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On Boundaries and Areas in Local History Research

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Eilert Sundt

Linker Adresser Gunnar Thorvaldsen
Translated by Idar Thorvaldsen

"It has always seemed to me that close circumspection of space is absolutely necessary to the effect of isolated incident: it has the effect of a frame to a picture" Edgar Allan Poe, The Poems of Edgar Allan Poe (1882)"



Among the social sciences, history is characterised as the most particularising discipline - the discipline to the greatest extent studying the way definite actors, events and structures differ from time to time and place to place. A considerable part of Norwegian historical research deals with local areas, *kommuner* (municipalities), *fylker* (provinces) and other regions below the national level. This is true in part for history written as commissioned research for various administrative units, and in part for independent research at universities and colleges. In the first category the parish and city community histories are the most numerous, in the other we must first and foremost count the many local history post-graduate theses by students of history.

When the definite place plays such a central role as an object of research, it is important to pose some fundamental questions with regard to geographical delimitations: How shall the area of study be defined in relation to the surrounding area? And what criteria might be used to partition the selected area into smaller zones for more detailed study and comparison? These questions are closely related, particularly because an outer border in one work (for example a community study) can surface as internal boundaries in another (for example a province history). It is, therefore, more a matter of perspective than empirical reality when this article focuses more on the inward division into smaller zones rather than definition of the outer boundaries.

Criteria for the Placing of Boundaries

From a theoretical point of view, the boundaries can be viewed as a hierarchic division of an area into smaller units. This is most evident when one looks at administrative arrangements: The country is divided into provinces ⁽⁰⁾ (fylker), these are divided into municipalities (kommuner), which are again divided again into districts (bydeler/kretser). The divisions are made through a combination of political, administrative and juridical decisions. Previously, the decision-makers were mostly interested in whether the boundaries followed the physical division of the countryside along rivers, mountain ranges etc. Eventually, it became more common to use a greater range of functional criteria for the creation of boundaries: communications and other infrastructure, social and cultural divisions. At the same time, the advent of democracy has to a greater extent forced the authorities to listen to local opinion when settling boundary issues. In areas or periods with dictatorship, the authorities have more leeway, but still traditional divisions based on language, ethnicity, religion or other cultural and historical differences will be influential, so that the boundaries the authorities might regard as most functional cannot be used. The government of any country faces the time-honoured question of how many levels one needs in the administrative division of the country. With a flat structure and few levels the central level of government might experience problems assimilating all the information from the lower levels. An increase in the number of levels, on the other hand, will transfer power to the lowest levels, since the central agency no longer knows exactly who does what.²

Other divisions in regions or landscapes may to a greater or lesser extent cross the administrative divisions. In his *Handbok i lokalhistorie* (*Handbook of Local History*), Jørn Sandnes (1983) defines a district as larger than an (old) parish, and ascribes to this kind of area a social community. He perceives the region as a more unclear concept. In line with the first part of this definition, Harald Winge, the former head of the Norwegian Local History Institute, has defined a district as an area consisting of more than two municipalities. However, he is of the opinion that a region "has traits that are so fundamental or so conspicuous that the area, on the basis of these traits, may be demarcated from the surroundings". ³

Personally, I do not find distinguishing between regions and districts in such a fashion very useful. The divisions are, at any rate, made from a set of criteria perceived as more or less specific for each particular area. On the highest levels of the hierarchy there will usually be more and clearer criteria coinciding to divide the area from others. On the lowest levels of the area hierarchy there might be only one border-defining criterion, e.g. that the border of the municipality goes between and not through the farms defined by the land tax registers. At the same time, the low level criteria are less specific and stable, and the borders will therefore be changed more often than they will be on the higher levels. Before the great merging of municipalities from the 1960s, growing towns usually had parts of the neighbouring administrative provinces transferred to them, and the shifting of land register farms between municipalities was somewhat random. The criteria for the placing of borders come in many forms: Political and administrative decisions, the historical and ethnical composition of the population, language and dialects, natural formations etc. The connection between criteria and division might be unclear both regarding what it takes to define a border and what in each particular case is the cause and the effect. For example, the inhabitants of Bohuslän in Sweden spoke Norwegian well into the 19th century, a result of older divisions and without effect on the present-day borders. In the same way that administrative borders might be drawn up independently of geographic or demographic traits, it is possible to define relatively stable and homogenous regions without any relations to the administrative borders, e.g. the area around a lake, on both sides of a fjord or in a valley. Another type of division might be more historically conditioned, for example by the formation of unions, the development of infrastructure etc. Anyone who believes that communications only connect people should study the geographical and social divisions created by freeways in American cities.

Unlike Norwegian, English makes the distinction between the two concepts of *border* and *frontier*. While the first is represented by the thin, well-defined line on the map, the frontier is a borderland, a zone with few settlements, unclear delimitation and a loose connection to administrative institutions. Historically a frontier might be viewed as a transitional phenomenon in a phase where the area is colonised for the first time or is being taken over by new settlements. After a time, there will be drawn clearer borders through the area, and an administrative apparatus will be established. I will return to the task of defining borders in sparsely populated areas in Norway, since the idea of the frontier is stronger in the history of other nations.

A highly debated theoretical element is the hypothesis about a dominant mentality amongst the population of a particular territory. In part, it is alleged that mentalities are part of the factors delimiting and constituting a region, and partly that regional traits has created a particular mentality amongst the population. Most famous - and maybe disputed - is Turner's theory that conditions along the western, American frontier before the 20th century conditioned the especially liberal democracy of the US.⁴ Of a more unclear origin, but still extensive, are the conceptions like those of *hedmarkings* being slow, *trønders* sedate, *sørlendings* religious etc. In particular, older local history may contain corresponding assertions about the population on or below municipal level. More serious assertions about a particular mentality amongst the population is usually made on a regional level.

