# WAVING THE MAP FOR NATIONAL IDENTITY: HOW CARTOGRAPHY IN NORWAY AND SWEDEN WAS USED AS A NATION-BUILDING TOOL IN THE EIGHTEENTH AND NINETEENTH CENTURIES

ANNE CHRISTINE LIEN

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Summary: Cartography has for centuries been used as a political instrument to support national pride, impact and influence, whether through use of a national prime meridian or local toponyms, the emphasising of the country's extent through colour, or the underlining and even distorting of its position and size through projection. In Scandinavia, the eighteenth and nineteenth centuries were times of upheaval, during which regions changed political affiliation and nations formed shifting political unions. Norway had not been an independent nation since 1380, but by the turn of the nineteenth century, Norwegian national consciousness was emerging, in parallel with the rise of ideas about the national state in the rest of Europe. The purpose of this paper is to examine whether and how the rising focus on national identity in Norway was nurtured through cartography during the final decades of the union with Denmark (1380-1814) and the first decades of the new union with Sweden from 1814 (-1905). A further aim has been to consider how Sweden, as the senior union partner, might similarly have used cartography to keep the union together as a unity, in opposition to the Norwegian national selfassertion. A selection of Scandinavian maps from the late eighteenth century and throughout the nineteenth century have been analysed with a focus on cartographic elements with potential impact on national identity. The main results indicate that both Norwegian and Swedish maps of that time may have been used as instruments of political influence. The use of cartographic elements on the analysed maps in general seem to have strengthened Swedish hegemony on one side and Norwegian nationalism on the other side, thus reinforcing the political division of Scandinavia still seen today.

Zusammenfassung: Kartographie wurde jahrhundertelang als politisches Instrument eingesetzt, um den Nationalstolz und die Wirkung und den Einfluss zu unterstützen, sei es durch die Verwendung eines nationalen Nullmeridians oder lokaler Toponyme, die Hervorhebung der Ausdehnung des Landes durch Farbe oder die Unterstreichung und sogar Verzerrung seiner Position und Größe durch die gewählte Projektion. In Skandinavien waren das achtzehnte und neunzehnte Jahrhundert Zeiten des Umbruchs, in denen Regionen ihre politische Zugehörigkeit wechselten und Nationen alternierende politische Zusammenschlüsse bildeten. Norwegen war seit 1380 keine unabhängige Nation mehr, aber um die Wende zum 19. Jahrhundert entwickelte sich ein norwegisches Nationalbewusstsein, parallel zum Aufkommen von Ideen über den Nationalstaat im übrigen Europa. In diesem Beitrag soll untersucht werden, ob und wie die zunehmende Konzentration auf die nationale Identität in Norwegen durch die Kartographie in den letzten Jahrzehnten der Union mit Dänemark (1380-1814) und in den ersten Jahrzehnten der neuen Union mit Schweden ab 1814 (-1905) gefördert wurde. Ein weiteres Ziel ist es, zu untersuchen, wie Schweden als dominierender Unionspartner die Kartographie in ähnlicher Weise genutzt haben könnte, um die Union als Einheit zusammenzuhalten, im Gegensatz zur norwegischen nationalen Selbstbehauptung. Eine Auswahl skandinavischer Karten aus dem späten 18. und dem gesamten 19. Jahrhundert wurde analysiert, wobei der Schwerpunkt auf kartographischen Elementen mit potenziellem Einfluss auf die nationale Identität lag. Die wichtigsten Ergebnisse deuten darauf hin, dass sowohl norwegische als auch schwedische Karten aus dieser Zeit als Instrumente der politischen Einflussnahme genutzt wurden. Die Verwendung kartographischer Elemente auf den untersuchten Karten scheint im Allgemeinen die schwedische Hegemonie auf der einen und den norwegischen Nationalismus auf der anderen Seite gestärkt zu haben, wodurch die politische Teilung Skandinaviens, wie sie heute noch besteht, verstärkt wurde.

Keywords: Cartography, map analysis, national consciousness, Norway, political geography, Scandinavia

#### 1 Introduction

Maps are often perceived as an objective documentation of the World, which makes them highly influential. However, the depiction is a selective view of reality, reflecting the interests of the creator (Schüler 2011). Discourses can be reinforced or concealed through cartographic elements like prime meridians, projection, borderlines, or colouring (EHRENSVÄRD 2006). Hence sovereigns may use cartography as a tool to construct a world view that serves their strategies (HARLEY 2001: 55-60).

STRANDSBJERG (2010: 70) calls this the "'performative power of maps', that is, how maps are not only representing a geographical reality, but they are serving to shape this very reality."

The Scandinavian peninsula is divided into the two modern nations of Norway and Sweden. The eighteenth and nineteenth centuries were times of political turmoil in the region, as Norway's more than 400 year-long political union with Denmark ended with the surrender of Norway to Sweden in 1814 (BERG 2014). The last decades of the union with Denmark saw an awakening of national consciousness in Norway. This movement grew to new heights after the Norwegian hope of political independence was dashed by the 1814 union with Sweden.

The emerging Norwegian national pride faced the Swedish monarchy, which as the senior union partner aimed to assert its authority over the Scandinavian peninsula. Sweden's efforts to unify Scandinavian cartography included a royal decree promoting a common union prime meridian, a significant cartographic element. In contrast, Norway asserted its national identity by maintaining its own prime meridian throughout the period of political union with Sweden.

The study period was a watershed in Norwegian cartography. The historical context was unique, with the transition from one political union to another. There was rapid technological development in surveying and cartography. This coincided with the transition from confidential, military mapping to public surveys and publicly available map series. Against this backdrop, this paper delves into the theory of cartographic elements and their potential influence, as well as conducting an empirical analysis of maps produced by different Scandinavian cartographers. The topic has gained new relevance today when we see political use of cartographical elements in an ongoing territorial conflict in Europe.

The aims of this paper are:

- to analyse how Norwegian nation-building in the late eighteenth and the early nineteenth century might have been reflected on maps of the period, through cartographic elements such as title, dedication, toponyms and others, and the implications this might have had on Norwegian political ambitions
- to analyse how elements on Swedish maps of Scandinavia from the same period might have reflected Sweden's attempts to assert its authority over the Scandinavian peninsula.

Several of the maps analysed in this article have been presented earlier (e.g. in GINSBERG 2009, HARSSON & AANRUD 2016) but the political function of cartographic elements has not been subject to systematic analysis previously. The present article expands on studies initiated by the present author (LIEN 2020, LIEN & LUNDBERG 2022, LIEN in press) and examines in greater depth the ways in which different cartographic elements were used to promote the contrasting political objectives of Norway and Sweden. This contributes to new insights regarding the political power of maps in general, and within the Scandinavian context in particular.

### 2 The state-building function of cartography

The sovereign state system has its roots in late-medieval Europe (1300-1500), where the sovereign had ultimate authority over political, social, and economic matters within a territory (MURPHY 1996). Portraying their realms as identifiable units on maps was a means of legitimising the sovereigns' territorial possessions (Jones 2003). Cartography has thus been a significant factor in the way the state visualizes its territory (ANDERSON 2016: 163-164). SEALE et al. (2004) argue that societies are reflected in their maps. STRANDSBJERG (2010: 69) claims that "the cartographic transition that took off during the European Renaissance provided the spatial conditions for ... defining sovereignty in territorial terms." Helped by improved cartography, the Westphalian Treaty of 1648 led to an increasing number of state boundaries on maps. According to FOUCAULT (2001), knowledge and power are closely related, and mighty sovereigns mapped their territory to demonstrate possession (Black 1997). This section will explore this further, focusing on the potential of cartography as a facilitator for statebuilding and national pride.

The concept 'nation' is defined by ANDERSON (2016: 6-7) as an independent area limited by clear borders. He adds that a nation is characterized by being an "imagined political community," where the inhabitants are tied together by invisible bonds. SMITH (1993) describes how shared ethnic origins, language and religion can constitute a nation, even without a defined territory, like for instance the Kurds or the Basques. He explains 'national identity' as a sense of belonging and loyalty to a nation, while the concept 'nationalism' is interpreted as a result of traditions, myths and symbols. He further states that the "healthy sense of national identity"

can be transformed into destructive nationalism. Anderson (2016: 8) reminds us that even if it today is common to regard nationalism as negative and connected with racism, it is also an expression of a profound love for one's fatherland and its values for which many are willing to die.

Branch (2013: 91) describes how state identity became increasingly territorial as cartographic boundaries were demarcated on the ground. TAYLOR (1994) regards territory as a spatial 'container', filled with state functions and social relations that constitute the modern nation-state. As the concept of nation-states evolved, national consciousness emerged with an increasing tendency to focus on the state itself as the core of identity (ANDERSON 2016). Similarly, with developments in cartography, emerging nationalism was expressed through the mapping of the state's territory (BERG 2005: 183, BERG 2009: 95). Some nations even appeared on maps before being unified politically (SCHNEIDER 2007: 88, Branch 2013: 81). To promote national ideas, schools and mass media can be crucial, and formation of geographical notions has often been stimulated through maps intended for educational use (Taylor 1994, Schneider 2007: 9). The role of the school system in the nation-building process has been examined by among others BARON (2022). In general, school wall-maps and atlases were powerful tools in many countries to support desired agendas, due to their considerable distribution and their power of influence on the new generations.

