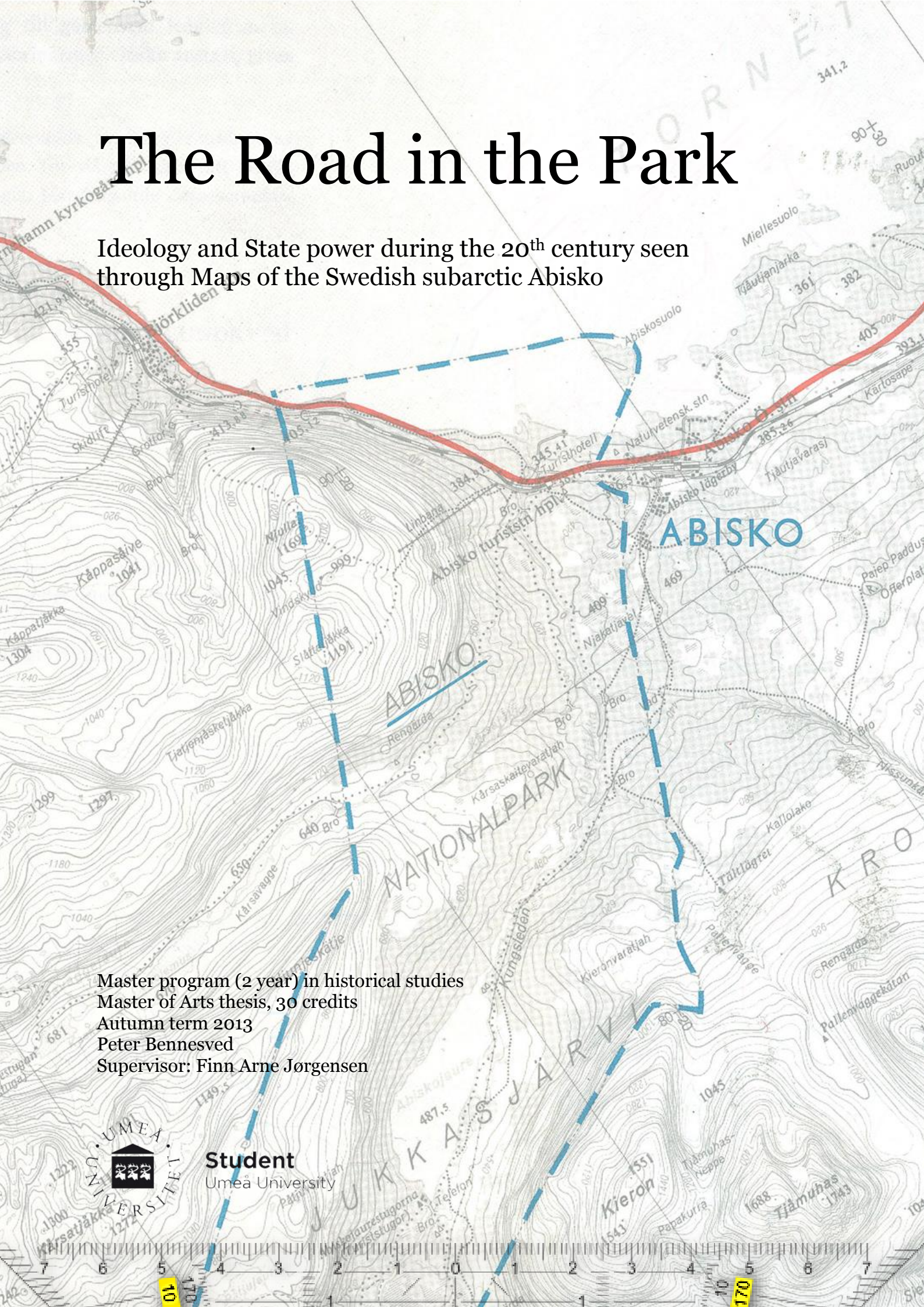
The Road in the Park

Ideology and State power during the 20th century seen through Maps of the Swedish subarctic Abisko



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Peter Bennesved
Supervisor: Finn Arne Jørgensen

Student
Umeå University

Vägen i parken

Ideologi och statlig makt under 1900-talet studerad genom kartor över Abisko

av

Peter Bennesved

Abstract

Uppsatsens syfte är att försöka hur kartor fungerar som en länk mellan politisk diskurs och det fysiska landskapet. Detta görs genom att studera tre kartor som avbildar samma område men vid olika tidpunkter och med olika motiv. Kartorna studeras genom en operationalisering av den franske sociologen Bruno Latour's teori om 'immutable mobiles'.

Uppsatsen visar att den statliga kartografiska verksamheten under 1900-talet i Sverige producerade immutable mobiles som sedan kunde avläsas av aktörer och som i sin tur kunde använda dem för att understödja deras politiska och vetenskapliga argument. En tillsynes trivial poäng. Problemet är dock avståndet i mellan den centraliserade makten och platsen som i detta fallet är ca 1400 kilometer. Kartorna möjliggör alltså en maktrelation trots det stora avståndet. Allt eftersom de statligt ägda kartorna var hämtade, tolkades de av aktörernas ideologiska perspektiv. Dessa tolkningar låg sedan till grund för politiska beslut som sedan resulterade i faktiska ingrepp i landskapet.

Formerandet av Abisko nationalpark används i uppsatsen som ett exempel på hur denna process fungerar. Parken skapades med ett specifikt set av ideologiska motiv. De politiska aktörerna använde statliga kartor för att utforma sin proposition. Formerandet av parken är således en manifestation av både statlig närvaro, statlig kontroll över landskapet och ett ideologiskt artefakt. Det vore därtill omöjligt att skapa parken utan en karta för att definiera dess gränser. Planerandet och konstruerandet av mellanriksväg 98 mellan Kiruna och Narvik har analyserats på ett liknande sätt, dock med en annan ideologisk bakgrund.

Uppsatsen resulterar i en möjlig förklaring till vad kartorna har för roll i en statlig platsskapande och landskapsförändrande process. Vidare så försöker uppsatsen förklara hur olika ideologiska tolkningar av landskapet kan hamna i konflikt med varandra över tid på grund av inkompatibla ideologiska motiv.

I

Introduction

Preamble

As I sit in the hotel lobby of Abisko Tourist Station an employee talks to me about his experience of being so far away from Stockholm. The distance is significant. To get from Stockholm to Abisko you have to travel about 1400 kilometers north. I listen carefully and he says that although he is situated in such a faraway place he can order fresh milk and have it delivered to his workplace in Abisko in only two days. He found it strange and he thought of it to as an evidence of the globalized world we today find ourselves in. Although, what is presented here will not concern fresh milk, the shop clerk I was talking to managed to with his thoughts frame one of the main themes of this thesis: How come such an extremely peripheral place like Abisko can be so well integrated into the Swedish national picture, both symbolically and practically?

Abisko's history and importance within a Swedish national narrative are connected with single infrastructural projects such as the railroad, the road leading there and tourism ventures like Abisko National Park. Trekking in the national park and later skiing tourism in Abisko's vicinity have had a status as a genuine Swedish experience since the beginning of 20th century. The shop clerk I was talking to was employed to serve that tourism and the railroad and the road are the backbone of communication which allows it. Together, the communication infrastructure and the tourism in Abisko serve as means and purpose of human presence in the region. Without infrastructure and tourism, Abisko as we see it today would not exist.

However, both Abisko National Park and the Transnational Road 98 are objects in the landscape constructed and administered with the agency of the state at different points during the 20th century.[1] Both the road and the park were once ratified by the Swedish Riksdag[2] and are also administrated by

[1] The American historian of British modern history Jo Guldi said that: "Modern government in developed nations have mediated the relationship between individuals and infrastructure technology for so long that the role of the state in designing ports, sidewalks, and bus lines is nowadays taken for granted." Jo Guldi, *Roads to Power: Britain Invents the Infrastructure State* (London 2012), p.4.

[2] The Swedish parliament is called Riksdag.

it. Moreover, the state is not without ideological influence. Every artifact created with the agency of the state, is built with a specific ideological idea behind it. Since it is impossible to foresee all probable consequences of a specific political plan, the result that is supposed to be achieved, is necessarily incorporated within a utopian political vision. The argument looks something like this: by building A, we achieve B, and when we have B, daily life will be easier. It is politics, plain and simple. Both the road, the railroad and the national park amongst other things followed this argument-structure in one way or another as they were built.

The notion that an ideological vision accompanies every political venture - be it roads or national parks – also means that such visions can linger over time. Even though the state and its ideological basis evolves and takes on new ideas. The gap in time between political ventures in a specific region can then cause conflicts although the same state is the agent behind both the conflicting ideas.

The road and the park that this thesis involve are examples of such a conflict. The park was instigated with a specific set of ideological motifs. The road was built with another, not necessarily compatible with the first. In this way the artifacts left in a landscape leave traces from their contemporary ideology. As we will see later, these two different goals would conflict and cause a political debate in the Swedish Riksdag. For some of the politicians something would be gained by the road. For others, something would be lost. That something is the specific ideological symbolism of the road and of the park.

A part from that, artifacts in the landscape are also evidence of earlier presence. To be able to build something, anywhere, you must know of the place you want to build on. Every political act to build a road or instigate a park reveals a preceding information gathering of that place.

So to summarize, Transnational Road 98 and Abisko National Park are inevitably political objects and they are present in the daily life of everyone living or visiting Abisko. They are things taking up space in the landscape and they are objects made and controlled by the state apparatus. Inherent in them are the ideology set into motion as they were built. They are also evidence of human presence, both after and before their making. Furthermore, the fact that the road and the park caused a political conflict presents a possibility to see how the ideological background of each object linger in time.

This is all good. But there is one thing that must be resolved, and that is the matter of distance between center and periphery. I mentioned it above, the distance between centralized power in Stockholm and Abisko is significant. Somehow the state must resolve the problem of distance on a practical level to be able to enforce political agendas. To understand the process in which a state takes place I must study how the state sees the landscape without having to be there.

To aid me in this, I have chosen to adopt the American anthropologist James C. Scott's perspective. Scott's book *Seeing like a State* has an emphasis on the power-relationship between state and landscape. He also uses maps and city plans as one of his main sources. Scott studies how an otherwise blind state takes control over territory and people through systems of measurement such as maps.[3] For a state to be able to 'see' and exercise control in lands were it is barely present, it needs tools and systems that are uniform to substitute the lack of physical presence.[4] Moreover, the two authors Lars Ottosson and Allan Sandberg, who wrote the book *Generalstabskartan 1805-1979,* notes that the 19th century Swedish state cartography focused initially on the northern regions. It was part of a state venture to minister Lapland's[5] further cultivation and colonization.[6]

As these scholars have shown, the map seems to float somewhere in the middle between the state and the physical landscape. And it seems that the very cartographic craft in Sweden is closely associated with Lapland's development and history. So to formulate some sort of general scope with this background: this thesis will try to explore the question of how the process of place making plays out in a specific region: How do a state incorporate territory both in a symbolic and a practical way? I will treat the concept of maps as the departure point for this question.

Scope and research questions

By using maps included in three different argumentative sources - all depicting the Kiruna-Abisko-Narvik region in subarctic Sweden - I will discuss how the process of place making occurs and what the map's role is in this process. To operationalize the scope has been divided into three research questions. The first concerns what the road and the park's advocates aimed to achieve by building or

[3] James C. Scott, *Seeing like a State* (New Haven 1998). I will return to his argument in the chapter below: "Maps and Landscapes – Theory and method"

[4] See also the book *Civilizing Nature.* Here, the historians Gissibl, Höhler & Kupper draws attention to the technologies of statehood to understand the process of creating national parks: the map, the expedition, the fieldwork, the research station, but also law making, bureaucracy and armed surveillance are all important tools to understand nationalist will to territorialize nature. Bernhard Gissibl, Sabine Höhler & Patrick Kupper (eds.) *Civilizing Nature: National Parks in Global Historical Perspective* (New York & Oxford 2012). p.10-11.