Attitudes as a background for stable party preferences in the different parts of Norway was one of social scientist Stein Rokkan's most important areas of research. He shows how obstinacy may be a common, popular trait. Under the headline: "A basic theme of Norwegian Politics:

Resistance to Central Authority" he discusses how the polarisation between the centre and the periphery shaped the Norwegian political party landscape. Most topical this is a central issue in the recently published *Northern-Norwegian Cultural History*: The population here is supposedly more obstinate than the population in the rest of the country. The regional differences seen in the referendums on EU-membership are partly used to support this hypothesis, partly the resistance is supposed to explain the results of the referendum. But the existence of these traits are not easy to show on a national level either, and to reconciliate with the *Cultural History's* emphasis on the diversity in this part of the country, or the way the socialists' share of the vote varied more in Northern than in Southern Norway. Rokkan viewed the special development in the north mainly as a result of broader opposition between the classes.

Mentalities have not been used much for the definite demarcation of boundaries in Norwegian local history studies. However, the administrative divisions create a foundation for a sense of identity which, especially in a democracy, will contribute to cement the borders, as seen in the debates about the merging of municipalities. An expression of this are the area and city histories that use past administrative divisions, as the case is with the three different book projects for parts of present-day Mandal. Contrarily, the new *History of the city of Tromsø* is based on the present-day municipality boundaries, something that undoubtedly contributes to the creation of a new Tromsø-identity crossing many differences between the "city"-districts. ⁹

Use of present-day boundaries

Both because of and despite of the rather drastic alterations in municipality boundaries, the four volume *History Tromsø City* is based on its present-day borders. The old town, the surrounding Tromsøysund municipality as well as parts of what was then Hillesøy, Lyngen and Karlsøy, is covered in the work and is to some degree treated separately when it comes to political and social history. Publishing different volumes for the different parts of the *municipality* was not a viable alternative, since several of the parts do not constitute meaningful localities. On the other hand, it's simple to find examples of how the comprehensive model caused extra work, e.g. with the sources.

In volume II¹⁰ Astri Andresen used the census microdata of 1801, 1865, 1875 and 1900 to reconstruct the present day boundaries of the municipality for her period. She has selected the data for the specific farms or places situated in the area that today is a part of Tromsø. These pieces are then put together so that the results become censuses covering the present-day Tromsø municipality. In contrast to the printed statistic from the Central Bureau of Statistics where the old boundaries were followed, she can thus make overviews of parts of the area or all of it. Thus, we can for the first time know how many people lived in today's Tromsø-area in 1801, the birthplaces of the inhabitants here according to the three other censuses etc. An extra effort is be made to show the ethnic composition of the population in connection with an analysis of the Sami areas in Hillesøy, Tromsøysund and Sørfjorden.

Thus, when facing changing borders, a common method is to delimit the area of study in light of the present-day situation. Also, in the history of Vadsø, Einar Niemi chooses to study "the entire area that is delimited by the present Vadsø municipality. He points out how this is a naturally delimited area, it has been a judicial district, and is uniform with respect to ethnic and industrial aspects. On the other hand, Vadsø has been part of Vardø parish and a wider trade region. There are also a couple of other reasons why one should back-project the present-day administrative divisions: The access to and the work with the sources might well be easier, the provenance principle decreeing that source material is to be organised by administrative divisions. In that regard, however, former divisions might be just as important as present ones. A pedagogical element should be given considerable weight; most readers are more familiar with current municipality boundaries than past ones. Finally, the financing of the project can be decisive; politicians and bureaucrats might experience difficulties defending the project if

the historical work covers areas outside their own municipality, or disregards areas in the municipality where the population feels the right to be included. The present-day borders might have the greatest legitimacy in politics, but this legitimacy should not without any further concerns be converted to a scientific reason for the choice of a research project. A discussion of the choice of region like the one Niemi does is imperative, but is often lacking in commissioned research reports.

The reduction in the number of Norwegian municipalities by nearly fifty percent of their maximum number, confirms the hypothesis that boundaries on such a low level in the hierarchy are not stable over time. One must require that local historians also consider other kinds of administrative divisions than present-day ones. The boundaries of parishes and other church districts, do not always relate simply to municipality boundaries. Neither do the boundaries of military districts or maritime districts. Judicial divisions into *tinglag* and bailiff-districts often deviate from the boundaries of municipalities and could be changed independently of the former. For example, Tjøme was transferred from Sandar to Nøtterøy *tinglag* in 1849 to make the area conform to the ecclesiastical division. ¹³ The boundaries of the provinces are more stable than the borders of the municipalities, but they too have been subject to change, sometimes when the *municipality*-boundaries have been changed. For example, a small area in Ofoten has belonged at times to Troms province, and at other times to Nordland province.

When the need arises to divide the area of study into smaller units, the administrative boundaries might be less well suited. Certainly, it might sometimes be natural to deal with each parish separately if the municipality has consisted of several of these. Or, when dealing with a large, merged municipality, one can distinguish between the different municipalities it was once made up of. Such divisions are to be found in a number of local historical studies, cf respectively Ståle Dyrvik's *Etnesoge* and Nils Kolle's *The History of Bømlo* for details. ¹⁴ When such a division is less well suited, it might be because one lacks traditional, internal divisions, because the internal boundaries have changed several times, or the alterations made to the boundaries are so radical that one is left with parts of areas that won't seem natural to treat as distinct units. As I will discuss later, a similar problem emerges when dividing a province: What municipal division should be chosen? The one with most municipalities, the one with the fewest, or something in between?

