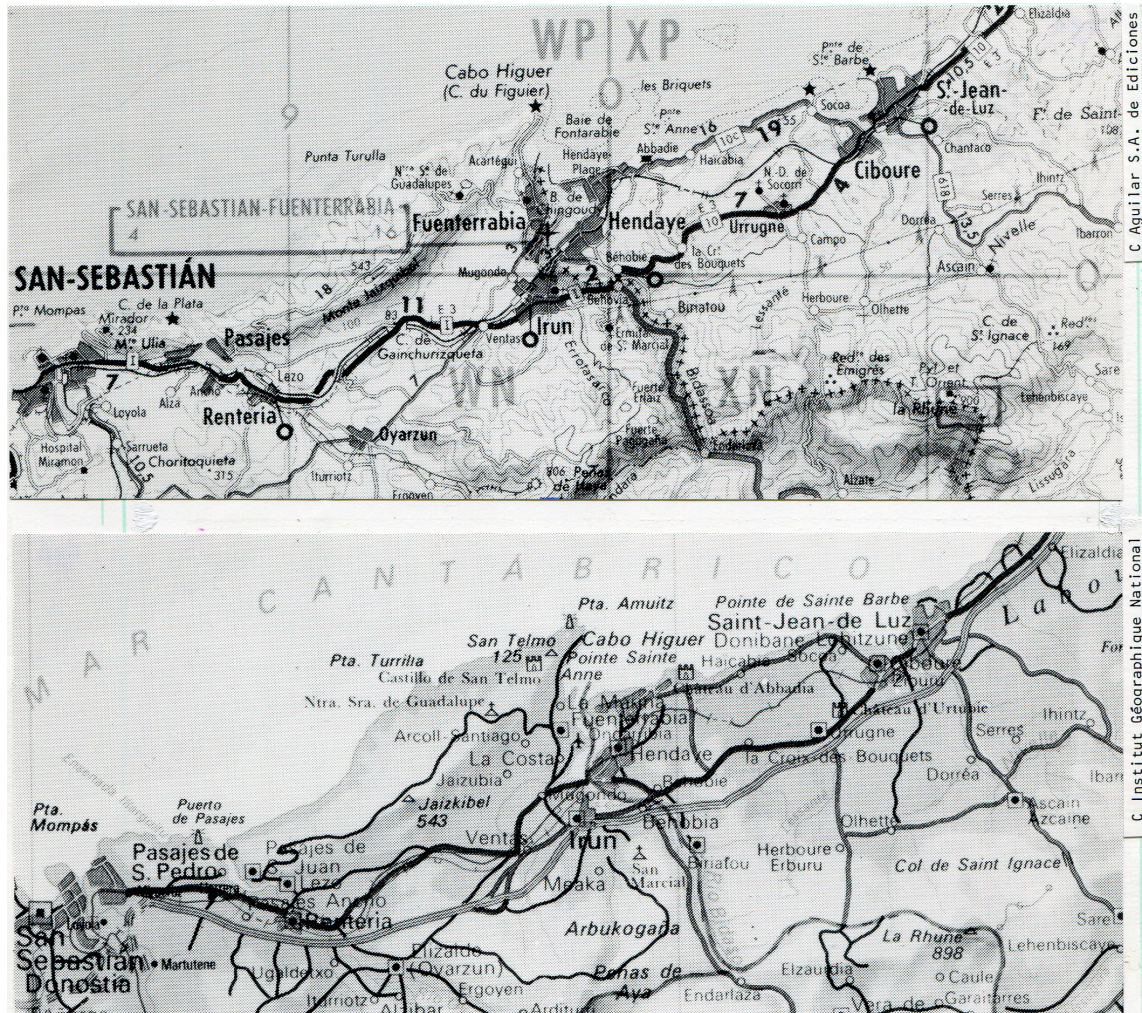
Figure 69 Official and bilingual toponymy for the Basque Provinces. Above, a detail from the Carte de France 1:250 000, sheet NK 30-3, Pau, 196? (Permission of the Institut Geographique National). Below, a detail from the Atlas Grafico del Pais Vasco/Euskal Herriko Atlas Irudiz (1977), Madrid: Aguilar.

A possible reason for the relatively large number of Basque names which have only been transcribed in Castilian (in contrast with the Catalan names which are mostly translated) is probably the fact that the Basque language is less cognate to Castilian than Catalan, and therefore less frequently considered for translation. In France too, Catalan names are more frequently translated than the Basque toponyms.

Footnotes to Chapter 3

1 Report of the Departmental Committee Appointed by the Board of Agriculture to inquire into the Present Condition of the Ordnance Survey. London 1893.

2 1:50 000 Second series, sheet 115, Caernarfon & Bangor (1974).

3 Atlas Cenedlaethol Cymru/National Atlas of Wales. University of Wales Press, Cardiff 1981-1984.

4 Report of the chairman of the UK Division to the UNGEGN for its ninth Session. United Nations, New York, february 17-27, 1981.

5 Boundary Department - General instructions for the Guidance of the District and Assistant Boundary Surveyors, in the Performance of their respective Duties (1832, p.72, 73), quoted by Andrews 1975, p.120.

6 Personal Statement by Dr.B.Ó Dubhthaigh, Senior Inspector, Department of Education, Dublin 1981.

7 Scottish Place Names: Revision of Ordnance Survey Maps. Scottish Geographical Magazine vol.29, 1913, pp.322-323.

8 There are two Standards closely related to one another: the 'K.L.T.G.´ which, because i t was published during

the Second World War i s not generally accepted, and the 'Orthographie universitaire'. The former is especially propagated in Rennes, and the latter in Brest.

9   La cartographie au XVIII siede et l'oeuvre du Comte de Ferraris (1726-1814). Colloque International, Spa 1976. Credit Communal de Belgique, Bruxelles 1978.

10   The orthographies for place-names in French-Flanders in use in the Netherlands and in the Dutch-speaking part of Belgium are different. Refer to J.Huisman - Regionale vormverschillen in nederlandstalige namen van steden in Belgie en Noord-Frankrijk. Naamkunde vol.8, 1976.

11   See Übersichtskarte von Mitteleuropa 1:300 000, sheet J 50, Metz. Published by Reichsdienst für Landesaufnahme, Berlin 1940. Edition 1944.

12   Refer to the internal regulation 'Note à l'usage des topographes operant en Alsace. IGN, Service des cartes aux moyennes echelles, Commission de Toponymie. Août 1979, Paris.

13   Carte de France au 1:20 000, sheet XXXVI1-21, Altkirch, 1-2, 3-4, 5-6, 7-8 (1937) and Messtischblätter der königlichen Preussischen Landesaufnahme im Massstabe 1:25 000, sheets 3693, Hirsingen (1885/86), and 3688, Altkirch (1887).

14   Carte topographique de l'Ile de Corse dressée par order du Roi, d'apres les opérations geodésiques et les levées du cadastre exécutés de 1790 à 1791 et dirigés par feu MM Testevuide et Bedigis, publiée par le Depôt de la Guerre, Paris 1824. Scale 1:100 000, in 8 sheets.

15   Compare with Carte touristique 1:100 000 (serie verte), Paris 1976. Third edition.

16   See Carte Michelin 1:200 000, sheet 86, Perpignan (1974).

17   See Carte de France 1:50 000, sheet XXIV-48 (1972) and XXIV-49 (1967), names respectively Rivesaltes and Céret.

18   For example the Mapa General de España dividido en sus actuales provincias, islas adyacentes y regno de Portugal por Don Tomas Lopez. Madrid 1792.

19   It is meant here that a hierarchy developed between the Belgian language communities, in which the French-speaking community dominated the (subordinated) Dutch-speaking community. Refer to F. van Mechelen - De minderheid als sociologische categorie. Sociologische Gids, vol. 9, 1962, pp.62-80.

20   Gerard Mercator produced the map of Flanders 1:172 000 possibly on the basis of information collected by Van Deventer. This map was published in 1540. A map of Liège was published by Mercator in 1585 - Refer also to R.Kirmse - Die grosse Flandernkarte Gerhard Mercators, ein Politicum. Duisburger Forschungen Band 1,1957.

21   A reduced facsimile-edition of De Ferraris' map 1:11 520 has been published recently, financed by Credit Communal de Belgique.

22   Authors to be mentioned here are: Van de Wijer and Draye (1947), Mansion (1929) and De Flou (1929).

23   Article 3 of the 1963 Language Act (Taalwet); 1966 Acts on the use of languages in Administration in Malmédy, Eupen and Sankt Vith; Revision of the Constitution of 24-12-1970.

24   Carte de Belgique 1:50 000, sheet 56, Vielsalm (1954); Series België M736, 1:50 000, sheet 56, Vielsalm (1977).

25   Personal Statement by Mr. J.Vanderstraeten, NGI, Brussels 1981.

26   Frisia occidentalis. Adriano Metio et Gerardo Freitag auctoribus. In: Mercator-Hondius-Janssonius - Atlas or a geographicke description of the World. Amsterdam 1636.

27   Topografische kaart van Nederland 1:25 000, surveyed 1960-1970.

28   Kaart van Friesland/Kart fan Fryslân. 's-Gravenhage 1968, 1975, 1977, 1978. Published by Fryske Akademy, Leeuwarder Courant, Provinciaal Bestuur van Friesland, VVV-Friesland and Falkplan-CIB. Scale 1:100 000.

29   Frisia occidentalis. Sibrandis Leo Leovardiensis describ. 1579- In: Ortelius - Theatrum Orbis Terrarum, 1579.

30   Nammejouwingskommisje/Toponymisk Wurkforban, Fryske Akademy - Plaknammen yn Fryslân. Manuscript, 1981.

31   Topografische kaart 1:25 000, sheet 10H, Sneek (1949). Co-ordinates 170.556.

32   Topografische kaart 1:25 000, sheet 10F, Oosterlittens (1949). Co-ordinates 172.563.

33   Topografische kaart 1:25 000, sheets 5H, Dronrijp (1973) and 6C, Leeuwarden (1970).

34   Waterstaatskaart 1:50 000, sheet 5, Harlingen-Oost (1974).

35   The so-called 'Nieuwe Stavering', approved by the Provincial States of Friesland in 1980.

36   Refer to: Allgemeine Richtlinie für die Schreibweise geographischer Namen der Niederlande. Ministerium des Innern, Berlin 1967.

37   Messtischblätter herausgegeben vom königlichen Preussischen Landesaufnahme, sheet 3352, Metz (1882); second edition 1912.

38 Carte de France 1:20 000, sheet XXXIV-13, 1-2, Metz (1926); second edition 1939.

39 Topographische Uebersichtskarte des Deutschen Reiches 1:200 000, sheet 122, Aachen, 1901 (Preussische Landesaufnahme); 1943 (Reichsdienst für Landesaufnahme).

40 Übersichtskarte von Mitteleuropa 1:300 000, sheet J 50, Metz. Editions published in 1909, 1929, and 1943 (Reichsdienst für Landesaufnahme).

41 Richtlinien für die Darstellung der Reichsgrenzen vom Jahre 1918 und der Orts- und geographischen Namen in den abgetrennten Gebieten. Erlass des Reichsamtes für Landesaufnahme vom 21.4.1937, gebilligt durch Erlass des Reichs- und Preuss. Ministerium des Innern VI A 4397/6460 vom 28.4.1937. Mitteilungen des Reichsamts für Landesaufnahme 14 Jg., 1938, p.123.

42 Europa 1:300 000. Deutsche Heereskarte. Zusammendruck Breslau-Sillein (1941).

43 Karte des Deutschen Reiches 1:100 000, Einheitsblatt 68, Posen (1941).

44 Refer to Topographische Übersichtskarte des Deutschen Reiches 1:200 000, sheet 168, Pfalsburg (1944); Übersichtskarte von Mitteleuropa 1:300 000, sheet J 50, Metz (1943); Müllers Ortsbuch für Eupen-Malmedy, Elsass-Lothringen und Luxemburg. Post- und Ortsbuchverlag Wuppertal-Nächstebreck (1942); Verzeichnis der Wohnplätze in Lothringen. Herausgegeben von der Reichspostdirektion Saarbrücken, Stand vom 1.Oktober 1941.

45 Europa 1:300 000. Deutsche Heereskarte. Zusammendruck Wien-Szegedin, Sonderausgabe III (1941); Zusammendruck Kaschau-Klausenburg R 49 / S 47, Ausgabe 2 (1941).

46 Anleitung zur Schreibweise geographischer Namen, bearbeitet von der Geschäftsstelle des Ständigen Ausschusses für Geographischen Namen beim IfAG, Frankfurt am Main 1980. Published in English as: Toponymic Guidelines for the Federal Republic of Germany, New York 1981.

47 Nord Friesland/Nordfriislon 1:100 000 mit den friesischen Ortsnamen bearbeitet von R.K.Holander und V.Tams Jörgensen. Nordfriisk Institutt, Bredstedt/Bräist, 2.verbesserte Auflage, 1973.

48 Slesvigs Festland i VI Blade. Generalstaben, Köbenhavn (1857); Deutschland 1:50 000, sheet L 1522, Schleswig (1973), sheet L 1524, Eckernföhrde (1973).

49 Danmark 1:100 000, sheet 57, Tönder (1952); sheet 58, Dybböl (1951); sheet 59, Sönderborg (1951).

50 Topographische Übersichtskarte des Deutschen Reiches 1:200 000, sheet 8-9, Westerland/Tondern. Aufnahme 1906, letzte Nachträge 1939. Edition 1951.

51 Topographische Übersichtskarte 1:200 000, sheet CC 1510, Westerland (1963, 1976), sheet CC 1518, Flensburg (1968, 1976).

52 Joint Operations Graphic Chart 1:250 000, sheet NN 32-5, Flensburg (1973), sheet NN 32-6, Kiel (1973).

53 Gazetteer Federal Republic of Germany. Preliminary edition Niedersachsen. Third UN Conference on the Standardization of Geographical Names, Athens, 1977.

54 Topographische Übersichtskarte 1:200 000, sheet CC 5502, Köln, 1st edition 1964,3rd edition 1975.

55 Personal Statement by R.Böhme, IfAG, Frankfurt 1981.

56 Bundesgesetzblatt I, p.413, 14-8-1952.

57 Übersichtskarte Bundesrepublik Deutschland 1:500 000 (1978-1981).

58 Übersichtskarte von Mitteleuropa 1:300 000, sheet K 48. 1st edition 1912, last edition 1964.

59 Allgemeine Richtlinie für die Schreibweise geographischer Namen der Deutschen Demokratischen Republik. 3e Auflage, Berlin 1979. Ministerium des Innern, Verwaltung Vermessung und Kartenwesen (1st edition 1966, 2nd edition 1970).

60 Instruktion für die Schreibweise geographischer Namen in kartographischen Erzeugnisse der DDR. Berlin 1972.

61 E.g. Messtischblätter der königlichen Preussischen Landesaufnahme 1:25 000, sheet 2325, Burg (1903/16), sheet 2326, Werben (1903/12), sheet 2252, Straupitz (1903/19) and sheet 2253, Lieberose (1903/20).

62 Germany 1:50 000, sheet L 4150, Werben (1963). Based on the sheets 4050, 4150 and 4151 (1934) and sheet 4051 (1942) of the Topographische Karte 1:25 000.

63 Verkehrskarte der DDR 1:200 000, sheet 7, Cottbus-Dresden (1964, 1974); Bezirkskarte der DDR 1:200 000, sheet 7, Bezirk Cottbus (1975), sheet 9, Bezirk Dresden (1975); Verwaltungskarte der DDR 1:600 000. Berlin/Leipzig 1979.

64 Stadtplan Bautzen/Budyšin. VEB Tourist, Berlin, about 1970.

65 Mapa Przegladowa Europy 1:1 000 000. Niemiecka Republika Demokratyczna (1969).

66 Statement by Dansk Geodaetisk Institut, 1982.

67 Listi yvir staðanovn í Føruyum. København 1960 (in Faroese) and Fortegnelse over stednavne på Faerøerne. København 1960 (in Danish).

68 E.g. Geologisk kort over Faerøerne / Jarðrødiligt Føroyakort 1:50 000, København 1969, by J.Rasmussen and A.N.Nygaard.

69 Danmark - Grönland 1:250 000. E.g. sheet 62 V 1, Frederikshaabs Isblink (1956).

70 Atlas-håndbog over Grønland / Kaiaallit Nunaat. København: Nyt Nordisk Forlag Arnold Busch, 1978.

71 E.g. W.Streit - Der Daenische Staat, und die Gebiete der freien Städte Hamburg und Lübeck. Leipzig 1832.

72 Videnskabernes Selskabs kort - Danmark & Slesvig 1:120 000. København 1768- 1825.

73 Kart over den Sydlige Deel at Hertugdömmet Schleswig samt öen Femern. Kong.Vid.Selskab 1825. Scale 1:120 000.

74 Slesvigs Fastland, VI Blade udgivet af Generalstaben 1857. Scale 1:120 000.

75 Messtischblätter der königlichen Preussischen Landesaufnahme, sheet 95/96, Tondern (1895); Series Danmark 1:100 000, sheet 57, Tønder (1952).

76 On the frontier-sheets of the series Atlasblader 1:40 000 (1871-1874) in German area Danish names were retained.

77 See Danmark 1:100 000, sheet 57, Tønder (1952) and sheet 58, Dybböl (1951).

78 Kongeriket Danmark 1:500 000 (1979).

79 Stortingsvedtaket om Matrikkelen for Nordland/Troms, 1907. Quoted by Hovda 1978, p. 131.

80 Føresegner om Skrivemåten av Stadnamn. Kronprinsregentens resolusjon 31.mai 1957.

81 See 'Stedsnavnsamling for 0st-Finnmark', by J.Jernsletten and Per K.Bertelsen, Polmak 1976. Their gazetteer for 0st-Finnmark contains seven times as much Sami names as Finnish names. It is an inventory of all toponyms contained in the Økonomisk Kartverk.

82 Personal communication from Mr.Th.Frette, Ural-altaisk institutt, Oslo 1981.

83 Atlas over Sverige. Svenska Sällskapet för Antropologi och Geografi. Stockholm 1953-1971.

84 Stephens (1976, p.692) gives 20-30 000 Finnish-speaking Swedes. The 'Toponymic Guidelines for Cartography – Sweden' (Working Paper 38, 9th Session UNGEGN, New York 198l) reports 40 000.

85 Nordiska Samerådet (Northern Same Council), established 1956.

86 Toponymic Guidelines for Cartography - Sweden. Working Paper 38, 9th session UNGEGN, New York 1981.

87 Proceedings of the Second United Nations Conference on the Standardization of Geographical Names, London 1972. New York 1974. - Resolution 36: The Conference, noting that in some areas, e.g. the Lappish speaking part of Northern Europe, a minority language is spoken inside the territory of more than one country, noting further that geographical names in the minority language are sometimes spelt according to different principles in the different countries where the minority language is spoken ……,recommends that, where possible, the countries in question, in consultation with native speakers of the minority language, a)   adopt a common orthography for all geographical names of the minority language, ...

88 H.Ringstam, LMV, Gävle, reported in 1981 a 100% increase.

89 Topografisk Karta over Sverige, 1:100 000, Fältkarta 26H, Jäkkvik (1970).

90 E.g. Generalstabskarten 1:100 000, sheet 108, Storejen (1917).

91 A.o. on the Topografisk Karta over Sverige 1:50 000, sheet 15 ESO (1972), sheet 15 FSV (197D and sheet 15 FNV (1971).

92 Personal communication from A.Rostvik, OAU, Uppsala 1981.

93 Toponymic Guidelines for International Cartography - Finland. Working Paper 37,9th session UNGEGN, New York 1981.

94 Nordeuropa 1:2 000 000. LMV, Gävle 1981.

95   Nordisk Skolatlas (1977), Stockholm: Esselte.

96 Karta Yugo-vostochnoy chasty Finlandii. St.Petersburg 1863.

97 Sheet Pyhtää (no 3023 06 of the 1:20 000 series) contains the town-name Pyhtää/Pyttis; sheet Pietarsaari (no 2321 of the 1:100 000 series, 1978) contains the town-name Jakobsstad/Pietarsaari.

98 Inari-Menesjärvi 1:50 000. Series Ulkoilukartta/Friluftskarta, Helsinki 1975.

99 Josephinische Landesaufnahme. Innerösterreich u.Illyrien. Specialkarten 1:28 800, no 126. Kriegsarchiv Wien, B IX a 54; FranziszeTsche Landesaufnahme, Inneröster reich u.Illyrien 1:28 800. Section 4 West. Colonne 1; Oestl. Colonne 1.

100 FranziszeTsche Landesaufnahme, Innerösterreich u.Illyrien 1:28 800, Section 5 West. Colonne 1; Oestl. Colonne 1.

101 Generalkarte von Mitteleuropa 1:200 000, sheet 32° 45° , Pola (1908).

102 Special Orts-Repertorium von Kärnten. Neubearbeitung auf Grund der Ergebnisse der Volkszählung vom 31.12.1890. Heraugegeben von der K.K. Statistischen Central-Commission. Wien 1894 / Specialni Repertoriy

Krajev na Koroškem na novo Predelan po Rezultatih popisa ljudstra Dne 31.decembra 1890. Na svitlo dala C.Kr.Centralna Statistična Komisija. Wien 1894.

103 Toponymic Guidelines for cartography - Austria. Third edition. Item 8, provisional agenda 4th United Nations Conference on the Standardization of Geographical Names, 1982.

104 Technische Weisungen Nr 2, Wien, Februar 1969; Nr 4, April 1972; Nr 5, Dezember 1975. Internal instructions Bundesamt für Eich- und Vermessungswesen.

105 Österreichisches Statistisches Zentralamt - Ortsverzeichnis von Österreich 1971-Wien, 1974-77, 9 vols. E.g. Ortsverzeichnis Steiermark 1971. Wien 1976.