[5] The large region this thesis concerns have several different names and since I will use them as they are referred to in my sources some explanation might be useful: *Lapland* refers to the province. *Norrland* refers to the large northern part of Sweden above Dalälven (Dal River) which includes nine different provinces. About half of Norrland is located above the Arctic Circle and is sometimes referred to as the subarctic or arctic region. *Norrbotten* is the name of the county (but can also refer to a separate province) and includes about the same area as the subarctic region of Norrland. However, counties are the only regional classification of the three that has any administrational purpose. The province name and the names of the large three regions of Sweden are only used for self-identification or as general remarks in politics and weather forecasts. As a general note it can be said that Lapland refers mainly to the inland region in the most northern part and Norrbotten refers to the most northern part of Sweden with the east coast included. The word 'Lap' in Lapland is etymologically related to 'Lapp' which is an old name for the indigenous Sami population. Lapp is commonly not used since it is considered a discriminatory name. However, the name has not been changed for the province 'Lapland' to this date. To confuse even more, the Sami's have their own definition of the region: *Sápmi,* which includes parts the three northern Scandinavian countries as well as the Russian Kola Peninsula. There is also yet another name of the region which also is a transnational geographic definition: *Nordkalotten*. Nordkalotten (Cap of the North) usually refers to the region above the Arctic Circle and includes Sweden, Norway, and Finland.

[6] Lars Ottoson & Allan Sandberg, *Generalstabskartan 1805-1979* (Stockholm 2001), p.30.

instigating them. In chapter II and III this first question will be covered:

1. *What did Abisko National Park and Transnational Road 98 symbolize as they were planned and built?*

By using the backdrop provided with the first two chapters, I will discuss how the road and the park's ideological roles in a national perspective caused a political conflict in Swedish Riksdag as they confronted each other. This part will be covered in Chapter IV and can be operationalized with the following question:

2. *Why did Abisko National Park and Transnational Road 98 conflict in Proposition 1974:107 and in what way were the conflict connected to the objects symbolic meaning?*

While answering the above questions I will approach an argument about what the maps' actual role are in the relationship between the state and the landscape the state claims to control. Chapter V will thus be a continued discussion of the map's particular role and the process of place making as politics are played out in a specific place:

3. *In what way are the symbolism of Abisko National Park and Transnational Road 98 connected to state power and what is the map's role as an immutable mobile?*

Transnational Road 98 and Abisko National Park – introduction and historiography

This part will function as a brief contextualizing section and a short summary of historiography concerning the two objects of interest for the thesis.

Road building in general around the Kiruna area seems to have been sparse during the first half of the 20th century. By 1926 Kiruna was connected through Altajärvi to Svappavara and then Gällivare and from here further to the national road network. Abisko, which is a quite small community of only about 150 permanent inhabitants, was not connected to the national road network until 1980. The road construction started in Kiruna 1978 and reached Abisko by 1980, Riksgränsen 1982, and was finally connected to Narvik by 1984.[7] With the completion of Transnational Road 98 (today known

[7] The local historian Agge Theander has made a handmade map over the development of the road net surrounding the Kiruna region: Kiruna kommun, *Kiruna: 100-årsboken. D. 1*. (Kiruna 2000), s.133f. Before the road was built the inhabitants in the region used the railroad in all sorts of creative ways to satisfy the needs of travel and communication.

as European Route 10[8]), Abisko Tourist Station, Abisko Research Station and of course Abisko National park, were finally connected with another communication infrastructure beside the railroad.

As I did research on the road project between Kiruna and Narvik I discovered that there had been some controversy about the road as it was planned. I found protocols from the Nordic Council[9] discussing a transnational road and where it would fit in a nordic economic perspective. There were also an Environmental impact assessment report conducted by Uppsala University as it was finished which discussed the environmental and economic consequences. Additionally, I heard rumors of individual resistance from people living near Abisko. Irritated people were pulling up markings during nightly raids, markings placed by the Road Office. There were also interest groups in Kiruna opposing the road, being loud, and making 'No Road!' T-shirts.[10]

Finally, I found that as the road was at last to be built, the proposition[11] that was written to ratify the intrusion of Abisko National Park caused some debate in the Swedish Riksdag. This proposition was called 1974:89 and was taken up in Swedish Riksdag 1974 by the minister of Agriculture Svante Lundkvist. The critique against it mainly came from the right wing politician Hans Wachtmeister, who was opposed and replied by a variety of left wing and center politicians.

Abisko National Park came about in an age where the ideology of nationalism was a great part of the political discourse in Sweden. By 1909, in Proposition 1909:125, a group of scientists active in the Abisko region proposed that nine national parks, six of them located in the arctic region, should be protected and placed under the administration of the Swedish crown. The parks' were made with specific criterion and were considered of great national importance. Building a paved road straight through it perhaps caused unease amongst those who held the park in high regard.

The ethnologists' Billy Ehn, Jonas Frykman and Orvar Löfgren's book *Försvenskningen av Sverige*[12] discusses how the Swedish people cultivated nationalism. The purpose was to gather the population and creating an individual identity of Swedishness. Furthermore, Sverker Sörlins dissertation *The land of the future* from 1988 described the relationship between the national parks, tourism and

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The scheduled passenger traffic on the railroad was of course its basis. The locals used different forms of motor driven and rail bound communication such as rail busses. Torne Lake was also frequently used as means of communication with boat traffic. Margareta Redin & Birgitta Forssell, *Nästan allt om Abisko* (Abisko 2011), p.30-33.

[8] At the time it was planned and discussed it was called Transnational Road 98, (mellanriksväg 98). The 'European' prefix was added when Transnational Road 98 was bundled together with the road between Luleå and Kiruna as well as the Norwegian road from Å i Lofoten to Narvik, forming European Route 10 or E10.

[9] Nordiska Rådet. The Nordic Council is an organization consisting of several ministers from the nordic countries that work with transnationally related political ventures.

[10] Redin & Forssell (2011), p.33.

[11] A proposition is somtimes known as a Parliament Bill.

[12] Billy Ehn & Jonas Frykman & Orvar Löfgren, *Försvenskningen av Sverige* (Stockholm 1993). In english: *The Swedization of Sweden.*

science and its connection to the overall national development.[13] Concerning nationalism as a wider concept Sörlin has also been involved in *Den globala nationalismen*[14] together with Björn Hettne och Uffe Östergård. This book discusses several different themes on nationalism and how it has progressed ever since the 17th century until today.

All together these scholarly works point in the direction that the national parks' roles in a wide national sense were used as a political artefact to convey a vision of what was Sweden and Swedishness as an individual identity.

The road on the other hand, was built and planned in a different ideological environment. Concerning the road building practices in Sweden the Social anthropologist Olle Hagman's dissertation, *Bilen, Naturen och det moderna* [15] brought up some light on what roads meant during the mid-20th century in Sweden. Hagman studied Swedish car commercials and ads to see how the swedes relation to nature has changed with the implementation of the automobile society in urban planning and culture.[16] Hagman discusses automobility as a part of the proto-ideology modernism[17] and he further describes the relationship between the car as technology and the human and how the two relate to nature. He claims that the car was seen as an extension of the human body in many ways. With it, the citizens could travel farther and carry more with them.[18] The historian Per Lundin has also contributed to the field of automobility. In the dissertation *The Car Society: Ideology, Expertise and Rule-making in Post-War Sweden* Lundin took a wide national grip and examined how Sweden became a car society.[19] According to him the technocrats of the first half of the 20th century had a significant role in advocating the expansion of automobility within the confines of urban planning.

What both these authors have shown is that the road building and cars were loaded with a modernist ideology. Both on a personal level and in a nationwide perspective the car and the urban planning that

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[13] Sverker Sörlin, *Framtidslandet: debatten om Norrland och naturresurserna under det industriella genombrottet* (Umeå 1988), p.105-110. Sverker Sörlin has been an active writer of the Norrland region. He has also contributed in *The Ore-Railroad*
100 years which is a handy anthology concerning mostly the rail road track but also the Kiruna region in general.
Kjell Lundholm (ed.), *Malmbanan 100 år* (Luleå 1988).

[14] Björn Hettne, Sverker Sörlin & Uffe Östergård, *Den globala nationalismen* (Stockholm 2006). In eng: The Global Nationalism.

[15] Olle Hagman, *Bilen, Naturen och det moderna: Om natursynens omvandlingar i det svenska bilsamhället* (Stockholm 2000). In eng: *The car, nature and the modern: The view of nature's change in Swedish automobile society.*

[16] See also Cristof Mauch & Thomas Zeller (eds.), *The World beyond the Windshield: Roads and Landscapes in the United States and Europe* (Athens 2008).

[17] A proto ideology is an underlying ideology. If modernisms' goal is the progression of the human society, the right – left spectra of politics are only different pathways to that specific goal. For instance, Nazism and communism have a similar goal to create the perfect society. Their end-point gives similar results. However, their methods and political/philosophical ideology are different. In that sense their underlying ideology, or proto-ideology is modernism while the political pathways are ideological superstructures built on top of it. This will be further explained in chapter 2.

[18] Hagman (2001), p.47f.

[19] Per Lundin, *Bilsamhället: Ideologi, expertis och regelskapande i efterkrigstidens Sverige* (Stockholm 2008).

followed in their footsteps were utterly political. So if the park is perhaps best analyzed with 19th century nationalism in mind, the road should be seen with mid-20th century modernism as context.

The Swedish state's involvement in Lapland's development and the immense resource extraction has not been without problems, especially from the indigenous Sami perspective. A notable scholarly work on the subject that relates to this thesis is that of the Swedish historian of science and technology May-Britt Öhman. In the article "On Visible Places and Invisibilized Peoples"[20] she describes how the Swedish state constantly made the Sami 'problem' invisible throughout the exploitation of Lapland's hydropower resources. Furthermore, according to Umeå University Historian Daniel Lindmark the asymmetrical relationship between the Swedish state and the Sami is seldom recognized as colonialization in Swedish historiography.[21] This should also be related to the point that James C. Scott tries to make: As the state takes control over the spatial realm with uniform methods of measurement, local practical knowledge and needs from people on the actual site are ignored and replaced by the state's ideological frame.[22] As we dig into the Swedish state's actual activities in the Abisko region, perhaps some clues to how this 'invisibilization' occurs can be traced.