How did the boundaries originate?

The Norwegian province and municipality boundaries and other administrative divisions are the results of a long historical development. In contrast to North America it is unusual to simply decide on a high level that the boundaries are to follow degrees of latitude or longitude. Neither are ethnic or linguistic differences very important for the placing of boundaries. The transition between dialects is gradual, and only a few municipalities in the northernmost province of Finnmark have a dominant Sami population. It is striking how little the national and province borders have changed in the last few centuries, while the municipal division has seen extensive changes.

Iif examined over a greater period of time, however, more changes can also be found on the higher levels. The regional division into provinces originated in 1671 when Denmark-Norway was divided into *amts*. The 18th century also saw somewhat drastic changes: Buskerud and Opplandene in the south-east were separated from Akershus *amt* in 1767, and Opplandene were separated from Hedmark in 1781. Bergenhus and Trondhjem's *amts* were split in two in 1763 and 1804 respectively. Troms was transferred from Nordlandene to Finnmark in 1787 and made into a separate *amt* in 1866. The modern concept *fylke* for province dates back to 1918, and has nothing in common with the medieval province units of the same name.

The division into *amt*s is based on the older division into *lens* and might consist of a collection of smaller *lens* into one *amt*, as can be seen in the old name "Smaalenene", for the province of Østfold. The example of Agder, a landscape name

of unknown origin, shows us a complicated boundary history before 1660. The area was subsequently divided into Vest-Agder (aka. Nord-Agder), Aust-Agder, Råbyggelaget and Midsyslet (aka. Mandal's *len*). Also, Agder is well suited to show the changing division of regional parts of the country, as the Agder provinces were seen as part of Western Norway until the author Vilhelm Krag came up with its new name Sørlandet (South Norway). This last is in turn a landscape name without any clear borders. ¹⁶ The only thing certain is that it is connected to the coast, but can sometimes be stretched all the way into Vestfold province. While the changing of the regional boundaries previously was rather extensive, democratic Norway has scarcely seen regional boundary changes.

In an article from 1936 Per Tang accounts for the Norwegian Geographical Survey and other public institutions' involvement in the settling of municipal boundaries. Traditionally, the Department of the Interior was responsible for borders, but in1903 such cases were transferred to the Department of Justice. The basis is usually the land register of main farms and their boundaries, only exceptionally a farm is divided between two municipalities. When dealing with home fields, the boundaries of the farm are usually clear, but the examination of court records and registers of mortgages in the state archives can lead to changes because details may have been forgotten. This is all the more true in outlying fields - Norway also had true frontier borderlands for a long time, especially in Northern Norway. In woodlands boundary lanes will grow over and changed ownership may make the boundaries unclear. In the mountains, the distribution of commons and co-ownership sections between municipalities and provinces were undefined far into the 19th century. In that regard, the enclosure movement was significant. As a part of the fixing of the boundaries of farms the superior administrative boundaries became clearer. In our century the work with the borders has continued in the highest parts of the mountains. The purpose is to determine on the basis of the archives in what places the boundary deviates from the natural, that is, the drainage divide or the ridge.

The Law of local democracy (formannskap-law) of 1837 based the administrative division of the municipalities on the old ecclesiastical divisions into parishes and church districts (prestegjeld and prestesogn), with certain exceptions. (Only the definite boundaries of the towns are determined by law.) Accordingly, there was not much practical help in the legal framework or the preliminary work for the surveyors. They still had to base their work on old maps and boundary descriptions, and align these using other sources critically. Especially where no certain boundaries existed or where there was cause for doubt, people who knew the locality were used. The survey regularly sent suggestions for the boundaries to the mayors in the affected municipalities and were under instruction to listen to people who knew the area on both sides of the boundary. However, one did not have the resources to stake the frontiers with locals out in the field, or to make a systematic examination of the relevant archives. The established boundaries could never become completely certain, and borders were regularly revised on the basis of new information.

The work of defining the boundaries was intensified in connection with the composition of Helland's description of the *amts* in *The Country and People of Norway* from 1876 to 1916. The first "universal part" contains for each *amt* passages on location, internal divisions and boundaries, where the ecclesiastic, judicial, military and customs-related division is examined along with a historical overview of alterations to boundaries. However, only the boundaries of the *amts* are described in any detail. The survey had a lively correspondence with priests, *lensmenn* (sheriffs) and mayors, where a series of uncertain boundaries were established. Many of the decisions must still be characterised as questimates without fieldwork. After 1916 the provinces of Finnmark and Troms were also examined. ¹⁷ In addition, the regional archives have reported the boundaries they have found in connection with other examination of various archive records.

The administrative boundaries we are left with have three main sources. Firstly, they have been settled by surveyors working in the field. Secondly, they have been established by the Norwegian Geographic Survey after corresponding with people who know the local area. And thirdly, the boundaries are regulated on the basis of various maps and documents that are located in the archives. In all cases there is room for individual judgement, a judgement the local historian should be critical towards. Where there is cause for doubt, it is natural that a discussion of the outer and inner boundaries becomes a part of local historical works. If the historian combines his locality knowledge and insight into the sources with modern tools like economic maps and aerial photography, she could make important contributions towards exposing both the present-day boundaries and their historical background.

The division of a municipality into lesser parts

In connection with micro-studies and as a basis for comparison, it is necessary to divide the area of study into lesser units. Here the commissioned researcher will have more freedom than

when deciding on the external boundaries of the inquiry, and there are several alternative solutions. In his recent volume III of the history of Oslo, *The divided city*, Knut Kjeldstadli discusses several ways of dividing Kristiania. The division between east and west is fundamental, but problems arise as soon as the different districts of the city are to be placed. Particular city districts emerge and then disappear after a short period, others are placed at different locations by different observers; far from everyone agreed with the author Oscar Braathen when he said that the district of Sagene lay east of the river Akerselva, for example.