106 Glossar. Verzeichnis schwieriger in geographischen Namen vorkommender Wörter. Bundesamt für Eich- und Vermessungswesen, Abt.L2 - Topographie. Wien 1969.

107 396. Bundesgesetz vom 7-Juli 1976 über die Rechtstellung von Volksgruppen in Österreich. Bundesgesetzblatt für die Republik Osterreich, Jahrgang 1976, 118 Stück, 5 August 1976.

108 308. Verordnung der Bundesregierung vom 31 Mai 1977, mit der die Slowenischen Bezeichnungen für Ortschaften festgesetzt werden. Bundesgesetzblatt für die Republik Österreich, Jahrgang 1977, 69. Stück, 14 Juni 1977.

109 Personal statement by Dr.J.Breu, Wien 1981.

110 Österreich 1:50 000, sheet 200, Arnoldstein (1956).

111 Spezialkarte 1:75 000, sheet 19-IX, Bleiberg und Tarvis (1882).

112 Österreichische Mittelschulatlas, 86th edition (1961), Wien: Hölzel.

113 Refer also to the results of the population census of Italy, as published in: Censimento del 1971, vol III - Populazione delle frazione geografiche e delle località abitate deicommuni. Tav.2 (e.g. Provincia di Bolzano/
Bozen).

114 Österreichische Karte 1:50 000, sheet 177, Sankt Jakob (1954); sheet 195, Sillian (1953)

115 Österreichische Karte 1:50 000, sheet 155, Krimml (1956); sheet 150, Zell (1970).

116 Carta topografica d'Italia 1:50 000, sheets 27 (1968) and 28 (1969).

117 E.g. Carta d'Italia 1:25 000, sheet 9 I NO, Silandro, ed.4 (1960). Only 10 of the 150 toponyms have not been translated or otherwise adapted.

118 These separate maps are also collected in the Atlante Automobilistico 1, Italia Settentrionale (1969), Milano: Touring Club Italiano.

119 Atlante stradale d'Italia 1:250 000 (1969), Novara: Istituto Geografico De Agostini.

120 For this purpose the sheets 12 and 25 of the Carta d'Italia 1:50 000 published in 1976, have been compared to other sheets of this map-series for South Tirol published 1968-1972.

121 Neuer Schulatlas für Südtirol für Mittelschulen und höhere Schulen (1972), Bozen: Athesia.

122 Tirol Atlas (1969 -), Innsbruck: Universitätsverlag Wagner.

123 Freytag-Berndt 1:100 000, sheet 12, Grossglockner und Venedigergruppe (1932). Italian names have only been added to the names of mountain-cabins.

124 Langkofel- und Sellagruppe. Ausgabe 1904, Nachträge 1926. Neue Ausgabe 1959. Namenberichtigung nach C.Battisti u.a. Gemeinsam herausgegeben vom Deutschen Alpenverein und vom Österreichischen Alpenverein, 1969.

125 Vinschgau, Südliche Ötztaler Alpen. Wanderkarte S2 (1979), Wien: Freytag-Berndt.

126 Cenni Intorno alla formazione della Carte Topografica degli Stati in Terraferma di S.M. il Re de Sardegna. Torino 1841, p.37.

127 Article 38, first paragraph of the Loi Constitutionelle no 4, 26-2-1948. Gazzetta ufficiale della Republica Italiana no 59, 10-3-1948.

128 Carta Topografica degli Stati in Terraferma di S.M. il Re de Sardegna, sheet 21, M.Bianco (1869); sheet 30, Aosta (1856).

129 Carta d'Italia 1:25 000, sheet 28, Aosta II SO (1930); sheet 27, Monte Bianco I I NE (1950).

130 Nouvel Atlas General (1953), Paris: Bordas; Nouvel Atlas Bordas (1973), Paris: Bordas.

131 Spezialkarte sheet 21-IX, Tolmein (1882); sheet 22-IX, Görz und Gradisca (1918); sheet 23-IX, Triest (1916).

132 E.g. in the school-atlas Naš svijet (1971), Zagreb: Školska Knjiga.

133 See Atlante Stradale d'Italia. Nord. 1:200 000. 6th edition. (1981), Milano: Touring Club Italiano.

134 Carta Turistica d'Italia 1:400 000, sheet 3-4 (1978), Milano: Touring Club Italiano.

135 Francisco Coello - Atlas de España y sus Posesiones de Ultramar. 1:200 000. Madrid 1847-1870. Not

    completed. The sheets of the provinces Alava, Guipuzcoa and Gerona date from 1848, 1848 and 1851 respectively.

136 Seminar on toponymy, Madrid, May 1969. See also p.212 of the Report on Participation by Canada in the Second UN Conference on the Standardization of Geographical Names (UN, London 1972), published by the Canadian permanent committee on geographical names, Ottawa 1972: "In Spain, Catalan and Basque names are treated not on the basis of their spoken form, but in accordance with the standard orthographies of those regional languages".

137 Normas sobre toponimia de] mapa topografico nacional, en las zonas de idioma o dialecta no castellano. Madrid, about 1970.

138 Accuratissima Principatus Cataloniae et Comitatuum Ruscinonis, et Cerretaniae Descriptio. In: Huygh Allard - Atlas Minor. Amsterdam 1697.

139 Mapa topografico de Catalunya 1:100 000.

140 Atlas Grafic de Catalunya (1977), Madrid: Aguilar. A parallel edition in *Castilian* was published as : Atlas Grafico de Cataluña (1977), Madrid : Aguilar.

141 Pirineos 1:50 000 (Cap d'Aran - Pallars - Sobirà). Edicion homenaje de la Federacion Española de Montañismo, al Centenario del Excursionismo de Catalunya, 1876-1976. Institute Geografico y Catastral, Madrid 1976.

142 Atlas Bàsic de Catalunya (1981), Barcelona: Diàfora.

143 *Valls* d'Andorra 1:10 000. Servei de Treballs Públics del M.I.Consell General. 3rd edition. Andorra la Vella, 1976-78. 19 sheets. Valls d'Andorra 1:50 000. Servei de Treballs Públics del M.I.Consell General. Andorra la Vella 1977.

144 Carte de France 1:50 000, sheet 21-49, Fontargente (1969).

145 Mapa Topografico Nacional 1:50 000, sheets 182, 183, 215, 216 (1951).

146 Mapa militar Itinerario de España 1:200 000, sheet 6-1, Bermeo (1969); sheet 6-2, Bilbao (1970); sheet 7-2, Pamplona (1969).

147 Atlas Grafico del Pais Vasco / Euskal Herriko Irudiz (1977), Madrid: Aguilar (Transcripción de topónimos: Luis Pedro Peña Santiago).

4.COMPARISON OF ATTITUDES

This chapter analyzes the influence on the orthography of geographical names of linguistic minority areas of the factors distinguished in Chapter 1: official regulations and procedures, and geographical, historical and cartographical factors.
The results of Chapter 3 are compared with each other and an analysis is made of the extent to which minority toponyms are represented in their own language including own generic terms and designations. Apart from toponyms within the neatlines of the map, the representation of map-titles, legends and other marginal information is also investigated. The attitudes of various countries with regard to the regions which share the same language but fall under the sovereignty of a different national state with a different majority language (the 'irredenta') are also examined. The chapter will be concluded with comments on specific approaches.

4.1 Determinants of orthography

4.1.1 The influence of the official regulations and procedures

In July 1982, the author sent out a questionnaire to the topographic agencies of those West-European countries mentioned in Chapter 3, concerning the national attitudes to minority toponyms. The questionnaire contained questions on the use of the minority language on the official topographic map-series published. The text of the questionnaire as well as the answers received appear as annex 2 at the end of this thesis. The answers have been incorporated in this chapter; in those cases where they did not correspond with the attitudes as concluded from the maps, these are mentioned explicitly. The Federal Republic of Germany, the German Democratic Republic and Austria reported that no official regulations regarding the representation of minority languages were available. Although in some cases exceptions for research purposes are made, the official regulations and procedures of the other countries examined are not generally accessible.
An exception to this is made in France, where the IGN described the regulations according to which the toponyms on Corsica are dealt with in its 1978 Bulletin. Previously, IGN-staff had already published the general principles adhered to by the 'Commission de Toponymie' of that institute. (Deslandes 1947; Pégorier 1971; Ramondou 1981). From the answers to the enquiry-form in annex 2 can be seen which countries allow access to their regulations and procedures.

If all official regulations and procedures had been public, then information could have been derived from them with regard to the manner in which various categories of minority toponyms are dealt with at different scales. Unfortunately this is not the case.
Since a few years additional material has become available on the various governmental attitudes. This is due to the activities of the United Nations Group of Experts on Geographical Names (UNGEGN) and the example which Austria has given with the publications of its first 'Toponymic Guidelines for Cartography' by Dr.Breu. The Austrian example was followed by various other UN-member nations and at present toponymic guidelines for some ten countries are available. Unfortunately this material is often incomplete or vague with regard to the manner in which regions with minority languages are dealt with. One of the reasons is that the regions in which the minority languages have official status are not demarcated. Nor is indicated what categories of names are covered.

Administrative names for example, which were standardized long ago, often as the first category of names, are not covered by the regulations allowing the use of minority language for toponyms. Thus, these regulations often do not cover all categories of geographical names.

In the fourth column of table 33 is indicated whether the spelling of geographical names of a particular country is officially standardized. This is not the case in all countries. Exceptions are the Netherlands for instance, as well as Great Britain and France. The names of municipalities however, have been officially established in France. In Ireland the name-versions in the English language have been standardized already while the Irish names are being dealt with. In Spain, Catalan name-versions are presently being reconstructed, for the benefit of commercial mapping.
The treatment of names and the official determination of their orthography has, in a number of countries, become the task of the topographic agency. Elsewhere, these agencies are only entitled to collect and publish names, whereas the decision on their spelling is left to other authorities. This is the case in Switzerland and Austria for example. Apart from Finland and Denmark, no examples have been found of countries where the linguistic minorities or their representatives determine the spelling of their toponyms on the map themselves. In Belgium, the French-speaking section of the Royal Committee for Toponymy and Dialectology (KCTD) makes recommendations to the Nationaal Geografisch Instituut for the spelling of minority names in the German language. In Great Britain, it is the Ordnance Survey which determines the spelling whereas the Welsh and Scottish institutes only make recommendations. In France and Spain, the topographic agencies also decide upon the orthography without requesting advice. In Denmark, the spelling is fixed by the national spelling-committee; this does not include the spelling of the toponyms of the Faroes, which have their own academy to determine their spelling. In the Federal Republic of Germany, the Bundesländer define the spelling of toponyms while in Norway, the Ministry for Church and Culture has delegated this authority to special name-consultants. In Sweden the topographic service is autonomous, even though it follows the recommendations of the scientific place-names institute. A similar institute plays an important rôle in Finland, where the position of the Swedish-speaking minority is formally that of a language group with equal status, which explains its exceptional position described above.

In most linguistic minority areas in Western Europe, the language of the minority has legal status. This is not the case for the Frisian language-community in the Federal Republic of Germany. It hardly applies to Gaelic in Scotland which is only used in elementary education, nor to the Finnish-speaking population in Sweden. The children of the linguistic minorities of France receive, according to the Loi Deixonne, only a few hours of tuition per week in school in their own regional language.

There have hardly been any official language boundaries drawn for regions where the minority language has received official status or has taken on the position of a local majority. This has occurred in Belgium where both the German-speaking regions of Eupen and Sankt Vith and the regions where the German-speaking minority have been officially accorded language facilities, have been legally delimitated. In the Netherlands, throughout the province of Friesland, teaching in Frisian at primary-school level is compulsory, since the Royal Decree of 1980. In the Federal Republic of Germany there is an officially bounded minority language

region for the Danish-speaking population in a narrow zone to the south of the Danish-German border. Because of their island-character, the borders of the Faroe Isles and Greenland are clearly defined. In the United Kingdom there is no official language-boundary. In Ireland however, the Irish-speaking regions - the Gaeltacht - have been defined officially, but the boundaries of these regions no longer reflect the actual language situation (Fennel 1981). In France there are no official language boundaries; in the case of Spain, this could not be checked. In Italy, linguistic facilities only apply to precisely defined regions, i.e. to the autonomous region of the Aosta valley and to the province of Bozen/Bolzano. In Austria, municipalities with a Slovene-speaking population of more than 25% were indicated on the basis of the 1971 population census. In Norway and Sweden, there are no official internal language-boundaries. In Finland as in Austria an official boundary is based on census results.

The toponymical regulations to be applied within the minority regions, vary greatly. In the province of Friesland in the Netherlands for example, certain categories of toponyms are presently being rendered in Frisian on the topographic map. In Belgium, the different sections of the KCTD take care of both the French- and Dutch-language toponyms. Special instructions pertaining to the Eupen-Sankt Vith region are supposed to exist, but were not available to the public. The map-material of this region seems to imply that the authorities are aiming at grammatically correct forms.

In Great Britain, the instructions prescribe the adherence to the spelling forms of current local usage, whereby, as a result of recommendations from minority-language organizations, a certain degree of standardization of generic terms is achieved. In Ireland, it appears from the maps that all anglicized toponyms are accompanied by Irish versions. In France, the policy is followed to record the 'regional-language toponyms' in a local dialect-form. In Spain there is question of standardization of minority toponyms in the alphabet of the minority language, but this does not affect the official names of populated places. In Italy, according to the responses to our questionnaire, the use of names in the majority language is compulsory if they exist. During the 19th century, instructions of the Kingdom of Sardinia determined that French- and German-language toponyms had to be completely adopted. Despite the recognition of the rights of the Slovene-speaking minority, Austrian maps give no Slovene names apart from a few farm-names. According to its 'Toponymic Guidelines', the Federal Republic of Germany gives neither Frisian, nor Danish names. In the German Democratic Republic, there are no specific spelling-regulations regarding minority names; bilingual and minority names are represented on large-scale maps.

Danish regulations regarding minority toponyms are not accessible. The result of these regulations however, is that on the Faroes only Faroese names (will) occur, and that in the future Inuit names on Greenland will be given precedence. Finnish maps show that in Finland the authorities prescribe their topographers to follow the spelling as indicated by the relevant department of the language research institute for names occuring on either side of the Finnish-Swedish language-boundary. For the Sami or Lapp names in the north of Finland instructions seem to exist prescribing the representation of Sami names in both Sami and Finnish. The Toponymic Guidelines of Sweden indicate that the Sami names must be given on the map, written in the official Sami spelling, in accordance with the recommenda-tions of the UN. Judging from the difference between the French and Spanish (Castilian) representation of Basque and Catalan toponyms, France and Spain have not taken notice of these UN-recommendations. Finnish names in Sweden,

according to the regulations, must be rendered in a Finnish spelling. Though a consultant for Sami names has been appointed in Norway no regulations are known for the use of the Sami language. It is compulsory however to follow the new Northern-Sami spelling for Northern-Sami names.

The official regulations and procedures also determine which categories of names are to be considered for recording on the map. As this is one of the aspects of scale, this will be discussed under the heading 'influences of cartographical factors'.

It can be concluded that the official regulations and procedures in a number of regions stimulate the use of the minority language on maps (e.g. Swedish-speaking Finland) while in other regions they minimize the use of minority toponyms (e.g. in Friesland).

4.1.2 The influence of historical factors.

When speaking of historical factors, the duration and the nature of the contacts between two language regions (whereby one dominates the other) must be taken into consideration. Furthermore, it is relevant to determine in which period the contacts and/or map-recording took place. The mapping, and the codification resulting from it implies a caesura in the process of adaptation of the minority names to the majority language. In general it can be said that a recent large-scale survey carried out after a longer contact period will produce more names adapted to the majority language than a previous one. When comparing the French-speaking region of the Mont Blanc on Italian maps 1:50 000 and 1:25 000[1] of respectively 1870 and 1950, it appears that the map of 1870 shows a few 'chalets' on Italian territory. The 1950 map shows a large number of 'albergos', 'rifugios' and 'bivuacos' as well as other names for touristic features in Italian instead of in French.

A number of states in Western-Europe are still relatively young, others are much older but have gradually extended their territories. Again others (the Netherlands being one of them), for the last 300 years have hardly changed their national boundaries.Consequently the historical development has influenced the period of time during which the linguistic minorities (and also indirectly the toponyms) fell under the sovereignty of the present states. As a matter of fact not only the formation of states and/or the change of their territory call for adaptation in names. At much earlier stages as a result of contacts between language communities exonyms will have emerged (see also fig. 70). Change of sovereignty however, is considered as an important turning-point since it affects mapping and other forms of official inventories.
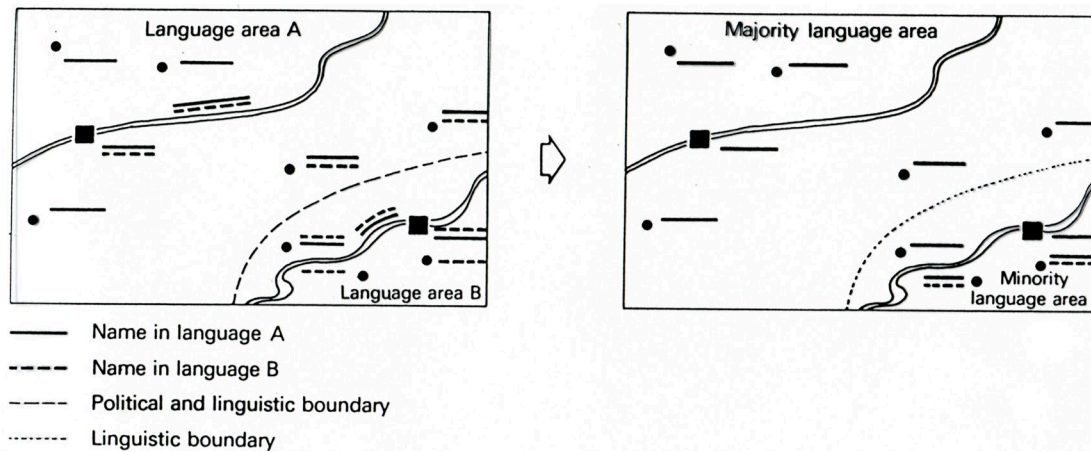
Figure 70 Map of the historical development of exonyms to majority-language-versions in minority language areas. Left, exonyms emerge in adjacent areas where another language is spoken, both for important features throughout the area and for minor features in the border—zone. When a minority/majority situation develops, the majority-language exonyms become the new, official names to which the names in the minority language are added sometimes in parentheses.

Examples of regions where longlasting administrative contacts influenced place-names in minority language regions, in the sense that versions of majority-language adaptation emerged, can be found in Wales, Ireland and Scotland, the Frisian language areas along the North Sea, Lapland, the Torne-älv region, Lausatia, Slovenian Carinthia and Italy, as well as in the Aosta-valley, on Corsica, in Brittany and the Basque Provinces. Other regions have fallen under sovereign powers with a different language at a moment when they had been topographically mapped in their own language. This is the case for example in French-Flanders and the Alsace. Again in other regions, a formal sovereignty only resulted in an effective administrative control (including mapping) at a much later stage. This is the case in Greenland and the Faroes. After 1860, the minorities of Schleswig and Eupen-Sankt Vith, South Tirol, Slovenian Italy and Austria came into existence. The Slovenians already formed a minority in the Habsburg monarchy but its position there was different.

The position of the Swedish-speaking population of Finland also changed after 1860. Swedish switched from a dominant cultural language in Finland before 1918 into a minority language with equal rights thereafter. The deviating position of the Finnish-speaking minority in Sweden can also be explained in relation to its history. With the exception of Swedish-speaking Finland and Eupen-Sankt Vith, minority regions which came into existence after 1860 are rigorously represented on the map in the majority language with extensive adaptations, translations or new names. New names emerged in Eastern-Prussia from about 1890, during the First (and Second) World War in occupied France, after the First World War in South Tirol, and after the Second World War in Saarland and again, Eastern Prussia.

History also plays an important part where changes of attitudes towards toponyms are concerned. An attempt has been made to illustrate its influence in table 31. On the basis of the types of changes in toponyms outlined in Chapter 1, the table characterizes the vicissitudes of toponyms of the linguistic minority regions on maps. It is divided into the following periods: a) from the 16th century up until 1860 (pre-nationalistic Europe), b) 1860-1950 (nationalistic Europe) and c) 1950-1980 (revaluation of the linguistic minorities).

Table 31 shows that the type of changes occurring before 1860 are mainly

phonetical representations in the majority language orthography. During the period 1860 - 1950, the phonetical representation in most cases is maintained beside which, in many cases, adaptations to the structure of the majority language take place. Within this period in most of the minority language regions examples can be observed of translation of toponyms into the majority language. After 1950, the number of regions where the phonetical, adapted or translated representation is retained, remains high. It can also be concluded that there is a rapid increase of the number of regions where the spelling of the minority language names is restituted in its original form.

The bilingual representation of names first took place in the period 1860-1950 and increases somewhat after 1950. The Habsburg monarchy was the only country where, in a previous period (from 1860-1920), a more liberal names-policy was followed than in present times. In Wales, Scotland and Ireland, scientific support in the precise representation of minority names on the map dates back as far as 1820. If minority language regions were acquired after 1860 or even after 1918, then the changes in the toponyms on the map mostly consist of translations and the introduction of new names. Evidently governments become more conscious and aware of the propagandist value of place-names. With the exception of Eupen-Sankt Vith, this applies to all minority regions transferred in Western-Europe after 1864. This is illustrated by the extensive conversion of Danish names into German ones in Schleswig and the conversion of Slovenian and German names to Italian ones in Italy after 1918. Especially in Italy the high percentage of translations and new names (of the total number of changes) results in a kind of visual landslide. Most new names appear on maps during the 20th century when new names are devised for geographical features, independently of existing ones.