Concerning the historiography of Abisko National Park and Transnational Road 98, very little has been written in a humanistic scholarly sense. Two books are notable; Birgitta Forsells and Margareta Redin's *Nästan allt om Abisko* and Agge Theander's *Abisko Turist Station – de första hundra åren.*[23] However, none of these books are scholarly works, but they are more or less what is available on the subject. Concerning the research station and its history, Carl Gustaf Bernhard's *Abisko Scientific Research Station* written 1989, is notable but can mainly be used for contextualizing information.[24] Lennart Bäck and Christer Jonasson's *Environmental Impact Assessment Report* [EIAR] is probably the only scholarly written work at all concerning the road specifically after it was finished.[25]

[20] May-Britt Öhman, "On Visible Places and Invisibilized Peoples: Swedish state-supported Hydropower Exploitation of Indigenous Peoples' Territories", in Enrico Baraldi, Hjalmar Fors & Anders Houltz (eds.), *Taking Place: The Spatial Contexts of Science, Technology and Business* (Sagamore Beach 2006). For more readings about Sami and Lapland's colonization see: Daniel Lindmark "Colonial Encounter in Early Modern Sápmi", in Magdalena Naum & Jonas M. Nordin (eds.), *Scandinavian Colonialism and the Rise of Modernity: Small Time Agents in a global Arena* (New York 2013).
[21] Lindmark (2013), p.133f. By describing Lapland as a purely Swedish realm the possibility of describing the process as imperial colonization is circumvented. Thus the 'problem' of the indigenous peoples becomes 'invisibilized'
[22] Scott (1998), p.79-83, 309-316, 345-346.
[23] Birgitta Forssell & Margareta Redin, *Nästan allt om Abisko* (Abisko 2011). Agge Theander, *Abisko turist station – de första hundra åren* (Abisko 2002). In english: *Almost everything about Abisko, Abisko tourist station – The first hundred years.*
[24] Carl Gustaf Bernhard, *Abisko Scientific Research Station* (Stockholm 1989).
[25] Lennart Bäck & Christer Jonasson, *Miljökonsekvensutvärderingar kring väg E10 mellan Kiruna och Riksgränsen* (Uppsala 1998). This EIAR consists of a whole array of theses from Uppsala University concerning all kinds of subjects but mostly the environmental consequences of the road project and tourism in the Abisko – Björkliden – Riksgränsen region.

Maps and Landscapes – Theory and method

A great part of my answer to the posed research questions will be to find out what exactly a map is. Both in a material way and as a theoretical concept. As a second step I must try to find a way to methodologically approach the map and its different layers in a qualitative way.

The map as an immutable mobile

For a start we can all agree that a map never represent reality as it is. The number of ways a map can be used is manifold and it seldom comes on its own. A map is often accompanied with text such as propositions, media articles and remittances, or is a part of encyclopedias, atlases or books. The map always have a specific purpose or is a part of an argument in all of these cases. By necessity it is thus always an abstraction or a summarization of something larger and more complex.

> A city map that aspired to represent every traffic light, every pothole, every building, and every bush and tree in every park would threaten to become as large and complex as the city that it depicted. And certainly it would defeat the purpose of mapping, which is to abstract and summarize.[26]

How do the process of abstraction and summarization that Scott mentions actually occur? A map often claims to be a representation of reality as we would experience it if we were 'there.' And since the subjectively chosen data that constitutes the map is dependent on the cartographers' purpose and experience as she or he moves through the landscape, what we see in a map is the specific cartographer's perspective.

To probe the question of how knowledge of a place is produced and turned into maps, I will use the French sociologist Bruno Latour's concept of *immutable mobiles*. Without getting too entrenched in his reasoning behind the concept of immutable mobiles, I can say that an immutable mobile is a visualization of collected and inscribed information. Imagine for example a diagram or a graph. A graph consists of series of information gathered for a specific purpose which is then translated into a visual form to pose an understandable argument. For instance, it would be impossible to understand a geographical position just by reading a text description of a map.

The map constitutes a series of information, but not every information available. It can be a massive amount of collected and processed textual data from field work and astronomical observations that in the end comes down to a single two dimensional visualization. Since the cartographer always makes

[26] Scott (1998), p.87.

a map with a certain purpose such as navigating, tourism, measuring potential resource amounts, tax outtakes and so forth, some things will be left in and some things out. [27]

However, what makes the mobile part of the Latours' theory interesting is that immutable mobiles can be layered upon each other and form large sets of data. Once a map has been compiled it is decoupled from its maker and can be stored and sent to other places. This is one of the key aspects of immutable mobiles. It can be brought as a simple document to other scholars and other nodes of calculation resources independent of its maker. Moreover. The 2D nature of, for example a map, makes it possible to layer information, compare and correct with other immutable mobiles. The Immutable mobile thus moves through both distance and time. [28]

The neatly stacked layers of information made understandable with visualizations can in turn create uniform systems of calculations of different types. Consider a meteorological observation station somewhere remote. A single meteorologist can spend a lifetime in compiling a set of statistics for a specific region. The information he has makes sense only at the place where he is. However, as the statistics of for example annual rainfall is filled in and sent by mail to the meteorological institute in Stockholm, the lone meteorologist's data can be compared and added to all the other meteorologist's data who are doing the same thing at other places. Their gathered data forms a complete picture of annual rainfall in all parts of Sweden. In the same manner Sweden's first complete set of maps, The General Staff Map, were made. All the observations the cartographers made were compiled in a centralized institution. Latour calls a centralized collection of immutable mobiles a centre of calculation.[29]

Maps as a power relation

Based on this argument one could ask, how do the state use the set of data that it gathers? How do the state use the meteorological data or maps that it gathers? James C. Scott in the book *Seeing like a State* offers an interpretation of measurements such as the enforcement of the metric system, uniform time measurement, calendars and detailed maps as a way for the emerging state to see where it is otherwise blind and left to oral witness.[30] In essence, any such uniform system is made possible by

[27] Bruno Latour uses this concept to follow an epistemological argument concerning the spread of scientific results and changes in scientific paradigms. According to Latour the layering of processed information is one of the key aspects of modern scientific thought. For a short introduction I recommend the article "Visualization and Cognition: Drawing things together" originally published in *Knowledge and Society Studies in the Sociology of Culture Past and Present*, vol.6 (1986), p.1-40 <http://www.bruno-latour.fr/sites/default/files/21-DRAWING-THINGS-TOGETHER-GB.pdf> retrieved 2013-12-16. For a more complete argument I recommend the book *Science in Action* (Cambridge 1987), especially chapter 6 "Centres of Calculation", p.215-258.
[28] Latour (1986), p.19ff.
[29] Bruno Latour uses the term Centres of Calculation to describe these centralized institutions, see Latour (1987), p.236ff.
[30] Scott (1998), p.23-33.

the systematic collection of data, visualized as immutable mobiles and then layered and added with more information. Thus, in combination Latour's immutable mobiles and Scott's state-power perspective shows that the visualization of landscape such as a map can serve as a form of tool to exercise power over territory remote from its core. The arctic region of Norrbotten is significantly remote from the centralized power in Stockholm. But when a map of Norrbotten is made from data extracted from that particular place and then brought to Stockholm the government can impose laws and regulations, draw borders and expropriate land without having to go there personally themselves.

Scott mentions city plans as an example of how the gathering and compilation of immutable mobiles (maps) can be used by authority to shape landscape. The purpose of city plans is to control how the city should progress and grow over time in accord with specific ideals. However, Scott says that standing on the sidewalk in Chicago you cannot see or experience the grid shape enforced by the city plans. To be able to see (and draw the grid shape) you must watch the city and its landscape from above in one way or another. The map is a substitute for the top-down perspective and allows what Scott calls "God's eye-view or the view of an absolute ruler."[31] Only from a sky perspective can the authoritarian control over the city's planning and development be understood. The map thus becomes the mediator that make the power relation between state and place possible. With a map over its territory, the state is no longer blind.

So what we can see here is that when an immutable mobile is gathered into a centre of calculation, the political actors can use them for political purposes. The political actors can so to speak 'tap' into the information and with it make propositions, government reports or educational material for that matter. When the politicians have the map, they can use it to shape the landscape with roads and tunnels even if the original map never was made with that purpose.

A map's context and details

I have so far discussed how maps, understood as immutable mobiles, can be analyzed as a mediator between state and landscape. However, maps as an artefact on its own can and has been analyzed in other ways as well. The environmental historian of Science and Ideas Sverker Sörlin writes that in the beginning of the 20th century the role of the national map was to create an experience of national identity. Having a map on the classroom wall, depicting the Swedish territorial extension, was a way of tutoring "territorial alfabetism" to Swedish school children.[32] They had to recognize Swedishness in the borders and the images of Sweden just as well as in poetry and literature.

[31] Scott (1998), p.57.
[32] Hettne et. al. (2006), p.340-343.

The ‘room’ where the map is located can also be an abstract context such as government propositions or books. The maps in these cases functions like any other picture. To understand them they must be studied within the context where they exist. For example in Sörlin’s case it is not the specific symbols that map features but the map as an artifact in itself and where it is placed in a specific room that matters. Its surrounding context such as its function in an argumentation, its utopian outlook and who it addresses are in these cases the object of study.

We can also zoom in to see the details of the map, such as shapes and data, names, colors, fonts et cetera. This mode of study addresses in particular the cartographer’s selection of data. A map of a metro system can serve as an extreme example. Every metro station in Stockholm has a map of the system’s extension. To make it interpretable for the stressed citizen heading to work, the map is reduced to depict the metro only and nothing else. Modern commercial maps bought in gas stations usually has signs on them symbolizing their own corporation but no other corporations. Tourist maps have another set of symbols to point in the direction of historical places or monuments and a map made with a military purpose focuses on topographic details and infrastructure. The common ground is however that all of the different maps can depict the very same site but the base layer used and specific symbols added convey different meanings and purposes depending on who the maps address. Therefore, a place has different meaning for each individual, and that meaning can be understood by studying the maps that the individual uses. The symbols themselves can also be traced backwards in time since they often are used in a uniform manner. For instance, the symbol for railroad or gas station is often similar whatever country you are positioned in.

Making places out of sites

A map can thus be studied on several different levels and every level can reflect different things either through its origins, its use, or its detail. The collection of information about a specific place tells us something of who needs information and who can acquire it. Also, who owns the right to the map, and who can use it for politics tells us about which actor has the ability to act. Additionally, the choice of details or the frame of the map is important since it reflects what the actor wants the user to see.

All in all, these different levels comes down to how a landscape is shaped by politics. As things are made in the landscape by ideological acts the above process is invoked: Someone at some time has gathered information about a place, someone else has used that information for political use. When a decision is ratified an object is constructed in the same landscape. That object is by necessity an artefact that in some way or another manifests the actor’s ideological intent.

However, the object can be physical or non-physical. For example, a national park made with the intent of preserving a certain land area as it is, does not necessarily have any physical borders such

as a fence. In that case it is the mere idea of the park that embodies the political actor's ideology. The law that protects a park can also be seen as manifestation of the actor's ideology but exists nowhere else than in a law book that has to be taken seriously by the surrounding actors. A road for automobiles on the other hand is definitely physical but can nonetheless be analyzed in the same manner.

The social construction of places

But how can laws, abstract borders and roads have meaning outside of their physical existence and how do sites become places worth mapping?

The map in Sverker Sörlin's example had in that case a specific meaning that the actors in the discourse attribute to the object. The meaning, whatever it contains, is constructed in the social interaction. Without the school children or the teachers to actively see it and discuss it, the map on the classroom wall would be rendered meaningless. The object has no essence by itself, it has to be seen in a specific context to be understood and appreciated.

This statement is also transferable to landscape. Meanwhile Abisko National Park and Transnational Road 98 has a physical extension. I argue their apparent meaning could be seen as something constructed in the social relationship between people using and experiencing the objects. The relationship between social constructivism and landscape is further discussed by the American historian David J Bodenhamer in the anthology *The Spatial Humanities:*

> Spaces are not simply the setting for historical action but are a significant product and determinant of change. They are not passive settings but the medium for the development of culture. All spaces contain embedded stories based on what has happened there. These stories are both individual and collective, and each of them link geography (space) and history (time). More important, they all reflect the values and cultural codes present in the various political and social arrangements that provide structure to society. In this sense then the meaning of space, especially as place or landscape, is always being constructed through the various contests that occur over power.[33]

Bodenhamer presents two examples to explain this. One where feminist geographers have raised critique against feminization of mapped objects with phrasing such as 'virgin land' and 'mother nature' and another where native Indians have complained that what has been depicted as New World and untouched or uninhibited by humans were their homelands for generations. For Bodenhamer, this is a very convincing example of how the human understanding of the world is socially constructed.[34]

[33] David J. Bodenhamer, John Corrigan, & Trevor M. Harris, (eds.), *The spatial humanities: GIS and the future of humanities scholarship*, (Bloomington 2010), p.16.
[34] Ibid. p.16.