Another aspect of maps as nation-building instruments relates to controlling one's own narrative (Losang 2020). Anderson (2016) claims that decolonization was driven partly by cartography, as national maps were published immediately after liberation to emphasise ownership of one's territory and to seize control over the map as political symbol.

# 3 Historical framework and emerging nationalism

This section will give a brief overview of the historical backdrop for the study area with emphasis on Norway, as well as a brief note on the cultural historical period National Romanticism, with a focus on national identity.

After the Viking Age, the kingdom of Norway was an independent country for several hundred years, with an expanded realm that in periods included Iceland as well as Greenland. However, the pandemic Black Death in the middle fourteenth century

critically weakened Norway as more than half the population died (AASTORP 2004, GUSTAFSSON 2017: 66). From 1380, Norway was in a political union with Denmark, which lasted more than four centuries. During this period, there were numerous controversies with Sweden, and large regions changed affiliation back and forth. In the Arctic part of Scandinavia there were ambiguous boundaries and a vast region of common use, which contributed to the disputed sovereignty. The national boundary between Norway and Sweden was not agreed upon until 1751, and the Norwegian border with Russia as late as 1826.

In the late eighteenth and early nineteenth centuries, the relationship between the union Denmark-Norway and their neighbour Sweden was turbulent. The Borders Survey of Norway was established in 1773 to map the important areas along the boundary with Sweden (HARSSON & AANRUD 2016: 16-17). The same period saw an awakening of national consciousness across Europe. In Norway there was an increasing demand for its own national institutions such as a university, which was established in Oslo in 1811 (COLLETT 2009). Another important factor was the establishment of The Royal Society for Norwegian Development in 1809, as "an ideological movement that pointed to a strong Norwegian identity and Norwegian independence" (DØRUM 2015: 40). To rebuild a new Norwegian national identity, Norway's heyday in the Middle Ages was also brought into focus, based on the sagas on the Norwegian kings. In line with the National Romanticism of the time, writers, painters and composers were inspired by the Norwegian nature (FALNES 1933). The Norwegian language, strongly influenced by Danish after the 400-year union, was Norwegianised with words from dialects and Old Norse (Vikør 2010). Maps with old place names, or toponyms constructed to support Norwegian national identity, such as Trollheimen (Home of the Trolls), were widely distributed, and some of the maps also had elaborate decorations inspired by typical Norwegian landscapes or activities.

Napoleon conquered large parts of Europe in the late eighteenth century. His final defeat had considerable consequences for the map of Europe (Bregnsbo 2009). In 1814, Denmark, on the losing side, had to cede Norway to Sweden, on the winning side. This was an encouragement for Sweden, which in 1809 had lost Finland (the latter being subject to Sweden since the twelfth century). The 1814 transition also fulfilled the Swedish strategy regarding the conquest of Norway, as, according to Steen (1951:

13), just "a glance at the map was sufficient... do document that the two countries by nature were destined to form one unit." However, Norway saw an opportunity for independence, and managed to establish a Norwegian Constitution, signed 17 May (1814), which is still the National Day. Yet, after a short war with Sweden, Norway had to accept the new union with its former enemy (Sweden) (STEEN 1951: 285).

The building of Norwegian national identity continued within the new union, and a national cartography was one of the tools (BERG 2017: 196). This was met with resistance from Sweden. Cartography can be used to spread new ideas by presenting them as reality on maps, and Karl Johan actively used his cartographers to impose his image of Scandinavian unity on Norwegians (BERG 2009). However, among many Norwegians this was considered an attempt to undermine the country's position as an independent union partner. This was despite the fact that even leading Norwegians wanted a common state with Sweden, exemplified with certain social circles in Eastern Norway having secret contacts with the Swedish king already at the end of the eighteenth century, when Norway was still in union with Denmark (Gustafsson 2017: 140). Even during the union with Sweden in the nineteenth century, leading Norwegians supported Scandinavism, among them the writer Bjørnstjerne Bjørnson. On the Swedish side, also Karl Johan's successors on the Swedish throne, King Oscar I from 1844 and King Carl XV from 1859, supported Scandinavism, a pan-Scandinavian idea that included Denmark. (BARTON 2003: 60, Hemstad 2018b).

Both in Norway and in Sweden the school system had an important role in the process of creating a Norwegian national identity, or a Scandinavian identity, respectively. In Norway, this increased with new school laws in 1827 and 1860 (HEMSTAD 2018b: 117-118). Knowledge presented on maps became compulsory, reinforcing the importance of educational cartography (BERG 2017: 199). On the other side of the boundary, Sweden used the school system to promote their concept of Scandinavism. Cartography was central in this process, and "the purpose was ... to plant the idea of Scandinavia's unity in the head of the child" (HEMSTAD 2018b: 125). However, towards the end of the nineteenth century, Sweden gradually renounced the idea of Scandinavian unity, and the political union with Norway was dissolved relatively peacefully in 1905. Since then, Norway has been an independent kingdom.

### 4 Sources and analytical procedure

The point of departure for this study is a selection of maps from GINSBERG's cartobibliography Maps and Mapping of Norway 1602-1855 (GINSBERG 2009). This extensive collection of maps depicts Norway during an important period both politically and cartographically. However, the cartographic elements are generally not analysed by GINSBERG. He presents the maps in detail as historical objects, and as such they form an excellent starting point for an in-depth examination. Further maps have been selected from the National Library of Norway's collection and from the digital archives of the Norwegian Mapping Authority. An examination of additional maps from Swedish archives might nuance the argument, but this lies beyond the scope of this article.

The aim has been to examine relatively few maps systematically and in detail. The analysed maps have been selected to give a broad picture of the situation in the study period from the Norwegian perspective. They are all printed maps, produced by cartographers working within Scandinavia. The selection comprises five Norwegian and four Swedish maps, chosen to ensure a certain representativeness regarding publication date, size, scale, and cartographer's nationality (Tab. 1).

According to MONMONIER (1991), nations are symbolized by maps, and cartographic elements can emphasise nationalistic traits. Hence, details on the map can be used to gain geopolitical influence (HEMSTAD 2018b: 122). The following cartographic elements may have nation-building potential:

Map title: The title of the map may express whether the cartographer considered the depicted area to constitute a common entity or separate countries, or in this case indicating Scandinavian unity or desire for national independence. A subtitle may also provide information on financial or other support for the construction of the map.

Dedication: A dedication may express a close connection to the authorities or other prominent persons, demonstrating for instance whether the map was made on the order of a king or other ruling authority.

Decorations: The artistic maps of the seventeenth century with depiction of fantastic beasts both at sea and at land gradually gave way to a more scientific based cartography (VAN MINGROOT & VAN ERMEN 1988, EHRENSVÄRD 2006). Consequently, most maps from the study period did not have decorations, although some cartographers illustrat-

Tab. 1: Overview of the analysed maps

No.	Cartographer	Nation	Year	Title	Dedication	Border	Toponyms	Prime meridian	Other	Scale, c.
1	G. Schöning	N	1779	Ancient Norway	-	Clear	Norse	-	Saga era	?
2	C.G. Forsell	S	1815/ 1826	Sweden and Norway or Scandinavia	Royal	Faint	DK-N	Ferro	-	1: 500,000
3	O.J. Hagelstam	S	1820	Sweden and Norway	Royal	Faint	DK-N	Ferro	Abundant information	
4	C.B. Roosen	N	1829	Norway	-	Clear	DK-N	Ferro (and Copenhagen and Christiania)	-	1: 200,000
5	Whitelock	S	1837	Scandinavia	-	Faint	DK-N	Ferro	Infra-structure	
6	A. Vibe and N.C. Irgens	N	1844	Christiania	Prof. Hansteen	-	DK-N	Christiania		1: 25,000
7	P.A. Munch	N	1845	Norway	-	Clear	Norwegian	Ferro	Education. Shape. Abundant information	1: 1 800,000 (1:3 600,000)
8	C.B. Roosen	N	1848 (-45)	Southern part of the Kingdom of Norway (Noregr)	-	Clear	DK-N (Norse)	Ferro (and Christiania)	Independence dating. City maps	1: 1 000,000
9	T.A. von Mentzer	S	1872	Sweden and Norway	-	Clear	DK-N	Ferro	Education	

ed their maps with motives connected to national identity. While pictorial elements on maps may in some cases represent the visual culture of nationalism, most of the selected maps in this study lacked such elements.