Table 31 Varying treatment of minority toponyms on maps from the year 1500 onwards. The table only informs on the type of changes occurring in the various periods and not on the number of toponyms changed

	1500-1860[b]	1860-1950	1950-
Wales	6,7,9; 1820+ 5,13	5,6,9,13	5,6,11[a],14[a]
Ireland	1,6,7,10; 1824+ 12,13	1920+ 11,14	11,14
Gaelic Scotland	6,7	6,7,11[a]	6,7,11[a]
Brittany	6,7	6,7	6,7,13
French-Flanders	1; 1830+ 6	2,3,4,5,6	2,3,4,5,6
Alsace Lorraine	1; 1830+ 6	2,3,4,5,6	2,3,4,5,6
Corsica	1	1,7,9	1970+ 11
Roussillon	1; 1770+ 7,9	1,7,9	1,4,7,9
French Basque prov.	6	3,4,5,6	3,4,5,6
Flanders	1,6	1,5,6	11
Eupen-Sankt Vith	-	1918+ 1,6,9	1970+ 11
Friesland	1,7,9	1,5,7,9	1979+ 11[a]
North-Friesland	1,7,9	1,7,9	1,7,9
Schleswig (Danes)	-	1,7,9	1,7,9
Faroe Islands	-	1,7,9,14	1, 11,14
Norwegian Lapland	-	5,6,9	5,6,9,11,14
Swedish Lapland	-	5,6,9	5,6,9,11,14
Finnish Lapland	-	9,14	9,14
Greenland	-	1936+ 6,10,14	1980+ 11,14
Torne-älv area	-	1,6	1,6
Swedish speaking Finland	-	1	1,14[a]
Lausatia	6,7,9	6,7,9,10	1945+ 6,7,9,14
Slovenian Carinthia	6,7,9	14; 1918+ 6,7,9	6,7,9
Slovenian Italy	-	1918+ 7,9,10	7,9,10
South Tirol	-	1918+ 7,9,10	7,9,10
Vallée d'Aoste	1	1; 1920+ 9	1945+ 11
Catalonia	1,9	1,9	1969+ 11[a]
Spanish Basque prov.	1,6	1,6	1969+ 11[a]

a   Covers only a small part of the toponyms   b   1820+ designates the period since 1820

Explanation of the numerics:

1	Unchanged names	8	Transformation influenced by folk-etymology
2	Addition of diacritical marks		
3	Addition of articles in majority language	9	Translation in the majority language
4	Addition of name-elements in majority language	10	Substitution of new names in the majority language
5	Addition of generic terms in majority language	11	Restoration of original sounds in the minority alphabet
6	Phonetical representation in the majority language orthography	12	Restoration of original sounds in the majority alphabet
7	Adaptation to the structure of the majority language	13	Rectification of the worst errors
		14	Bilingual representation

The approach indicated in table 31 - code -11- implicates a complete representation of the place-names-spelling in the alphabet of the minority language. This is the case in the Aosta-valley, Corsica, Flanders, the Faroe Islands. Eupen-Sankt Vith, Swedish Lapland, and to a limited degree in Catalonia, the Spanish Basque Provinces, Wales, Scotland and Friesland. Table 31 is not differentiated to such an extent that it shows what has occured in relation to the various categories of toponyms. It has been stated in Chapter 1 that the names of larger places and of rivers in a minority region are probably the first to be transferred to the majority language. This possibly occurs first in the form of an exonym before the majority-regime, at a later stage, exerts sovereign rights over the minority region (refer to fig. 70). Since the contacts are initially only slight, those names will have the character of adaptations to the majority language.

In later surveys - this is supported by figure 25 in the paragraph on the Alsace - the proportion of translated names increases. In Chapter 1 was indicated that at a much later stage, i.e. in mapping at larger scales, names of cadastral-lots, farms and relief features appear on the map which can be represented in combination with generic terms (for example Hoeve De Vriendschap), or with appellatives (De Vriendschap, hoeve; hoeve - (transl.: Farmhouse Friendship; Friendship, Farm; Farm)).

The different categories of names however, have not been investigated separately as to the extent to which they have been affected by the majority language. This subject provides numerous possibilities for later research.

In Chapter 1, Kranzmayer was quoted, stating that peaceful contacts between different language groups during the last centuries lead to a high percentage of translations of toponyms and that less peaceful contacts result in numerous adaptations. Where it was possible to investigate, the ratio's in table 32 between numbers of names adapted to the majority language and numbers of translated names were found. However, the comparison was made difficult because maps at the same scale were not always available which resulted in a varying emphasis on different name-categories.

Since too few sample regions were investigated, and because the scales varied extensively, no conclusions have been drawn from this information. On the basis of the data shown in table 32, no definite statement to this effect can be made.

Table 32   Percentages of toponyms adapted to the majority language and of toponyms translated into the majority language, for features from minority language area

	Adaptations		Translations	
	Per cent	Language	Per cent	Language
French-Flanders	32	French	22	French
Friesland	48	Dutch	28	Dutch
Schleswig (Danes)	46-61	German	9-23	German
Alsace	41-58	French	2-17	French
South Tirol	45	Italian	29	Italian
Roussillon	67	French	14	French
Carinthia[a]	49[a]	German	41[a]	German

a   Only valid for name-pairs studied by Kranzmayer (1933)

Another aspect in which time plays an important part is the phenomenon of the delayed adaptation. This means that certain changes (such as new views on toponyms) can only be effectuated on derived scales when their introduction on larger, basic-scales is completed. An extreme example of this was Corsica. Here Tranchot's map, dating from the Napoleonic period, as the last homogeneously edited base-document with regard to toponyms, was used for the spelling of the names on maps 1:100 000 which were published from the year 1960 to 1981. Apart from the rigorous manner in which toponyms were dealt with in parts of Europe which had become minority regions after 1860, and also apart from the general tendency towards restoration of minority toponyms after 1950, historical factors did not result in any general conclusions.

4.1.3 The influence of geographical factors.

The influence of official regulations and procedures and of historical factors can be traced from various sources; geographical factors, however, are more general in nature and less easily defined by way of research.

The geographical factors discerned here refer to two principles which are in line with each other and which concern the number and the selection of names of different categories on the map:

    a)   depending on the regulations and procedures, on history and on the map-scale, name-categories are influenced by the majority language to varying degrees and each in their own particular manner.

The number of names in each name-category (the relative proportion of the different categories) which can be considered for representation on the map is determined by geographical circumstances.

    b)   only the most important of features will be maintained or mentioned on maps at small scales. Due to geographical factors, certain minority language regions might lack features sufficiently important to be mentioned on maps at smaller scales. This influences the absolute number of names in various categories.

The spatial expression of demographical, economical and administrative processes ranks first among the geographical factors, mentioned under a) and b). Their possible impact will be dealt with briefly in the following paragraphs.

When the linguistic minority areas are categorized according to population density, in groups with less than 10, 10-50, 50-100 and more than 100 inhabitants per sq.km, then the first category coincides with the areas around the Polar circle. It is in these regions that much effort is displayed in restoring the original names, with the exception perhaps of Finnish Lapland and Finnish-speaking Sweden. The Gaeltacht in Ireland and the Faroes, the Hebrides, the Danish minority area in Schleswig and Swedish-speaking Finland, Slovenian Austria, the Aosta-valley and Corsica all have 10-50 inhabitants per sq.km. In this group too, a distinct trend can be observed to represent the toponyms in the minority language.

The toponymical treatment of the minority regions with a population density of 50-100 inhabitants per sq.km. (French Basque Provinces, Roussillon, South Tirol, Lausatia, North Friesland, Eupen-Sankt Vith and North Wales) shows little consistency. The last category, with over 100 inhabitants per sq.km, comprises Catalonia, the Spanish Basque Provinces, Brittany, French-Flanders and the Alsace, Slovenian Italy and Friesland. In this group also, strongly varying governmental approaches can be discerned.

The absolute numbers of the minorities concerned vary from 2300 Same or Lapps in Finland to over 5 million Catalans in Spain (see table 33). One would expect that the larger population groups would have succeeded in effecting the official recognition of their languages and of its rendering on the map by means of political pressure. Actually, quite the opposite is the case. The toponyms in the Alsace with 1.3 million inhabitants are represented on the map in the majority language. The same used to be the case for the Catalan minority area, where 5 million Catalan-speakers live and for the Basques in Spain (500 000). The same still applies for the Bretons (660 000), and the South Tiroleans (260 000) as well as for the Frisians in the Netherlands (400 000). Only in Wales with a Welsh-speaking population of 540 000 has there been a slight recovery of the original toponyms on the map. On the other hand, in thinly populated Corsica, with 200 000 inhabitants, minority toponyms have been acknowledged on the map; the same is the case for

the Swedish-speaking Finns with a population of 300 000. The same is not valid for the 260 000 French-Catalans. For the French-Basques with a population of 90 000, topographic maps show toponyms transcribed into French, with accents, as for the French-Flemish (90 000). The toponyms of the Gaelic-speaking Scots, with a population of some 88 000, are conscientiously recorded in the minority language. Toponyms of the smaller minorities of Northern Europe are mostly represented (also) in the minority language.

Population-density is closely related to urbanization. The more strongly urbanized regions such as the Spanish Basque Provinces, the Alsace and Catalonia, however, have been no exception to other regions. Town-names in the Alsace are generally less frenchified than other names. Basque town-names in Spain are partly transcribed into Spanish (at least as far as could be ascertained). Catalan town-names have become castilianized as much as possible.

Most northern minority regions are characterized by a population-decrease. This applies to Ireland, Scotland, Schleswig, Swedish-Lapland and the Torne-älv region, Swedish-speaking Finland, Lausatia and Brittany. In most of the Southern-European regions, the population is increasing steadily. Here too, no relation could be found between specific attitudes to names and population numbers.

In Spain, economically, the inhabitants of the Basque Provinces and Catalonia are the better off. In the Aosta-valley and South Tirol, the income per capita is a little above the Italian average; that of the Slovenians in Italy lies just about average. No income-data are available for Slovenians in Carinthia. Schleswig-Holstein lags behind in relation to the national economical development in the Federal Republic of Germany, as does Friesland in the Netherlands. Corsica is one of the poorest regions in France. Others, with the exception of the Alsace, lie just beneath the French average. The Celtic regions of the British Isles do not belong to the most fortunate economically. The Faroes and Greenland are not rich, and the same applies for Lapland.

Table 33 Comparison of numbers, history, and status of linguistic minorities in Western Europe

	Number of minority group members (000's)	Population density per square km	Existence standardized minority		Language boundary demarcated	Official status minority language	Previous surveys in minority language	Major. language dominant since (MA = Middle Ages)
			alphabet	geogr. names				
Wales	540	50-100	yes	no [a]	no	yes	no	MA
Ireland (Gaeltacht)	30	10-25	yes	yes	yes	yes	no	MA
Scotland (Hebrides)	88	10-20	yes	no [a]	no	no	no	MA
Brittany (Basse-Br.)	660	100	yes	no [a]	no	no	no	MA
French-Flanders	90	100	yes	no [a]	no	no	yes	1680
Alsace-Lorraine	1 300	100	yes	no [a]	no	no	yes	1640
Corsica	200	25	yes	nc [a]	yes	no	yes	1760
Roussillon	260	50-100	yes	no [a]	no	no	no	1659
French Basque prov.	90	50-100	yes	no [a]	no	no	no	1659
Flanders [c]	5 400	390	yes	no [a]	yes	yes	yes	MA
Eupen-Sankt Vith	62	70	yes	no [a]	yes	yes	yes	1919
Friesland	400	100-200	yes	no	yes [e]	yes	no	MA/1795
North-Friesland	10	75-100	no	no [a]	no	no	no	1864
Schleswig (Danes)	50	25-50	yes	no [a]	yes	yes	yes	1864
Faroe Islands	47	35	yes	yes	yes	yes	no	MA
Norwegian Lapland	10	1	yes [b]	no [a]	no	no	no	MA
Swedish Lapland	10	1	yes [b]	yes	no	yes	no	MA
Finnish Lapland	2	1	yes [b]	no [a]	no	no	no	MA
Greenland	48	1	yes	yes	yes	yes	no	MA/1721
Torne-älv region	40	1-10	yes	yes	no	no	no	MA
Swedish-sp. Finland	303	25-50	yes	no [a]	yes	yes	yes	-
Lausatia	50	50-100	yes	yes	yes	yes	no	MA
Slovenian Carinthia	24	25-50	yes	no [a]	yes	yes	yes	MA
Slovenian Italy	50	100-200	yes	no	no	yes [d]	yes	1866/1920
South Tirol	260	50-100	yes	no	yes [e]	yes	yes	1919
Vallée d'Aoste	70	20-50	yes	no	yes [e]	yes	no	MA
Catalonia	5 000	100-200	yes	no [a]	yes [e]	yes	yes	MA
Spanish Basque prov.	500	100	yes	no [a]	yes [e]	yes	no	MA

a Municipality names excepted. In most countries this refers to names of all populated places.
b In North Sami only.
c From a cartographic point of view the minority position disappeared in 1960.
d In Triest province only.
e Language boundaries presumably corresponds with administrative (provincial) boundaries.

The average income is closely related to the extent of industrialization, which, in turn, results in features which are considered for mentioning on the map. The older industrial regions such as the Alsace, the Basque Provinces and Catalonia are economically the most fortunate minority regions. In other minority regions industrial activity, mostly financed by majority groups, is of a more recent date. Only in this century some centres in Italian minority regions became industrialized: e.g. Aoste/Aosta, Bozen/Bolzano, and Meran/Merano. Large-scale industrialization in French-Flanders (Dunkirk) started after the Second World War; in the German Reich large lignite-complexes were developed in Lausatia (Schwarze Pumpe). This century also saw the development of the iron ore mines of Kiruna and Gällivare in Swedish Lapland. In all these places industrialization resulted in a large influx of majority-language speakers, in larger populated places and industrial centres, which due to their economic importance found their way to small-scale maps, written in majority versions.

Beside industry and urbanization, tourism also influences geographical names. Those features which belong to the tourist-infrastructure are generally rendered on the map in the majority language. This applies to winter-sport or mountaineering facilities in the Aosta-valley, South Tirol, and the Pyrenees as well as to sea-side resorts in Wales, on Corsica, and the 'Waddeneilanden' (West Frisian Islands) in the Netherlands. However, toponymical effects of the economical development have not yet been investigated further.

Finally, minority toponyms can be incorporated on the map when they designate administrative entities entirely inhabited by a minority group. The chances that such administrative units (such as municipalities, provinces, counties) are represented in the minority language are greater than when the minority group forms only part of their population. In the case of the Basque Provinces and Catalonia, regionalization according to the new Spanish statutes appears to have consequences for the languages as well. In the case of South Tirol, regional autonomy does not seem to have had any effect on toponyms on the map - at least not yet.

The influence of the separate geographical factors as listed above on the representation of toponyms is difficult to assess. The impact of the combined set of factors however cannot be denied. It appears that governments for a long time displayed a more indulgent attitude to the poorer, thinly populated, less developed minority regions than to the richer, industrial areas, resulting in an earlier acceptance of their toponyms on maps. Thus, the willingness to take account of the linguistic identity of minority regions seems to be inversely proportional to their demographic and economic potential.

4.1.4 The influence of cartographical factors

At smaller scales, the number of toponyms on the map diminishes due to the decreasing amount of space available. Depending on the purpose of the map and the existing regulations certain categories of toponyms will either be retained or left out. This results in the 'scale-effect' according to which certain categories of names with their specific adaptation to the majority language will dominate at certain scales.
Another cartographical factor is whether or not older maps exist which can be used as source material. If such maps are available it is evident that names will be copied more or less integrally from them unless of course there are serious objections against this. Because maps have a codifying effect, it is important to find out whether such a codification had taken place before the present majority regime started to dominate.

This appears to be the case with Eupen-Sankt Vith, Danish-speaking Schleswig, South Tirol, the Alsace and Catalonia. With the exception of Eupen-Sankt Vith, this early codification seems to have had very little effect. This was probably due to the fact that the mapping activity coincided with the period in which the majority government came into power. If 16th and 18th century provincial maps of the Netherlands are considered as topographic maps, then French-Flanders can be placed in the same category. Here, there does appear to be some sort of influence on the names given at a later stage, as is evident from the first French systematic mapping by Cassini. In the same way the maps of Corsica, with the names rendered in Italian due to Tranchot, have had a great, and long-lasting impact. This

was certainly the case up until 1870, and even at a later stage on the map 1:100 000, before the 'corsisation' of toponyms was adopted. The availability of Swedish maps was the reason why the Russians in their mapping of Finland in the 19th century adopted the Swedish name-versions. Friesland also has been mapped a number of times before 1795, when it lost its autonomy. These maps however, have all been lettered in the later majority language, with one small-scale exception.

Not only topographic maps have influence on the codification. It appears that atlas-maps also contribute to this process. Atlases in the minority language comprise maps of French-Flanders, Eupen-Sankt Vith[2], Swedish-speaking Finland, South Tirol, the Aosta-valley, the Alsace, Corsica, Catalonia and Roussillon.

The availability of contemporary sources in which the minority toponyms are mentioned is also a factor in their use and application. At present, atlases are again being published in a number of minority regions with repertories for the toponyms in the minority language versions. Here, the atlases of Wales and Ireland must be mentioned, school-atlases as well as national atlases. In France, atlases in the minority language hardly exist, while the existing regional atlases pay no attention whatsoever to the language situation. In the Federal Republic of Germany, there are no separate atlases for linguistic minority regions, neither have they been found for Sorbian Lausatia. The North-Frisians have rendered a topographical map of their home region in the Frisian language. There exists a bilingual atlas of Greenland, but not of Lapland; only a map of the Sami-speaking region in its former extent, with Sami toponyms[3], was found. The Swedish-speaking minority in Finland have their own teaching aids in the Swedish language[4]. South Tirol has its own cartographic products for its schools. Special mention should be made of the regional Tirol-Atlas, published from 1969. This atlas strengthens the relation between the regions on both sides of the Austrian-Italian boundary that in earlier years formed one entity. No atlases have been traced for the Aosta-valley; they have for Catalonia. Table 33 comprises a comparison of all factors (the regulations and procedures, historical, geographical and cartographical factors) which can influence the orthography in minority regions.

As was indicated in figure 3 the name-categories which the topographer has to record change during the course of time. In the 16th century, only towns, villages and private estates were recorded. It was only during the 19th century that relief-features were named on maps. Moreover, many micro-toponyms are only considered for mapping when land is recorded for cadastral purposes. The gradual increase of the scale of topographic maps since the end of the 18th century, results in the first recording of names of farms, regions and smaller watercourses, etc.

The nature of the names which are collected not only depends on the period in which they were recorded, but also on the country in question or the agency involved. When comparing the German and French maps at scale 1:25 000 from the years 1900 and 1925 respectively, the German maps show many regional names and the names of military barracks, garrisons and exercising-grounds, and the French maps show more names of fortresses. The categories of names recorded also vary within the same country. The French cadaster for instance, mentions the names of cadastral-lots and regional names. The topographic service in France records the names of point-features. The mapping-service of the Ministry of Internal Affairs recorded mainly administrative data and roads on its map-series 1:100 000 (Carte de l'Intérieur). The present 'Carte Michelin', with its function for

navigation and for tourist-information emphasizes other aspects as was also mentioned in paragraph 3.3.

It has not been investigated to what degree emphasis is laid on certain categories of names by various national topographic agencies nor to which extent this influences the proportion of names written in the minority language. The so-called 'scale effect' is described in the paragraphs on the Alsace and Basque Provinces. As was indicated in the paragraphs 3.3.4 and 3.3.7, as a result of the extra emphasis put on certain categories of names, the percentage of names remaining in the minority language can vary strongly with the scale.

Finally, in de discussion on cartographical factors, mention must be made of the effect of the addition of generic terms and designations (appellatives). In Chapter 3, a number of examples have been given of maps of linquistic minority areas where the effect of adherence to the minority toponyms was largely set aside by the great number of such terms and their abbreviations in the majority language added.

On the map-sheet Caernarfon & Bangor[5] (paragraph 3.2), 93 Welsh names with English generic terms added (.....-farm), 422 separate English designations (churchyard, cemetery) and 340 English abbreviations (PH (public house, Sch (school), etc.) were incorporated beside 1320 Welsh names. This is 1/3 of the total number of written units on the map. On the map 1:25 000 of Belgium for the Eupen-Malmédy region, we find 1284 toponyms of which 84% is German. Beside these, there are also some 1845 French generic terms and designations on the map, many in abbreviated form, but in total this brings the percentage of German words back to some 35%. This large number of abbreviations, is the result of a cartographical policy according to which letter-symbols or abbreviations are used, instead of figurative symbols as in other countries. As far as this is concerned, the British and Belgian topographic maps are the most marked of all. Elsewhere, for instance in France or Scandinavia, the number of designations on maps is much smaller.

4.1.5 Other factors which influence minority toponyms

Beside the four previously mentioned factors, others can be distinguished which affect the representation of minority toponyms on maps. In the first place, there is the linquistic factor: differences in the degree of linguistic affinity can lead to specific attitudes towards minority languages. Basque and Catalan-speaking areas, both mapped according to the same regulations and by the same mapping agencies (French or Spanish), show a strongly varying percentage of either frenchification or castilianization of the toponyms. The proportion of unchanged names and/or names represented phonetically in the majority language is in both cases much higher for the Basque than for the Catalan-speaking regions. The degree of linguistic affinity between the minority and majority language seems to be an obvious explanation in this case.

Also, the distinction made in this study between adapted and translated names is affected by linguistic affinity. A minor adaptation in name-suffixes results in translated forms in cases where languages are closely related (e.g. Riu-Rio; Vilalonga-Villelongue etc.). This translation falls into the same category as much more radical changes as between German, Romance and Slavic languages (e.g. Holzbruck- Ponte di Legno; Biela Gora-Weissenberg etc.).

Political factors too, such as the absence of a democratic constitution, affect the representation of names in minority language regions. The restoration of the original minority names is partly conditioned by the possibilities and provisions which a legislation on name-changes has to offer. The linguistic and legal factors mentioned here have not been investigated further, since this would reach beyond the scope of this study.