I claim that, while the fact that Abisko National Park and the surrounding areas is accessible for recreational purposes can be said to be true, the value or meaning of such access is socially constructed and expressed by actors and agents with relations to that place. The beauty of the mountain range in Abisko, Torne Lake or Kärkevagge or any other site in the area become a place worth seeing in the social context between humans. The sites have no essential trait apart from its material extension. A mountain can either be treated as a resource, an obstacle, a beauty, a religious site or a hiding place depending on the situation.[35]

Method of inquiry

This thesis is a study of three maps, depicting the same geographical region but made at different times and with different purposes. The first map is part of a proposition to instigate Abisko National Park, the second present nine different alternatives on how a road between Kiruna and northern Norway could be built, and the third depicts the decision to let the road cut through Abisko National Park. These three maps will have a front position during my research.

However, to be able to unravel the maps different layers and the meaning of the places they depict, the maps have to be analyzed alongside other material as well. The first map, included in Proposition 1909:125, has been studied with the help of mostly secondary literature since the early 20th century nationalism in Sweden has been widely explored by other scholars. The second map has been studied with SOU 1958:1, SOU 1966:69 (Bilaga 5) and SOU 1969:56 (SOU: Official Government Report) and mainly Per Lundin and Olle Hagmans dissertations as secondary literature. The third map presented together with Proposition 1974:107, has been studied along with Riksdags Protocol 1974:89 §5, where the Riksdags debate concerning the proposition was recorded.[36]

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[35] This argument is also inspired by Winther Jörgensen & Phillips classic book on discourse analysis. The term discourse analysis is of course older than their work. Michelet Foucault is perhaps the one scholar that introduced the method and theory as we know it today. Winther Jørgensen, Marianne & Phillips, Louise, *Diskursanalys som teori och metod* (Lund 2000), p.10ff.

[36] All of them can be viewed at the National Library except the oldest can be viewed in digital form. All documents concerning the road project are available in the Road Office's archives in Härnösand. Kiruna Municipality also has documents concerning the road in their own archives and all remittances and documents concerning the propositions can be seen in the National Library in Stockholm.
Vägplan för Sverige D.1 (SOU 1958:1) <http://libris.kb.se/bib/13483458> ;
Trafikutveckling och trafikinvestingar (SOU 1966:69, Bilaga 5) < http://libris.kb.se/bib/13927021> ;
Vägplan 1970 (SOU 1969:56) <http://libris.kb.se/bib/14681064>;
Proposition 1974:107 <http://data.riksdagen.se/fil/A0564EBA-6A78-4379-A0C2-7D1413171966>;
Riksdagsprotokoll 1974:89 <http://data.riksdagen.se/fil/604EA936-5BF0-4FCD-9312-3B456D83EFA7>;
Sven Godlund & Gunnar Rasmusson *Planering för väg Kiruna-Nordnorge: ett bidrag till den tillämpade geografin* (Stockholm 1961) <http://libris.kb.se/bib/738076>; Sven Godlund & Gunnar Rasmusson, *Väg Kiruna - Nordnorge: natur- och näringsgeografisk undersökning utförd år 1959*, (Stockholm 1960) <http://libris.kb.se/bib/3200901>.

Furthermore, I have used digital methods to reach my conclusions. As my thesis has progressed it has been significantly useful to be able to use the web based platform Omeka and Neatline to study the maps that this thesis concerns. I have used programs such ArcMap and QGIS to georeference the maps in their digital form. Georeferencing means that historical maps are tied to coordinates related to a navigational system (in this case WGS84). This procedure makes it possible to layer the maps on top of each other in different manners and study them in relation to each other on digital platforms.

So with this said, this chapter finally comes down to four concepts that will function as methodological questions that has been put in relation to each map:

1) The map as an immutable mobile: This question asks where the maps base layer originates from. What information is the map made out of, what is its origins?

2) The map as a power relation: For whom was the map made, and who uses it?

3) The maps context and details: In what context does the map occur, and what has been added or removed for this particular context. What can the contemporary ideological background say about the map?

4) The depicted landscapes meaning: Taken together, what does the three above concepts say about what meaning the depicted place acquires in relation to the maps?

Exploring Digital Humanities

Since this thesis involves maps, an object best experienced in visual form, I have taken the opportunity to explore digital visualizations of them as a parallel project. Practically this means that this thesis will also be presented as a web based Omeka-Neatline exhibition on the domain mapping.urbanarctic.net. I will let the reader (or perhaps user?) explore that site without further explanation but I do want to say some things about the relation between this utterly text based thesis and its web based counterpart.

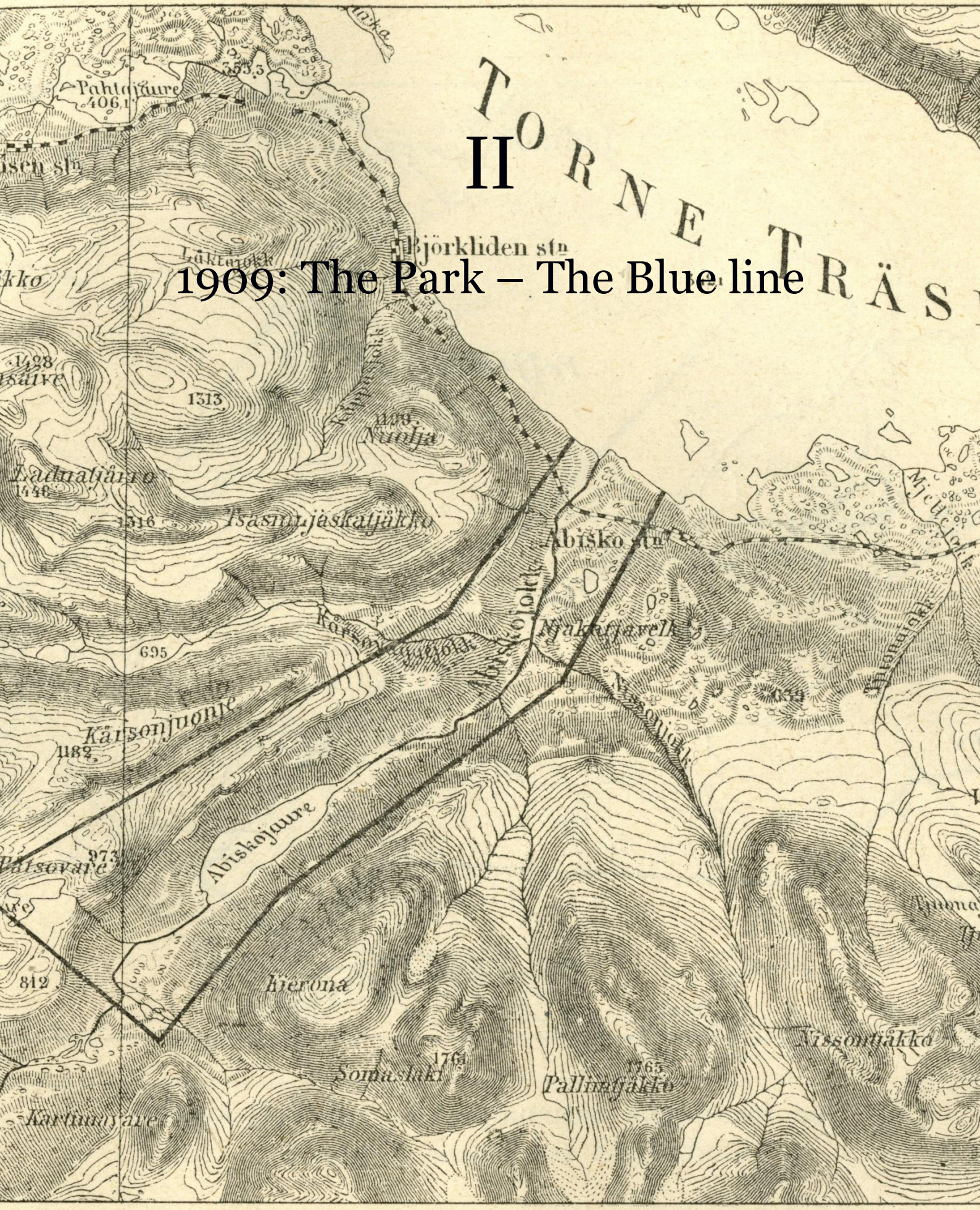
Since this thesis will revolve around the physical landscape, and since some of my sources are based on geographical material there is reason to consider using the visual experience as a way of completing my argument. Large parts of my empirical chapters discusses objects on the maps and the maps themselves. On the website, the map can be explored simultaneously as the text is being read. The map is thus always present and can be juxtaposed with the other maps in a pedagogical way. The best way of optimizing the capability would probably be to use the site parallel to reading the thesis with the purpose of exploring the details mentioned in the thesis. So, consider this thesis perhaps

more as a modest exploration of how traditional forms of scientific writing can be supported and developed with digital methods.[37]

[37] There are few works in Swedish historiography that resembles or relates to my scope here. However a notable one, is Reinhold Castensson and Urban Windahl's work on the Göta Kanal cartography. Just like him, I have used a web based platform for his research and it is still accessible today (although its compatibility with contemporary browsers is quite faulty). Reinhold Castensson & Urban Windahl, *De historiska Göta Kanalkartorna: design, tekniskt utförande och nyttjande av kartwebben* (Linköping 2001) <http://liu.diva-portal.org/smash/record.jsf?pid=diva2:375797> retrieved 2012-12-12.

II

1909: The Park – The Blue line



Den föreslagna nationalparken i Abiskodalen.

The different visions of Lapland's future

Abundant resources, the loss of Finland and demographic growth during the turn of the century

Ever since the 17th century, Norrland have been accompanied with ideas of a great potential that could be compared to even the most prominent imperial nations and their colonies. In this first part of chapter II, I will discuss what historians have written about the Kiruna-Abisko regions development during the 19th century to establish why it became an important region for the Swedish state.

The Swedish historian Sverker Sörlin describes Lapland as the *"land of the future"* for the late 19th century citizen.[38] Norrland would sometimes be referred to as a "Klondyke" or "Swedish America." These ideas were introduced by natural philosophers such as Carl von Linné and politicians like Carl Bonde[39] (who thought of Norrland as a Swedish West India), and were from the start connected to a vision of abundant resources, such as farmland, wood, ore and later hydropower.[40] As Sweden was industrialized it became economically feasible to exploit such resources. Railroad technology and a new ore refining process (named the Thomas process after Sidney Gilchrist Thomas) facilitated this development. Because of the metallurgical inventions there was also a growing demand of iron ore worldwide.[41] In this environment Loussavaara Kiirunavaara Aktiebolag, commonly known as LKAB, was founded 1890.[42] LKAB is one of the world's largest mineral exporter. Today LKAB is Sweden's largest single tax payer.