It is precisely the location of Sagene that is discussed in-depth in Jan Myhre's graduate thesis as part of the Kristiania project. ¹⁸ There, he combines a series of different criteria to define his object of study: First, the opinion of the people of Sagene, secondly unsettled fields, further, the town boundary, some streets and the boundary of one of the land register main farms. The zoning of the brick building requirement is mentioned as some of the background for the origin of of the district, but is not used as the formal geographical demarcation. He is unclear as to why some historical informers' information is preferred in preference to others, and admits that the town boundary is chosen because of source-related reasons; the census of 1875 was only data processed for the city itself. Even though his division is not unassailable, it is a good example of how a clear demarcation is possible inside the area of a municipality.

Kjeldstadli broadens this discussion in a more fundamental article on the delimitation of the present city districts in Oslo. He singles out five factors that may have contributed to the formation of the city districts: boundaries, names, local institutions, administrative divisions and social conditions. Excepting the last factor, I feel that it is hard to say what comes first, as the other elements are just as much consequences of as conditions for the formation of city districts. Therefore, it is all the more opportune when the author points out the unfortunate aspects of the lack of continuity between old and new ways of dividing the capital into districts.

Using the census wards

Although separate administrative entities for many years, the *History of Balsfjord and Malangen*²⁰ is treated by Anders Ole Hauglid as a joint history project, and he therefore follows the present-day municipal boundaries. He does this in spite of the fact that the area was made up of two municipalities during most of the period he deals with. As is usual in community studies, the municipal politics of the two parts must to some extent be dealt with separately. A more exceptional feature is Hauglid's attempt to penetrate the history of each particular wards within the double municipality. The basis for this is the machine-readable version of the nominative censuses of 1865 and 1900. In the chapter "Ethnic diversity in a multi-cultural society" the census of 1865 is the main source along with Friis' ethnographic maps from 1860. Hauglid examines census ward after census ward in an attempt to map settlement patterns, the distribution between Norwegians, Sami and persons of Finnish stock and their kinship relations. He puts little effort into aggregating the data sets. Instead, much of the material becomes sheer reeling-off of the contents of the census, with only glimpses of complementary information and explanations.

The snapshot he makes of the 1860s is not comparable to that which he makes in the chapter "The exploitation of resources and occupations in the year 1900". The ward boundaries were different for the census that year, and the author does not attempt to make any consistent division of the municipality over a period of time. Additionally, he is now more interested in the trades and industry of the population. Even though the diversity inside the municipal boundaries is shown both in regard to ethnicity as well as trades and industry, the description is somewhat kaleidoscopic, and we have few opportunities to see how the industries and the composition of the population in the different constituencies evolved over time.

With the Ward database (*kretsdatabanken*) the Norwegian Social Science Data Services made such information far more accessible for research. Unfortunately, the database only covers the

post-war period, based on the decennial censuses from 1950 to 1980. The information is of the kind we are used to seeing in the official statistics from the censuses on the municipality level. That is, the composition of the population divided into sex and age, industry and employment, religion and language, house and residence. The number of variables ranges from 60 in 1950 to over 500 in the last two censuses. Originally the census wards only had a purely practical function in distributing the work to the different census takers. After a while, however, they have been given the added function of being units of analysis. This has led to, among other things, that Statistics Norway has moved the boundaries of the census wards in order to have more meaningful areas when compiling statistics, e.g. by distinguishing between urban and rural areas. This has had the side-effect of making data from the wards incomparable over time. To some extent this has been remedied by re-aggregating the information from the 1960 census by using the boundaries of the census of 1970. Data on the ward level is therefore completely comparable in regard to geographical areas in the beginning and ending of the 1960s.

When using ward data from the censuses of 1950 and 1980, the local historian must in each case evaluate to what extent the boundaries have changed and how suitable this division is when dividing the area of study. Often, the ward boundaries will follow former administrative divisions, and so one might have an overview of the composition of the population in, for instance, municipalities that have been merged or in various parishes. Where the boundaries are completely incomparable over time, the constituency data might still give a more nuanced image of internal differences in the area of study, and with far less effort than working with data about the main farm units. A pedagogical point is that map coordinates for each ward's focal point of population have been established for the censuses of 1960 and 1970, making it comparatively easy to draw maps of how the population was distributed with regard to different characteristics. In 1990 only a sample households was investigated for the census. Instead, for the period 1987-1993 the Ward database contains yearly, simple numbers for the population distributed by sex and age based on numbers from the national population register. After a while this time series will give local historians a better grip on the short-term variations in the population.

Data on individuals has not been made public and available for research as far as this into the twentieth century. This causes problems such as the increased risk of ecological fallacies, as we have no way of combining the variables being examined at the individual level. On that basis, we should demand that Statistics Norway makes public anonymized, random samples from the latest censuses, and preferably also from the national population register. This would make for a more reliable basis when investigating local communities, and let historians and other social scientists be more unrestricted in their choice of the area of study.

In *The History of Sandefjord* Finn Olstad divides Sandar municipality, which used to surround that town, into an outer and an inner part.²¹ His purpose is to investigate any differences as to what trades and industries employed people in separate parts of the municipality. The workforce was divided into different sectors by the main occupation listed in the 1900 census. About half were employed in the primary industries, mainly agriculture, in the inner part of the municipality, while this was only true for about a fourth of the population in the outer part, which was closer to the coast. In this area the population compensated by partaking in maritime trades to a greater extent.