4.2 The result on the map

4.2.1 Title and legend

In table 34, an illustration is given of the degree in which the topographic maps of the various West-European countries make room for the language of the linguistic minorities in their home areas.

Apart from Flanders and Swedish-speaking Finland, where the equal rights of the minority languages have produced their full effect on the map, Ireland where the dismissal of the colonial past has resulted in the promotion of original names, and Eupen-Sankt Vith and the Faroes where statutory enactments apply, the serial title of the national topographic map is not found rendered in the appropriate minority language. The map-title - the name of the specific map-sheet - is generally named after the largest populated place on the map. This is also generally rendered in the majority language version, partly because it is the largest of places which will be the first to be rendered in a majority language version.
The marginal information (rather technical information on accuracy, administrative divisions of the mapped area, sources used etc.), is rendered on even fewer map-series in the minority language. This could be ascertained on the maps of Flanders, the Faroes and Swedish-speaking Finland.

One aspect which is of the greatest importance to the user is the question whether the legend is rendered in the language of the minority. Beside those countries where both the serial-title and the marginal information are rendered in the minority language, this is also the case in Greenland and Norwegian Lapland.

4.2.2 The lettering on the map

The substitution of abbreviations and designations in the majority language by synonyms or translations in the minority language would be a most elaborate and time-consuming operation. In some countries such as Great Britain this would even mean the substitution of (letter)-symbols on the entire map-series. This may explain the fact that in this respect only very few countries have come to terms with pressure groups of the minority language communities. The substitution of French abbreviations by Dutch ones has only occurred in Flanders. A similar substitution will take place in the third edition of the map-series 1:25 000 of the Eupen-Sankt Vith region.

The column in table 34 which indicates the surface area of the linguistic minority regions, is meant to illustrate whether the region is, cartographically, large enough for all this kind of changes to be carried out for the benefit of linguistic minorities. One will be more easily inclined to render the serial-title, legend and marginal information in the minority language when the number of sheets is large, than when this is not the case. In the representation of terms on a map, whether

geographical names or separate generic terms or abbreviations, the larger the region is the more reason there will be for changes not to be carried out as a result of the amount of work which goes into effecting such changes. A map-sheet at scale 1:50 000 represents a surface-area of some 500- 1000 sq.km, and a map-sheet 1:25 000 some 100-250 sq.km. A region such as Friesland with an actual surface area of approx. 3000 sq.km will be covered by 10 sheets of a topographic map 1:50 000. When political considerations are weighed against economical ones, the area of the region will affect the use of the minority language.

Table 34 Representation of minority toponyms and of marginal information in the minority language on official topographic map-series of West-European states

	Map series title in minority language	Map sheet title in minority language	Marginal information in minority language	Legend in minority language	Designations in minority language	Estimate of surface area in sq.km (000's)	Percentage of toponyms in minority language	Map Series studied for previous column
Wales	no	yes	no	no	no	11	88	1: 50 000
Ireland(Gaeltacht)	yes	yes	no	yes	no	1.3	50[c]	1: 5 000
Scotland(Hebrides)	no	no	no	no	no	7	83	1: 50 000
Brittany(Basse Br.)	no	no	no	no	no	14	83	1: 50 000
French Flanders	no	no	no	no	no	1.4	30	1: 50 000
Alsace-Lorraine	no	no	no	no	no	12	38	1: 50 000
Corsica	no	no	no	no	no	9	96	1: 50 000
Roussillon	no	no	no	no	no	4	12	1: 50 000
French Basque prov.	no	no	no	no	no	4	91	1: 50 000
Flanders[a]	yes	yes	yes	yes	yes	13.5	100	1: 50 000
Eupen-Sankt Vith[b]	yes	yes	no	yes	no[d]	1	82	1: 25 000
Friesland	no	no	no	no	no	3	25	1: 25 000
North-Friesland	no	no	no	no	no	2	30	1: 50 000
Schleswig (Danes)	no	no	no	no	no	0.3	30	1: 50 000
Faroe Islands	yes	no	yes	yes	yes	1.4	85	1: 20 000
Norwegian Lapland	no	yes	no	yes	no	70	50[e]	1: 50 000
Swedish Lapland	no	yes	no	no	no	90	75	1:100 000
Finnish Lapland	no	no	no	no	no	40	50[c]	1:100 000
Greenland	yes	no	yes	yes	no	2175	98	1:250 000
Torne-älv area	no	no	no	no	no	28	92	1:250 000
Swedish-sp. Finland	yes	yes	yes	yes	yes	11	100	1: 50 000
Lausatia	no	no	no	no	no	3	50[c]	1:200 000
Slovenian Carinthia	no	no	no	no	no	0.9	6	1: 50 000
Slovenian Italy	no	no	no	no	no	0.4	0	1: 50 000
South Tirol	no	no	no	no	no	7	4	1:200 000
Vallée d'Aoste	no	no	no	no	no	3	60	1: 25 000
Catalonia	no	no	no	no	no	60	75	1: 25 000
Spanish Basque prov.	no	no	no	no	no	6	54	1:200 000

a   From a cartographical point of view the minority position disappeared in 1960
b   Only applies for map-series Belgium 1:25 000   c   Bilingual toponyms
d   Not yet (envisaged for 3rd edition 1:25 000)   e   In mountain areas

The most important column in table 34, but also the most liable to be subjected to criticism, is the one which indicates which proportion of the toponyms of the minority region is rendered in the original minority spelling. Here, separate designations and abbreviations have not been taken into account. The results are presented under reservation, since they are based on a small number of sample

regions. Only of Eupen-Sankt Vith, the smallest minority area, all the names were counted. Elsewhere, this was an impossible task and therefore a number of sample regions were chosen. For those sample regions, a location was selected which was assumed to be characteristic of the region in which more than 50% of the population spoke the minority language. An attempt to achieve this was made on the basis of language-boundaries and statistical data, but this could not be checked on the spot by fieldwork. The statistical data did not originate from corresponding years and the publication dates of the maps widely diverged. Therefore, the percentages given are approximations with margins determined by the factors mentioned.

An additional complicating factor here, is that it was not always possible to establish with certainty whether or not a name was represented in either the minority or majority language. In the dealings with the individual minorities in Chapter 3 it has been indicated, where possible, on what criteria the categorization was based. In regions where the sovereignty changed after topographical surveys, it is possible to collect concrete figures. This was the case in the Alsace, Eupen, South Tirol, Slovenia and Schleswig. Elsewhere, where mapping activities were carried out only by the present majority language regime such as is the case for Basque, Inuit (Greenland), Sami and Gaelic-speaking language communities, the minority-character can only be derived from the deviations from the majority language. In table 34, the column of the percentages of names rendered in the minority spelling is followed by the scale of the map on which the investigations were based.
There appears to be a number of regions, where, on the map, the minority language has not at all been taken into account: e.g. South Tirol, Slovenian Italy, Slovenian Austria and Roussillon, all with less than 20% of names in the minority language. Then there is the group in which some attention has been paid to the minority language, with percentages of names in the minority language of between 20-40%: i.e. Catalonia, North Friesland and Friesland, Danish-Schleswig, Alsace-Lorraine and French Flanders. The following regions where considerable attention has been given to the toponyms in the minority language, with percentages of between 40-70% of the toponyms rendered in the minority language are: the Basque Provinces in Spain and France, Lausatia, Finnish-Lapland, and Ireland. The largest proportion of toponyms rendered in the minority language is to be found in the Aosta-valley, Greenland, the Torne-älv region, Norwegian and Swedish-Lapland, the Faroes, Eupen-Sankt Vith, Flanders, Corsica, Welsh-Wales and Gaelic-Scotland.

4.2.3 The treatment of the irredenta

In European history regions under foreign sovereignty and inhabited by representatives of adjacent sovereign language communities, became known as the 'irredenta', a term derived from 'Italia irredenta' (i.e. unredeemed Italy) and used by Italian nationalists in the 19th century and thereafter. It appears that even in modern Europe the official attitudes towards the 'irredenta' differ from those to minorities within the state boundary. Austria for example gives no Slovene names on the maps of Carinthia, but does expect Italian maps of South Tirol to be rendered in the German language. Also, there can be a discrepancy between the official views as expressed on the topographic maps and the feeling of the people at large such as expressed in commercial publications. The official attitude such as gathered from the small-scale topographic maps in the Federal Republic of Germany, results in the integral adoption of the official names in foreign countries

in Western Europe. Commercial German publishers (whose products must be approved for use in schools by educational authorities of the various 'Bundesländer') do however still use the old German names in Alsace-Lorraine.

In table 35 the official and popular attitudes to the irredenta are analysed. It has also been investigated whether minority regions, other then 'irredenta', publish commercial cartographic products with toponyms and exonyms rendered in their own language (see table 36).

Table 35   Present attitudes towards the cartographic representation of toponyms of the 'Irredenta'

Irredenta linguistic minority area (and language)	Official attitudes in states where the language mentioned in the first column holds a majority position	Private or commercial attitudes in states where the language mentioned in the first column holds a majority position
French-Flanders (Dutch)	Belgium: official French toponyms	Belgium, Netherlands: Dutch toponyms
Alsace-Lorraine (German)	F.R.G: official French toponyms	F.R.G.: French and German toponyms
Corsica (Corsican/ Italian)	Italy: official French toponyms	Italy: official French toponyms
Eupen-Sankt Vith (German)	F.R.G.: official toponyms	F.R.G.: official toponyms
South-Jutland (German)	F.R.G.: official Danish toponyms	F.R.G.: German toponyms
Schleswig (Danish)	Denmark: official German toponyms	Denmark: German and Danish toponyms
Torne-älv (Finnish)	Finland: official Swedish toponyms	Finland: Finnish toponyms
Swedish Finland (Swedish)	Sweden: official Swedish toponyms	Sweden: official Swedish toponyms
Lausatia (Sorbian)	Poland, CSSR:[a]	Poland: Sorbian toponyms, Polish exonyms
Slovenian Carinthia	Yugoslavia:[a]	Yugoslavia: German and Slovene toponyms
Slovenian Italy	Yugoslavia:[a]	Yugoslavia: Italian and Slovene toponyms
South Tirol (German)	Austria: German toponyms Switzerland: Italian and German toponyms	Austria: German toponyms Switzerland: official Italian toponyms
Vallée d'Aoste (French)	France: official toponyms	France: French and Italian toponyms

a   Topographic maps unaccessible

It appears that Austria is the only exception to the rule that official names from foreign countries are to be used in official publications. Austria does not adopt the names of the Italian topographic maps, though officially South Tirol is bilingual. Furthermore, it is apparent that in commercial cartography, minority toponyms are almost always appropriately dealt with (recognized) except in the case of Corsica. If the language spoken in the minority language area does not have a majority position elsewhere, then the linguistic claims of the minority area can be expressed in the form of commercial cartographic publications. Both the National Atlases of Wales and Ireland, are bilingual. The French regional atlases pay no attention to the 'parlers régionaux'.

Table 36   Existence of cartographic products published in minority language areas with minority toponyms and exonyms

	Cartographic products with minority toponyms	Cartographic products with minority exonyms
Wales	yes	yes
Ireland	yes	yes
Scotland	no[a]	no
Brittany	no	no
Roussillon	yes	no
French Basque provinces	yes[b]	no
Friesland	yes[c]	no
North-Friesland	yes[c]	no
Norwegian Lapland	no	no
Swedish Lapland	no	no
Finnish Lapland	no	no
Catalonia	yes	yes
Spanish Basque provinces	yes[b]	no

a   For the positions marked with 'no' no material could be traced
b   A bilingual Spanish-Basque atlas published in Spain presented a modest number of minority toponyms
c   Only one bilingual map has been traced

Footnotes to Chapter 4

1. Carta topografica degli stati in terraferma di S.M. il re de Sardegna, 1:50.000, sheet 21, Mte.Bianco (1869/79); Carta d'Italia 1:25.000, sheet 27 II NE, Monte Bianco (1950).
2. Homann's Erben - Atlas Scholasticus (1740/50).
3. Sábmi, Ålgusad'dujurvun Oslo sāmiid saervi ja Sámi institutta čađa. Oslo (1975).
4. These have not been identified.
5. OS 1:50.000 Second Series, sheet 115, Caernarfon & Bangor (1974).

5. EVALUATION AND RECOMMENDATIONS

5.1 Introduction

Cartography is defined in the Multilingual Dictionary of Technical Terms in Cartography (1973) as "— the art, science and technology of making maps, together with their study...". Not only the production, but also the use of maps is the object of cartographic research. The functioning of thematic, and topographic maps is studied, depending on their purpose. Research into this field, until recently, focussed on the functioning of maps for navigational purposes and for the transfer of geographical concepts in schools. In this type of study, it is mainly the physical conditions with which one is concerned, such as lighting and formats, and perceptual conditions such as information-density. Sociological and linguistical variants have, until now, not been the subject of map-use-studies. Consequently, when studying the functioning of topographic maps in linguistic minority areas, it is not possible to fall back on existing research. This specific aspect will be dealt with deductively here, on the basis of the general requirements which can be expected of maps in their use.

In many fields in Western Europe, attention is being paid to linguistic minorities. There are radio- and television-programmes in minority languages. The latter are also used in education, church-services, newspapers and books, place-name signs and roadsigns and official forms. A recent trend is the issue of regional postage-stamps of the minority area, such as those which have agpeared for Wales, Scotland, for the Faroes and Greenland and for the Aland Isles in Finland. The use of a minority language on the map should also be more a rule than an exception, if only for practical reasons. Maps are mostly used in the regions depicted, whether by their inhabitants or by visitors who, in consultation with the local population, must be able to orientate themselves. For this reason, toponyms should also be linguistically adjusted to local usage.

In general, the use of maps is divided into a number of phases. Bertin (1967, p. 140) distinguishes between 1) external Identification, 2) internal identification and 3) actual map-reading, i.e. the establishing of significant relations between features perceived on the map. External identification is concerned with locating the region and the theme of the map with the aid of the title or map-section. Internal identification concerns the manner of representation or symbolization, the relation between the symbols and the features they represent. This relation is explained in the map-legend. The establishment of relations between signs and symbols is only possible after internal and external identification.

After the inventory and comparison of the different ways in which geographical names have been dealt with for a number of linguistic minority areas in Chapters 3 and 4, the use of maps under these specific circumstances will be analysed here. Finally, recommendations will be made for a cartographical contribution to an attitude towards minority toponyms that is in accordance with pertinent UN-resolutions and extends them.

5.2   Map-use requirements and international resolutions.

What will happen when the language of the map and of the catalogues in which they are listed do not correspond with the language of the prospective users? First, the user has to face documentation problems. It will be difficult to trace the desired

cartographic document. The title of the map-series as well as of the map-sheet (often identical to the name of the largest populated place in the region depicted) will be given in the majority language (see table 33 for the countries concerned). In the internal Identification process, similar problems arise. The legend is seldom rendered in the language of the minority region depicted on the map. This was understandable against a colonial background such as for example found in the Dutch mapping of Java during the 19th Century. A similar attitude however, can not be accepted for e.g. the topographic mapping of Friesland at the end of the 20th Century, since civil map-use now surpasses military applications.

In most cases in using a map, two sets of hurdles have to be taken by minority language-speakers: the title and the legend. These hurdles are not unsurmountable as the Speakers of minority languages are, in practice, mostly bilingual. The actual shock manifests itself only in the actual reading of the map, when the map-user notices that his surroundings are dressed in a strange onomastical cloak and are unrecognizable (see for example fig. 66 with the map of South Tirol). In this way a feeling of displacement may occur which can strongly impede the use of the map.

Apart from impeding the use of the map another argument against the exclusive use of the majority language can be brought forward: the responsibility of the national state for the cultural heritage of its minorities, on the preservation of which the United Nations have made recommendations. Geographical names also belong to this cultural heritage, or 'patrimoine'. The national state has the duty to guard this heritage and to function as an intermediary by which the minority Community can present itself internationally. Unfortunately this is not always the case (at the World Exhibition in Brüssels in 1958 for example, few visitors will have noticed that they visited a country in which a large proportion of the inhabitants did not speak French as their mother-tongue, but Dutch). In the field of place-names, the national state can also function as an intermediary by Publishing gazetteers and/or maps showing the original minority toponyms.

In 1967 the United Nations expressed themselves on minority toponyms: the first United Nations Conference on the Standardization of Geographical Names adopted the following recommendation (UN 1968):

"It is recommended that, in countries in which there exists more than one language, the national authority as appropriate a) Determine the geographical names in each of the official languages, and other languages as appropriate; b) Give a clear indication of equality or precedence of officially acknowledged names; c) Publish these officially acknowledged names in maps and gazetteers." (UN 1968).

This recommendation, no.4d, is known as the 'Multilingual Areas' recommendation. So far, little heed has been taken to this resolution. A large number of West-European countries have not published gazetteers, let alone gazetteers containing names in the minority language. Also, in their 'Toponymic Guidelines', submitted to the UNGEGN (United Nations Group of Experts on Geographical Names) hardly any attention has been paid to the above.
In its activities, which include reducing the number of exonyms, the UNGEGN as well as the Conferences on the Standardization of Geographical Names, propagate the so-called 'local-names-policy'. This entails the giving of preference to the local, official name versions. This is a necessity for the United Nations in order

to ensure the interests and rights of its member-states. It can also be an aid to international understanding and efficient communication as wel as being of value to local use. These general considerations plead for the local names policy to be extended to the linguistic minority regions and to opt in those regions for the minority toponyms.

The concept of the local names policy dates back to A. Penck who, at international geographical congresses in 1891 and 1909, advocated the introduction of the locally official spelling on the International Map of the World on the Millionth Scale (IMW). When the United Nations after the Second World War took over the co-ordination of the IMW, Penck's ideas were adopted. The concept was taken up at the first UN Conference on the Standardization of Geographical Names in Geneva in 1967, where the preference for local names is embedded in recommendations 4b, 4c and 19c (UN 1968). Recommendation 4b reads[1]:

"For each geographical name which is to be standardized,it is to be recommended that: a) There be as complete a field and office research as pertinent to provide information on the following points: 1) written and spoken form of the name and its meaning according to *local inhabitants*...b) *The local spoken form* of the name be recorded on tape and written in the phonetic notation approved by the national names authority; c) ... and that the meaning of the generic terms *used locally* be clearly defined; d)If possible,at least *two local independent sources* be consulted for each inquiry."

Recommendation 4c reads:

"It is to be recommended that 2) the spelling of geographical names be as much as possible in accordance with the current orthographic practice of the country concerned, *with due regard to dialect forms* .."

Recommendation 19c reads:

"The Conference recommends the approval of the following definition: Generic term - term included in a geographical name, indicating the type of the named entry and having the same meaning in *current local use*."

Article 4d of the aforementioned UN recommendations, states that a clear indication of equality or precedence of officially acknowledged names must be given, and that regions must be demarcated where special guidelines are applied to (minority language) toponyms. This demarcation, possibly on the basis of numerical ratios, is required for a proper recording of minority toponyms on the map. According to recommendation 4b, on the collection of geographical names, names should be recorded in the form in which they are known locally, together with the locally accepted generic terms, with their correct orthography and pronunciation. When this recommendation is applied to minority regions, it can only mean that their toponyms should be recorded in the proper local minority version.

A number of member states of the UN has attempted to oppose name-changes which occur when state-authorities change. The matter was raised at the third Conference of the United Nations on the Standardization of Geographical Names at Athens in 1977. The resulting resolution (Resolution no. 16, National Standardization, E:CONF.69:C.1/L5) runs as follows;

"It is recommended that any changes made by other authorities in the names standardized by the *competent* national geographical names authority should not be recognized by the United Nations" (UN 1979).

This resolution has not become a tool by which minority names can be protected because of the term 'competent', which is susceptible to different Interpretation; the toponyms to be adhered to depend therefore on the national geographical names authorities (and therefore on the governments) acknowledged.

5.3 The Situation in Western Europe.

In Chapter 4, the attitudes of national states to their linguistic minorities, as recorded on maps, were compared. It appeared that an attitude which results in an unproblematical external and internal Identification which also offers good possibilities for orientation only occurs in Flanders (which has outgrown its minority-status), Eupen-Sankt Vith (as far as the map-series 1:25 000 is concerned), Swedish-speaking Finland, Norwegian Lapland, Greenland and the Faroes. There is even a gazetteer in Faroese. No gazetteers could be traced for Belgium, Finland or Greenland.

Figure 71 illustrates the manner in which linguistic minorities are being dealt with on topographic maps. When no minority language is used in the map-title, the marginal Information or in the legend, and where less than 30% of the names have been retained in the minority spelling, maps have been classified in figure 71 under the heading 'not yet accomodating', i.e. not yet disposed to comply with minority languages. This applies to the homelands of the Slovenian, German (excluding Eupen-Sankt Vith), Frisian and Danish minorities. The next category comprises the regions for which maps used the minority language in rendering place-names, but not the marginal Information or the legend. This category includes the homelands of the Sami, Sorbian and Basque minorities, (all having languages not cognate to the majority language of the countries concerned), as well as Corsica, the Aosta Valley and Catalonia.

The image presented by figure 71 is based upon data collected in 1982. The increasing concern for Sami names, for the representation of Welsh names in Wales, for non-Castilian names in Spain, as well as the tendency in France to retain dialect-versions, and the recent introduction of official minority names in Friesland and Eupen-Sankt Vith, are all indications of a turn in the tide of mapping policies. Similar trends, however, are not reflected on maps of the Federal Republic of Germany, Austria and Italy.