Borders: In medieval Europe, wars and shifting alliances led to frequent border revisions. The 1648 Peace of Westphalia contributed to a profound transition towards rigid boundaries (Murphy 1996). This was based on a consensus that the sovereign states had absolute power within their own territory (Taylor 1994). The eighteenth century was thus a 'century of delimitation', with border treaties between many European nations and demarcation of borderlines on maps (Nordman 2020: 163). Consequently, maps became decisive for the formation of nations (Schneider 2007: 23). In Scandinavia, the 1751 Border Treaty between Norway and Sweden was the result of a long period of negotiations (Brish 2014). Certain stretches

of the border were particularly controversial, and historical maps depicting different borderline positions were part of the evidence leading to the final agreement (LIEN & LUNDBERG 2022). According to BERG (2009: 91-92), the new established borderline was "gradually solidified as a consequence of the development of modern cartography." As the cartographers continued to depict the physical borderline on the maps, the boundary became an identity marker (BERG 2005: 183). As a cartographic element in this study, borders could be marked on the map as a clear dividing line between Norway and Sweden as an indicator for Norwegian national identity, or more subtly, as a marker for Scandinavian unity.

Colouring: Printed maps in the mid-eighteenth century and for a century onwards were normally printed in black-and-white. Different copies of the same map could be hand-coloured by colourists representing different sovereigns (Delano-Smith 2007: 555). Colouring was frequently used to rep-

resent boundaries on the map (EHRENSVÄRD 2006: 68). Colour was also used to identify and emphasise political units, and as such, could be a tool to depict the Scandinavian peninsula as an entity or as divided into two separate nations (Branch 2013: 80). Different coloured versions of a particular map could depict territorial distribution in very divergent ways, and consequently function as a political instrument (BRISA 2014). One example is how maps from Arctic parts of Northern Europe were coloured differently. During the sixteenth to nineteenth centuries, sovereigns used cartography to influence political affiliations in this region, ordering maps with colouring that supported their ambitions (LIEN in press). However, documenting this is a challenge, because, among other factors, the colourists did not sign their work. As an example, the National Library of Norway has a large number of coloured historical maps in its collections but lacks information on the name or nationality of the

Toponyms: The use of place names, or 'toponyms', can encourage national self-esteem (Keates 1996). An example is the 1507 world map that first featured the name 'America' (Missinne 2015). Its significance for American patriotism and desire for independence has led to it being called 'America's birth certificate' (Dalrymple 2001, Schneider 2007: 131).

Place names can be "expressions of domination and power relations", and cartographers often behaved "like language imperialists" (Schneider 2007: 9). As new territories were conquered, new names were given to the defeated areas, demonstrated on the maps. Quite often, a sovereign's culture was imposed upon the conquered land, like the naming of New York by the British and New Holland (Australia) by the Dutch. Later, liberated colonies wanting to regain symbolic control of their own territory have used toponyms as a tool, as part of "the cartographic language of a rising nation" (CHLOUPEK 2019). Toponyms on maps still have political power. A recent example is how Russia demonstrated territorial claim in their 2014 invasion of the Ukrainian peninsula of Crimea, by forcing Google Maps to use Russian toponyms in the occupied area (Bjørnstad & Henden 2016). Hence, cartography added legitimacy to the Russian annexation. These examples demonstrate how national identity and language are closely connected. However, after Norway's 400 years' union with Denmark, the old Norse tongue was no longer in use. Norse was spoken in Norway (and Iceland) in the Middle Ages, a period when Norway was an

independent kingdom. During and partly after the union with Denmark, Danish was the common language among Norwegian officials and members of the bourgeoisie, and many toponyms had for centuries been variants of Danish (Sandvik 1983: 21). As part of the Norwegian nation-building project, a political ambition was to re-establish Norwegian toponyms. Several Norwegian cartographers followed up this initiative, alluding to the independence of the Saga age (Barton 2003: 96).

Prime meridian: The maps from the study period could display the use of a Norwegian-based meridian, common union meridian, Swedish meridian, or international meridian. The nation-building function of a cartographic element such as a prime meridian is illustrated by the dispute between France and Britain over the global prime meridian. During this process, both countries aimed to underline their nation's supremacy by claiming the 'right' to this important line of zero degrees longitude (HIGGITT & DOLAN 2009). The 'triumph' of Greenwich as the international prime meridian after the decisive conference in 1884 was, according to WITHERS (2017: 6), "a victory for British ... imperialism ... and ... power." Similarly, the newly independent United States of America in the late eighteenth and early nineteenth centuries established an American prime meridian through Washington, D.C. (EDNEY 1994). In Norway, an abundance of local prime meridians was replaced in 1779 by a national meridian through the fortress of Kongsvinger close to the Swedish border. During the following century, it was gradually replaced by a meridian established in 1847 through the Norwegian capital (today's Oslo, named Christiania/Kristiania from 1625 to 1925), which proved resistant against the Swedish decrees on a common union prime meridian (LIEN 2020).

Other elements: Other cartographic elements with a potential for supporting national self-esteem could be information about the cartographer's nationality, or map symbols emphasising important infrastructure, industries, settlements or fortresses.

### 5 Map analysis

In this section, the theoretical ideas presented hitherto will be grounded in empirical material through a presentation of a selection of maps and a comprehensive examination of chosen cartographic elements. All maps are from the nation-building period spanning from the latter years of the political union with Denmark in the late eighteenth century, through 1814 and the new political union with Sweden, and to the end of the nineteenth century.

### 5.1 G. Schöning's map of Southern Norway 1779

Gerhard Schöning (1722-1780) was Norwegian, and headmaster of the Cathedral School in Trondheim (BRICKA 1901: 451). In 1760 he was one of the three founders of the Royal Norwegian Society of Sciences and Letters (Det Kongelige Norske Videnskabers Selskab), still existing as Norway's oldest scientific institution, whose purpose was to support independent Norwegian research (Andersen et al. 2009, Ginsberg 2009: 115). Schöning's considerable contributions to the fields of history and cartography were vital for Norwegian self-confidence (HOEM 1986: 104, GINSBERG 2009: 115). Schöning produced in 1779 a historical map of Norway after travelling extensively around Southern Norway, partly financed by the authorities (VELSAND 2018: 87) (Fig. 1). The map title translates as 'Ancient Norway depicted from the Göta river to Hålogaland'. Following the common practice at that time, the map has no coordinates and thus no prime meridian. Norway is depicted at the height of its power, in the pre-union period before 1397. Although a small part of Sweden is visible, Norway is clearly presented as its own nation, and the borderline with Sweden is distinctly marked. Ginsberg's version of the map is coloured (reproduced in GINSBERG 2009: 117), and it is worth noticing that the border is depicted prominently in pink and yellow.

The cartographic element of greatest interest is the use of toponyms. Schöning's map is loaded with place names in their original form, termed 'Norwegianisms'. Many of them are written as they were pronounced in Schöning's time by local people, while others are in their original Norse form. A typical example is the use of –ur endings, such as Hardangur instead of Hardanger. Another example is the region Haurdaland, whose official name in Schöning's time was the Danish form 'Søndre Bergenhus amt'. The use of local Norwegian place names instead of Danish names was a powerful political statement (HOEM 1986). It is noteworthy that the Norse forms of place names are also used on the Swedish side of the border.

According to Larsen (2000), Schöning's work was important for the rebirth of the nation Norway. His map depicting the country as it was thought to

be in the Saga era can be regarded as a significant contribution to the nascent Norwegian national consciousness.

# 5.2 C. G. Forsell's map of Sweden and Norway or Scandinavia 1815-1826

Shortly after the 1814 transfer of Norway from Denmark to Sweden, Swedish officer Carl Gustaf Forsell (1783-1848) was put in charge of a new initiative to survey the union (HOEM 1986: 114). Both as officer and cartographer, he was loyal to the Swedish Crown Prince Karl Johan (king from 1818), and he was appointed the king's adjutant in 1811 (EKSTRAND 1903, HILDEBRAND 1966: 311). Forsell's manuscript map of the new union was presented personally to the crown prince in 1817. The final map was printed and published in 1826 (HARSSON & AANRUD 2016: 435-437) (Fig. 2).

The southern halves of Norway and Sweden, along with Denmark, are covered by eight detailed maps, while a small-scale key map covers the whole of the three countries (reproduced in GINSBERG 2009: 191). The map is titled 'Sweden and Norway or Scandinavia', which emphasises the Swedish view of Norway and Sweden as a single Scandinavian unit. This is underlined by the almost invisible boundary on the map, contributing to Forsell's ambitions of erasing the border also in a figurative sense (HEMSTAD 2018a: 58). The map is very detailed along the coast, but strikingly empty in the interior of Norway, in contrast to the interior of Sweden.

The first of the eight sheets provides important cartographic information. The title translates 'Map of the Southern part of Sweden and Norway or the so-called Scandinavia after His Majesty the King's most gracious command'. The prime meridian is the international meridian of Ferro, which demonstrates that the king's ambition for a common union cartography was not followed up even by his own cartographer. Sheet II provides the key, with over 30 different symbols covering themes such as infrastructure and industry, fortresses and administrative borders. Sheet IV is the first to include a part of Norway, while the rest of Southern Norway is depicted on sheets VI and VIII.

The map's toponyms follow the traditional Danish-influenced spelling. A coloured version of the map (reproduced in GINSBERG 2009: 191) has pink and blue shading along the administrative borders, while the national boundary is hardly noticeable. In contrast, a version at the National Library of





Fig. 1: G. Schöning's map of Southern Norway from 1779, and below a map extract showing part of Western Norway. Source: Norwegian Mapping Authority.