Olstad remarks that the divide between the inner and outer parts of the municipality was drawn on the basis of the census wards, and therefore "only approximately reflect the actual situation". His main problem is that the ward boundaries follow no such divide, they rather extend from the coast into the inland areas. Another problem is that the definition of what outer and inner areas are is difficult to explain; few readers know the ward division of 1900. If Olstad

had tried to compare the distribution of workers to trades over time, he would have encountered a further problem. In the next or previous census the ward boundaries were different, so that other farms and places would be part of the 1900 census wards.

Since there are problems associated with both gathering the census constituencies in homogenous groups and explaining such divisions of the municipality in question for the readers, there is every reason to consider alternative criteria when defining boundaries within a municipality. One possibility is to use the current administrative division. The school districts mostly coincide with the election districts, and these should therefore be known to people, whether or not they have children of school age. In some cases the present-day boundaries coincide with old divisions, but often the ward boundaries have changed because of new schools being built or new means of transport. Therefore, the current administrative divisions might be difficult to relate to the historical situation, while differing school districts for the different school types make them harder for the readers to understand.

Non-administrative divisions

It is relatively easy to communicate divisions based on pure topological criteria, e g zones at a certain distance from the coast or concentric circles around the central point of the municipality, but such divisions have a more or less arbitrary impression depending on the shape of the landscape. A series of migration historians, most notably the Swedish geographer Torsten Hägerstrand have used circles to show the relation between the number of migrants and distance moved. However, this technique produces better results on plains than in areas where the migrants have to cross forests or mountains.

Geometrical divisions are connected neither to past nor present administrative divisions. Therefore, access to units below the ward level (farms, streets etc) is a precondition. Such divisions will need extra work in order to be implemented, but a local historian should know his area well enough that this should not be a decisive hindrance. It is more important to note, however, that divisions based on distance criteria will as a rule not follow well known topographical landmarks in the area. We must consider divisions between cultural landscapes and natural landscapes, or between urbanised and rural areas. Ranges of hills, rivers, lines of communication etc. create a basis for drawing boundaries which one can follow both in the terrain and on the map. Several of these topographical landmarks are stable over time, and are therefore natural divisions both from a historical and from a pedagogical objective.

An alternative division of Sandefjord

If we now return to Sandefjord, is it possible to find such topographical divisions in this flat rural district? There are neither mountains nor forests splitting this local community. Two or three fjords cut into the municipality, but these are easy to cross and have rather united than separated the peninsulas and islands. Apart from the sea, the range of hills along the Vestfold moraine is the most obvious topographical division. This end moraine from the previous ice age divides the municipality into a north-oriented and a south-oriented part. It should be noted that the moraine has always been a travel artery, and furthered rather than hindered communication along its top. But the conditions for agriculture and the distance to the sea must have been to the advantage of the south-oriented area, while the north-oriented area had better access to forests. The moraine is a valid divide for all historic periods and is easy to relate to even for someone who knows the municipality superficially. The question, though, is if it might not be too far from the sea (over 3 km) for it to function as a divide between the hamlets truly close to the coast and the inland. In that regard another boundary might be suited: the railway line through the municipality. This has only been a divide in the 20th century, but it is built in an approximately constant distance from the coast. (This is no coincidence, as strategic motives made a railway line too close to the coast vulnerable to attack from hostile naval vessels.)

Below, I shall attempt to divide Sandefjord into three parts in such a fashion: A zone close to the coast, an inland zone north and west of *Raveien* (the former E18 main road) and a middle zone between this road on the moraine and the railway. The placement of the town is unproblematic: it was situated in the coastal zone. The former municipality of Sandar is more problematic, as most census wards lie in more than one zone, while no ward is divided across all three of our new zones. This shows that Olstad's division to some extent meets the criteria of census wards close to the coast, but that on the other hand it is easy to find wards stretching several miles along the coast/inland dimension. The starting point for operationalizing the division is a list with information from the census of 1875, containing microdata from the front pages of the census forms, that is, farm and place names and usually land register and serial numbers. The census takers largely followed the land register when working in the field, and therefore the forms are archived in an approximately topographical order. Thus, we do not have to deal with one farm after the other, but we may instead decide what zone a cohesive group of farms belongs to.

Based on maps, old community studies and local knowledge, most farms and localities are easy to put in place. Cases of doubt occur for three reasons. A few place names of the type "Aldersro" could not be identified. Other names are ambiguous, since the same farm name may exist in two locations in the municipality, and designations such as "eastern" or "western" may be missing in the census. The most important problem, however, is that our zone boundaries will split some land register farms. Here I have followed the rule of cohesiveness when in doubt, since the census takers usually dealt with the hamlets and neighbourhoods contiguously.

The 1875 census for Sandar lists ten wards. Two of these could be completely placed in the coastal zone, while a third ward almost completely was located here. Only the Unneberg-area, which lies just north of the railroad, had to be placed in the middle zone. Here, the railway line has probably split an old neighbourhood. Four wards are distributed more evenly between the coastal and the middle zones, while the remaining three constituencies lie in both the middle and the inland zone. The focal point of the population is clearly the coastal zone, where somewhat more than half the inhabitants resided in 1875. 28% lived in the middle zone, while 18% belonged to the inland zone. If we add the town population (almost two and a half thousand people) of Sandefjord, this distribution tips even more in the favour of the coast. It is not easy to calculate the respective area size of the three zones, but they do not differ so much that it is not clear that the coastal zone is obviously the one most densely populated, followed by the middle zone.