5.4 Phases in the acceptance of toponyms in minority languages and their evaluation

In "Les noms de Lieux et le contact des langues", Dorion (1972, p. 21) gives an example of the notation of various types of contact situations between language groups. In total, he distinguishes 16 contact situations. Taking advantage of his method of notation, a schematic outline of 15 contact situations between majority and minority languages as they occur on the maps of Western Europe is given in figure 72. Not all of these European variants are discerned by Dorion, and not all of Dorion's variants occur in Western Europe.
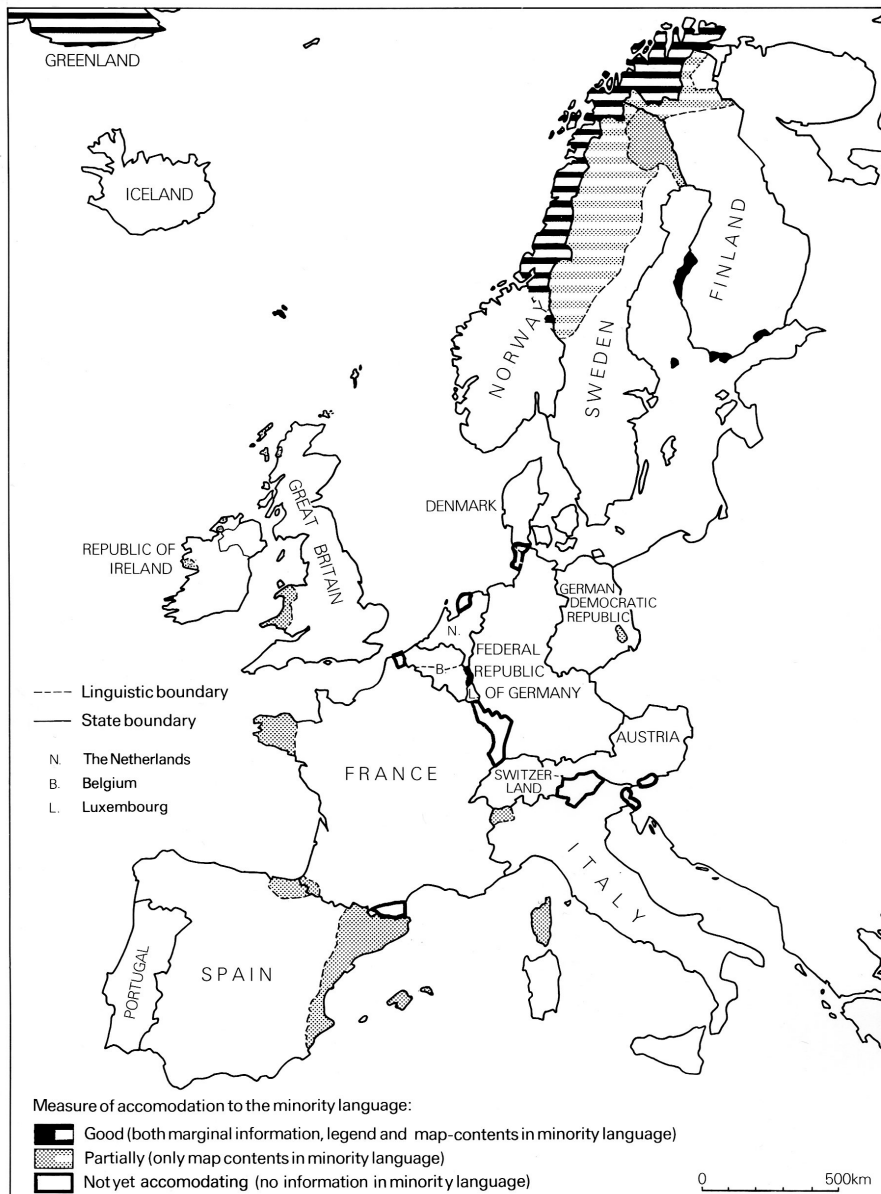
Figure 71 Linguistic minority regions in Western Europe according to the degree of representation on the maps in the minority language. The topographic maps either accommodate the minority language in both legend and toponyms ("good"), only show toponyms in the minority language ("partially"), or have neither in the minority language ("not yet accomodating").

The attitudes to minority toponyms distinguished here vary from entire disregard to complete acceptance. When ignoring the disturbing or complicating influence of linguistically determined administrative boundaries or the existence of small enclaves with a divergent linguistic status, these attitudes can be presented in a series of notations as portrayed in figure 73a. The geographical distribution of the various attitudes to minority toponyms is illustrated in figure 73b.

The first type from figure 73a illustrates the case in which there is no minority language. This only occurs in Western Europe in Andorra, Luxembourg, Portugal and Iceland. In regions of the second category, minority toponyms are only presented in the majority version. Examples are: Schleswig, Slovenian Italy and Austria, and South Tirol. In category 3, some minority toponyms are officially acknowledged. Examples of this type are the Alsace and French-Flanders. A variant of type 3, type 3a, shows next to some acknowledged versions of minority toponyms also bilingual forms. Type 3a occurs for example in Friesland and Great Britain. In the fourth category, toponyms of both languages are officially

acknowledged. This is the case in Finnish Lapland, in the officially bilingual regions of Finland and in Lausatia. In category 5, only minority toponyms are recorded in minority areas, such as in Belgium, Switzerland, the Aosta Valley and Swedish-speaking Finland. In type 5a, a variant of the former, a majority language version has been added to the names of several important features. Examples are the Faroes and Greenland.

Ireland is an example of the sixth type, characterized by official bilingualism throughout the entire country. The small-scale map-series of the Faroes used to illustrate the case in which different language versions appeared on separate map sheets. This case has been designated type 6a.
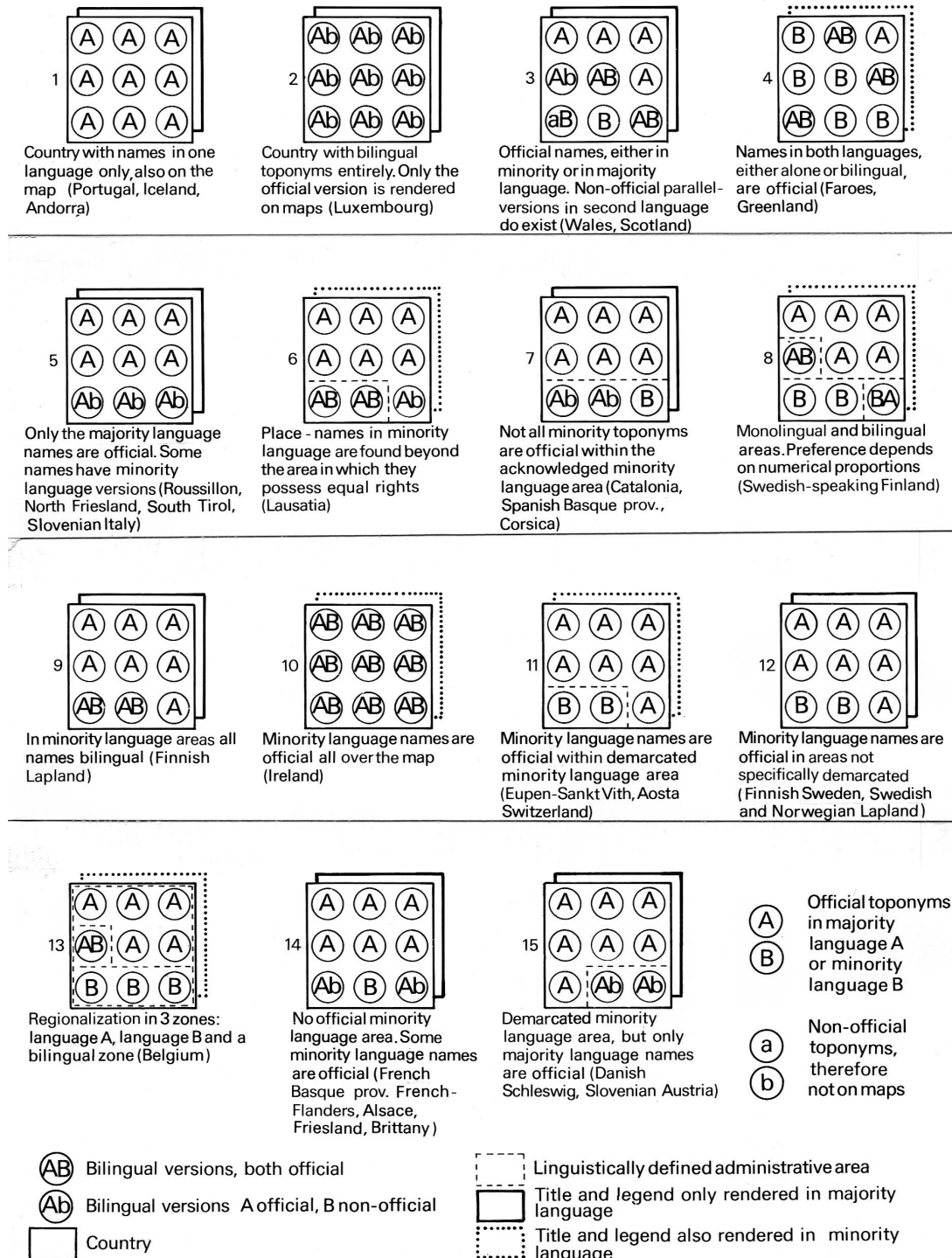
Figure 72 Notation according to the Dorion method of the types of treatment of toponyms of linguistic minorities found on the topographic maps of Western Europe.

Not all regions belong entirely to one of the categories distinguished here. In a number of them, some minority names are established whereas, for the most important features, the majority Version is still official. Wales and Scotland belong to this particular group. In these regions, toponyms both in the majority and minority version occur as do several bilingual forms. This also applies to Brittany, Corsica and the French Basque Provinces, where minority names predominate. These are written in a French transcription, whereas frenchified forms represent important features. The borderline between the above types 2 and 3 has been drawn - arbitrarily - at a percentage of toponyms not transferred in the majority language of 30%.

The options shown in figure 73a vary from a) the rendering of the names entirely in the majority language through b) the tolerance of several official minority names, c) absolute bilingualism, d) bilingual names supplemented by exclusively minority names, to e) an integral rendering of the minority toponyms.

The objection to the second type, portrayed in figure 73, is that it does not at all consider the inhabitants of the minority region in question, and does not fully meet the requirements of rational map-use. An intermediate form between types 2 and 3 is conceivable, in which some names at least are rendered officially in the minority language. This type does not occur in Western Europe, however. The third category has both official names in the majority, as well as in the minority language. This is confusing for the speakers of the latter.
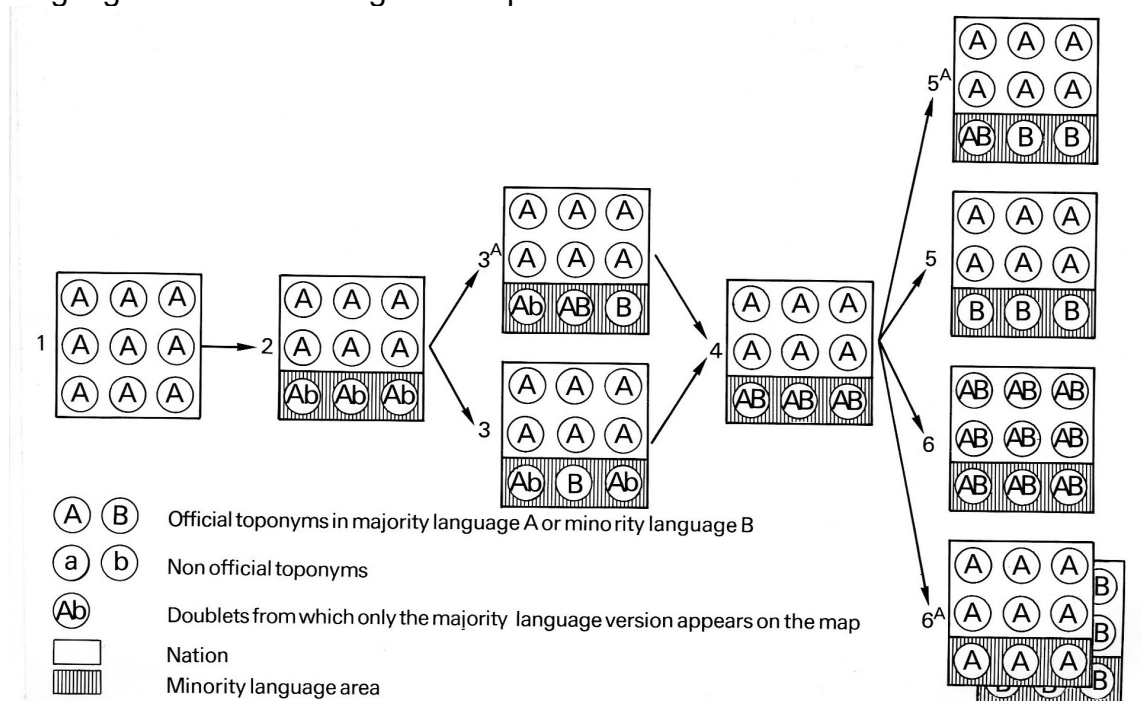
Figure 73a Stages in the treatment of toponyms of linguistic minorities on maps.

It is not possible to rely on such a map, as there is no system in the representation of names. Most minority language regions, however, fall within this category. The same objection can be raised against its variant with a small number of official bilingual forms (type 3a), such as is the case in Friesland. In regions where the majority and minority language groups are intermingled, this situation is possibly inevitable.

The official bilingual category creates problems for map-use. If this solution were to be applied to all toponyms, this would lead to illegible maps in densely populated

regions such as Catalonia. In Western Europe official and complete bilingualism is only found on the maps of thinly populated Finnish Lapland, on the large-scale map-series of Ireland, 1:5000, and on those of Lausatia or Brussel.

For other, more densely populated regions, bilingual representation is only possible by reducing the number of names on the map. Only then it is possible to keep the confusion to a minimum. (Which of the two names designates this particular feature? Or do they both? or: Why are there bilingual forms here, and not over there?). Official and absolute bilingualism on the map has already been reconsidered for the officially bilingual region of Brussels, and also for Canada. Partially bilingual Solutions on the Faroes will, in the future, be abandoned.

The best solution is that which gives only one, locally used name, i.e. type 5. For minority regions this means one name, in the minority language. Its application also ensures the recording of minority names in the minority language. In order to achieve a solution such as described by type 5, in cases where this does not yet exist, the following steps must be taken:
1. The demarcation of the language-boundary.
2. The introduction of a transitional period of bilingualism, or of map-series in two languages.
3. An official changing of those names in the minority region, which have been officially codified in a majority language version back into a minority language version.

The demarcation of the area in which over 50% of the population speaks the minority language as its native tongue is more easily envisaged in those areas where in national censuses the inhabitants1 mother-tongue is recorded, as is the case in Italy. In a number of regions, the language boundary more or less coincides with administrative borderlines: examples are Friesland, Catalonia, the Spanish Basque Provinces, Corsica and Lausatia. In the case of the non-sedentary Sami population in Scandinavia, it is not easy to work with the minority concept as one can only speak in terms of distribution area: a region formed by the exclusion of the area settled by the sedentary, majority-language-speaking population. Demarcation of the linguistic boundaries is necessary for cartographers. They have to know the extent of the area where special rules apply to the representation of names (bilingual versions, rules of preference or diacritical signs, etc.).

It is not advisable, from the viewpoint of a proper representation of topographic data, to change names of map features from one edition to the next. If more than one single letter is changed (e.g. Gerona/Girona) the map-user will encounter difficulties with orientation, especially when comparing between various map-scales. Therefore, a period of bilingualism is called for. The period should at least be long enough to enable the introduction of new names in derived map-series. Names of larger settlements in particular are officially codified (in Acts) in the majority language owing to the fact that these names are also used in administration. In order to obtain a homogeneous map-face as well as a conformity between cartographical and other sources of Information, it is recommended that the official names of administrative entities in minority-language-regions are also adapted to that minority language during the transitional period indicated above. Together, the steps recommended above require a complex System of planning and organization which is designated by the term 'official naming policy'.
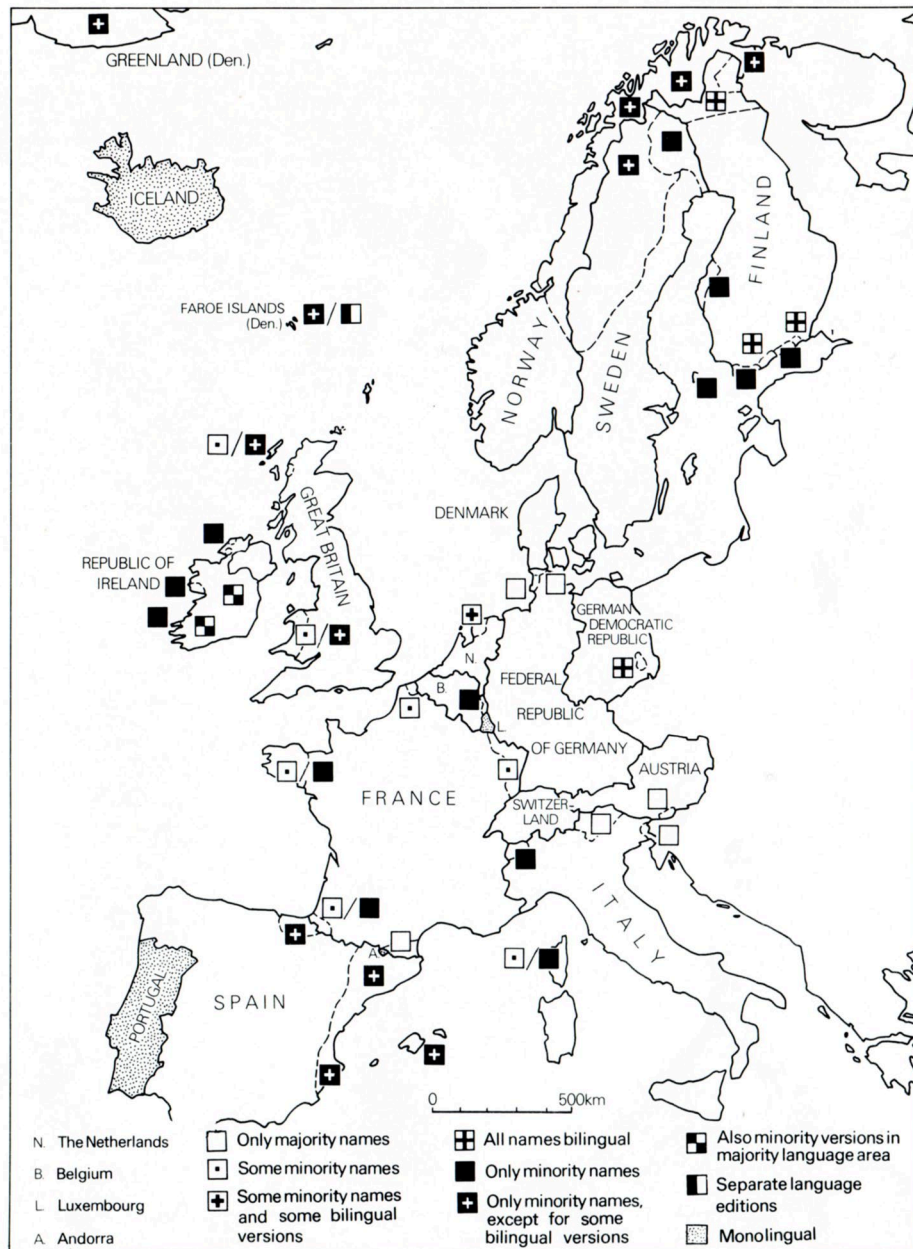
Figure 73b – Distribution of the stages of treatment of minority toponyms over Europe.

5.5   Official naming policies

The pursuit of an official policy with regard to toponyms is not new. In South Tirol, the italianization of toponyms must, due to the extent of the process and the short period in which it was effectuated, have been guided by official bodies.

In France, an official policy aims at decreasing the number of homonyms by way of introducing supplementary name-elements (IGN 1968). In the Soviet-Union, the government intervenes by changing names with an unfavourable or undesirable connotation, by replacing them by less ambiguous names (Belen'kaya, 1975).

In Poland, after 1945 there was a need for the polonization of toponyms for features in the newly acquired provinces along the west- and northern borders. An official policy was initiated for the treatment of some 40 000 names, based upon guidelines such as:

a) reconstruct, if possible, the former versions, in current Polish orthography and,

b) translate names which are originally German into Polish, and

c) if translation is not possible, then replace German names with current Polish

names (Rospond 1972).

"Ce ne sera pas un malheur si un lieu ou un autre se maintient sous un nom autre que le nom original ou sous un nom un peu modifié, à condition que cela ne choque pas le sens culturel de la population" (Nitsch 1945)

An official policy for the restoration of the original minority-language-character of toponyms in minority-language-regions is only found in Western Europe on the maps of Belgium and Ireland. It is map-analysis that leads to this conclusion; the policy itself is not documented in any form of publication. In Ireland, on topographic and cadastral maps, all toponyms are conscientiously provided with Irish parallel-versions. In Flanders, the effects of the language-policy have taken a long time to become apparent on the map. In Eupen-Sankt Vith, this did not take that long to manifest itself. It is not quite clear whether the NGI in Belgium was autonomous in its introduction and enforcement of these changes, or whether some sort of legal obligation existed for the restoration of Dutch and German name versions. Nor is it clear in the case of Scandinavia, as to what extent the topographic agencies are autonomous in the determination of the policy chosen towards linguistic minorities.

The present study is based on the presumption that the attitudes of the topographic agencies, and their resulting treatment of minority toponyms on the map, are the outcome of official points of view. The possibility of these being autonomous decisions has been quite purposely neglected. On the presumption that these agencies formed almost autonomous 'closed societies', especially in the 19th Century when they were all part of the military establishment, it is still obvious to assume that they complied with (tacit) majority viewpoints with regard to the spelling of names.