The rapid export growth was ministered by the construction of the last part of the Iron-Ore track reaching from Kiruna to an ice free harbor in Narvik. The complicated railroad project was initiated by a British company with experience from Indian railroad construction. However, the company went bankrupt after a few years and the project was bought and completed by the Swedish government. A few years later, the Swedish state bought half of the stocks in the newly formed LKAB.[43]

Furthermore, the region became important in a defence perspective because of new military doctrines and a new geographical situation since the Napoleonic Wars. The loss of Finland in 1809, which meant a loss of a third of Sweden's total territory and the forced union with Norway 1814, more or

[38] Sörlin (1988), p.60ff. The different visions present during the industrialization age has been discussed by Sörlin in his dissertation *Framtidslandet* (Sörlin 1988). See chapter II, "Guldet från Norden – Norrlandsvisioner intill 1800-talets början" p.21-48, and chapter III "Sveriges Amerika" p.49-94.
[39] Carl Carlsson Bonde. Influential free trade-liberal politician active during the late 19th century *Nordisk Familjebok (projekt Runeberg)* <http://runeberg.org/nfbc/0591.html> retrieved 2013-12-12.
[40] Sörlin (1988), p.36, p.49-53, p.58.
[41] Sörlin writes that: "The Swedish ore export, which in the beginning of 1880 was more or less nonexistent grew during the next decades and yielded by 1913 8,5 percent of the national gross export." Sörlin (1988), p.56.
[42] Kiruna kommun, *Kiruna: 100-årsboken. D. 1.* (Kiruna 2000), p.62f, 136f.
[43] Kiruna kommun, (2000), p.62f, 136f.

less turned the Swedish geography on its head. The new situation meant that the northern Finnish border, as well as the northern Norwegian border suddenly became strategically important in a new defense perspective. The politicians' insight that Norrbotten was also a treasure chamber resulted in the conclusion that Norrbotten had to be fortified and protected. The new type of warfare introduced during the Napoleonic wars also meant that the state had to raise its preparedness. Swift movements, massive amounts of troops and large battles had to be partly prepared for in advance by the military apparatus. There would be no time for mapping when the new form of wars were started.[44]

There had also been a period of significant demographic growth in Sweden during the 19th century. This resulted in massive population movements on a national level and some of these migrants moved north in search of work. The Lapland parishes grew about 157 percent between 1890 and 1910 and many of the youngest municipalities like Kiruna and Gällivare exceeded the older ones like Luleå in size quickly.[45] The historian Lena Andersson writes that, during the years of railroad construction 1898-1902, Kiruna grew from practically nothing to 14 100 inhabitants by 1915. [46]

On many levels the state was thus entrenched in Norrlands development. Economically, by the industrialization. Politically, by the new geographic and defence situation and socially and culturally because of the demographic growth.

Tourism and Science in the Abisko region

At the same time there was a general shift towards Alp tourism in Europe, sometimes referred to as mountain-romanticism. The idea of creating a National Park surfaced in Sweden when Alp-tourism reached its peak in Europe.[47] Sverker Sörlin writes that alpinism was connected to an upper-middle class achievement-ethic. It was something for the rich and well educated. Mountain trekking required a different sort of undertaking than the everyday work and such hardship became intertwined with what was perceived as national traits.[48] The Swedish Tourist Organization (STF, founded 1885) attracted tourist from the educated upper middle class. In the book *Försvenskningen av Sverige*, Ehn et. al. describes the new tourism as "herrskapsturism" or in English: Gentlemen Tourism.[49] Sörlin

[44] Ottoson & Sandberg (2001), p.8
[45] Sverker Sörlin, "Järnvägen som kulturbärare", in Kjell Lundholm (red.) *Malmbanan 100 år: 1888-1988* (Luleå 1988), p.16-18, 71; Also in Sörlin (1988), p.49.
[46] Lena Andersson, "Staten, malmbanan och malmbolagen: Kampen om de norrbottniska resurserna under 100 år", in Kjell Lundholm (red.) (1988), p.93f; Sörlin (1988), p.59.
[47] Ehn et. al. (1993), p.92-93, Hettne et. al. (2006), p.339.
[48] Hettne et. al. (2006), p.339.
[49] Ehn et al. (1993), p.97.

uses the term “bourgeouis-culture” [borgerlig] or upper-middle class culture to describe the same phenomenon.[50]

The focus on mountainous areas in the creation of Sweden’s National Parks and in other cultural artefacts were quite skewed. The Swedish topography in general is not especially mountainous, actually it is rather flat (the mountainous regions comprises about 17 percent of Sweden’s total extent[51]). But nonetheless the newly founded STF focused heavily on the mountains in Lapland during its first decades.

The new Swedish alp-tourism thus found its foremost habitat in the region west of Kiruna, in the mountain range close to the Norwegian border. One of these places was the small community called Abisko. Abisko is situated about 130 kilometers North West of Kiruna along the railroad track, on the south side of Torne Lake. As a permanent settlement Abisko is not older than the railroad leading to it.[52] When the railroad between Kurina and Narvik was finished by 1902, STF was offered to buy three officer's homesteads along the new railway. One of them was positioned between the mountain Noulja and Torne Lake, very close to Abisko. The station was named Abisko Tourist station.

The tourist station quickly became popular, and the small building meant for only a handful of guests was heavily rebuilt to accommodate about 60 guests by 1906-1907. When Abisko National Park was instigated 1909, it encircled Abisko Tourist Station which had by that time grown to 10 buildings and could accommodate about 130 people.[53] Abisko’s new tourism was a rapidly growing business, and became the crown jewel of STF's facilities.[54] Today the tourist station has about 42000 guest-nights per year.[55]

The geography has some unique consequences for Abisko Valley, which is partly the reason why it became what the local historian Agge Theander describes as a “unikum” of Swedish nature. The mountain range west of Abisko forms a weather shield, which makes the Abisko valley extremely dry. If it would not be for all the creeks filling up the valley with melt water from the surrounding

[50] ”Early tourism was a strictly upper middle-class pehonomenon, yet these awe-struck gatherings beofre the mountin majesties contained ideological overtones, of national unity and the resolution of political conflict.” Sörlin (1988), p.264.
[51] Ottoson & Sandberg (2001), p.113.
[52] Before about 1900, there were practically no permanent settlements in the Abisko area. However, it had been used for quite some time by the Sami people. Geographically the area is easily accessible in comparison to the region both north of Torne Lake and south of Abisko Valley, which are more mountainous. This fact makes it something of a 'natural' communication corridor between Norrland's inner landscape and the ice-free west coast of Norway. This is why the indigenous Sami have been using it as a pathway to seasonal herding grounds and this is also why the railroad was laid out here. Bäck & Jonasson (1998), p.1.
[53] Theander (2002), p.20-21. Abisko National Park is about 77 squarekilometers, which means that it is a quite small park in comparisson to other Swedish national parks.
[54] Theander (2002), p.20-21, 23.
[55] Svenska turist föreningen, *STF Årsredovisning 2012* (Stockholm 2012) p.44. Today, Abisko tourist station attracts a new sort of tourism, that of northern lights, along with the old.

mountains, the valley would be classified a desert.[56] This is why the flora and fauna is much richer here than in other valleys of the Scandinavian mountain range. So little snow falls in comparison to example Björkliden or Riksgränsen (situated only a few kilometers away), that plants and animals can survive here in greater extent than otherwise would be possible.

Fredrick Svenonious – the archetype of the 19th century scientist

In 1902, the geologist Fredrick Svenonius (1852-1928) founded Vassijaure research station only 30 kilometers further west with the railroad from Abisko. Vassijaure research station became a hub for the scientific elite, and by 1910 the station hosted the International Geologist Congress. Later the same year, it unfortunately burned down. It was quickly rebuilt 1912, but between Abisko village and Abisko Tourist Station instead. During the first 20 years the station was partly financed by The Royal Academy of Sciences, which by 1934 took over the administration completely. The station has continued to grow throughout the years and is still an important part of the Swedish scientific community.[57]

Svenonious often returns in books and stories about Abisko's early history. His famous letter, complaining about the harsh living conditions for the 19th century geologist is cited in both the local historian Agge Theander's book, as well as Carl Bernhard's *Abisko Scientific Research Station*. Svenonious became a somewhat famous Norrland-propagandist, often active in debates concerning the region. His local knowledge of Abisko and the surroundings, his cowboy-style and ambitions to instigate the National Park in Abisko as well as the fact that he was somewhat a homegrown individual (his father was director of *Gellivare-verken*, an early mining operation in Gällivare[58]) seems to have given him a sort of local heroic status.[59]

Geologists like Svenonious were there with mostly a scientific purpose. They were there to explore and to register the environment. All corners of Sweden were to be discovered and researched, in an effort to show both themselves and the rest of the world what sort of resources the great nation held. Sörlin describes Svenonious as an archetype scientist of the northern natural science endeavor: Svenonious tried to register geological traits wherever he went, always focusing on the base layer of nature. He noted sedimentary layers, stone types, river paths and deltas, leaving plants, animals and

[56] Theander (2002), p.17.
[57] Redin & Forssell (2001), p.35ff.
[58] See *Gellivare-verken* in Nordisk familjebok from 1859-1870 <http://runeberg.org/hgsl/3/0038.html> retrieved 2012-12-16.
[59] Read about him in Theander (2002), p.75; Bernhard (1989) p.1-6; Sörlin (1988), p.131-140.

human presence out.[60] The purpose of Vassijaure research station was to research the nearby glaciers. The station was the most northern station in the world at the time.[61]

Abisko National Park as embodied ideology

The tourism businesses during the late 19th century addressed a specific class. However, the landscape that was supposed to be experienced through tourism was nonetheless a concern for the Swedish people in general. Tourism as a concept revolved around the nationalist unity between classes and political differences. It was part of the ideological essence of 19th and early 20th century nationalism. STF's first slogan was "Get to know your country" and later "Discover Sweden."[62] The Swedish nature would function as a glue that held the nation together. Every Swede was supposed to be gathered around a national identity and that identity had its common 'ground' both literally and spiritually in the Swedish territorial soil. There would be no room for political differences or class related conflicts between two individuals doing a mountain hike together. Such things had to stand back in favor of cooperation to manage the long hike.[63] To enforce such a mindset Svenonius and his friends had ideas about local educational camps. Young Swedes would learn how to take care of themselves and live in a Spartan manner. All in an effort to foster physical ideals and teach them the value of the Swedish nature.[64]

The line separating the scientist from the tourist within nationalist ideology and culture is slightly obscure. When superficially observed, the two groups use the same territory differently. However, looking closer it seems they represent different sides of the same coin. As Sörlin has explained with the concept of Geodeterminism,[65] the landscape itself held the destiny of the Swedish Nation: competition between nations was seen as a direct relation between possible resource amounts. Through observation, scientific research and evaluation of the Swedish nature, that destiny could thus be uncovered and foretold which explains the presence of the scientist. The presence of the tourist seems more distinctly connected to nationalist politics. Moreover, STF was founded by and the board consisted of scientist for quite.[66] One should not be surprised then that Abisko Tourist Station also

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[60] Sörlin (1988), p.132.
[61] Ibid. p.140.
[62] STF's web page: <http://www.svenskaturistforeningen.se/en/About-Us/The-History-of-STF/> 2013-12-13.
[63] Sörlin (1988), p.82f.
[64] Ibid. p.87. Fredrick Svenonious and his friends proposed such an establishment through the *Northland committé (*Norrlandskommittén).
[65] Ibid. p.153. Sörlin writes that in the era of industrialism, when all nations worked with large scale resource extraction, a nations competitive power was seen as something directly related to its natural resources.
[66] Sörlin (1988), p.89-92. This perspective can still be seen today on STF:s homepage: "STF was born from the idea that it needed to be easier to discover and experience Sweden. Over its 125-years history, the association has taken that idea further, firstly under the banner of 'Get to know your country' and then for the past few years 'Discover Sweden'" <http://www.svenskaturistforeningen.se/en/About-Us/The-History-of-STF/> retrieved 2013-12-16.