A thorough analysis of the population's composition in each of the three zones lies beyond the scope of this article. I shall only include the following little table, which shows that, as expected, the portion of the population connected to seafaring was greatest in the coastal zone. However, a significant part of the population also had maritime work in the other two zones, and there was little difference between them. Distance to the sea was not an entirely decisive factor for sailors, but either the chance of choosing such a profession was greater for those who lived close to the sea, or seamen tended to move towards the coast. In addition, there was a certain tendency for people from the coastal zone to hold higher positions on ships. We know that at the same time there was an extensive relocation of ship's officers to the town centre. This, along with the fact that the transition from zone to zone was not gradual, might indicate that the predominance of sailors in the coastal zone was a result of moving. People further into the municipality compensated with agriculture, as well as crafts in the middle zone. A corresponding division of the municipality on the basis of the census lists of the year 1900 would create the foundation for showing to what extent the composition of the population changed over time.

Table 1: The population in three parts of Sandar municipality in 1875, after their connection to seafaring. Relative numbers.

In a study of town and village growth in Grenland, Telemark, the geographer Jens Chr. Hansen has used a similar zone division based on the 440 land register farms in the area. ²² The basic data consist of population numbers from each of the farms according to the four censuses 1875, 1910, 1950 and 1960. Until 1964, the Grenland region contained ten municipalities with differing sizes and commercial characteristics. Hansen shows that an analysis of the village growth based on municipal data gives a rather rough picture, because the municipalities are different and because the development in one part of the municipality may be neutralised by developments in other parts of the same municipality. A division into census constituencies might be detailed enough, but the many boundary changes create a weak basis for comparison. The boundaries of the land register farms, on the other hand, have been almost constant throughout the entire period, and allows a division of the area into 41 stable zones. Since the purpose is to explain the modern settlement pattern, the zones are defined by using the population, land usage and settlement of the 1960s.

A last division method developed by geographers is based on the so-called Geo data system. This disregards the complicated boundaries for administrative or economical units completely. Instead, a grid divides the landscape, e.g. in the way we see on the Norwegian Map Services' series in 1:50000 scale, the so-called *gradteig* maps. Each square on the map is given certain characteristics based on the amount of population, type of settlement, types of employment etc. This creates a basis for the definition of area types such as villages surrounding a commuting area or quantitative analyses where one attempts to explain, among other things, the development of the population size over time. The division of the map itself is simple, but the topographical distribution of the variables is often somewhat arbitrary. For example, where does the population of a land register farm belong when the farm fills two or three map squares?

Adjustment of the municipal boundaries

Thus, divisions based on the geo data system's grid, concentric circles or homogenous zones can be used to divide municipalities, regions or entire countries. In national analyses social scientists and historians have usually employed the municipality as a unit when different regions are compared. This is because the municipal level is seen as less random and more pedagogical than other divisions, and a large amount of statistics and other information are easily available on the municipal level. The problem of the constant changing of municipal borders must still be solved if we wish to use such data sets for comparison over time.

A standard solution is integrated in the Municipal database of the Norwegian Social Science Data Services, containing a growing number of variables about Norwegian municipalities from 1769 and onwards. By extracting a time series, researchers can request that the municipal boundaries are to be standardised to a certain point in time. The software will then conduct a proportional distribution of the population affected by the municipal changes in the period studied. This process can be made clearer through an example from election studies. For the sake of simplicity we shall use only two municipalities and two parties. Let us assume that a small area containing 100 people was transferred from Fjord to Fjell in 1935 and that we want to study the development of the number of votes from 1933 to 1936. If the area transferred was an electoral constituency, one could have found numbers for the different parties in this constituency, but this possibility is not built into the Municipal database. Instead we have to be content with assuming that the votes from the 100 were distributed in the same way the votes were distributed in the entire municipality. If party A received 70% and party H received 30% in Fjord in 1933, the program adds 70 A-votes and 30 H-votes to the election result in Fjell in 1933 before we compare with 1936. This is obviously a gross approximation. Often, the votes probably have been different in the transferred area, e.g. because of a different employment structure than in the rest of Fjord municipality. Consideration of occupations, age structure etc.

is, however, not incorporated into the Municipal data base algorithms. If we want greater precision, we can use constituency data for the last decades (see above) or for some variables base our research on standardised municipal units created by letting each municipality contain the same land register farms over time.

Identical division of a province over time - the example of Troms²³

Ideally, one should study phenomena like population movement in relation to the smallest unit, that is, to the farm or the house. This is, however, difficult, since the census only reports place of birth on the municipal level. Only occasionally do the censuses report what farm, address people are born on. In the period from 1865 to 1900 we find greater and lesser changes in the municipal division of Troms province. It is evident that when studying the composition of the population in the individual municipalities over time, this will cause problems. An important condition when studying population movement or migration for instance, is to create a general regionalisation of the province over time.

The census of 1865 is reported for the following thirteen parishes in the province: Kvæfjord, Trondenes, Ibestad, Målselv, Tranøy, Berg, Lenvik, Balsfjord, Tromsø, Tromsøysund, Karlsøy, Lyngen and Skjervøy. This is the ecclesiastical division of the province, which was turned into municipalities in 1837. Other censuses have a somewhat different division, both because they used municipalities as units, because the number of municipalities increased and because there were other boundary changes. In Trondenes, which included present-day Skanland, the neighbouring municipality of Bjarkøy was included in 1865. Ibestad parish also included Gratangen, Lavangen and Salangen. Bardu was a separate municipality from 1855, but is merged with Målselv so that the 1865 census states the birthplace as Målselv for all those born in the parish. If I did not merge Målselv and Bardu, it would still be impossible to say who was born in Bardu, and who was born in the neighbouring municipality Målselv. Tranøy also included the municipalities of Sørreisa and Dyrøy , while the municipality of Berg consisted of the present-day Berg and Torsken. Balsfjord also included, then as now, the former municipality of Malangen. The contemporary municipality of Lyngen also included Storfjord and Kåfjord, while Nordreisa and Kvænangen were part of Skjervøy. (Kvænangen was a separate unit in the census of 1875, while Nordreisa became a separate municipality from 1886). We see that the parish and municipal units in some cases cover the same geographical area, while some parishes consist of several municipalities. The fact that comparison of birthplaces over time is important, forces us in conclusion to use the rough parish division found in 1865.