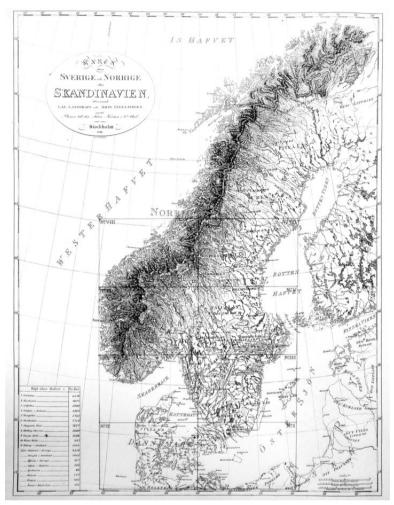




Fig. 2: C. G. Forsell's map of Sweden and Norway or Scandinavia 1815 (published 1826), and below an extract depicting a coloured version. Source: Royal Library of Sweden and (coloured version) National Library of Norway.

Norway (reproduced in Harsson & Aanrud 2016: 436) shows the boundary sharply marked by a red line clearly separating Norway and Sweden. This copy was probably hand-coloured after printing, and the distinct boundary may have been added to underline the division between the two countries. However, no information is available about the colourist or this person's nationality.

After completing the manuscript map in 1817, the cartographer was ennobled (EKSTRAND 1903, GINSBERG 2009: 189). The significant position Forsell held in Swedish cartography was further demonstrated by his appointment as director of the Swedish Land Survey in 1824 (HILDEBRAND 1966: 311). Forsell's map of Scandinavia was considered the official map of the Swedish-Norwegian union (ENEBAKK 2012: 137). However, in Norway it never managed to challenge the Dane C.J. Pontoppidan's map of Norway constructed in 1785 (GINSBERG 2009: 191, HARSSON & AANRUD 2016: 437).

### 5.3 O. J. Hagelstam's map of Sweden and Norway 1820

Otto Julius Hagelstam (1785-1870) was born in Finland (part of Sweden until 1809) and served many years in the Swedish Navy (HOEM 1986: 113). He conducted several naval surveys and maritime cartography projects (SWEDISH NATIONAL ARCHIVES 2019).

During the union with Denmark, Norwegian maps were kept in archives in the Danish capital of Copenhagen. After Norway was ceded by Denmark to Sweden in 1814, Hagelstam was commissioned to go to Copenhagen and take possession of the Norwegian archive material on behalf of Sweden (Hoem 1986: 113, Ginsberg 2009: 271, Berg 2017: 196). These maps were the basis for Hagelstam's first map of Norway, published the following year (Swedish National Archives 2019). He also drew a map of the Norwegian capital with detailed information about the city's fortress (Harsson & Aanrud 2016: 458).

With the new union, Sweden gained full access to its former enemy Norway, and an early ambition was to map the new possession (Brish 2014). A significant new map was Hagelstam's detailed 'Map of Sweden and Norway' published in 1820 (Swedish National Archives 2019) (Fig. 3). The map was made 'with the royal most gracious permission', and the cartographer's background as lieutenant, knight, and member of the 'Academy of Sciences'

(The Royal Swedish Academy of Sciences, Kungliga Vetenskapsakademien) is mentioned in the title and gives the map credibility. The title also states that it is a 'geographical, military and statistical map'.

The prime meridian is the international meridian of Ferro, which was a common prime meridian in this period (LIEN 2020). The toponyms in Norway follow the Danish-influenced spelling, such as 'Qvindsherred' and 'Folgefonden'. The map has many administrative and military dividing lines, to a degree that it is difficult to distinguish the national boundary between Norway and Sweden from other lines. According to HEMSTAD (2018a and b), Hagelstam's 'hidden' boundary line contributed to the map portraying Scandinavia as a unit despite the title 'Sweden and Norway'. On the copy of the map kept at the National Library of Norway, many of the local administrative lines are coloured. However, the national boundary is not coloured, rendering it almost invisible compared to the other lines on the map.

The map is exceptionally detailed. The legend indicates administrative and military borders, and symbols for a large number of different features such as fortifications, post roads, churches, agriculture, forestry, and other livelihoods. The mapping of these elements provided the Swedes with abundant information about their new union partner, from which the military aspect appears dominant. The military background of the cartographer Hagelstam may have influenced the design of the map, but it might be that the Swedish king Karl Johan specifically required mapping of the military aspects. The detailed tables on the map sheet give a thorough overview of Norway's military capacity, right down to the individual soldier, horse, and cannon. Sailors and vessels are listed in a separate table for the Navy, and the map even provides an overview of the response time of the armed forces. Civil information on population and administrative division is also included. In addition, every remaining spot on the map sheet is filled with information on flora and fauna, resources such as reindeer and fish, climate, growing conditions and other useful information. The impression of the map is that it is a tool for overview and control, and it provides the sovereign with an information base for exploiting the country's resources.

#### 5.4 C. B. Roosen's map of Norway 1829

Carl. B. Roosen (1800-1880) was a Norwegian officer and surveyor who was very patriotic (Bratberg 2009). He was actively involved in the





Fig. 3: O. J. Hagelstam's map of Sweden and Norway from 1820 and below an extract showing the title. Source: National Library of Norway.

contemporary debate over the celebration of the Norwegian Constitution Day on 17 May, which, from its inauguration in 1814, gradually became a national festivity, to the degree that Swedish King Karl Johan in 1828 imposed a ban on marking the day (HAMMER 1923, STAGG 1956: 185).

Roosen was very productive (GINSBERG 2009: 174-183). His 1829 map of Norway is selected for analysis as it can be viewed as a response to the Swede Forsell's map printed three years earlier. Roosen's map focuses on Southern Norway, with Northern Norway depicted in smaller scale in a corner of the map. The map is designed to make Norway stand out as a separate country, as adjoining parts of Sweden are only faintly depicted. This is underlined in the map title, 'Map of Norway'. The subtitle emphasises the cartographer's nationality as a 'Norwegian engineer lieutenant'. The toponyms have the traditional Danish influenced spelling.

The prime meridian is the international meridian of Ferro, and the map also depicts the Danish meridian of Copenhagen. In addition, Roosen included the planned nation-building meridian of the Norwegian capital 15 years before its official establishment, a powerful statement by the cartographer.

The national boundary with Sweden is clearly marked, as are administrative borders within Norway. The map has abundant information on infrastructure, military installations, and settlements. This adds to the image of the map as a picture of a nation with everything needed for independence. On the version of the map kept at the Norwegian Mapping Authority, a few of the county borders are coloured yellow or pink; otherwise, the map is in black-and-white. On the version reproduced in GINSBERG (2009: 177), Norway is divided into four regions with different coloured shading. The small part of Sweden visible on the map sheet is not coloured. Thus, the colouring underlines Roosen's work as a map of Norway only.

Roosen's map became a commentary on contemporary society. He engaged actively in the cartographic struggle between Norway and Sweden and criticized the Swedes Hagelstam's and Forsell's maps for the way they depicted Norway as a part of the Swedish-led Scandinavian unit. Roosen claimed that cartography was a tool for spreading false concepts, with what was depicted on the map presented as reality (HEMSTAD 2018b: 121-122). His work was important for the construction of Norwegian identity, and another of his maps is examined later in this section.

## 5.5 C. O. Whitelock's map of Scandinavia 1837

Swedish cartographer C.O. Whitelock (VÖBAM 2019) produced a map of Scandinavia in 1837 that seems to support the rulers' view of the two union countries as a single unit. The title is 'Map of Scandinavia', and the names 'Norway' and 'Sweden' do not feature on the map at all. The border between the two countries is only faintly marked. A small part of Denmark is visible but is apparently not included in the cartographer's 'Scandinavia'-concept. The prime meridian is the international meridian of Ferro, even though just three years earlier a new order on common union cartography was issued by Swedish King Karl Johan (LIEN 2020: 7).

The subtitle of Whitelock's Scandinavia map informs in Swedish that its purpose was to give an overview of public work on canals, harbours, fortresses, and roads that had been initiated from 1810 to 1837. The subtitle has a French translation, stating that the map covers the public work done 'in Sweden'. This supports the impression that Whitelock portrayed Norway and Sweden as a single entity under Swedish leadership.

In accordance with the stated purpose, Swedish ports and fortifications are listed in tables around the map sheet, as are Swedish canals and road constructions. A few symbols for fortresses can be found, such as the Norwegian Kongsvinger and the Swedish Carlsten. Toponyms on the map are sparse, also on the Swedish side of the border, and the spelling on the Norwegian side is the traditional Danish influenced, such as 'Bodøe' and 'Fillefjeld'. A basic pattern of infrastructure is included in the map. The scale is in Swedish miles only, adding to the impression of the map as a Swedish piece of work.

The version of the map kept at the National Library of Norway has blue shading along the coasts of Norway and Sweden. The almost non-existent boundary line between the two countries on the original black-and-white map is here depicted by pink and yellow shading along the border, dividing Whitelock's single entity into two parts through use of colouring.