A country in which the 'official naming policy' is excellently documented is Canada. In 1907, the Geographical Board of Canada adopted the proposal to introduce a bilingual cartographical nomenclature for the province of Québec. This was enforced in spite of protests from Québec itself. The regulation was later extended to a policy which introduced both English and French name-versions for all important features in the entire country. In practice however, this policy worked to the disadvantage of the French names in Québec, as Canada was rendered on the map in English with the exception of Québec which was rendered bilingually. After the Second World War, the Situation gradually changed. In 1953, a French-language version of the official map of Canada, scale 1:6 336 000, was published, followed in 1958 by a French edition of the National Atlas (Atlas of Canada 1957). Also, the sheets of the large-scale topographic maps, were gradually made suitable for both language groups. This is illustrated by the Mt. Orford sheet of the topographic map 1:50 000, portraying a part of Québec, which only comprises English generic terms in its 1956 edition, whereas on the 1969 edition, half the generic terms were rendered in French. To illustrate the serious intentions of the 'bilingualists', in that period, it may be reminded that even the costs were calculated to publish two separate editions of the topographic map-sheets concerned. This would amount to 4 million Canadian dollars for the publication of 5000 map-sheets! (Delaney 1972). In 1971 the Canadian Permanent Committee on Geographical Names (the CPCGN), appointed a working-group to design a new national policy for geographical names on Canadian maps (Smart 1978). The committee recommended to change over from bilingualism to what was called the 'territorial principle'. In Canada the meaning of this term is different from that in Switzerland, where it refers to the concept of inviolable language-areas. In

Canada, the term is used to designate the primacy of local usage (thus a local-names policy)(Smart 1978, p.78), which can vary with the composition of the population. It was decided in 1976 upon the recommendations of this working-group, to publish two editions (one in French and one in English) of all maps at scales equal to or smaller than 1:2 million. Those larger than or equal to 1:1 million were to be published in one single edition with bilingual series-title, marginal Information and legend. Designations on the map were to be replaced by Symbols where possible, and in other cases, designations in both languages should be used. Only the official toponyms, as established by the various provinces, were to be incorporated.

Having recognized the rights of minority languages, a government has the Option for its minority regions between publication of a) two separate map-editions, b) one single edition with bilingual toponyms, and c) one single edition with all names in one language. Canada has given preference to the latter, with the exception of the group of small-scale maps.

These developments, however, came too late for Québec, which had previously decided to use only French names in the entire province (Smart 1978, p.74). This policy was established in a provincial language-act in 1977. This implied that in traditionally English-speaking parts of Québec such as the Eastern Townships, the valleys of the Ontario and the St.Lawrence rivers, the Southern Laurentians and the homelands of the English-orientated Inuit, the English names or the names transcribed into English were to be substituted by French names or transcriptions. In this case, at a local level, the principle of 'local usage' has been disregarded and replaced by the principle of 'jurisdiction': the language in which a feature is to be named depends upon the jurisdiction under which it falls: " cuius regio eius lingua". The philosophy behind this policy is clearly phrased in the following statement by the government of Québec: "Le gouvernement indiquait clairement son intention de voir la commission (de toponymie) contribuer a l'effort de francisation de Québec par le biais de la toponymie" (Gouvernement de Québec 1980, p.8). The criteria developed by the Québec Toponymie Committee included the transfer of all generic-name-elements into French and the use of French for all new names.

Beside the 'territorial principle' of Switzerland - which implies that the borders of the language-regions are established once and for all and that no changes are allowed within these boundaries, and the 'personal principle' of Finland implying that the (changing) ratio of the language-groups in a region decides the language of toponyms, a 'jurisdictional principle' can be distinguished. This implies that the authority that exercises jurisdiction over a certain feature also determines the language in which it is named. Language and jurisdictional boundaries may coincide. Owing to changing ratios caused by migration, or by different birth-rates of the various language-groups, language-boundaries can be eroded.

5.6 Conclusion

The 'local usage principle' which has been advocated by the author for minority regions as well, clearly indicates a preference for toponyms in the locally spoken language. The conditions for map-use on the spot are only optimal when both external and internal identification as well as actual map-reading is (also) possible in the locally spoken language. Furthermore, a bilingual representation generally results in an illegible map, except in cases where there is a low name-density.

These three considerations lead to the acceptance of monolingual representation of minority-toponyms in the minority language as the most suitable.

As it is essential to link up with the actual map-use, which will take place mainly in the region depicted, one should also render designations in the minority language on the map, as well as sheet title, series title and legend. From a functional point of view this is more important than the usual maintenance of uniformity in a map-series.

This optimal choice - i.e. the representation of toponyms, legends, title, series-title and marginal information in the minority language - cannot be immediately achieved. In order to avoid confusion for non-local users, for foreigners who only understand the majority language and for motorists in transit it seems desirable to have a single bilingual transitional edition between the change-over from a majority to a minority edition.

A monolingual representation of toponyms can be envisaged in the edition subsequent to the transitional period. However, this should conform with the actual field-situation. Not only the names on the map are used for orientation purposes, also names on road signs influence one's orientation, and these categories should be well keyed to each other. In the Dutch province of Friesland, the authorities consider the rendering of place-names on road-signs in Frisian only; a project-group is studying the procedure to be followed in order to avoid discrepancies between the field situation and names used in administration. Here lies another sound argument for an official geographical names policy to find solutions taking into account the interests of map-users.

5.7 Recommendations

For contained regions, in which more than 50% of the population speaks the minority language, internal and external identification as well as actual map use should be made possible in the minority language concerned. In order to accomplish this, the following steps should be taken:
1) Language boundaries within which the minority language has official status, should be well-demarcated.
2) Gazetteers should be published, in which toponyms from minority language areas are clearly indicated in the minority language.
3) Toponyms should be rendered in the minority-language on the maps of minority language areas
4) The series title, marginal information and the map legends should also be rendered in the minority language.
5) Where topographic designations are needed on the map, these should (also) be rendered in the minority language.
6) Frequently used geographical terms in the minority language should be clarified (i.e. in a separate glossary, or in the margin of the map) for outsiders.

As an intermediate step, the most important features should be rendered in both languages. This is to make features recognizable, and to simplify orientation for outsiders.

The recognition of its language makes an important contribution to the strengthening of the identity of linguistic minorities. The official use of geographical names in the minority language is part of this recognition.

The rendering of toponyms on maps seems to be an insignificant aspect thereof. These names however, are often the first and only manifestation by which the minority can reveal itself to outsiders. The acknowledgement of minority toponyms on the map can be considered as an official recognition and acceptance of a linguistic minority.

Footnote to Chapter 5

1 The spaced-out lettering was introduced by the author in order to give evidence of an i m p l i c i t agreement on the 'local names policy'.

BIBLIOGRAPHY

ALINHAC, G. (1962), Cartographie historique et descriptive. Paris: Institut Geógraphique National.

ANDERSSON, Th., E. BRYLLA, A. ROSTVIK, Eds. (1980), Ortnamn och språkkontakt. Uppsala: Nordiska Samarbetskommittén för Namnforsking (NORNA-rapporter 17).

ANDREWS, J.H. (1975), A paper landscape: the Ordnance Survey in nineteenth century Ireland. Oxford: Clarendon Press.

ATLAS OF CANADA (1957), Ottawa: Department of Mines and Technical Surveys.

ATLAS OF IRELAND (1979), Dublin: Royal Irish Academy.

AUROUSSEAU, M. (1957), The rendering of geographical names. London: Hutchinson.

BATTISTI, C. (1953), Italiano e tedeschi nell'Alto Adige.   L'Universo 53, nov-dic.

BÉCAT, J. (1977), Atlas de Catalunya-Nord. Prades: Terra Nostra.

BEETSTRA, W.T. (1980), Strjitnammen yn hokker taal? út de Smidte 14-2, p. 3.

BELEN'KAYA, V.D. (1975), Current tendencies in the naming of places. Soviet Geography 16, pp. 315-20.

BERNAUER, L. (1965), Het Duits in Zuid-Tirol. Ons Erfdeel 9, pp. 44-59.

BERTHAUT (1899), La Carte de France 1750-1898. Etude historique. Paris: Service Géographique.

BERTHAUT (1902), Les ingénieurs geographes militaires. Paris: Service Géographique de l'Armée.

BERTIN, J. (1967), Sémiologie graphique. Paris: Gauthier-Villars, Mouton.

BIELAWSKI, J. (1897), Die Schreibung geographischer Namen nach russischen Kartenwerken. Mittheilungen des kaiserlichen und königlichen Militär-Geographischen Institutes 17, pp. 75-79.

BLAEU, J. (1663), Le Grand Atlas. Vol. 4. Amsterdam: Blaeu.

BLOK, D.P. (1965), Iets over toponymie en geografie. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 82, pp. 369-375.

BOILEAU, A. (1972), Toponymie et contact des langues en Belgique. In: Dorion 1972, pp. 42-90.

BONAPACE, U & G. MOTTA (1975), Atlante geografico metodico. Novara: Agostini.

BREU, J. (1960), Zur Schreibung der deutschen Ortsnamen Südosteuropas in Österreichischen Mittelschulatlanten. Mitteilungen der Österreichischen Geographischen Gesellschaft 102, pp. 102-114.

BREU, J. (1970), Die Behandlung der geographischen Namen in der Österreichischen staatlichen Kartographie. In: Bundesamt für Eich- und Vermessungswesen 1970, pp. 153-74.

BREU, J. (1971), Kartographie und Ortsnamenkunde. Internationales Jahrbuch für Kartographie 11, pp. 291-301.

BREU, J. (1975), Geographisches Namenbuch Österreichs. Wien: Österreichische Akademie der Wissenschaften (Forschungen zur theoretischen Kartographie 3).

BUNDESAMT FÜR EICH- UND VERMESSUNGSWESEN (1970), Die amtliche   Kartographie Österreichs. Wien: Bundesamt für Eich- und Vermessungswesen.

CABESA I VALLS, J., A. JOLIS I FELISART, A. ROMA I ESPI (1975), Revision de toponima y actualización del Mapa

Nacional escala 1:50.000 del Instituto Geográfico y Catastral. Hojas números 149, 150, 181, 182. Barcelona: Federación Catalana de Montañismo.

CANADIAN PERMANENT COMMITTEE ON GEOGRAPHICAL NAMES (1972), Report on participation by Canada in the Second United Nations Conference on the Standardization of Geographical Names. Ottawa.

CANADIAN PERMANENT COMMITTEE ON GEOGRAPHICAL NAMES (1978), Third United Nations Conference on the Standardization of Geographical Names. United Nations, Athens 1977. Ottawa: Printing and Publishing Supply and Services Canada.

CARLISLE, N. (1811), A topographical dictionnary of the dominion of Wales. London.

DE DAINVILLE, F. (1962), L'Évolution de l'Atlas de France sous Louis XIII. Le Théatre Géographique du Royaume de la France des le Clerc. 1619-1632. Actes du 87ième Congrès National des Sociétés Savantes, pp. 1-51.

DE FLOU, K. (1929), Over bronnen voor toponymie. In: Inleiding tot de studie van de Vlaamse plaatsnamen, pp. 39-69.

DE HóIR, E. (1972-73), The anglicization of Irish place-names. Onoma 18, pp. 191-95.

DELANEY, G.F. (1972), Language problems in Canadian toponymy. In: Dorion 1972, pp. 302-34.

DE L'ISLE, G. (ca. 1750), Carte de France. Amsterdam: Covens & Mortier.

DESLANDES, G. (1947), La doctrine toponymique de L'I.G.N. et son application cartographique. Onomastica 1, pp. 322-28.

DESLANDES, G. (1961-63), Toponymie. 2nd ed. Paris: Institut   Géographique National.

DE VAUGONDY,R. (1753), Partie méridionale du Gouvernement de Guienne, Gouvernement de Bas-Navarre et Béarn. Paris.

D'HOLLANDER, R. (1956), Topographie. Paris: Institut Géographique National.

DORION, H. Ed. (1972), Les noms de lieux et le contact des langues. Québec: Les presses de l'université Laval.

DRAYE, H. (1943), De gelijkmaking in de plaatsnamen. Leuven: Instituut Vlaamse Toponymie (Taalgrens en Kolonisatie 2).

DUDEN (1966), Wörterbuch geographischer Namen Band I. Europa ohne Sowjetunion. Mannheim: Duden.

DYEVRE, M. (1948), Toponymie des côtes de Basse-Bretagne. Onomastica 2, p. 79

EEKHOFF, W. (1849-1859), Nieuwe atlas van de provincie Friesland. Leeuwarden: Eekhoff.

EIDGENÖSSISCHE LANDESTOPOGRAPHIE (1943), Karte und Ortsnamen. Bern: Eidgenössische Landestopographie.

ERIKSEN, H.Kr. (1968), Finnenes Innvandring til Finnmark. Ottar, Populaere småskrifter fra Tromsφ Museum.

FALC'HUN, F. (1948), La toponymie nautique des côtes bretonnes. Annales de Bretagne 55, pp. 108-120.

FALC'HUN, F. (1958), Pour une commission de toponymie bretonne. Annales de Bretagne 65, pp. 413-21.

FENNEL, D. (1981), Can a shrinking linguistic minority be saved? In: Haugen 1981, pp. 32-39.

FINSTERWALDER, K. (1953), Ortsnamen und Sprachengeschichte in Südtirol. Erdkunde 8, pp. 253-63.

FINSTERWALDER, K. (1935), Die Namenarbeit an den Alpenvereinskarten. In: Finsterwalder, R. 1935, pp. 53-65.

FINSTERWALDER, R. Ed. (1935), Alpenvereinskartographie und die ihr dienenden Methoden. Berlin: Wichmann (Sammlung Wichmann 3).

FOCKEMA ANDREAE, S.J. (1959), Friese plaatsnamen. Mededelingen van de Vereniging voor Naamkunde 35, pp. 106-110.

FOCKEMA ANDREAE, S.J. en B. VAN 'T HOFF (1961), Christiaan Sgrootens kaarten van de Nederlanden. Leiden: Brill.

FRASER, I.A. (1972), Anglicisation in Scottish Gaelic place-names. Onoma 17, pp. 206-15.

GILI, J. (1974), Introductory Catalan Grammar. 4th ed. Oxford.

GOOSSENS, M. (1970), De kleine wereldatlas. Leuven: Wolters.

GOUVERNEMENT DE QUÉBEC (1980), Rapport d'activité 1977-1980. Commission de toponymie. Québec: Éditeur officiel.

GRADMANN, R. (1927), Deutsche Ortsnamen in den Grenzgebieten. Petermanns Geographische Mitteilungen 73, p. 360.

GROSJEAN, G. (1974-1975), Kartographie für Geographen. Bern: Geographisches Institut (Geographia Bernentia U9, 10).

GUITER, H. (1972), Catalan et français dans la toponymie roussillonnaise. In: Dorion 1972, pp. 90-97.

GUITER, H. (1976), Onomastique et contact de langues. Exemple des confins pyrénéo-méditerranéen. Onoma 20, pp. 106-127.

HAACK, E. (1972), Die Schreibweise geographischer Namen in kartographischen Erzeugnissen der Deutschen Demokratischen Republik. Vermessungstechnik 20, p. 374.

HAARMANN, H. (1975), Soziologie und Politik der Sprachen Europas. München: DTV.

HARLEY, J.B. (1971), Place-names on the early Ordnance Survey maps of England and Wales. The Cartographic Journal 8, pp. 91-104.

HARLEY, J.B. (1975), Ordnance Survey maps - a descriptive manual. Southampton: Ordnance Survey.

HARLEY, J.B. and G. WALTERS (forthcoming), Welsh orthography and Ordnance Survey mapping 1820-1905. Archeologica Cambrensis.

HAUGEN, E., J. DERRICK McCLURE, D. THOMSON, Eds. (1981), Minority languages today. Edinburgh: University Press.

HENS-VERCAUTEREN, L. (1973), De topografische kaarten van de Zuidelijke Nederlanden (1815-1830). Tijdschrift van de Belgische Vereniging voor Aardrijkskundige Studies 42, pp. 333-455.

HÉRAUD, G. (1961), Le Val d'Aoste, minorité française en Italie. Europa Ethnica 18, pp. 15-26.

HÉRAUD, G. (1966), De Katalanen. Ons Erfdeel 9, pp. 41-44.

HET RENDIER EN DE MENS (1981), Beelden van Lapland. Groningen: Arctic Centre.

HOLANDER, R.K. und V. Tams JÖRGENSEN (1973), Nord Friesland/Nordfriislon 1:100.000 mit den friesischen Ortsnamen. Bredstedt/Bräist: Nordfriisk Instituut.

HOLM, G. (1980), Nordiskt och Lapskt i Lapplands ortnamn. In: Andersson 1980, pp. 28-63.

HOUET, A. et R. CLEEREN (1950), Dictionnaire moderne "géographique, administratif, statistique", des communes belges. Brussel: Van Muysewinkel.

HOVDA, P. (1978), Normering av stadnamn. In: K. Zilliacus 1978, pp. 122-33.

HUBSCHMEID, J. (1946), L'orthographie officielle des noms de lieux de la Suisse. Onomastica 1, pp. 329-33.

HUISMAN, J. (1976), Regionale vormverschillen in nederlandstalige namen van steden in België en Noord-Frankrijk. Naamkunde 8, pp. 159-66.

IfAG (1981), Geographisches Namenbuch Bundesrepublik Deutschland. Frankfurt: Institut für Angewandte Geodäsie.

IGN (1968), La toponymie officielle des cartes de France et le traitement mécanographique des écritures cartographiques. Bulletin d'Information de l'Institut Géographique National 6, pp. 11-13.

IGN (1978a), Spécial toponymie. Bulletin d'information de l'Institut Géographique National 35.

IGN (1978b), Principes de transcription des toponymes corses adoptés par la Commission de Toponymie de l'I.G.N. IGN 1978a, pp. 25-28.

IMHOF, E. (1962), Schweizerische Mittelschulatlas. Zürich: Kantonaler Lehrmittelverlag

INLEIDING TOT DE STUDIE VAN DE VLAAMSCHE PLAATSNAMEN (1929), Den Haag: Nijhoff (Nomina Geographica Flandrica, studiën 2, 1).

IRWIN, B.St.G. (1977), The Ordnance Survey, Roy's legacy. Geographical Journal 143, pp. 14-26.

JAMES, H. (1875), Account of the methods and processes adopted for the production of the Ordnance Survey of the United Kingdom drawn up by officers under Sir Henry James, director general. London: HMSO.

JERNSLETTEN, J. & P.K. BERTELSEN (1976), Stedsnavnsamling for φst-Finnmark. Polmak.

JOURET, B. (1975), La généralisation cartographique: procedure fondamentalement géographique. De Aardijkskunde 107, pp. 19-45.

KADASTER (1978), Modelblad voor de vormgeving van de grootschalige basiskaart van Nederland. Apeldoorn: Kadaster.

KALMA, J.J. Ed. (1949), Fryske Plaknammen 2. Ljouwert: Dijkstra.

KALMA, J.J. (1949), Tink om 'e kaert. In: Kalma 1949, pp. 75-77.

KIRMSE, R. (1957), Die grosse Flandernkarte Gerhard Mercators (1540) - ein Politicum? Duisburg: Stadtarchiv (Duisburger Forschungen Band 1).

KIRRINNIS, H. (1942), Die Ortsnamenänderungen in Ostpreussen. Petermanns Geographische Mitteilungen 88, pp. 265-70.

KOEMAN, C. (1963), Handleiding voor de studie van de topografische kaarten van Nederland, 1750-1850. Groningen: Wolters.

KRANZMAYER, E. (1933), Zur Ortsnamenforschung im Grenzland. Zeitschrift für Ortsnamenforschung 9, pp. 105-148.

KRAUSS, G., W. BECK, G. APPELT et al. (1969), Die amtliche topographischen Kartenwerke der Bundesrepublik Deutschland. Karlsruhe: Wichmann (Sammlung Wichmann Neue Folge 10).

KRAYENHOFF, C.R.T. (1808), Instructie voor de geographische ingenieurs bij het Depôt-Generaal van het Koninkrijk Holland. Depôt-Generaal van Oorlog. (Algemeen Rijksarchief - Archief Gogel 196).

KUYPER, J. (1865-69), Gemeente-atlas van Nederland naar officiële bronnen bewerkt. Leeuwarden: Suringar.

LA CARTOGRAPHIE AU XVIII SIèCLE ET L'OEUVRE DU COMTE DE FERRARIS 1726-1814 (1978), Colloque international, Spa 1976. Brussel: Credit Communal de Belgique.

LAUR, W. (1960), Die Verdeutschung dänischer Ortsnamen im ehemaligen Herzogtum Schleswig. Beiträge zur Namenforschung 11, pp. 101-143.

LEMOINE, J. J. (1977), Toponymie de Pays Basque et des Pays de L'Adour. Paris: Picard.

LEVACIC, J. (1897), Die Schreibung geographischer Namen auf der Balkan Halbinsel. Mittheilungen des kaiserlichen und königlichen Militär-Geographischen Institutes 17, pp. 67-72.

LEXIKON DES MITTELALTERS (1977), (Ed. L. Lutz, J.M. Mc.Lellan, U. Mattejiet e.a.) München.

LINTON, R. Ed. (1945), The science of man in the world crisis. New York: Columbia University Press.

LYYTIKÄINEN, H.E. (1976), Basic mapping of Finland 1947-1975. Helsinki: Maanmittaushallituksen Karttapaino.

MANNERFELT, C., G. LUNDQVIST en H. VÄÄNÄNEN, (1963), Oppikoulun kartasto. Porvoo: Werner Söderström.

MANSION, J. (1929), Over methode. In: Inleiding tot de studie van de Vlaamsche plaatsnamen 1929, pp. 1-39.

MIEDEMA, H.T.J. (1975), Het naamkundig werkverband van de Fryske Akademy, Naamkunde 7, pp. 281-284.

MÜLLER, Fr. (1942), Müllers Ortsbuch für Eupen-Malmedy, Elsass-Lothringen und Luxemburg. Wuppertal-Nächstebreck: Post- und Ortsbuchverlag.

MÜLLER, H. (1920), Das Sprachgebiet der Wenden. Mitteilungen des Vereins für Erdkunde zu Dresden 3, pp. 209-228.