The smaller areas, which never were administrative units, but transferred from one municipality to another in the period from 1865 to 1900 must also be handled. Let us start with an example: In *The Official Statistics of Norway* the population number of the municipality of Karlsøy is stated as 2763 individuals in 1865, while the same source for 1875 only gives the population as 2162. The explanation is not massive emigration, but that the area around the inner part of Sørfjorden in 1867 was transferred from Karlsøy to Lyngen municipality. This is, however, not mentioned in connection with the tables. Such municipal changes will result in two types of error if we do not take precautions when dealing with the sources. The first is that the same people can be found in different municipalities in different censuses even though they lived in the same place, so that we overestimate the number of migratory movements from one census to another.

The other problem that might fool us is the entry for the birthplace of an individual. Often the census takers wrote nothing in the birthplace column. When coding, we have interpreted this as the place of birth and habitation being identical. When we transfer people from one municipality to another to compensate for changes in the municipalities we must be certain to change their place of birth in accordingly. The individuals we transferred from Karlsøy to Lyngen in 1865 have therefore been given the birthplace Lyngen, if nothing else is indicated. (The smaller source of error, that persons who are born in the outer part of Sørfjorden but have later moved to the

inner part, will not be counted, we must simply tolerate.)²⁶ If we did not change the places of birth in accordance with the place of residence, this source of error would also cause overestimation of the migratory movement between the municipalities.

In 1873 the northern part of the Malang peninsula was transferred from Balsfjord to Tromsøysund municipality by adjustment of the municipal boundaries. This area is in my standardised division already transferred to Tromsøysund from 1865 onwards. The same thing is true for the Navaren farms on Målsneset. These belonged to Lenvik in the census of 1865, but are moved to Målselv in order to conform with the censuses of 1875 and $1900.^{27}$ In 1891 the municipal boundary was altered so that the Målsnes farms became a part of Malangen instead of Målselv municipality, but I have kept them in Målselv throughout the century. The transfer of the inner part of Sørfjorden from Karlsøy in the 1865 census to compensate for the municipal alterations in 1867 we have already used as an example. In practice, the changes were made by me going into the machine-readable editions of the census of 1865, moving the person and farm entries from one file to another. This had to be done both for the full text and the encoded versions of the censuses. The work was done on the basis of information from the Norwegian Social Science Data Service (NSD), maps, and by comparing lists with farm names and land register numbers for the different municipalities in each of the census years. This is some of the background for my choice of not creating a more detailed division, e.g. the one used in 1900 when the province was divided into 23 municipalities. This division could in principle have been made in the censuses of 1875 and 1865 since we have data on the individual and farm level. But such a new division with the movement of individuals and farms for an entire province is very time-consuming done in the way the process is described above. And the main problem is that the place of birth is given on the municipal level that was used in that specific census year. When people in the Malang part of the municipality of Balsfjord in 1865 state their place of birth as Balsfjord, this probably means that they are born in Malangen, but we cannot be certain.

Whatever municipal concept we employ, it may affect the results that the units have different dimensions in regard to population and area, where the smallest municipality is Berg, with 810 inhabitants in 1865, while the largest is Ibestad, with 5681 inhabitants and a larger territory. The degree of immigration may be affected by the municipality's area and the size of its population, when we define migration as the passing of municipal boundaries. The less space between the municipal borders, the more likely it is that they will be passed in connection with migration.

Conclusion

The use of administrative boundaries in historical research has also been criticised on a more principle basis: "Bureaucracies first produce definitions to serve their own purpose. Economists come along later to rationalise the definitions." How fruitful are then the administrative divisions for historians? As we have seen, the answer will depend both on the specific area and on the research questions under examination. In some cases, as the division between the town Tromsø and the surrounding Tromsøsund municipality, the boundary runs through densely populated areas. Here the significance of short movements between town and countryside is easily overestimated. I will, however, contend that the area boundaries in large parts of Norway follow the topography and define natural and stable areas to a greater extent than in many other countries. The Norwegian municipalities have been larger, with more natural boundaries than most other areas in Europe. The problem of arbitrary and/or random boundaries is far more prominent on the plains.

Nonetheless, a Norwegian local historians should consider alternate ways of delimiting his area. The outer boundaries for the area of study may be defined by the limits of his project from the start, but the historian would be wise to discuss the boundaries - both in the book committee and in the text. The history of the boundaries are at any rate an important part of the history of

any local community, and the changing geographical framework around the area of study is a part of the legitimacy of the research project. When the area is to be divided for close studies and comparisons of its constituent parts, the historian will be freer to choose criteria for the placing of boundaries. The significance of the boundaries in that regard are seen clearly by their relation to the levels of analysis Sivert Langholm has described in the article "On the Scope of Micro History".²⁹

Notes

* This article was originally published in Norwegian in Kjeldstadli et al (eds) *Valg og vitenskap*. *Festskrift til Sivert Langholm*. Oslo 1997.