# 5.6 A. Vibe and N. C. Irgens' map of Christiania 1844

Andreas Vibe (1801-1860) was a military officer, surveyor, and cartographer (BLANGSTRUP 1928: 59). Nils Christian Irgens (1811-1878) was a military officer and engaged in civilian engineering work on

Norway's infrastructure such as harbours, roads and later also railways (Blangstrup 1922: 489, Ginsberg 2009: 271). Vibe and Irgens together produced a map of the Norwegian capital Christiania in 1844 (Fig. 4). The scale is indicated in Norwegian units only. The toponyms follow the traditional Danish influenced spelling, and all map versions examined are in blackand-white only.

A few years earlier, Sweden had once again tried to impose cartographic unity on the union (Arosenius 1859). Yet this map uses the highly controversial prime meridian through the Christiania Observatory. Some decades earlier, Swedish Crown Prince Karl Johan had refused to accept the establishment of such a Norwegian national meridian due to its symbolic significance for Norwegian independence (Pettersen 2014). Nevertheless, through a long process, the Christiania Observatory's director, astronomer and professor Christopher Hansteen (1784-1873) finally managed to establish this national meridian in 1847 (Harsson & Aanrud 2016: 210-211). The use of this prime meridian on Vibe and Irgens' 1844 map thus predates its official establishment.

The title of the map translates 'Map of Christiania including a square mile of the surroundings, summarized by the latest and most reliable information. With honour dedicated the Director of the Norwegian Geographical Survey Mr. Professor Knight M.M. Hansteen by Vibe and Irgens, engineer officers'. Hence, in addition to the provocative use of the Norwegian national prime meridian, the cartographers dedicated the map to the 'father' of this symbolic new meridian line (BERG 2017: 198). Their support for his work is also noticeable in the decorations, where important buildings of the Norwegian capital are depicted along the map frame. They include the Royal Residence, the University and the Theatre, but the most prominent position is reserved for a depiction of the new Observatory. Supporting the decorations are informative tables on the capital's heights, geology, streets, public and military buildings, and several trigonometric points.

The versions of this map examined in this study (from the Ginsberg collection, the National Library of Norway and the digital archives of the Norwegian Mapping Authority) are in black-and-white only. The scale is 1: 25 000 and is given in Norwegian units only, adding to the nation-building function of the map. The toponyms appear to follow the traditional Danish influenced spelling, which is not unexpected as the capital would have been more affected by the long-lasting Danish-Norwegian union than remote Norwegian valleys.

Vibe and Irgens depict Christiania as a powerful city with all the institutions necessary for the capital of an independent country, and this image was disseminated through the distribution of the map. Shortly after the map was published, a scientific conference for nature researchers was arranged in the city (Eriksson 1991). Professor Hansteen arranged for all the participants to receive a copy of the new map as a gift (Gimse 2014). This spread the new Norwegian national prime meridian and its symbolic function opposing Swedish cartographic unity.

### 5.7 P. A. Munch's map of Norway 1845

The interests of Peter Andreas Munch (1810-1863) were within history and geography. Both are regarded by Anderson (2016) as important elements when constructing a new national identity. Munch had thorough knowledge of the Norwegian Middle Ages and the Norse language and regarded Danish to be a "standoffish ridiculous confirmation dress around the healthy peasant boy" (the latter probably representing Norway) (HOEM 1986: 117). Munch aimed at using old Norwegian place names and focused on the bright historical past (SANDVIK 1983: 26). According to GINSBERG (2009: 116), Munch used Schöning as one of his sources.

With his 1845 map of Norway, Munch was the first to reproduce the country's correct shape cartographically (ENEBAKK 2012: 131). This accuracy was partly due to his observations and surveys during extensive travels (HOEM 1986: 117, ENEBAKK 2012: 141, BERG 2017: 202). The title is 'Map of Norway for use in the lower grades', and the teaching purpose ensured a wide distribution of the map and the ideas established in it.

Most of the map sheet depicts Southern Norway, with Northern Norway inserted in half scale. There is no dedication. The borderline with Sweden is clearly depicted, and the prime meridian is Ferro. One copy of the map has a faint colouring of the administrative borders and the national boundary (reproduced in GINSBERG 2009: 218). Other copies, such as the one presented by HOEM (1986: 118-119), are black-and-white only.

In contrast to the small part of Sweden included in the map, the depiction of Norway has an abundance of shading and details, expressing the distinctiveness of Norway as a separate entity. The map is filled with symbols such as roads, towns and villages, farms, and copper- and ironworks, in addition to exceedingly detailed information on the administrative





 $Fig. \ 4: A. \ Vibe \ and \ N. \ C. \ Irgens' \ map \ of \ Christiania \ 1844 \ and \ below \ an \ extract \ depicting \ the \ observatory \ under \ the \ title.$  Source: Norwegian Mapping Authority.

division of Norway. The map has a high level of precision and is extremely rich in Norwegian place names, many of which were Norwegianised by Munch as part of the nation-building process (Enebakk 2012: 143, Berg 2017: 203). The over-abundant information might be considered to reduce the map's usefulness yet contributes to the impression of Norway as a vivid country with many settlements and prospering activities.

Munch's map was constructed in the middle of the period of National Romanticism at a time when contemporary historians aimed to prove that Norwegians had a distinctive Norwegian identity (ENEBAKK 2012: 147). Through long walks in Norwegian nature, mapping along the way, he gained a completely different impression of Norway than the prevailing narrative of a mountainous country devoid of settlement. Munch mapped watercourses, valleys, mountain passes and hiking trails on the mountain plateaus. The 1845 map therefore made a decisive contribution to Norwegian national identity (HOEM 1986: 117, ENEBAKK 2012: 129).

# 5.8 C. B. Roosen's map of Southern Norway 1848 (1845)

Roosen's map of Southern Norway from 1848 is titled 'General map of the southern part of the kingdom of Norway (Noregr)' (Fig. 5). The Norse form, 'Noregr', serves as a reminder of Norway's past as an independent country. The aim for autonomy is underlined by a distinct borderline to Sweden, and by the faint depiction of the adjoining parts of Sweden.

In the cartouche, Roosen describes himself as 'Norwegian citizen and engineer officer', emphasising both his Norwegian affiliation and his professional background, implying that the map could be trusted. This is supported by the subtitle of the map, which refers to astronomical and geodetical information from the Norwegian Geographical Survey (today: Norwegian Mapping Authority), the 1751 Border Treaty with Sweden, and updated cadastre legislation. The map is presented as a scientific work, grounded in the knowledge of a Norwegian citizen, independent of the Swedish professional institutions.

The versions examined are in black-and-white only. The prime meridian is Ferro, but Roosen's nationalistic mindset is demonstrated by the new and politically important prime meridian of Christiania also being clearly marked on the map. The most striking evidence of Roosen's patriotic attitude is that the map is dated to 'the 31st year after the dec-

laration of independence and the restoration of the Constitution. Eidsvold, 17<sup>th</sup> May 1814'. National pride could scarcely have had a more powerful expression than the use of a calendar rooted in the signing of the Norwegian Constitution. The time difference between 1814 and 'the 31<sup>st</sup> year' appears to indicate that the map was originally drawn in 1845.

The map has no dedication, and the toponyms follow the traditional Danish-influenced spelling. Several tables provide statistical information, and two city maps are included. One depicts Frederikshald (today's Halden), with its large fortress less than 3 kilometres from the border with Sweden, and referring to a rebuffed Swedish attack in 1716, thus accentuating the Norwegian will of independence. The other depicts Christiania, with its position as 'the capital' underlined, even if the Swedish capital of Stockholm was the official capital of the union. The city map includes information about important Norwegian institutions such as the University and the Parliament, supporting the Norwegian national self-esteem.

From a national point of view it is also noteworthy that the statue of Christian Krohg is depicted among the important Norwegian institutions on the inserted city map of Christiania. Krohg was a lawyer and Member of Parliament. He came to be regarded a national hero after he in 1824 stood up for the relatively new Norwegian Constitution when the union king Karl Johan attempted to expand his own power (STORSVEEN 2009). In 1833, a monument of Krohg was erected in the Parliament Square in Christiania, which became a gathering place for later celebrations of 17 May. Thus, the statue can be seen as a Norwegian symbol of independence, and Roosen probably included it in his map with this purpose.

# 5.9 T. A. von Mentzer's map of Norway and Sweden 1872

Ture Alexander von Mentzer (1807-1892) was a Swedish cartographer and officer (WESTRIN 2013). His cartographic production included historical and statistical maps, and maps depicting the growing net of railway lines. He published numerous atlases in the 1860s and 1870s, many of them designed for use in schools. His map from 1872 was intended for lower-grade teaching. The map's title is 'Sweden and Norway', and the prime meridian is the international meridian of Ferro. The map has no dedication or indication of scale. There are almost no symbols, except for dots representing cities and a few symbols





Fig. 5: C. B. Roosen's map of Southern Norway 1845 (published 1848) and below an extract showing dating relative to the signing of the Norwegian Constitution at Eidsvoll 17 May 1814 ('The 31st year after the declaration of independence and the restoration of the Constitution. Eidsvold, 17th May 1814'). Source: Norwegian Mapping Authority.

for fortresses, such as the Swedish Karlsten and the Norwegian Akershus.