NÄRHI, E.M. (1978), Ortnamnsvärden i Finland. In: Zilliacus 1978, pp. 22-41.

NITSCH, K. (1945), Nazwy miejscowe w odzyskanej Polsce Zachodnie. Jezyk Polski 25, pp. 33-41.

O DUINNíN, P. (1978), Atlas a dó do scoileanna na hÉireann. Dublin: Oifig an tSoláthair.

O MAOLFABHAIL, A. (1979), The placenames Branch of the Ordnance Survey Office. Onoma 23, pp. 176-179.

ORDNANCE SURVEY (1894), Report of the progress of the Ordnance Survey to the 31st December 1893. London: HMSO.

ORDNANCE SURVEY (1905), Instructions to field examiners. Southampton: Ordnance Survey.

ORMELING Sr., F.J. (1976), De Grote Bosatlas. Groningen: Wolters-Noordhoff.

ORMELING Sr., F.J. (1980), Exonyms: an obstacle to international communication, ITC-Journal 1980, pp. 162-176.

PARMENTIER, T. (1879-80), De la transcription pratique, au point de vue français, des noms arabes en caractères latins. Compte Rendu Association française pour l'avancement des sciences 8, pp. 1067-1109.

PEE, W.V.J. (1957), Anderhalve eeuw taalgrensverschuivingen en taaltoestand in Frans-Vlaanderen. Bijdragen en mededelingen der Dialecten-Commissie van de Koninklijke Nederlandse Academie voor Wetenschappen 17.

PÉGORIER, A. (1971), Toponymie cartographique. Bulletin d'Information de l'Institut Géographique National 13, pp. 11-16.

PIERCE, G.O. (1972-73), Some aspects of English influence on place-names in Wales. Onoma 17, pp. 173-91.

PIETERSEN, L. (1969), De Friezen en hun taal. Drachten: Laverman.

PINNA, M. and D. RUOCCO Eds. (1980), Italy, a geographical survey. Pisa: Pancini.

POULSEN, J.H.W. (1981), The Faroese language situation. In: Haugen 1981, pp. 144-152.

PTT (1977), Postcode PTT post. 's Gravenhage: PTT.

QVIGSTAD, J. (1938), De Lappiske stedsnavn i Finnmark og Nordland Fylker. Oslo: Instituttet for sammenlignende kulturforskning (Serie B. Skrifter 33).

RACHEL, B. und H. NOACK (1969), Sorbisch-deutsches und deutsch-sorbisches Ortsnamenverzeichnis der zweisprachigen Kreise der Bezirke Dresden und Cottbus. Bautzen: VEB Domowina-Verlag.

RAMONDOU, J. (1981), Guide de toponymie cartographique. Working paper 21, Neuvième session Groupe d'Experts des Nations Unies pour la Normalisation des Noms Géographiques. New York.

RECORDON, J. (1947), La problème toponymique dans la cartographique technique française. Aperçu historique. Onomastica 1, pp. 309-21.

RENTENAAR, R. (1970), Het leger, de Akademie en de plaatsnamen. Kleine bijdrage tot de spellingsgeschiedenis van de aardrijkskundige namen in Nederland 1857-1864. Naamkunde 2, pp. 50-76.

RIBAS I VIRGILI, E. (1930), Mapes topogràfis moderns de Catalunya. Barcelona: Club Excursionista de Gracia.

REUTER, M. (1981), The status of Swedisch in Finland in theory and practice. In: Haugen 1981, pp. 130-138.

RINGSTAM, H. (1978a), LMVs engagemeng i ortnamns-frågor. LMV-Information 6, pp. 13-16.

RINGSTAM, H. (1978b), Statistiska tätorters namm på allmänna kartor. In: Zilliacus 1978, pp. 111-122.

ROSPOND, R. (1972), La rebaptisation des noms de lieux dans les territoires recouvrés en Pologne. In: Dorion 1972, pp. 97-113.

ROSTAING, Ch. (1974), Les noms de lieux. 8th ed. Paris: Presses Universitaires de France.

ROSTVIK, A. (1980), Material från språkkontaktsområden i Ortnamnsarkivet i Uppsala. In: Andersson 1980, pp. 63-75.

ROSTVIK, A. (1981), Toponymic guidelines for Cartography, Sweden. New York: United Nations Group of Experts on Geographical Names.

RYGH, O, (1911), Norske gaardnavne 17 - Tromsφ Amt. Kristiania 1911.

SANSON, N. (1660), Sardones, Eves. de Elne ou de Perpignan, Comté de Rousillon. Paris.

SAXTON, Chr. (1574-79), Atlas of England and Wales. Reprint London: The Collectors library of Fine Art 1979.

SCHÄPPI, P. (1971), Der Schutz sprachlicher und konfessioneller Minderheiten im Recht von Bund und Kantonen. Zürich: Schulthess.

SCHORTA, A. (1943), Ziele der Ortsnamenkunde in der Schweiz mit besonderer Berücksichtigung der Kartennomenklatur. In: Eidgenössische Landestopographie 1943, pp. 1-25.

SCHOTANUS VAN STERRINGA, B. (1709-12), Grietenij-kaarten. Leeuwarden: Halma 1718.

SEYMOUR, W.A. (1980), History of the Ordnance Survey. Folkestone: Dawson.

SERPELL, D. (1979), Report of the Ordnance Survey review committee. London: HMSO.

SKELTON, R.A. (1961), Maps and the local historian. Middlesex local history council bulletin 11.

SMART, M.B. (1978), National standardization exonymns: a national policy for the bilingual treatment of geographical names on Canadian maps. In: Canadian Permanent Committee on Geographical Names 1978, pp. 73-93.

SPORCK, J.A. et L. PIERARD (1968), Atlas de géographie - la Belgique et le monde. Brussel: Asedi.

STAVENHAGEN, W. (1904), Skizze der Entwicklung und des Standes des Kartenwesens des ausserdeutschen Europas. Petermanns Mitteilungen Erganzungsband 31, 145 bis.

STEDNAVNEUDVALGET (1978), Fortegnelse over stednavne i amterne φst for Lillebaelt. Kφbenhavn: Akademisk Forlag.

STEPHENS, M. (1976), Linguistic minorities in Western Europe.   Llandysul: Gomer Press.

STEWART, G. (1975), Names on the globe. New York: Oxford University Press.

STOTHERD, R.H. (1883), Instructions to field examiners on the orthography of Welsh names, with rules for compounding, initialing and accenting under various conditions. Ordnance Survey. In: Harley and Walters (forthcoming).

TANK, R. (1943), Die Orts- und Flurnamen auf den amtlichen Landeskarten der Schweiz. In: Eidgenössische Landestopographie 1943, pp. 26-31.

TATHAM, A.F. (1978), German military mapping, an exploratory survey. The Cartographic Journal 15, pp. 20-27.

TAYLOR, W.R. (1969), The Ordnance Survey of Northern Ireland. The Cartographic Journal 6, pp. 89-90.

THE LAPPS TODAY IN FINLAND, NORWAY AND SWEDEN (1960), Den Haag: Mouton.

THOMSON, D. (1981), Gaelic in Scotland - Assessment and Prognosis. In: Haugen 1981, pp. 10-20.

TOPOGRAFISCHE DIENST (1968), Friese toponiemen. Interne instructie TA 28-10-1968. Delft: Topografische Dienst.

TOPOGRAFISCHE DIENST (1979a), Friese toponiemen. Interne instructie 24-4-1979. Delft: Topografische Dienst.

TOPOGRAFISCHE DIENST (1979b), Lijst van geografische namen voorkomende op de Overzichtskaart van Nederland 1:250.000. Delft: Topografische Dienst.

TUCKER, S. (1976), The Welsh Office Drawing Office. Bulletin of the Society of University Cartographers 10, pp. 14-23.

UNITED NATIONS (1968), United Nations Conference on the Standardization of Geographical Names. Report of the Conference. New York: United Nations.

UNITED NATIONS (1974), 2nd United Nations Conference on the Standardization of Geographical Names. New York: United Nations.

UNITED NATIONS (1979), 3rd United Nations Conference on the Standardization of Geographical Names. Report of the Conference. New York: United Nations.

VALUSSI, G. (1980). Linguistic minorities. In: Pinna and Ruocco 1980, pp. 174-181.

VAN AMERSFOORT, J.M.M. (1978), Het begrip minderheid. Geografisch Tijdschrift 12, pp. 63-67.

VAN DER BEKE, P. (1538), De Charte van Vlaendren.

VAN DER KROGT, P.C.J. (1980), Exoniemen in Europa. Kartografisch Tijdschrift 6, pp. 31-33.

VAN DER LINDEN, J.A. (1973), Topografische en militaire kaart van het koninkrijk der Nederlanden. Bussum: Fibula-Van Dishoeck.

VAN MARKEN, A. (1981), Het bewustwordingsproces in Sameland. Het rendier en de mens 1981, pp. 29-47.

VAN MECHELEN, F. (1962), De minderheid als sociologische categorie. Sociologische Gids 9, pp. 58-80.

VAN DER PLANK, P.H. (1971), Taalassimilatie van Europese taalminderheden, een inventariserende en hypothesevormende studie naar assimilatieverschijnselen onder Europese taalgroepen. Rotterdam: Brander-offset.

VAN DER PLANK, P.H. (1974), Ethnische minderheden in Europa. Intermediair 10, no. 34, 46, 47.

VAN DE WIJER, H.J. en H. DRAYE (1948), De plaatsnamenstudie in 1947. Handelingen van de Koninklijke Commissie voor Toponymie en Dialectologie 22, pp. 147-246.

VAN DE WIJER, H.J. (1967), Over geografische benamingen op internationaal plan. Mededelingen van de Vereniging voor Naamkunde 43, pp. 141-44.

VAN 'T HOFF, J.B. (1941), Inleiding tot de Facsimilé-uitgave "De kaarten van De Nederlandsche Provincien in de zestiende eeuw door Jacob van Deventer". "s-Gravenhage: Nijhoff.

VERDOODT, A. (1968), Zweisprachige Nachbarn. Stuttgart: Braumüller.

VON STEEB, Chr. (1897), Die geographischen Namen in den Militär-karten. Mittheilungen des kaiserlichen und königlichen Militär- Geographischen Institutes 17, pp. 53-66.

WAGLEY, Ch. and M. HARRIS (1967), Minorities in the New World. New York: Columbia University Press.

WALTERS, G. (1970), The Morrises and the map of Anglesey. Welsh history review 5.

WILSON, Ch. (1891), Methods and processes of the Ordnance Survey. Scottish Geographical Magazine 7, pp. 257-59.

WIRTH, L. (1945), The problem of minority groups. In: Linton 1945, pp. 347-373.

WITKAMP, P.H. (1865), Campagne's atlas der geheele aarde. Tiel: Campagne.

WITKAMP, P.H. (1873), Nieuwe atlas van Nederland en zijne overzeesche bezittingen. Arnhem: Voltelen.

WOHLERT, I. (1978), Om stednavnepleje i Danmark. In: K. Zilliacus 1978, pp. 41-49.

ZILLIACUS, K. Ed. (1978), Ortnamnsvård och ortsnamnsplanering. Uppsala: Nordiska Samarbets-kommittén för namnforskning (NORNA - rapporter 13).

Curriculum vitae

The author took the "Gymnasium β" grammar-school certificate at the Werkplaats Kindergemeenschap in Bilthoven in 1961. Subsequently he studied human geography at Groningen University, where he completed his studies in 1969, with Arabic and Cartography as subsidiary subjects. During his stay in Groningen he worked part-time as a map-editor at the Cartographic Department of Wolters Noordhoff Publishing Company. Since May 1969 he has been a member of the Cartography Section of the Department of Geography, University of Utrecht, currently as senior lecturer in Charge of instruction and research in thematic Cartography.

STELLINGEN

1.Namen op kaarten vormen zelden een volledige weergave van het beschikbare toponymenbestand. Ie zijn het resultaat van een selectie op grond van de functie van de kaart, zoals navigatie of onderwijs. Op basis van de gekarteerde namen kan men meer bewijzen omtrent de kaarten of nun makers dan omtrent het afgebeelde gebied dan wel zijn bewoners.

2.Het gebrek aan richtlijnen van de Nederlandse overheid en van geografische beroepsorganisaties op het gebied van de schrijfwijze van geografische namen leidt tot een inconsequent spellingsbeeld op de kaart (zie kaartfragment).

3.De introductie van officiele nationale eenheidstalen door jonge, centraal geregeerde staten (zoals Indonesie) vormt een ernstige bedreiging voor het voortbestaan van vele geografische namen uit minderheidstalen, aangezien dit ook tot vervorming van bestaande namen leidt (bijvoorbeeld Tjiliwung - Sungai Ciliwung).

4.Met het ten onder gaan van de "K. und K. Monarchie" na de Eerste Wereldoorlog is het schoolvoorbeeld van correct kartografisch handelen ten opzichte van taalkundige minderheden verloren gegaan.

5.De opmerking van R. Rees, "If a landscape presents objects for which the convention presents no Schemata the artist will tend to ignore them", gaat evenzeer op voor de kartografie en haar beoefenaren. (R. Rees - Geography and landscape painting. Scottish Geographical Magazine vol. 89 no. 3, december 1973).

6.De opvatting van kaarten als kunstwerken heeft de wetenschappelijke ontwikkeling van de kartografie geremd.

7.Men is zich in het algemeen slecht bewust van de invloed van de schaal op het lezen van kaarten. In Europese verhoudingen zal het op 700 km afstand liggen van een eilandengroep voor geen kuststaat reden zijn deze op te eisen. Dezelfde afstand is op de kaart van Zuid-Amerika zo klein, dat velen hierom vinden dat de Falkland Eilanden bij Argentinië horen.

8.Waar overwogen wordt het register van beschermde monumenten, beschikkingen tot aanwijzing als beschermd natuurgebied en andere publiekrechtelijke rechtsfeiten in te schrijven in de Openbare registers, dient tevens te worden overwogen, ten behoeve van een overzicht van de dusdanig aangemerkte gronden, deze rechtsfeiten ook grafisch tot uitdrukking te brengen op de kadastrale plans. (Op goede gronden. 150 Jaar Kadaster. Den Haag 1982).

9.De aanvankelijke verwachtingen, dat eenmaal digitaliseren op een grote schaal de automatische productie van afgeleide kaarten op elke gewenste schaal mogelijk zou maken, is op een misverstand gebaseerd.

10.Het effect van ontbossing op het CO_2~gehalte in de atmosfeer is minder groot dan tot nu toe werd aangenomen. (J. Goudriaan and P. Ketner - A Simulation study for the global carbon cycle, including man's impact on the biosphere. Submitted to Climatic Change, 1983).

11.Het door de NOS ter beschikking gestelde budget voor de grootste atlas van Nederland - de kaarten van het NOS-journaal - is, in vergelijking met de miljoenen guldens gemoeid met het actueel houden van Nederlandse schoolatlassen, te gering, en dat ziet een geschoold oog.

12.Het is terecht dat men in Nederland voor wat betreft de vakken aardrijkskunde en geschiedenis terugkomt op de doelstellingen van de onderwijsvernieuwing, voor zover deze geleid hebben tot verwaarlozing van de basiskennis en dus tot bevordering van ruimtelijk en historisch analfabetisme.
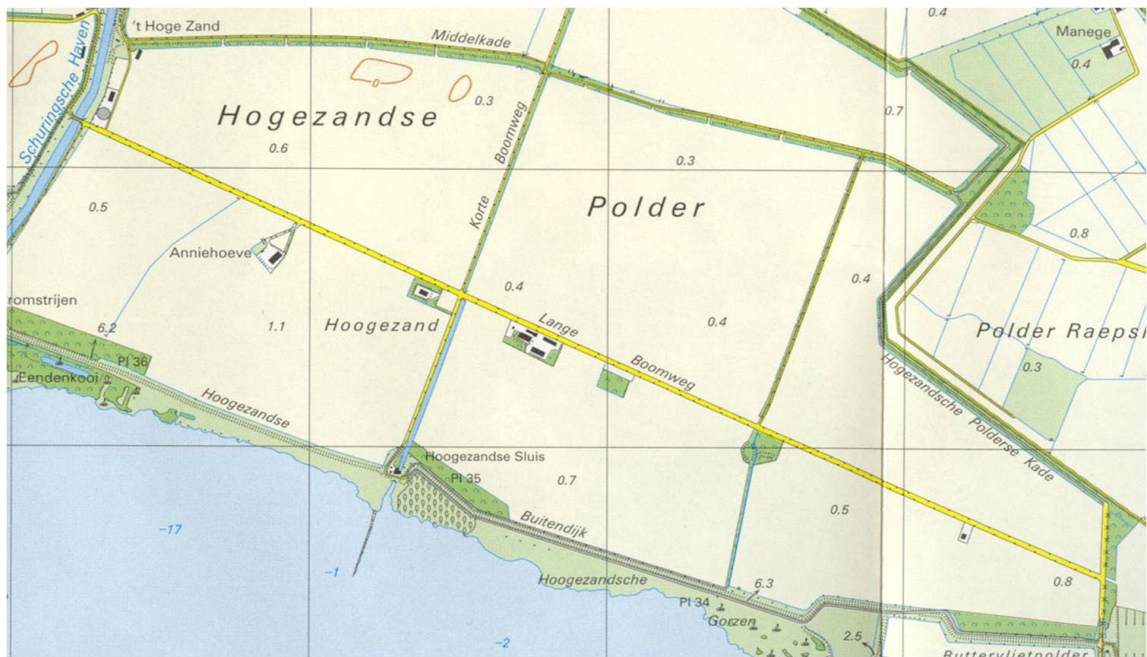
KaartFragment behorende bij stelling 2), ontleend aan de Topografische Kaart van Nederland 1:25.000, blad 43 F, Strijen (1980). Gereproduceerd met toestemming van de Topografische Dienst te Delft.

F.J. Ormeling

Minority toponyms on maps. The rendering of linguistic minority toponyms on topographic maps of Western Europe.

Utrecht, 3 juni 1983.

Annex 1 Notes on the method applied in the investigation of the cartographical representation of minority toponyms

During the period between 1935 and 1955, a linguistic controversy raged in Central Europe which also regarded the use of maps. The controversy concerned Battisti's studies which tried to prove that the Ladins, as the original inhabitants of South Tirol, had only become germanized in the 17th Century. In order to prove this Battisti a.o. investigated geographical names on maps. Countings of these names had to confirm his propositions. The methods followed by Battisti were severely criticized as follows (Finsterwalder 1953):

1.Map-material was used at scales which do not allow a homogenous representation of names.
On maps at the scale 1:100 000, relatively large numbers of names of cadastral-lots are incorporated from less densely populated regions. In the more densely populated regions, only names of large settlements are mentioned. The names of these settlements in South Tirol originated from Pre-Roman times. The names of cadastral-lots in the mountains are German. For Battisti, this was reason to assume that when the German-speaking population penetrated this region, only the mountains were uninhabited. When examining large-scale maps however, most names of cadastral-lots on the plains are also rendered in German. Conclusions on the settlement-history require maps on scales which allow complete representation of all categories of toponyms.
2.Maps had been used which gave a distorted representation of names. The names were counted on a recent Italian map which no longer rendered the names in the traditional versions. Where the Öesterreichische Spezialkarte contained the name "Gasthaus Schöne Aussicht" for example, "Albergo Bella Vista" is found on the modern Italian topographic map. It was on this map that Battisti counted the names, and therefore considered this particular toponym as an Italian name.
Depending on the guidelines used, it is conceivable that relatively more Italian-sounding toponyms were selected by Italian topographers for rendering on the Italian map.
3.The sample-areas were incorrectly demarcated. In order to allow the results of the countings to be to the advantage of non-German names, names had also been counted in regions where there was no German-speaking population. Instead of the language-boundary, the investigation was based on either a) larger administrative entities; b) regions bordered by the graticule, e.g. by counting all names on one map-sheet.
4.The nature of the names was not properly established.
In an effort to present a ratio between the German and Italian names to the advantage of the latter, the following errors had been made:
a.All pre-German names were considered to be Neo-Latin (=Italian) names.
b.Toponyms which comprised German loan-words adopted from Latin, were treated as being Italian toponyms.
c. All ecclesiastial names (hagionyms) were classified as non-German, i.e. Italian.
d. All other compounds with non-German Christian names were classified as being non-German (=Italian) toponyms.
e. All other names with name-elements which Battisti (incorrectly) considered as non-German names or derivations, were classified as being non-German, and therefore Italian.
5. One name which occurred in different forms was counted, incorrectly, as often as it was found.
The three toponyms Nieder-, Mittel-, and Üeberlana were considered as being three

separate (Italian) toponyms. Both the place-name Vöran and the farm-name Vöraner Joch were classified as being Italian toponyms, although the latter can only have been founded during the Middle Ages by German colonists while the former dates from the Roman period.

6.The names were not counted properly.

Based on Battisti's standards, Finsterwalder counted 221 German names instead of 133 in the Salurn-region, and 145 Italian ones instead of 171. This decreases the percentage of Italian names from 56% to 40% for this particular region situated on the language-boundary. This region was considered by Battisti as being representative for the entire region.

7.From the ratio between the toponyms grouped into different categories, incorrect conclusions had been drawn with regard to the intensity and the date of the initial occupation.

In Rhineland in the FRG too, one finds a reasonable percentage of names, which, according to Battisti's Standards, must be classified as being pre-German (=Italian) names. This region however, has never had an Italian-speaking population. See also points 1) and 2).

However, Finsterwalder with all his criticism on the use of place-names statistics by Battisti, does not necessarily disavow the use of maps in order to investigate the attitude towards toponyms such as is done in this study. Such an investigation must comprise the following elements:

    a)   a selection of the proper maps.
    b)   a correct demarcation of the region.
    c)   a proper establishment of the nature of the names in the region determined
        under point b).
    d)   a correct counting of the names.
    e)   a correct determination of the percentages.