⁰ The Norwegian word fylke has been translated into province rather than the more usual county, since both British and US counties are smaller than the twenty Norwegian *fylker*. They are more similar to the Canadian provinces.

¹From this follows my inclusive definition of Norwegian local history: All studies of areas below the national level. Regional studies are therefore a special case of local history, and they are a natural part of the Norwegian Local History Institute's area of responsibility. We do not have to differentiate between local and regional history according to the size of the municipality. For the history of individual municipalities the terms city or parish history are satisfactory.

²The continuous change of boundaries and borders can also be used as a "divide and conquer" weapon against the subjects of a ruler. Martin Ira Glassner: *Political Geography*, New York 1993, p.144f

³Harald Winge: "Regionen i norsk lokalhistorie". Paper at *The Norwegian History Days* in Bergen, June 1996. With bibliography of district-historical works.

⁴Frederick Jackson Turner: "*The Significance of the Frontier in American History and Other Essays*". New York 1994, lecture originally held 1893. Ottar Brox has introduced a similar Northern Norwegian thesis of a frontier with free access to the resources of the sea halfway into our century, which is refuted by a number of historians.

⁵Stein Rokkan: "Geografi, religion og samfunnsklasse: Kryssende konfliktlinjer i norsk politikk". In:Stein Rokkan: *Stat, Nasjon, klasse.* Rokkan's center-periphery model has been modified by Sivert Langholm: "On the Concept of Center and Periphery", *Journal of Peace Research*, 1971, p. 273-278. For more on historically conditioned regional differences in the US, see E D Ayers et al. Ed.): *All over the Map: Rethinking American Regions.* Baltimore 1996.

⁶Einar-Arne Drivenes et al. (ed.): *Nordnorsk Kulturhistorie I-II,* Oslo 1994

⁷Cf chapter 7 in Gunnar Thorvaldsen: *Databehandling for Historikere* (1999)

⁸Rokkan, ibid p. 162

⁹Jan Eivind Myhre: "Verdien av lokalhistorie. Lokalhistorien mellom bevisstgjøring matnytte." *Heimen* 1994/4, p. 228. My thanks to this author for useful comments on my article.

¹⁰Astri Andresen: *Tromsø gjennom 1000 år. Handelsfolk og fiskerbønder 1794-1900.* The municipality of Tromsø 1994.

¹¹Einar Niemi: Vadsøs historie vol. I, Vadsø 1983, p. 21ff

¹²Harald Winge, ibid.

- ¹³"Jurisdiksjonsforandringer & C." Copy of protocol from Olaf Rygh's private archive, the National Archive. Earlier, Tjøme had shared bailiff with Sandar and priest with Nøtterøy, a reminiscence from the *lensmann*-division from before 1660, when Tjøme belonged to Vestfold's southern county. Another example: Sandefjord maritime district extended from Bogen to Ula throughout the 19th century, and therefore included parts of the municipalities Stokke and Tjølling. On *soldatlegder*, cf Harald Hals: "Akershus gjennom tidene". In: H. Chr. Mamen (ed.): *Akershus*, Oslo 1981, p. 214f. My thanks to senior archivist Jørgen Marthinsen for useful references.
- ¹⁴Ståle Dyrvik: *Etnesoga, vol. III and IV*, The municipality of Etne 1995. Nils Kolle: *Bømlo bygdebok vol IV*, Bømlo 1973. These works are also examples showing how both family history and community history can be begun in this way.
- ¹⁵Hans Kr. Eriksen: "Troms gjennom tidene." In: Ivan Kristoffersen (ed.): *Troms*, Oslo 1979. For more details, see the article "Amt" in *Historisk Leksikon*.
- ¹⁶Andreas Vevstad: "Agder". In: Alv Kristiansen (ed.): *Agder*, Oslo 1975.
- 17 King Karl Johan was the first that had the national border towards Russia staked up.
- ¹⁸Jan Myhre: *Sagene En arbeiderforstad befolkes* 1801-1875. Oslo 1978, post-graduate thesis 1976.
- ¹⁹Knut Kjeldstadli: "Hva er en bydel". *St. Hallvard* 1987/2. Reprinted as chapter 14 in Kjeldstadli and Myhre: *Oslo spenningenes by. Oslohistorie.* Oslo 1995.
- ²⁰Anders Ole Hauglid: *Balsfjord og Malangens historie* 1830-1920. *Vol. II: Fram mot økt sjølstyre.* The municipality of Balsfjord 1991.
- ²¹Finn Olstad: Sandefjords historie, vol. I, Sandefjord 1995, p. 98
- ²²Jens Chr. Hansen: "Urbaniseringen av landsbygden". In: Fladby and Imsen (ed.): *Lokalhistorie* fra gard til tettsted. Oslo 1974.
- ²³These paragraphs are based on my thesis on geographical mobility in Troms. The University of Tromsø 1995.
- ²⁴Brosveet, Olaussen and Sande: *Kommuneendringer 1838-1978. Del 2: Koeffisienter og endringstall.* NSD-report no. 27.
- ²⁵See NOS C no.1 table no. 5 for the 1875 census.
- ²⁶In the 1865 census for Karlsøy "Sørfjorden" is listed as the birthplace for those resident and born there. These have initially been given the municipal code for the municipality of Ullsfjord. In analyses this has been translated to Lyngen for the inner part and Karlsøy for the outer part.
- ²⁷This is not documented as a municipal change with NSD and may be due to error on the part of the census takers in 1865.
- ²⁸Charles Tilly: "Migration in Modern European History": In: Sundin & Söderlund: *Time, Space and Man. Essays on Microdemography.* Umeå 1979, p. 175-198.
- ²⁹Scandinavian Journal of History, vol I, page 1.

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