There are relatively few toponyms on the map, although there seems to be a balance in their number between Sweden and Norway respectively. The Norwegian toponyms follow the traditional Danish influenced spelling such as 'Eidsvold' and 'Söndre Bergenhus amt'.

The boundary between Sweden and Norway is clearly marked, but so are the boundaries between the administrative units in both countries. The impression is a united region where the national boundary is toned down to the same level as local administrative dividing lines. This is underlined by the colouring, where each administrative unit is coloured without regard to whether it belonging to Norway or Sweden. From the colouring alone, it is impossible to distinguish between the two countries; they appear as a single entity.

#### 6 Discussion

In this section, the results of the map analysis will be interpreted for each of the chosen cartographic elements and discussed in light of the theory. I indicate where gains in knowledge have been made compared to previous work. For example, there has been substantial research on the relationship between the Scandinavian countries and what is included in the term Scandinavia, but it has not been previously investigated how the perception of Scandinavia is connected with the use of dedications indicating allegiance to a patron or sovereign. The following results from the map analysis contribute to new insights into these relationships.

Regarding map titles, the Swede Whitelock used 'Scandinavia' and the Swede Forsell used 'Sweden and Norway or Scandinavia'. This corresponds with the ambitious geopolitics of the Swedish sovereign Karl Johan (BERG 2009, HEMSTAD 2018a). In contrast, none of the Norwegian cartographers applied the union term 'Scandinavia'. The Norwegian Roosen additionally included the old Norse form 'Noregr' in his map title, referring to Norway's history as an independent nation and illustrating BARTON's (2003) description of the Saga period supporting new nation building. It accords with the views of BLACK (1997), Schneider (2007) and Branch (2013) regarding the role of cartography in the development of political identity. Nevertheless, there is no sharp delineation between Norwegian or Swedish cartographers regarding the use of map titles. Of the four analysed

Swedish maps, the two constructed by Hagelstam and von Mentzer mention Sweden and Norway as two separate countries.

Several of the analysed maps have a dedication or subtitle. Forsell has a very distinct dedication as his map was made on direct orders from the Swedish Crown Prince, as was probably Hagelstam's 1820 map referring to the 'royal permission'. On the Norwegian side, none of the analysed maps has a dedication to the Swedish royalty. This could be interpreted as an attempt by the cartographers to distance themselves from the union king. The only Norwegian map with a dedication is Vibe and Irgens' map of Christiania, demonstrating support for the originator of the new prime meridian through the Norwegian capital, a cartographic element with a powerful symbolic significance that the Swedish king strongly opposed.

Boundaries and colouring are often closely linked, and this analysis extends previous work (Lien in press) on the relationship. As described by BERG (2005), the mapping of Norway partly aimed to emphasise the boundary, and this study confirm that several cartographers used the borderline to make Norway stand out clearly as a separate country. Some copies of the maps further emphasise this by the use of colour. This corresponds to Anderson's (2016) definition of a 'nation' limited by clear borders. It also demonstrates that Norway was active in delimiting its territory as a separate nation, reflecting Branch's (2013) territorial perspective on state identity. At the same time, three of the four Swedish cartographers in this study included an almost invisible borderline between Norway and Sweden. The fourth, von Mentzer, drew a clear boundary, but at the same time he added almost as clear borders between the administrative units in the two countries, and hence the marking of the national boundary lost its significance.

Several of the cartographers in this study focused on toponyms as a nation-building tool, in line with their significance for national identity as described by Barton (2003) and Chloupek (2019). Already Schöning, in the late eighteenth century, replaced the Danish approved names with Norse toponyms as a reminder of the bygone era of an independent Norway. He nurtured a desire for dissolution of the union with Denmark, and his use of toponyms as a political tool accords with Keates' (1996) notion that national pride can be supported through conscious use of place names.

Like Schöning, Munch was interested in the combination of history and geography, which, as argued by GLENTHØJ (2009) and ENEBAKK (2012), are both

important when it comes to the building of identity. By replacing the Danish-influenced toponyms with Norwegian place names based on the heyday of the Middle Ages, Munch used cartography to support the aspiration for Norwegian independence. While this is known from previous work (HOEM 1986: 117, ENEBAKK 2012: 143-44, 148), Roosen's use of the Norse form of 'Norway' in the title of his 1845 map has not been pointed out previously. However, he did not follow this up by Norwegianising place names on the map itself. In general, the 400-year long union with Denmark seems to have had a long-lasting influence on toponyms on Norwegian maps, and Danish names were used by both Norwegian and Swedish cartographers.

The prime meridians of the analysed maps are important as, according to HIGGITT & DOLAN (2009), they can be used to assert national identity. However, LIEN (2020) has demonstrated that this opportunity for national symbolism was often not used on maps from Scandinavia, as, during the nineteenth century, the international prime meridian of Ferro was frequently applied. Ferro is used on seven of the nine studied maps. There are no Swedish or union prime meridians found on the maps in this study, confirming LIEN's (2020) documentation of the fact that not even Swedish cartographers followed their own sovereign's intentions regarding common union cartography. The analysis of the prime meridians in the present article places this previous work in a broader context. The two maps that stand out regarding prime meridians are Roosen's 1829 map of Norway and Irgens and Vibe's 1844 Christiania map. While the main meridian of Roosen's map is Ferro, the map also strikingly indicates the not yet established national prime meridian of the Norwegian capital. Irgens and Vibe, for their part, had the line through Christiania as their sole meridian, predating its official implementation by several years. This confirms BERG's (2009) argument that a map's prime meridian has symbolic value, and complements Edney's (1994) demonstration of the prime meridian as a patriotic instrument. It also accords well with Schneider's (2007) view of the political role of cartography in depicting the world not simply as it was at the moment of the map's production but also as a situation they hoped to bring about.

The central message of this study, in addition to the political use of map titles and dedications, lies in the political significance of map symbols. The relationship between national identity and symbols on Scandinavian maps has not been studies previously. This topic can be illustrated by Hagelstam's military and statistical maps, used by the Swedes to take possession of their newly acquired union partner while uncovering Norway's resources and defence capability. In parallel, Roosen's and Munch's maps are packed with information highlighting Norwegian industry, settlements and infrastructure. These maps stand in contrast to Forsell's Scandinavian map depicting Norway's interior as relatively empty. Their considerable focus on depicted resources may indicate that these provide an economic base for independence. Together with Roosen's use of important national symbols like the Royal Palace and the Supreme Court, in addition to the statue of the national hero Krogh, these cartographic elements supported the growing national self-esteem. These maps reflect in differing ways the society in which they were constructed, as pointed out by SEALE et al. (2004).

In this study, I have also examined some maps intended for use in education. As documented by Taylor (1994), schools can be decisive for diffusion of national values, and one of the tools is cartography. Two of the analysed maps were intended for school use, constructed respectively by the Norwegian Munch and the Swede von Mentzer. The analysis demonstrates that school maps were used to disseminate the authorities' world view, as pointed out by Baron (2022). These ideas spread widely with the increase in the number of schools during the nineteenth century.

The findings also indicate the national rivalry between Norwegian and Swedish cartographers. As Hemstad (2018a: 60) argues, Roosen was one of the most dedicated Norwegian patriots in the first half of the nineteenth century. This can be traced through elements in the two analysed Roosen maps, demonstrating that he used maps as political instruments in arguing against the unification of Norway with Sweden, in contrast to the competing cartography of the Swedes Hagelstam and Forsell. However, there is a certain irony in the Norwegians' resistance against Swedish cartography, for instance when rejecting the Swede Forsell's 1826 map of Norway in preference to the Dane Pontioppidan's (1785) map, which was in use for half a century, well into the new union with Sweden.

Another central result of the map analysis is that it generally appears as if Norway had to some degree become accustomed to the Danish influence on cartography after several centuries of Danish rule. For a period after the dissolution of the union in 1814, a few Norwegian cartographers, like C.B. Roosen, continued to refer to Copenhagen

as the prime meridian on some of their maps of Norway. Many Norwegian cartographers, some of them otherwise known to be patriotic, continued to use Danish place names on their maps. In contrast, Norway had a very different attitude towards Sweden during their union. This may be because Norway and Sweden were traditionally rivals, with numerous wars over the centuries. When the union with Denmark ended in 1814, Norway had hopes of independence, and there appears to have been less acceptance of a political union with Sweden, even though Norway's position in this union was more autonomous than in the one with Denmark.