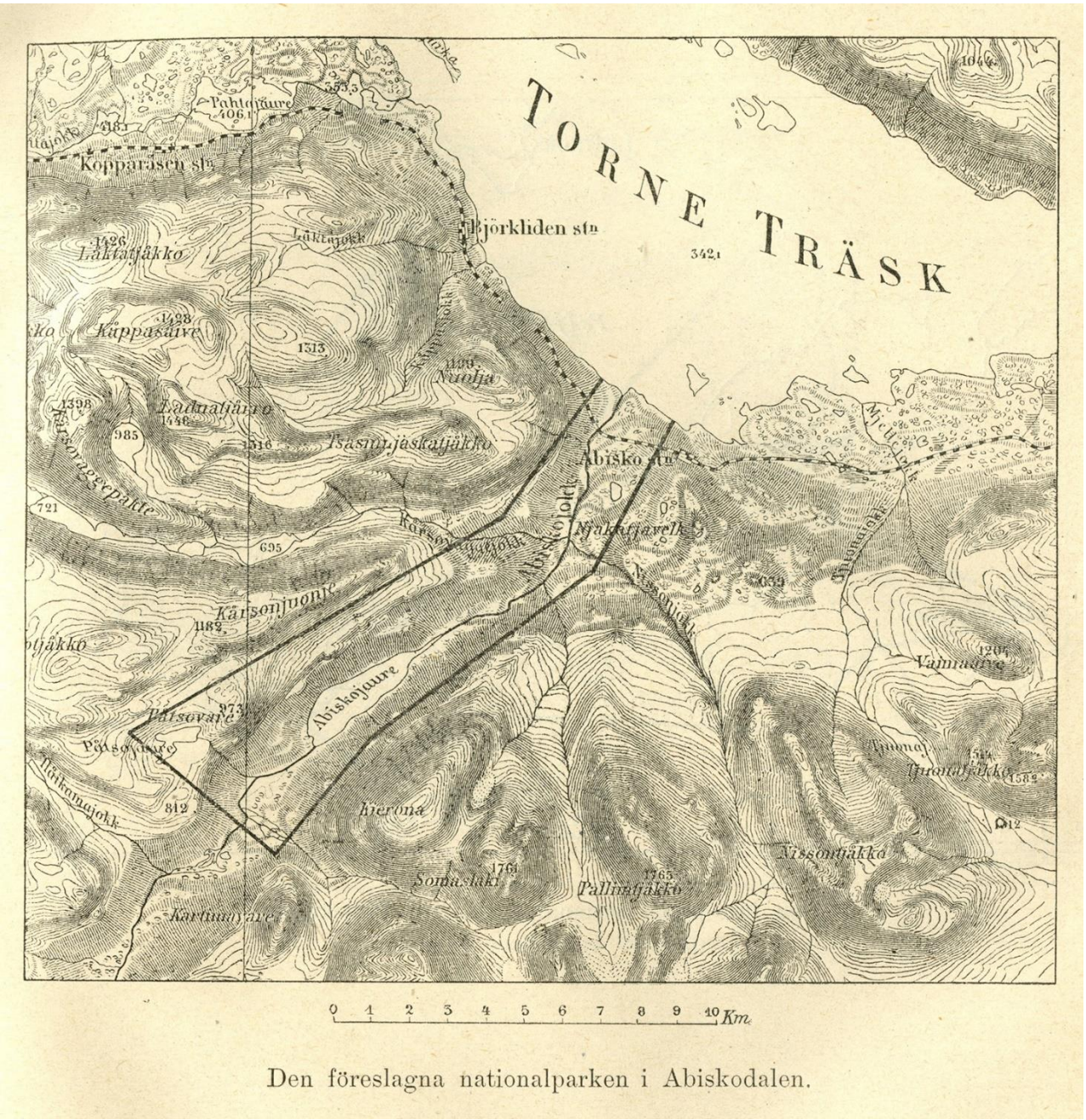
included scientific facilities and a library so that the tourist as a part of their vacation could further advance their knowledge of the flora and fauna.[67] Thus it seems as if the tourist and the scientist during the late 19th and early 20th century are the same person.

Crystalized nature

The ethnologists Ehn, Frykman and Löfgren writes that: "The nationalistic will to claim territory is about canalizing a national dedication to specific delimited spaces, places where you feel especially Swedish. In such places many different dimensions are woven together: Ideas of beauty, about history, about continuity and fellowship."[68] Whatever physical traits the park is said to have, its importance lies foremost in its purpose in a national perspective. The 19th and 20th century nationalism according to Frykman formed a symbolic bond with earth as a concept. Ehn et. al. writes that: "With the modern nationalism the national space became an absolute space. There should be no doubts of where Sweden began and where it ended – neither in physical nor cultural terms."[69] Territorialization claims a physical space, it encloses culture and preserves its environment. There is also a practical dimension. A physical space can be seen and experienced and easily subjected to control and homogenization. In this way the enclosed area becomes preserved as an object that can be controlled. Ehn describes it as a crystallization process; "gradually national scenery becomes enclosed and thickened into symbolic space that are 'typical'."[70]

The parks were made to construct a Swedish self-image, to foster a common understanding of what Swedishness was. The creation of Abisko National Park and organizations active around any such cause should be seen as artefacts or manifestations of the political actors' ideological intent.

[67] Theander (2002), p.20-21.
[68] Ehn et. al. (1993), p.117. "Det nationellas förmåga att ta plats handlar däremot om att utlokalisera ett nationellt engagemang till bestämda, avgränsade rum, platser där man känner sig särskilt svensk. I sådana rum vävs ofta många kulturella dimensioner samman: föreställningar om det sköna, om historien, om kontinuitet och samhörighet. Sådana konkreta visualiseringar av det nationella får en mycket stark genomslagskraft inte minst därför att retoriken sjunker in i landskapsupplevelsen."
[69] Ibid. p.85f.
[70] Ibid. p.96.



Den föreslagna nationalparken i Abiskodalen.

Figure 1: The proposed park in the Abisko Valley, included in Proposition 1909:125, appendix.

Proposition 1909:125

The Immutable mobile behind Proposition 1909:125

Above (Figure 1) is a map included in Proposition 1909:125 displaying the Abisko Valley, just south of Torne Lake. The region this map is depicting is located in the very north western corner of Sweden's geographical orientation, with a distance of about 1400 kilometers from Stockholm. The

region is thus very peripheral, if you travel the same distance south from Stockholm you will end up somewhere close to Frankfurt Am Main in central Germany.

The origin of this map is the much larger map (Figure 2) Generalstabskartan, segment nr. 3. Sjangeli (trans: General Staff Map, from here on referred to as GSK) measured 1881 and completed 1886. 3. Sjangeli depicts a much wider area west of what is now Kiruna (Kiruna did not exist as a town or even a village by 1886).[71]

Between 1874 and 1894 GSK was made under the jurisdiction of *Generalstabens topografiska avdelning* (trans: General Staff's Topographic department) which was a military department of the state. By 1894, the organization was restructured into *Rikets allmäna kartverk* (RAK, trans: The Nations General Cartography Office). During the reconstruction the civil and military cartography

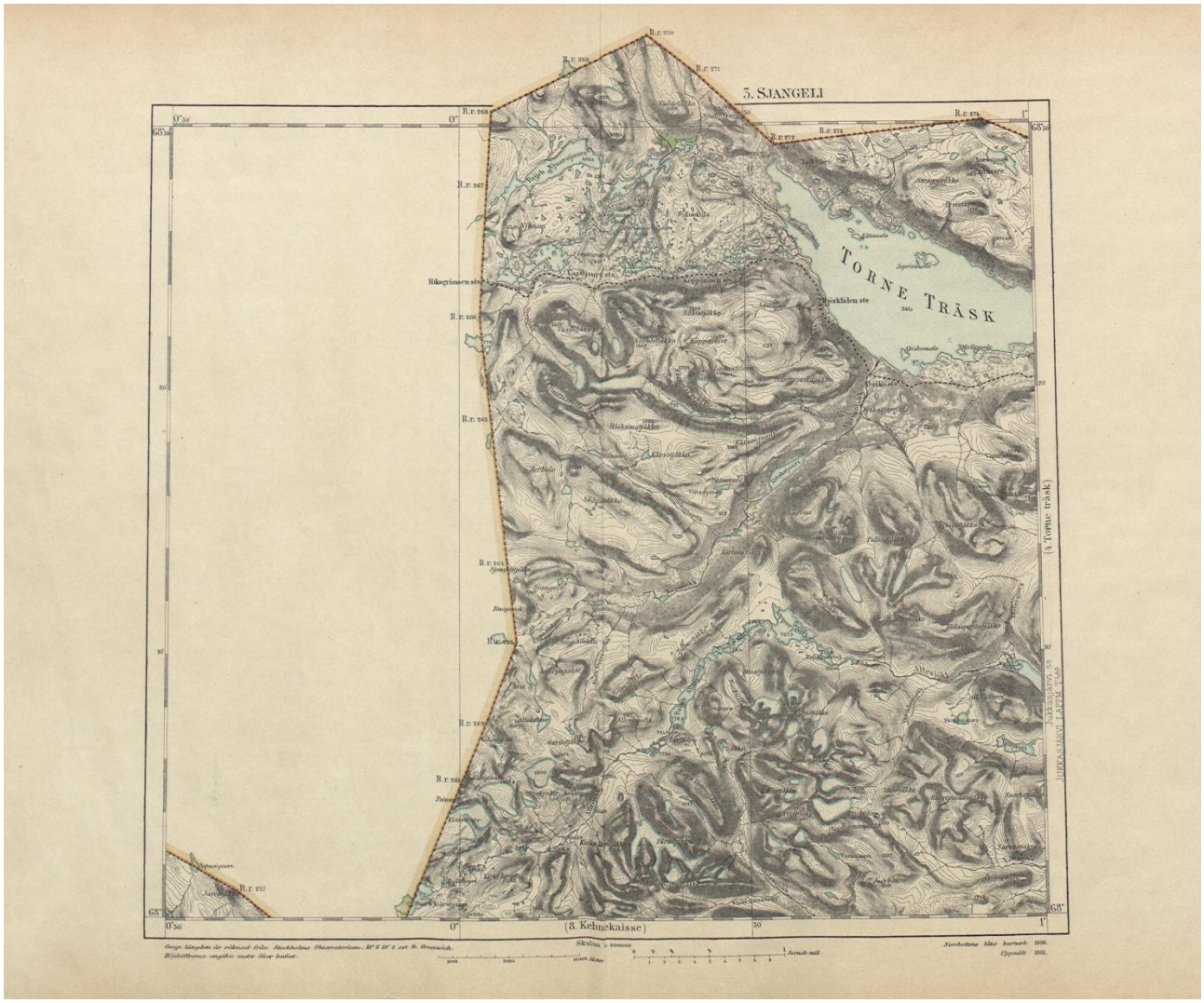


Figure 2: Generalstabskartan, 3. Sjangeli. The map has been scanned from the library in Umeå University.

were separated, and the new department responsible for civil uses like economic and geological

[71] The updated version of this map, called *3. Abisko*, can be seen freely in greater detail at: <http://historiskakartor.lantmateriet.se/arken/s/show.html?showmap=true&archive=RAK&sd_base=rak2&sd_ktun=52414b5f4a3234322d332d31&archive=RAK> retrieved 2013-11-11.

cartography was sorted under Department of Civil Affairs. From 1900, RAK was moved to the Department of Agriculture, the same department that the proposition came from.[72]

The reason behind Lapland's growing importance were military, economic, social and cultural. Because of that, the GSK map was made with different purposes in mind. The 19th century cartographic endeavor can be seen as an expression of all them. The maps were thought of as means to advance and minister Lapland's further industrialization and cultivation.[73]

According to the authors of the book *Generalstabskartan 1805-1979* the new form of warfare meant that maps for military purposes had to be made in advance during peace time.[74] Furthermore, since GSK maps were often used for civilian purposes they were supposed to include details of diplomatic and economic concern as they were made.[75] Other civilian uses could be large scale infrastructural investments such as railroad construction, but later on also for new interests groups such as tourist or for scientist who used them for geological surveys.[76]

This particular segment is actually the first prototype of what would later be first complete map collection of Sweden and was well into the 20th century the only official map of this region.[77] The state's first total cartographic overview over the nation thus started here and the map 3. Sjangeli, is the immutable mobile that is used by the political actors behind the proposition to instigate Abisko National Park.