On the basis of these five steps, one may ascertain that a certain percentage of the names within a region belongs to a specific category. The results however, say nothing about the toponyms not indicated on the map, and hence, nothing about the total 'arsenal' of toponyms. The reason for this is that:

-the names on the map form a selection which is dependant on the space available on the actual map.

-this selection may give rise to a certain distortion under the influence of regulations and procedures or preferences.

Even percentages of names of the entire 'arsenal' of toponyms do not necessarily allow conclusions on the intensity and the duration of other phenomena such as colonization, according to the method used by Battisti.

Finsterwalder indicates that in the case of colonization, it is not the root of the name, but the transition of the name from one language into another which is important. A farm-name with an Italian root, does not necessarily imply that that farm was founded by Italians. It is quite possible that German colonists retained the (pre-) Roman names of uninhabited cadastral-lots.

In the present study, no conclusions are drawn from the numerical ratios between minority toponyms and the total number of toponyms with regard to other phenomena such as colonization. The figures are the results of the actual investigation, since they indicate to which extent, and whether or not the mapping agency has removed the minority-linguistic character from the map. What is important, is whether or not the

map does justice to the minority language, whether the toponyms are retained in the minority language, or are incorporated in the majority language, by changing them. For this the ratios between minority and majority names are the most important source.

Annex 2 Questionnaire on the rendering of toponyms of linguistic minority areas on topographic maps on the scale of 1:50.000*

Regards the .... linguistic minority area.

1.Has the spelling of geographical names in your country been standardised by law?	1 yes no
2.Is there an institution in your country which is officially responsible for the standardisation of the spelling of geographical names?	2 yes no
3. Is the status of the minority language concerned established or protected by law?	3 yes no
4. Does the minority language, in the minority language area, have a status equal to that of the national language?	4 yes no
5.Is it permitted/obligatory for the local government to use the minority language in its area?	5 yes no
6.Has the spelling of the minority language been officially standardised?	6 yes no
7.Has the spelling of the minority language area toponyms been officially standardised in the minority language?	7 yes no
8.Do internal rules exist within your service indicating the procedure to be followed when collecting and processing toponyms in areas of minority languages?	8 yes no
9.Are toponyms from minority language areas (should a version thereof exist which differs from the national language) rendered in their own language in addition to the national language version?	9 yes no
10.Are toponyms from minority language areas (should a version thereof exist which differs from the version in the national language) rendered in the minority language only?	10yes no
11.Does the answer to question 10 also depend on the relation of the number of people speaking the minority language compared to the number of people speaking the national language in the area concerned?	11yes no
12.Are geographical generic terms in toponyms (bay, gulf, mountain) also rendered in the spelling or the idiom of the minority language on topographical maps of minority language areas?	12yes no
13.Are generic designations or abbreviations (like cemetery, factory, farm) also rendered in the minority language on topographical maps of minority language areas?	13yes no
14.Is the map series title also rendered in the minority language on the maps that cover (part of) the minority language areas?	14 yes no
15. Is the map sheet title also rendered in the minority language next to the national language version (should a version thereof exist which differs from the version in the national language) on the maps that cover (part of) the minority language area?	15yes no
16. Are the legends of every sheet of the topographical map representing the minority area, at a scale larger or equal to 1:250 000, also given in the minority language?	16 yes no

17. Is the marginal information on every sheet of the

topographical map representing the minority area at a
scale larger or equal to 1:250 000 also given in the
minority language?   17 yes no
18. Does your service consult linguistic bodies of the
minority concerning the spelling of the minority toponyms?   18 yes no
19. Does an official gazetteer of your country exist?   19 yes no
20. Are the toponyms of linguistic minority areas also given
in the minority language in this gazetteer?   20 yes no
21. Do 'Toponymic Guidelines for cartography' exist in your
country conformably to the recommendations of the United
Nations Group of Experts of Geographical Names?   21 yes no
22. Are these Toponymic Guidelines (be it internal instructions
related to the collection and processing of the toponyms of
linguistic minorities) available or accessible for
investigation purposes?   22 yes no
23. Starting at what date did the above given information of
    your service take effect?   23 ....

'Linguistic minority area' and 'toponym' are defined in an accompanying letter. This
letter also clarifies to what extent research is done and the application of the results.

*In case the situation indicated for maps on the scale 1:50 000 differs strongly from
that on larger or smaller scales (1:25 000, 1:100 000, 1:250 000), I request you to
indicate this underneath.

24.Remarks:..................

Table 37 Answers to the questionnaire by West-European agencies[a]

	Wales (UK)	Ireland[b]	Gaelic Scotland (UK)	Eupen-Sankt Vith (Belgium)	Friesland (Netherlands)	Schleswig (FRG)[c]	Faroe Islands (Denmark)[i]	Greenland (Denmark)	Norwegian Lapland (Norway)	Swedish Lapland (Sweden)	Finnish Lapland (Finland)	Torne-älv area (Sweden)	Swedish speaking Finland	Slovene Carinthia (Austria)	Slovene-speaking Italy	South Tirol (Italy)	Vallée d'Aoste (Italy)	Catalonia (Spain)	Spanish Basque Provinces (Spain)
1	□	X	□	□	□	□	■	■	■	■	□	■	□	X	□	□	□	□	□
2	□	■	□	□	□	□[c]	■	■	■	■	□	■	□	□	■	■	■	■	■
3	□	■	□	■	■	□	■	■	▨	■	□	■	■	■	■	■	■	■	■
4	■	■	■	■	■	□	■	■	□	□	□	□	■	■	■	■	■	■	■
5	■	■	■	■	■	■	■	■	□	□	□	□	■	□	■	■	□	■	■
6	■	■	■	■	□	□	■	■	■	□	■	□	■	□	□	□	□	■	□
7	■	■	□	□	□	□	■	■	■	□	□	□	□	□	□	□	□	□	□
8	■	■	■	■	■	□	■	■	■	■	■	■	□	■	■	■	■	■	■
9	■	■	■	□	X	□	■	■	□	■	□	■	□	□	□	□	□	□	□
10	□	□	■	■	□	□	■	■	■	□	□[d]	■[e]	□	■	□	□	□	■	■
11	□	□	■	■	□	□	□	□	■	■	□[d]	■[e]	□	□	□	□	□	□	□
12	▨	■	■	■	□[f]	□	■	■	■	■	■	■	□	■	□	□	□	□	□
13	▨	▨	▨	□	□	□	■	□	□	□	□	□	■	□	■	■	■	□	□
14	□	■	□	□[g]	□	□	■	■	□	□	□	□	■	□	□	□	□	□	□
15	□	■	□	■	□	□	□	□	□	■	■	□	□	■	□	□	□	■	■

For explanation pto.

Answers to the questionnaire by West-European topographic agencies[a]

	Wales (UK)	Ireland[b]	Gaelic Scotland (UK)	Eupen-Sankt Vith (Belgium)	Friesland (Netherlands)	Schleswig (FRG)[c]	Faroe Islands (Denmark)[i]	Greenland (Denmark)	Norwegian Lapland (Norway)	Swedish Lapland (Sweden)	Finnish Lapland (Finland)	Torne-älv area (Sweden)	Swedish speaking Finland	Slovene Carinthia (Austria)	Slovene-speaking Italy	South Tirol (Italy)	Vallée d'Aoste (Italy)	Catalonia (Spain)	Spanish Basque Provinces (Spain)
16	☐	☐	☐	■[g]	☐	☐	■	■	☐	☐	☐	☐	■	☐	☐	☐	☐	☐	☐
17	☐	☐	☐	☐[g]	☐	☐	■	■	☐	☐	☐	☐	■	☐	☐	☐	☐	☐	☐
18	■	■	■	■	■	☐	■	■	■	☐	■	■	■	☐	■	■	■	■	■
19	■	☐	■	☐	☐	■	☐	☐[h]	■	☐	☐	☐	☐	☐	■	■	■	☐	☐
20	☐	☐	☐	☐	☐	☐	☐	☐	■	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
21	☐[h]	☐	☐[h]	☐	☐	☐ ☐[c]	☐	☐	■	■	■	■	■	■	☐	☐	☐	■	■
22	■	☐	■	☐	■	☐ ☐[c]	☐	☐	☐	■	■	■	■	■	■	■	■	■	■
23				1968	1979	1982		1945			1982		1982	1968	1875		1875	1975	1975

a France and the GDR did not answer the questionnaire
b As Irish is officially the first language of the Republic of Ireland, the use of the term 'minority-language' in this context is inaccurate.
c According to the Landesvermessungsamt Schleswig-Holstein. Opposite views or procedures followed by IFAG in the production of the 1:200 000 series are indicated.
d Most toponyms in Utsjoki parish are known in Lappish only. If Finnish versions exist, they have priority over Lappish versions.
e If Finnish names exist, they are rendered too, regardless of the linguistic ratio's in the area.
f Mainly names of streets and roads.
g The answer was affirmative for the map-series België 1:25 000.
h In preparation or completed by now in 1982.
i Only valid for map-series 1:20 000.

☐ No

▨ Partly/occasionally

■ Yes

X Only for cities/towns

Samenvatting - Minderheden op de kaart - de topografische opname van toponymen van taalkundige minderheden in West-Europa

Deze studie beoogt a) de officiele overheidsstandpunten ten opzichte van de toponymen van taalkundige minderheden te reconstrueren aan de hand van analyse van topografische kaarten, en b) deze standpunten vervolgens te toetsen aan desbetreffende aanbevelingen van de Verenigde Naties en aan de eisen gesteld bij het kaartgebruik.

Hiertoe wordt eerst een overzicht gegeven van de algemene procedures gevolgd door topografische diensten in West-Europa bij het verzamelen en bewerken van geografische namen voor kaarten. Die procedures zijn niet overal in West-Europa identiek, en er is getracht bij de beschrij-ving een aantal representatieve voorbeelden te kiezen, en wel Groot-Britannië, Zweden, België en Zwitserland. In Groot-Brittannië is het plaatselijk gebruik bepalend voor de schrijfwijze van de namen. De plicht deze schrijfwijze te standaardiseren is hier niet bij de wet vastgelegd, hetgeen het ontbreken van enig systeem in de spelling der plaatsnamen tot gevolg heeft. In Zweden dienen de naamdelen welke herkenbaar zijn overeen te komen met de spelling zoals gebezigd in goed-gekeurde woordenlijsten. Er is al meer dan 100 jaar sprake van een wetenschappelijke begeleiding van de topografen door taalkundigen; het wettelijk kader volgens hetwelk de topografische dienst de namen moet vaststellen wordt thans voltooid.

In België is dat kader al aanwezig. De confrontatie der taalgemeen-schappen heeft hier geleid tot een ver doorgevoerde regulering; er is precies vastgesteld wie de spelling der namen standaardiseert en hoever de bevoegdheid der adviserende wetenschappelijke instanties zieh uitstrekt. Deze gaat in de regel tot aan de taalgrens, een op grond van de getalmatige verhoudingen tussen de leden der taalgemeenschappen vastgestelde grens. Een weergave van de namen in de versie van de numeriek dominante taalgroep wordt hier het 'Personalprinzip' genoemd. Een hand-haven van de gebruikelijke namen binnen eenmaal vastgestelde grenzen van taalgemeenschappen wordt als 'Territorialprinzip' omschreven. In Zwitserland kent men een sterke decentralisatie. Kantonale nomenclatuur-commissies schrijven hier de spelling der namen binnen hun gebied voor. In alle behandelde landen is de topografische dienst autonoom in de keuze van de op de kaart weer te geven namen. Er zijn in West-Europa ook verschillen geconstateerd in de mate waarin dialectnamen al of niet ongewijzigd voor opname op de kaart in aanmerking komen (zie ook fig. 4). Na deze achtergrond-informatie wordt nagegaan in welke mate de behandeling van de geografische namen uit gebieden bewoond door taalkundige minderheden afwijkt van die welke elders in de betrokken landen wordt gevolgd. Het begrip taalkundige minderheid is hier omschreven als een groep binnen een staat, welke niet dezelfde moedertaal spreekt als de dominante groep. De keuze van de behandelde taalkundige minderheden is bepaald door hun ruimtelijke neerslag, en door de beschikbaarheid van topografisch kaartmateriaal waarop veranderingen in de kaartnamen gevolgd konden worden. De behandelde minderheden staan aangegeven in figuur 1.

Vanaf het begin van de nationale topografische karteringen in deze gebieden, dat wil zeggen vanaf 1760 voor Frankrijk, of vanaf het begin van de twintigste eeuw voor Noord-Finland, is nagegaan op welke wijze de toponymen uit de minderheidstalen zijn vertekend, aan de hand van hun weergave op opeenvolgende kaartedities. Daartoe is een indeling gemaakt in a) ongewijzigde namen, b) aan de meerderheidstaal aangepaste namen, c) in de meerderheidstaal vertaalde namen en d) nieuwe namen in de meerderheidstaal. Voor een aantal representatief geachte proefgebieden zijn op de kaart de aandelen bepaald van de toponymen die vallen in de hierboven onderscheiden categorieën.

Niet alleen de geografische namen binnen het kaartkader kunnen in de meerderheidstaal zijn gesteld; dat geldt vaak nog in veel sterkere mate voor de overige tekst op de kaart. Want als regeringsproduct is de kaart en tevens legenda,

kaarttitel en overige randinformatie, bijna altijd gesteld in de regeringstaal.
Hoewel grootschalig kaartmateriaal van hun woongebied niet toegankelijk is, is ook de Sorbische minderheid in de Duitse Democratische Republiek in dit onderzoek betrokken. Daarvoor is met name gekozen om een vergelijking met de Sloveense taalminderheid in Oostenrijk mogelijk te maken. De zweedstalige minderheid in Finland, bij de wet geheel gelijkgesteld aan de Finse taalgemeenschap, is hier ook beschreven, en wel om een vergelijking met de finstalige Zweden mogelijk te maken. Voor België, Duitsland en Oostenrijk is, ter verklaring van de huidige toestand, ook de houding ten opzichte van vroegere taalkundige minderheden beschreven. De resultaten van de kaartanalyses zijn gecontroleerd aan de hand van de uitkomsten van een enquête, waarop alle Westeuropese topografische diensten met uitzondering van Frankrijk en de Duitse Democratische Republiek antwoordden.

Onderzoekt men de houding ten opzichte van de minderheden, dan blijkt dat de dienstvoorschriften in een aantal gebieden het gebruik van de minderheidstaal bevorderen en elders juist beperken. Het tijdstip waarop de minderheidssituatie ontstond heeft ook invloed gehad op de vertekening der toponymen. Ontstond deze situatie na 1860 dan is er sprake van een rigoureuze aanpassing van de namen aan de meerderheidstaal; de meeste nieuwe namen werden in minderheidstaalgebieden echter pas in de twintigste eeuw gegeven, toen men zich bewust werd van de propagandistische waarde van plaatsnamen. Na 1950 is er sprake van een voorzichtige restauratie van de oorsponkelijke plaatsnamen in minderheidsgebieden, al is dat nog niet overal het geval. Een met de tijd samenhangend verschijnsel is ook de in fasen voortschrijdende vertekening van de toponymen, welke zowel op Franse als Duitse kaarten is af te lezen. Het fenomeen van de 'uitgestelde aanpassing', het pas op afgeleide kaartschalen doordringen van nieuwe toponymische standpunten wanneer de basiskaarten geheel volgens de nieuwe voorschriften zijn uitgevoerd, valt ook onder de historische aspecten. De invloed van afzonderlijke geografische factoren kon niet worden geconstateerd; beschouwt men deze tesamen, dan blijkt dat regeringen een ontvankelijker standpunt innemen tegenover namen uit taalgemeenschappen welke dunbevolkte, economische minder ontwikkelde gebieden bewonen dan tegenover minderheden uit welvarender, geïndustrialiseerde streken. De bereidheid de taalkundige identiteit van minderheidsgebieden te accepteren blijkt daarmee omgekeerd evenredig te zijn aan het economisch of demografisch potentieel van deze gebieden.

Onder de kartografische factoren welke de weergave van minderheidsnamen beïnvloeden is het gebruik van afkortingen op de kaart in plaats van kaartsymbolen te plaatsen, zoals in Groot-Brittannië en België, van grote invloed; deze afkortingen kunnen het kaartbeeld in belangrijke mate 'kleuren'. Nog belangrijker als kartografische factor is de invloed van de schaal. Elke categorie van toponymen kent een kaartschaal waarop zij domineert: op grootschalige kaarten bijvoorbeeld boerderij- en perceelsnamen, op middelschalige topografische kaarten streeknamen en op kaarten op de schaal <1:200 000 plaatsnamen. Elke categorie van namen is op specifieke wijze aan de meerderheidstaal aangepast. Op de kleinste schalen zullen alleen de belangrijkste objecten in het afgebeelde gebied benoemd worden, en van deze objecten zal het eerst een eigen naam in de meerderheidstaal ontstaan. Op de kleinste schalen zal men dus de minste minderheidsnamen aantreffen.

Andere factoren waarop in het kader van deze studie niet is ingegaan, maar die toch ook invloed uitoefenen, zijn van juridische en taalkundige aard. Onder de juridische factoren hoort de mogelijkheid langs wettelijke weg naamsveranderingen te realiseren, en dus ook in een meerderheidsversie officieel opgetekende namen van objecten uit het minderheidstaalgebied hun oorspronkelijke naam terug te geven. In Nederland en Spanje (Fryslân en Catalonie) begint men pas de laatste jaren van deze mogelijkheid gebruik te maken. Onder de taalkundige invloeden is de ongelijke behandeling van verschillende minderheidstalen in een land. In Italië worden van de namen van de franstalige, duitstalige en Sloveense minderheden alleen de eerste in de oorspronkelijke versie opgenomen. In het Duitsland van vóór 1918 gold hetzelfde voor namen van de Franse maar niet voor die van Friese/Deense minderheden. Er is thans in de meeste onderzochte gebieden sprake van een omslag in de

benadering ten gunste van de minderheidstaal. Vanaf de dertiger jaren wordt de legenda van de topografische kaarten van Groenland ook in de Eskimo-taal aangegeven; in 1932 werd de eerste eentalig kaartserie van de Faeröer uitgebracht. Op het ogenblik gaat men alleen in de Bondsrepubliek Duitsland, Oostenrijk, Sloveens Italië en Zuid-Tirol niet mee met deze trend.

Als maatstaven ter beoordeling van de gevolgde attitudes werden het kaartgebruik en de door de Verenigde Naties aanbevolen 'local names policy' gekozen. Bij het kaartgebruik worden door Bertin drie fasen onderscheiden, namelijk de externe en interne identificatie en het eigenlijke kaartlezen. Hiertoe moet men achtereenvolgens de titel (van de kaartserie en van het kaartblad), de legenda en de kaartnamen kunnen lezen. De mate waarin deze drie in de minderheidstaal gesteld zijn werd als maatstaf voor een eerste evaluatie gekozen. De Faeröer, Groenland, Moors Lapland en Eupen-Sankt Vith zijn voorbeelden van een gebied waarbij deze handelingen in de minderheidstaal mogelijk zijn (zie fig. 71).

Na een anlyse van de wijzen van overgang van toponymen van een minderheidsgebied, uit de minderheidstaal naar de meerderheidstaal of terug naar hun oorspronkelijke versie, worden deze gebieden in Europa ingedeeld in een aantal typen (fig. 73) met behulp van een aan Dorion ontleende notatiemethode. De meest op de eisen van het kaartgebruik aansluitende methode is degene die een weergave van de plaatselijk gebruikte toponymen in enkel de minderheidstaal behelst. Als overgang naar zo'n ideaal geachte situatie wordt een (partiële) tweetalige editie gezien. Bij een dergelijke oplossing wordt in de toekomst bij kaartgebruik verwarring voorkomen, sluit men aan op de oriëntatie-funktie ter plaatse en fungeert de kaart meteen als een doorgeefluik voor het onderdeel van het cultuurgoed van de minderheidstaalgemeenschap dat de toponymen vormen. Om te kunnen slagen moet de spelling der betrokken namen op de kaart aansluiten bij die welke men ter plaatse bezigt, en dat vereist het voeren van een 'official naming policy'. Zo'n naamkundig beleid wordt door de Canadese overheid al gevoerd, en de situatie in Canada wordt daartoe als voorbeeld aangehaald.
De optimaal geachte oplossing - de weergave van zowel toponymen, legenda, kaarttitel en randinformatie in de minderheidstaal op de bladen van topografische kaarten die minderheidstaalgebieden bedekken - is bereikbaar indien de volgende aanbevelingen worden gevolgd:

a) Voor minderheidstaalgebieden dienen taalgrenzen te worden vastgesteld waarbinnen de namen in de minderheidstaal worden aangegeven.
b) Bij de publicatie van gazetteers dienen de namen uit de desbetreffende gebieden in de minderheidstaal te worden aangegeven.
c) Op kaarten van minderheidstaalgebieden dienen de toponymen in de taal van de minderheid te worden gesteld.
d) Op kaarten van minderheidstaalgebieden dienen serietitel, randinformatie en legenda ook in de minderheidstaal te worden gesteld.
e) Op kaarten van minderheidstaalgebieden dienen, voor zover topogra-fische soortaanduidingen nodig zijn, deze mede in de minderheidstaal te zijn gesteld.
f) Ten behoeve van kaartgebruikers van buiten het minderheidstaalgebied dienen de meest gebruikte geografische termen in de minderheidstaal te worden verklaard (in een aparte glossary of in de marge van de kaart).

De officiele erkenning van de eigen taal vormt een belangrijke bijdrage tot versterking van de identiteit van taalkundige minderheden; het officiële gebruik van de geografische namen in de eigen taal is daar een onderdeel van. De weergave van de namen op kaarten is daarvan maar een deelaspekt, maar de namen op de kaart zijn vaak de eerste en de enige manier waarop de minderheid zich aan buitenstaanders manifesteert. De weergave van haar minderheidstoponymen op de kaart is daarmee als een officiële erkenning en aanvaarding van een taalkundige minderheid te beschouwen.