The Scandinavism from the Swedish side may have had traces of expansionism, as BERG (2005: 180) suggests. The findings correspond well with Murphy's (1996) description of how sovereigns take possession over territories by mapping them as a unit. The graphical depiction of Norway as part of a united Swedish-Norwegian Scandinavia with a more or less invisible boundary line adds to the symbolic use of map titles by Forsell and Whitelock. It hence documents how the Swedish sovereign asserted political authority through maps, as mentioned by EHRENSVÄRD (2006). Hagelstam's 1820 mapping of Sweden's new union partner can be seen as a demonstration of political supremacy through the meticulous military information and listing of Norwegian resources. This relates to FOUCAULT'S (2001) focus on the connection between knowledge and power and Anderson's (2016) description of conquest by surveying. The thorough mapping of Norway by the Swede Hagelstam demonstrates how knowledge of a nation's geography facilitates territorial control, as pointed out by Jones (2003).

The empirical results document that several of the Norwegian cartographers were contributing to what Losang (2020) calls having ownership of one's own narrative. By the use of selected cartographic elements, Norwegian cartographers tried to portray Norway as if it were an independent nation. This illustrates Strandspjerg's (2010) link between development of cartography and territoriality, and Anderson's (2016) description of cartography as an important political tool for newly independent countries, as well as Monmonier's (1991) statement that nations can be symbolised by maps.

The findings relate to BERG'S (2009) theories on the link between nationalism and the mapping of the corresponding territory. The 'spatial container' described by TAYLOR (1994) contains both Sweden and Norway seen from the Swedish perspective, while the Norwegians considered the 'container' to

be limited to Norway only. By the different cartographic representations, both countries underscored their contrasting attitudes to the political division on the Scandinavian peninsula, as two separate countries or as a single (Swedish) entity, respectively.

#### 7 Conclusions

The aim of this paper has been to analyse whether and how different cartographic elements from a selection of late eighteenth and the early nineteenth century maps may have reflected Norwegian nation-building or Swedish authority over the Scandinavian peninsula. This partly compliments and extends other work on the subject, but mainly contributes with new knowledge on the relationship between political ambitions and cartographic elements. The main results of the study indicate that cartography contributed to one narrative about the union in Sweden and another in Norway. The use of maps for educational purpose reinforced the influence of maps supporting national or union identity respectively.

We have seen that all four selected Swedish cartographers used different cartographic elements to communicate a view of the Scandinavian peninsula as an entity. The map titles of Forsell and Whitelock focused on the Scandinavian unit, while the dedications of Forsell and Hagelstam emphasised the connection between the (Swedish) sovereign and the depiction of the union. With his thorough mapping, Hagelstam took the new union partner Norway cartographically 'into possession', and both Hagelstam and von Mentzer downplayed the importance of the national boundary line. These maps seem to reflect Swedish eagerness to conquer cartographically their former enemy Norway. The Norwegian maps, on the other hand, give the impression that some Norwegians mapped their country as part of a nation-building project, with different cartographic elements serving as symbols of independence. An example is how Schöning and Munch used toponyms to draw attention to Norway's past to support the emerging national consciousness.

Further findings are the evidence of Norwegian patriotism on Vibe and Irgens' map of Christiania from 1844 and Roosen's map of Norway from 1845/48. These two maps were constructed within a short period and indicate that Norwegian national consciousness was on the agenda, with cartographers resisting the Swedish royal decrees on common union cartography. Vibe and Irgens' map coun-

terbalanced Hagelstam's 1820 map through their use of the national prime meridian, as well as decorating their map with buildings of national importance. They demonstrated cartographic possession of the capital of Norway and underlined this with a dedication to the 'father' of Norway's new prime meridian, and by placing the new observatory of the Norwegian capital in a prominent place on the map sheet. Roosen displayed this upcoming prime meridian already on his 1829 map, alongside the international meridian of Ferro and the Danish meridian of Copenhagen. On his 1845/48 map, he followed up the nation-building work through several cartographic elements, including a novel calendar with its starting point in 1814 when Norway established its Constitution.

This study provides empirical evidence from the Scandinavian region showing how different worldviews can be expressed through maps. The relationship between nationalism and cartography is well established in existing literature, but the Norwegian perspective is relatively little known outside the region and deserves attention. This is not least due to the political situation, with Norway being transferred from one union to another, giving an opportunity for using cartography as a tool for independence. However, the main new knowledge gained from this study is that the picture was more balanced than initially supposed from the theoretical study. None of the Swedish maps examined used a Swedish or union prime meridian and, with a few exceptions, all the analysed maps, including the Swedish, used Danish-influenced toponyms. The Swede Hagelstam did not use the unifying term 'Scandinavia' in his map title, nor did the Swede von Mentzer. On the other hand, this study contributes to new insights into the use of cartographical elements promoting political objectives. The results demonstrate how resources such as infrastructure, military facilities or industries were mapped to support a view of economic wealth, geographical diversity and independence ability, thus supporting the increasing Norwegian national self-esteem.

An interesting avenue for further study would be to examine how Norwegian national identity was expressed through maps in the later nineteenth century, during the period leading to the dissolution of the Swedish-Norwegian union in 1905. The political independence obtained by Norway at that point was the final result of a slow but steady process that started in the late eighteenth century, in which the strategic use of cartography was one of several important tools.

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### Map sources

Schöning: Norwegian Mapping Authority, Norge 103: Norvegia Antiqua: https://kartverket.no/om-kartverket/historie/historiske-kart/soketreff/mittkart?mapId=17849

Forsell: Royal Library of Sweden, https://libris.kb.se/bib/11008529 (coloured version: National Library of Norway)

Hagelstam 1820: National Library of Norway

Roosen 1829: National Library of Norway, Norwegian Mapping Authority https://www.kartverket.no/om-kartverket/historie/historiske-kart/soketreff/mitt-kart?mapId=6802

Whitelock 1837: National Library of Norway

Vibe and Irgens 1844: National Library of Norway, Norwegian Mapping Authority, Akershus amt nr. 34: Kart over Christiania med en Kvadratmiil af Omegnen: https://kartverket.no/om-kartverket/historie/historiske-kart/soketreff/mitt-kart?mapId=349

Munch 1845: Norwegian Mapping Authority, Norge 161, Kart over Norge: https://www.kartverket.no/om-kartverket/historie/historiske-kart/soketreff/mitt-kart?mapId=6806

Roosen 1845/48: National Library of Norway, Norwegian Mapping Authority, Norge 165: General Kart over den sydlige Del af Kongeriget Norge: https://www.kartver-ket.no/om-kartverket/historie/historiske-kart/soke-treff/mitt-kart?mapId=6810

Von Mentzer-s map of Sweden and Norway, 1872. National Library of Norway, map 878, *Kartbok för Skolans lägre Klasser:* Sverige och Norge, T. A. von Mentzer, 1872. Stockholm: L. J. Hiertas förlagsexpedition.

### References

- Andersen HW, Brenna B, NJALSTAD M, WALE A (2009) Æmula Lauri: The Royal Norwegian Society of Science and Letters, 1760–2010. Trondheim.
- Anderson B (2016) Imagined communities: Reflections on the origin and spread of nationalism (originally published in 1983). London.
- Arosenius JFN (1859) Om svenska topografiska kartverket till och med år 1859. Gävle.
- AASTORP H (2004) Svartedauden enda verre enn antatt. Forskning.no. https://forskning.no/historie-pest-bakteri-er/svartedauden-enda-verre-enn-antatt/1047487
- BARON N (2022) Visual Channels (3): Cartography. In: Postoutenko, K., Tikhomirov, A., Zakharine, D. (eds) Media and Communication in the Soviet Union (1917-1953). Cham. https://doi.org/10.1007/978-3-030-88367-6\_4
- Barton HA (2003) Sweden and visions of Norway: Politics and culture, 1814-1905. Carbondale and Edwardsville.
- BERG R (2005) Fra den norsk-svenske grenselinjens historie 1814-1914. SØRENSEN Ø, NILSSON T (eds) *Norsk-svenske* relasjoner i 200 år: 178–196. Oslo.
- BERG R (2009) The nineteenth century Norwegian–Swedish border. *Journal of Northern Studies* 1: 91–103.
- BERG R (2014) Denmark, Norway and Sweden in 1814: A geopolitical and contemporary perspective. *Scandinavian Journal of History* 39: 265–286.
- BERG TR (2017) Verdensteater: Kartenes historie. Oslo.
- BJØRNSTAD NT, HENDEN H (2016) Russland presset Google til å endre kart over Krim. https://www.vg.no/nyheter/utenriks/i/OM9pE/russland-presset-google-til-aa-endre-kart-over-krim
- BLACK J (1997) Maps and politics. Chicago.
- Blangstrup C (ed) (1922) Nils Christian Irgens. Salmonsens Konversationsleksion, 2<sup>nd</sup> edition, Volume 12: 489. Copenhagen. http://runeBERG.org/salmonsen/2/12/0501.html
- Blangstrup C (ed) (1928) Andreas Vibe. Salmonsens Konversationsleksion, 2<sup>nd</sup> edition, Volume 25: 59. Copenhagen. http://runeBERG.org/salmonsen/2/25/0067. html
- Branch J (2013) The Cartographic State: Maps, territory and the origins of sovereignty. Cambridge.
- Bratberg T (2009) Carl Roosen. Norsk biografisk leksikon. https://nbl.snl.no/Carl\_Roosen
- Bregnsbo M (2009) Det danske imperium og napoleonskrigene. Frydelund B, Glenthøj R (eds): 1807 og Danmark-Norge: På vei mot atskillelsen: 25–37. Oslo.
- BRICKA CF (1901) Gerhard Schöning. Dansk biografisk Lexikon. Volume XV: 451. Copenhagen.
- Brisa BG (2014) Hvor gikk egentlig grensen? *Aftenposten Historie*, May 2014: 34–38. https://www.academia.edu/7157618/Hvor\_gikk\_egentlig\_grensen