Alfred Peterson and Fredrick Svenonius as the political actors

The 17th of March 1909, the minister of Agriculture Alfred Peterson presented Proposition 1909:125 in the Swedish Riksdag. This is where the map occurs (Figure 1), and thus constitutes the context of the map. The political actors behind the proposition is Alfred Peterson and Fredrick Svenonius.

The proposition's argument was that a large part of the Abisko Valley should be made into a National Park. Creating a National Park meant that it was protected from outside (mostly human) influence

[72] Ottoson & Sandberg (2001), p.13-14.
[73] Ibid. p.30; An interesting note about this is that the first maps depicting Norrland were made in the scale of 1:200 000, while the southern half of Sweden were made in the scale 1: 100 000. The mappers claimed that large parts of Norrland was uninhabited and this was a way of saving time. Ibid. p.39.
[74] Ibid. p.8.
[75] Ibid. p.11-12.
[76] Ibid. p.12.
[77] Ibid. p.39. By 1919, RAK began to revise older maps, but mostly with the purpose of updating communication infrastructure. As the military experimented with photogrammetric technology during the 1940s the Riksgränsen-Abisko region once again became a test region. Ibid. p.65.

and that the state would own the land. The proposition included 10 different areas where land should be expropriated and enclosed. Most of them, 6 out of 10 was located in the Swedish Norrland.[78]

The Proposition revolves around mainly three concepts which all relate to each other and are referred to with different intensity. The first and probably foremost one is the scientific. According to Alfred Petersson, the basis for creating a park should mainly be because of its scientific importance. To emphasis this argument Peterson claims that all the places suitable as National Parks were chosen by "experts" and he mentions Fredrick Svenonius as one of them. Svenonious is the one who have taken up the Abisko valley on the Royal Swedish Academy of Sciences' list of suitable areas. However, the scientific purpose was not without problems.

To define the scientific basis of the park Alfred Peterson uses arguments that relates more to the experience of nature than its actual scientific meaning: Peterson's claims in his introductory statement that a place suitable as a park could be: "a place where rare animals or plants thrives, a peculiar forest, a waterfall or some strange geological formation […] and where life can live in an untouched state [ursprungliga lif]".[79] What Peterson here refers to in this statement is what the viewer feels when he sees the objects in nature. The peculiar, strange and rare is not necessarily scientifically interesting. Still, as long as it catches the viewer's attention or imagination it seems to qualify. There is thus an emphasis on experience first and only after the experience can the scientific motif be pinpointed. [80]

Furthermore, the scientific argument relates to class specific problems. Although the parks are understood as expressions of nationalist ideology in its class emancipatory and unifying sense, Peterson's argumentation has a clear class specific dimension. For instance Peterson claims that: "for the park to fully fulfill its role, scientific research must be allowed, but not for the general public […] to prove that scientific motif really exist some [någon] government institution have to verify such claims."[81] The true role of the park can thus only be experienced by the scientist, which is necessarily

[78] Only nine of them were ultimately approved by the Swedish government. Between 1918 and 1962, 7 parks was added and between 1982 and 2002 another 12. Today there are 29 such national parks inside Swedish territory and they are no longer concentrated to Swedish Norrland. <http://www.naturvardsverket.se/Var-natur/Skyddad-natur/Nationalparker/#> retrieved 2013-12-16.

[79] "I skrifvelse den 13 maj 1904 anhöll Riksdagen, att Kungl. Maj:t täcktes låta verkställa utredning angående de åtgärder, som borde vidtagas för att bereda skydd för vårt lands natur och naturminnes-märken, och yttrade Riksdagen därvid, bland annat, att då staten på de mest skilda ställen i vårt land ägde större eller mindre besittningar: kunde, enligt Riksdagens mening, här och där en plats, där sällsynta djur eller växter trifdes, ett egendomligt skogsbestånd, ett vattenfall, någon säregen geologisk bildning o. s. v. fridlysas för åverkan, så att naturen där kunde lefva sitt eget ursprungliga lif, hvarjämte Riksdagen ifråga om lämpliga platser för dylika »nationalparker» hänvisade till åtskilliga bilagor, som fogats vid vederbörande utskotts utlåtande i ämnet." Proposition 1909:125 s.3-4.

[80] Sörlin claims that the scientific reasons were actually not very convincing and had the parks founding depended solely on scientific reasons few parks would have been made. Sörlin (1988), p.109.

[81] Proposition 1909:125, p.8.

not included in the societal strata referred to as "general public." It is also up to the scientific community to decide what exactly constitutes a park.

The scientific worth of the specific place also relates to the second main strand of thought, tourism. The realization that the National Park's wonderful "character" would attract troops of tourist posed problems.[82] The landscapes within the parks around the country had to be be protected from human tampering. Additionally the tourists themselves might need protection.[83] According to Petersson's proposition these problems were best solved with the bureaucracy that inevitably would follow with the instigation of a park. For example Peterson mentions that complications might arise if the visitors stray too far into the parks. Therefore some sort of surveillance that could protect both the park and the tourist had to be arranged: "Management regulations must be made, since the park need to be protected. It might also need protection from plant diseases, erosion and growth of harmful species."[84] Peterson also proposes that the forming of National Parks needs to be followed by lodging of different kinds which unfortunately would infringe on the strict rules and regulations. The instigation of the park is thus also about the state taking an active role as regulator of the specific place. It is also obvious here how science and tourism converges and uses the same territory but for different purposes. It is the scientific meaning that attracts the tourist. Science is also what needs protection so regardless of the tourist, it is science that functions as the overarching hierarchical principle.

There is no doubt about what the national parks ultimate purpose are, what they are supposed to convey. The parks were perceived as a cultural heritage or a patriotic place for the national audience to experience. Because of their uniqueness they were to be preserved for future generations. Petersson claims that: "They [the parks] are material for a patriotic outlook [fosterländskt åskådningsmaterial]".[85] This short but simple quote relates to the third main strand of thought behind the parks. The nationalist ideology, which we have seen encompasses both the concepts science and tourism. As Sörlin has noted, the Lapland soil itself was evidence of future national success. The framing and creation of national park was by itself an invitation to the Swedes to come and it was expected that the swedes would do so to experience this potentiality of success.

So to sum up it seems as if it was the scientist's role to decide where, and why a park should become a park. The 'meaning' that the park acquires in this process is based on the scientist's and scientific community's assumptions and ideology. As the park was instigated it was also internalized into the state bureaucratic apparatus. Peterson represents the political actor, Svenonious is the natural scientist

[82] Proposition 1909:125, p.8.
[83] Ibid. p.8-9.
[84] Ibid. p.8-9.
[85] Ibid. p.8.

and together they shaped a territorial place into a nationalist narrative using the immutable mobile 3. Sjangeli as a link to their argumentation.

The map's frame and geography: The connection between details and ideology

I have so far described what the context of map in Proposition 1909:125 was, and how it relates to an ideological situation of that period. I will now zoom in a few steps to study some of the details of the map and why it frames the Abisko valley in particular. I will also discuss how the details of the map can be related to the early 20th century nationalism.

Fredrick Svenonious wrote the recommendation to include the Abisko valley as a national park in proposition 1909:125. He have thus a direct relation with the national park which now puts him in the center of attention. Additionally. He was the initiator of STFs first cabin and he was the founder and first director of Vassijaure research station. Svenonious was also a member of the Royal Swedish Academy of Sciences.[86] The fact that Svenonious himself were present in the area, is itself an important part of the link between science, tourism and the landscape that the park framed. The organisations and their local stations depended on Svenonious and characters like him.

The scientific ideals brought by Svenonious had a classic manifestation at Abisko Tourist Station. The station had a building designated to geological and botanical studies. The tourist brought flowers and rocks with them from their walks in the park and could use the "Laboratory" for examinations and research.[87] Unfortunately, you cannot see the STF facilities on this map or on the larger map segment, but the borders of the proposed park actually encircles all of STF's buildings. Vassijaure, where the research station was located, is not visible either since it is located outside of the maps frame.

However, it is possible to see details on the map that reveals the cartographers interest. Making notes on type, variety and quantity, especially for wood resources was important and we can see that Svenonius' case for Abisko valley concluded that the valley was not suitable for the wood industry. The area was mostly covered with mountain birch, and north of Abisko Jaure (Abisko Lake), only a few pine trees.[88] On the mid-right side of the map, the small area south of the lake and north of the railroad, vegetation has been marked as birch forest. In Thulstrup's set of cartographic symbols used

[86] Sörlin (1988), p.132.
[87] Theander (2002), p.20-21.
[88] Proposition 1909:125, p.13-14: "[P]å förslag af d:r F. Svenonius upptagits på vetenskapsakademiens lista öfver områden lämpliga till nationalparker nämligen *Abiskodalens nedre del*. Beträffande detta område hafva de sakkunnige anfört, hurusom nämnda dal sträckte sig Torne träsk i sydvästlíg riktning upp mot fjällen. Marken utgjorde Oafvittrad kronomark och det afsedda området ägde en areal af 4,620 hektar. Det vore beläget 7-8 mil från närmaste kronopark och vore till större delen bevuxet med fjällbjörk samt nedom Abiskojaure med enstaka tallar."

for GSK there are a variety of symbols to be used depending on forest composition.[89] Mountain birch are only one of them, although it is the only one visible on this particular map.

The decision to display forest types can nevertheless have many reasons. However, the mentioning of economically exploitable wood can be seen as part of an underlying economic rationale that affected the scientist' choice of suitable sites.

The focus on forests is a result of a view of timber industry as Sweden's leading industrial branch. By the turn of the century the timber industry was part of the foundation of the national wealth along with ore, forceful waterfalls, protected harbors and rivers suitable for log driving. Sörlin has also mentioned that the economic aspect was important in the creation of the parks since it meant they would be excluded form future exploitation.[90] This can easily be seen in the proposition as an important variable for the authors in choosing specific landscapes for the parks.[91] The economic factors is also visible in the discussions of another park in the same proposition. National Park Stora Sjöfallet is first explained as unexploitable in economic sense: It "can be set aside without any significant sacrifices for the state." Later Peterson concludes that it is a beautiful place and representative of Swedish nature. Additionally, Professor Hambergs research have shown that the park might produce significant and interesting results.[92]

Svenonious was mainly interested in glaciers and the location of Vassijaure research station was due to its close vicinity to glaciers. In the proposition map we can trace them, as well as in the maps original model, which must mean that this was noted as GSK was made 1881. On the lower part of the map, just above the number seven on the scale ruler, the topography lines are dotted. This is not because of bad quality of the map, this was a technique used on the GSK to signify that this part of the mountain has a glacier.[93]

Nevertheless, the most important fact that Svenonius stresses in his recommendation is that the Abisko valley is "Iron-Ore railroad's most beautiful scenery."[94] It is also most suitable for scientific studies; the plant life in Abisko was not only abundant as a mountain valley usually is but unique in diversity. The short distance to Vassijaure research station is also helpful. Additionally, it has been noted that the growing tourism in Abisko might pose a threat to the flora and fauna. Enclosure and surveillance might solve these problems.