- Chloupek BR (2019) Public memory and political street names in Košice: Slovakia's multi-ethnic second city. *Journal of Historical Geography* 64: 25–35. https://doi.org/10.1016/j.jhg.2018.11.007.
- Collett JP (2009) Radikaliseringen av de nasjonale særkravene. Frydelund B, Glenthøj R (eds): 1807 og Danmark-Norge: På vei mot atskillelsen: 177–199. Oslo.
- DALRYMPLE H (2001) America's birth certificate. Library of Congress. https://www.loc.gov/loc/lcib/01078/discovering.html
- Delano-Smith C (2007) Signs on printed topographical maps c. 1470 to c. 1640. Woodward D (ed), History of Cartography, Volume 3, Part 1, Cartography in the European Renaissance: 528–590. Chicago.
- Dørum K (2015) Norsk folkeleg ideologi før og etter 1814. Berg R, Langhelle SI (eds) *Mod som en konge': Bøndene, makten og politikken 1800-1850:* 33–50. Bergen.
- EDNEY MH (1994) Cartographic culture and nationalism in the early United States: Benjamin Vaughan and the choice for a prime meridian, 1811. *Journal of Historical Geography* 20: 384–395.
- EHRENSVÄRD U (2006) Nordiska kartans historia: Från myter till verklighet. Helsingfors.
- Ekstrand V (1903) Svenska lantmätare: Biografisk förteckning, 1628-1900. Uppsala. https://jbgf.se/wp-content/uploads/2020/03/Svenska-lantm%C3%A4tare.pdf
- ENEBAKK V (2012) Kartlegging av Norge i tid og rom. BAGGE S, COLLETT JP, KJUS A (eds), *P.A. Munch: Historiker og nasjonsbygger.* 120–151. Oslo.
- ERIKSSON N (1991) I andans kraft, på sannings stråt: De skandinaviska naturforskarmötena 1839-1936. Gothenburg.
- Falnes OJ (1933) National romanticism in Norway. New York. Foucault M (2001) Power: Essential works of Foucault 1954-1984. Faubion, JD (ed). London.
- GIMSE TB (2014) Kart over Christiania: En bibliografi over trykte Christianiakart. Oslo.
- GINSBERG WB (2009) Maps and mapping of Norway 1602– 1855. New York.
- GLENTHØJ R (2009) Et Fædreland og et fødeland. FRYDEL-UND B, GLENTHØJ R (eds): 1807 og Danmark-Norge: På vei mot atskillelsen: 81–99. Oslo.
- Gustafsson H (2018) Nordens historia. En europeisk region under 1200 år. Lund.
- HAMMER SC (1923) Hovedstaden og 17. Mai til og med Torvslaget. Kristianias historie, Volume 4: 107–124. Oslo.
- HARLEY JB (2001) The New nature of maps. Essays in the history of cartography. Baltimore.
- HARSSON BG, AANRUD R (2016) Med kart skal landet bygges: Oppmåling og kartlegging av Norge 1773-2016. Oslo.
- HEMSTAD R (2018a) Kampen om 'Skandinavien'. Fortid 1-2018: 54–64.
- HEMSTAD R (2018b) Skandinaviens geografi. Norsk Pedagogisk Tidsskrift 2-2018: 114–132.

- HIGGITT R, DOLAN G (2009) Greenwich, time and 'the line'. Endeavour 34: 35–39.
- HILDEBRAND B (1966) Carl G. af Forsell. Urn: sbl:14349, Svenskt biografiskt lexikon, Vol. 16: 311. https://sok. riksarkivet.se/sbl/artikel/14349
- HOEM AI (1986) Norge på gamle kart. Oslo.
- JONES M (2003) Tycho Brahe og kartografien på slutten av 1500-tallet. *Nordenskiöld-samfundets tidskrift* 62: 51–78.
- KEATES JS (1996) Understanding maps. Harlow.
- LARSEN SB (2000) Gerhard Schøning og omvurderingen av det nordlige på 1700–tallet. *Norlit* 11: 163–178. https://doi.org/10.7557/13.2076
- LIEN AC (2020) From fortress flagpole to the Greenwich line: The establishment of a common prime meridian in Norway in the period 1770–1970. Norsk Geografisk Tidsskrift Norwegian Journal of Geography 74: 262-279. https://doi.org/10.1080/00291951.2019.1682035
- LIEN AC (in press) Colouring sovereignty: How colour helped depict territorial claims to the Arctic in Northern Europe on sixteenth to nineteenth century maps. LANGE D, VAN DER LINDE B (eds) Maps and Colours. A Complex Relationship. Leiden.
- LIEN AC, LUNDBERG A (2022) Lines of power: The eighteenth-century struggle over the Norwegian–Swedish border in Central Scandinavia. *The Cartographic Journal* 59: 102–119. https://doi.org/10.1080/00087041.2021. 1995124
- Losang EH (2020) Putting America's first empire on the map: American early efforts to map the Philippine islands. Kent A, Vervust S, Demhardt I, Millea N (eds) *Mapping Empires: Colonial cartographies of land and sea*: 23–36. Cham. https://doi.org/10.1007/978-3-030-23447-8 2
- MISSINNE S (2015) America's birth certificate: The oldest globular world map: C. 1507. *Advances in Historical Studies* 4: 239–307.
- MONMONIER M (1991) How to lie with maps. Chicago.
- Murphy AB (1996) The sovereign state system as political-territorial idea: Historical and contemporary considerations. Biersteker TJ, Weber C (eds) *State Sovereignty as Social Construct*: 81–120. Cambridge.
- NORDMAN D (2020) Boundary disputes and cartography. Edney MH, Pedley MS (eds) *The History of Cartography, Volume 4: Cartography in the European Enlightenment:* 162–167. Chicago.
- Pettersen BR (2014) Astronomiske bestemmelser av Norges første nullmeridian. *Kart og Plan* 74: 150–160.
- Pontoppidan JC (1785) Map of Southern Norway. Kartverket. Norge 109: Det sydlige Norge. https://kartverket.no/om-kartverket/historie/historiske-kart/soketreff/mitt-kart?mapId=6786
- Sandvik G (ed) (1983) Stadnamn. NOU Noregs Offentlege Utgreiingar 1983: 6. Oslo.

- Schneider U (2007) Kartenes makt. Oslo.
- Schüler CH (2011) Kart gjennom historien: Bilder av verden fra antikken til i dag. Oslo.
- SEALE C, GOBO G, GUBRIUM JF, SILVERMAN D (2004) Qualitative research practice. London.
- SMITH AD (1993) National identity. Reno.
- STAGG FN (1956) East Norway and its frontier. London.
- STEEN S (1951) Det frie Norge. 1814. Oslo.
- STORSVEEN OA (2009) Christian Krohg 1. In: Norsk biografisk leksikon at snl.no. https://nbl.snl.no/Christian Krohg - 1
- STRANDSBJERG J (2010) Territory, globalization and international relations: The cartographic reality of space. London.
- Swedish National Archives (2019) Otto Julius Hagelstam https://sok.riksarkivet.se/sbl/Presentation. aspx?id=13498
- Taylor PJ (1994) The state as container: Territoriality in the modern world-system. *Progress in Human Geography* 18: 151–162.
- Van Mingroot E, van Ermen E (1988) Norge og Norden i gamle kart og trykk. Oslo.
- VELSAND A (2018) Gamle dansk-norske kart over Norge: En undersøkelse av konteksten for tegningen av norgeskart i Danmark-Norge på 1700-tallet. Oslo https://www.duo.uio.no/bitstream/handle/10852/63081/Master\_VELSAND.pdf?sequence=1&isAllowed=y
- VIKOR LS (2010) Language purism in the Nordic countries. International Journal of the Sociology of Language 204: 9–30. https://doi.org/10.1515/ijsl.2010.028
- Vöbam (2019) Biografier över Kartografer, Gravörer, Konstnärer. Whitelock, C. O. https://www.vobam.se/layout\_kartografi.php?submeny=kartografer#W
- WESTRIN T (ed) (1913) Ture Alexander von Mentzer. Nordisk Familjebok, Volume 18: 143–144. Stockholm. http://runeBERG.org/nfbr/0088.html
- WITHERS CWJ (2017) Zero degrees: Geographies of the prime meridian. Cambridge.

#### Author

Anne Christine Lien
ORCID: 0000-0002-7606-740X
anne.lien@kartverket.no
University of Bergen
Department of Geography
Fosswinckelsgt. 6
5007 Bergen
Norway