[89] Ottoson & Sandberg (2001), p.131.Thulstrup will be discussed more in the next chapter.
[90] Sörlin (1988), p.102, 105.
[91] Proposition 1909:125, p.10ff.
[92] Ibid. p.12.
[93] Ottoson & Sandberg (2001), p.131.
[94] Proposition 1909:125, p.14.

The reasons why Abisko valley was chosen as a park thus seems to relate mainly to three concepts. The natural scientific activities were the first and foremost. Tourism was connected to the scientific endeavor and were already present on the site. The economic factor was also brought up. The authors of the proposition concluded that Abisko Valley did not hold any economic value in terms of resources or material. This constitutes what the political actors saw and looked for in the landscape. A view utterly ideological.

Railroad as a bearer of civilization: more details of the map

There are no structures on this map. By 1909, STFs facilities had grown and with it Abisko, but not a single building can be seen on the map of Proposition 1909:125. However, the black and white marked trail from east to west on the map has front position. That is the Iron-Ore railroad leading from Kiruna (east) to Narvik (west).

If we study the much larger original map segment, we can see that even here the map includes the railroad track. Since the GSK map was drawn 1886 and the railroad was finished only 1902, the symbol for the Iron-Ore railroad must have been added to the map later, but buildings have not. Ottoson and Sandberg have identified the person behind GSK's map symbols as Carl Magnus Thulstrup. His set of symbols was instigated by the government 1837 and were only slowly updated according to new societal demands. Railroads were one of them. This way of depicting railroads seen in segment 3. Sjangeli and the map from Proposition 1909:125 was only used on the eleven oldest map segments on the southern Sweden series of the first set of GSK. In the northern map series, they were used on all segments, after that the symbol for railroads were remade into a more modest form.[95]

The railroad was as a prerequisite for the presence of all forms of extended state activities. Only after the railroad between Kiruna and Narvik was completed did tourism brochures and travel narratives become abundantly published.[96] It was after the railroad that STF could expand their facilities and the research stations were built often using abandoned material buildings from the years when the railroad was built. Most importantly it was because of the railroad that the mining operations entered an economic boom. It was the first modern infrastructural system of the industrial age in Lapland and it brought Svenonious there, the archetype of scientists, it brought tourists there, bearers of culture, and it carried ore, which meant economic wealth.

Furthermore, the railroad was a physical embodiment of the progressive, advanced and industrialized nation. The straight geometrical rail lines cutting through untamed land carried with it a sense of

[95] Ottoson & Sandberg (2001), p.119-122.
[96] Sörlin (1988), p.75.

civilization for the contemporary. Once again we find Svenonius expressing these ideas: The railroad would resolve the cultural obstacles such as the "Babylonian language confusion"[97] that had emerged in communities such as Gällivare. This was due to the rapid migration and mix of Swedish, Finnish and Sami populations but Swedish as the common language had prevailed only a few years after the railroad was finished. The example convinced Svenonious that through technology the arctic lands would be truly incorporated into the Kingdom of Sweden both culturally and physically.[98] Fredrick Svenonious also related the railroad to Abisko and his newly rebuilt research station specifically: Mining, science and tourism would in his utopian vision converge and form the backbone of Abisko. To him it seemed as if the land itself had spared a suitable site, as if it craved for civilization. And, it was thanks to the railroad that this now was achievable.[99]

The symbol for railroad is brightly colored with shifting white and black with a heavily exaggerated thickness. Using the scale provided on this map, the railroad would be something like a 100 meters wide. Perhaps the railroad is presented in this manner because of its status as the one crown jewel of the scientific success, of civilizations successful taming of the wild. It was proof of the Crowns claim of the landscape and it clearly dominates the map because the cartographers want it to.

Conclusion: What did the establishment of the park symbolize?

Abisko National Park as an embodiment of nationalism

The most important factors that lead to the recommendation of the Abisko valley as a national park in particular revolves around two persons. The actors here are the 19th century scientist Fredrick Svenonious aided by the government director of Department of Agriculture Alfred Peterson.

Adjacent to Svenonius presence in Abisko is the scientific endeavor. If I am to stress one important thing for this thesis that Sörlin has pointed out, it is Svenonious idea of Vassijaure research station as a "spiritual fortification of the fatherland in the arctic region." Svenonius saw it as an important place, because it could show how the newly 'discovered' and civilized area had become indefeasible for the Swedish crown and its people.[100] His own presence and role there was in his utopian vision, a way of incorporating a peripheral spatial zone into a national self-image. A fortification by its very

[97] Sörlin (1988), p.75..
[98] Sörlin (1988), p.75-77; The idea that infrastructure could solve problems and unite has also been picked up by the historian Jo Guldi: [T]he Scottish landlords urged the power of roads to transform a nation, to unite separate ethnicities (Like Celts and Englishmen) into a single, people, to promote intermarriage, to overcome linguistic divides, and to quell the risk of military rebellion. The roads seemed to promise even greater forms of unity for the nation, a valuable tool for governments in the service of peace. Guldi (2012), p.15.
[99] Sörlin (1988), p.77.
[100] Ibid. p.131-132, 140-141.

definition is a structure to defend a physical space. By using the landscape, by making it into science and a cultural heritage he claimed and fortified the territory. There were also an obvious component of modernism adjacent to Svenonious vision: Technology as a bearer of utopian promise. As the first infrastructural technology of the industrial age, it was a symbol of civilization and success.

Furthermore, a significant trait of this type of nationalism is its emphasis on experience. It was connected to an object or place that must be immanently understood by the tourist. If the individual and at the same time national identity is connected to a place, it becomes feasible to preserve that place somehow. Abisko valley had to be be preserved so that future generations could experience it in the same manner as the contemporary tourists. By crystalizing the nature in the Abisko Valley, the door opened to a possible historical continuity that chimed well with the geodeterministic view of the landscape.

The park was made for and by the educated elite active within the confines of both tourism and science such as Svenonious. They were the only ones who had the means to move about in this landscape as part of leisure (the Samí's were thought of as part of the nature they tried to frame). It was not made for science in particular, or tourism in particular, but for a societal strata that can fully understand both these concepts in union. Moreover, the tourist were welcomed on the scientists' terms. As a tourist you had to follow bureaucratic rules, accept subjugation to bureaucratic control by the state.

So to sum up. Given the knowledge of the place, the Swedish state interpreted its accumulated data with a nationalist ideology at hand that emphasized or 'saw' certain objects and phenomenon in the landscape. Each of these objects had a symbolic value articulated by scientists such as Fredrick Svenonius. These objects were things that involved the scientific endeavor and economic value such as the research station and natural phenomena such as glaciers, forest, soil, rock types, flora and fauna. Other objects were artefacts connected to tourism, both physical such as the Abisko tourist station and nonphysical such as the beautiful scenery. Lastly, the railroad made it possible for the tourist and scientist to go there which made it function as a bearer of culture. Taken together, these objects and artefacts, be it physical or nonphysical, were the deciding factors that allowed the state to crystallize landscape into a single framed symbolic space that addressed the whole nation and articulated it as a symbol of Swedishness.

Alfred Peterson only left a single reference to the maps included in his proposition, but the map is in this case the most important object of all. The physical existence of the park manifests itself only through documents. The objects in the actual landscape added later, such as the gate to the park, or designated camping sites, relates to the park's documentary form of existence.

Additionally, the topography is not related to the borders. In that way their manifest state power was indifferent to the local landscape. The borders simply cut through neither can they be seen from the ground. The borders solely exist as an enforced abstraction as long as the map depicts it.

Perhaps it was Svenonious himself that stood by the desk with a ruler and pen to draw the borders. Regardless, someone did. Such an imaginative scene conveys an example of how the power of science, nationalist culture and state takes control over territory. A man looking *down*, using God's eye-perspective[101] with uniform metric measuring tools, forcing Sami place names into the alphabetical regime and drawing lines on a map displaying a region 1400 kilometers from Stockholm. There is nothing philosophical or abstract behind this scene, it is a simple matter of information in a political actor's hand which makes it possible.

The park is still popular for tourists and scientist. The camping spots, the wooden gate by the parking spot in its vicinity, documents and maps, they all instruct the visitor how to reenact the park's borders through regulations and hiking trails. Information signs show off scientifically important flowers, birds, tree's, insects, geological formations and rock types, and in the process constantly reestablishes for the visitor why the park is a park. But there is never any physical borders to be experienced, to see or to touch. The power relationship is fully abstract and is solely regulated by social behavior between individuals. If these paper documents and signs were removed, the park would instantly seize to exist. The abstract borders - the idea of the park and what it means, is thus dependent of the existence of maps to uphold, and reenact the park's specific discursive meaning. That means also that the producers of the documents are the ones who hold the power over that region. The crown with its bureaucracy, regulations, fines, and employed guards took meticulous control over the individual moving about in the landscape. Thus inevitably, the relationship between discourse and physical landscape is a relationship of power in this case.

Abisko National Park as an place-making process

James Scott writes that the cadastral map never has any real value for the local individual. A person that use and tend its habitat, for example the Sami population never needed state made maps of their landscape to get by. The map itself here shown is made for the purpose of the state to force the area into what Scott calls a property regime with an array of purposes: "State simplifications […] are designed to provide authorities with a schematic view of their society, a view not afforded to those without authority."[102] The map thus constitutes an immutable mobile that allows the state to manifest its power over the area. It allowed the state to virtually draw straight lines over landscape.

[101] Scott (1998), p.57.
[102] Ibid. p.45, 39, 79.

The details of the map reveals presence. Topography lines, the shading and small details reveals shifting vegetation and layers of snow. Numbers on the map explains height and the names reveal human presence. The scale below shows its scientific correctness, distances must have been carefully measured to be able to draw such a detailed map. The map itself is proof of *presence per se*.

The practical process for Alfred Peterson at this point was simple: A slice was cut out from GSK *segment 3. Sjangeli* and then lines were drawn in a rectangular fashion forming a border. But there is nothing simple about how GSK ended up in the hand of the authors at the Department of Agriculture. The map is a result of a historic accumulation of information about the site that has been layered on top of each other, from generation to generation. The state's official cartographic objective during the 19th century is not even enough to track its roots. The place names that we can see on the map is part of the Sami's own cartographic work dating much farther than even Carl von Linné's trips to the region. However, the map itself is completely decoupled from the century old process performed by the observers, cartographers or Sami's, but include nonetheless all of their accumulated knowledge about the specific place.

So then, we can conclude from this that the map we are studying exist for us to see only because of human presence in the region. The map had not been possible to draw if the actors behind the cartographic process didn't go there at some point. The questions is then which actor actually claims power over the accumulated information that the map provides? Proposition 1909:125 holds the answer here. At this point it is obvious that the Swedish state is the holder of the cartographic knowledge over the region and the proposition is a manifestation of that power. The immutable mobile, the map, has been moved in terms of distance and in terms of time to a state institution.

III

1961: The Road – The Red line

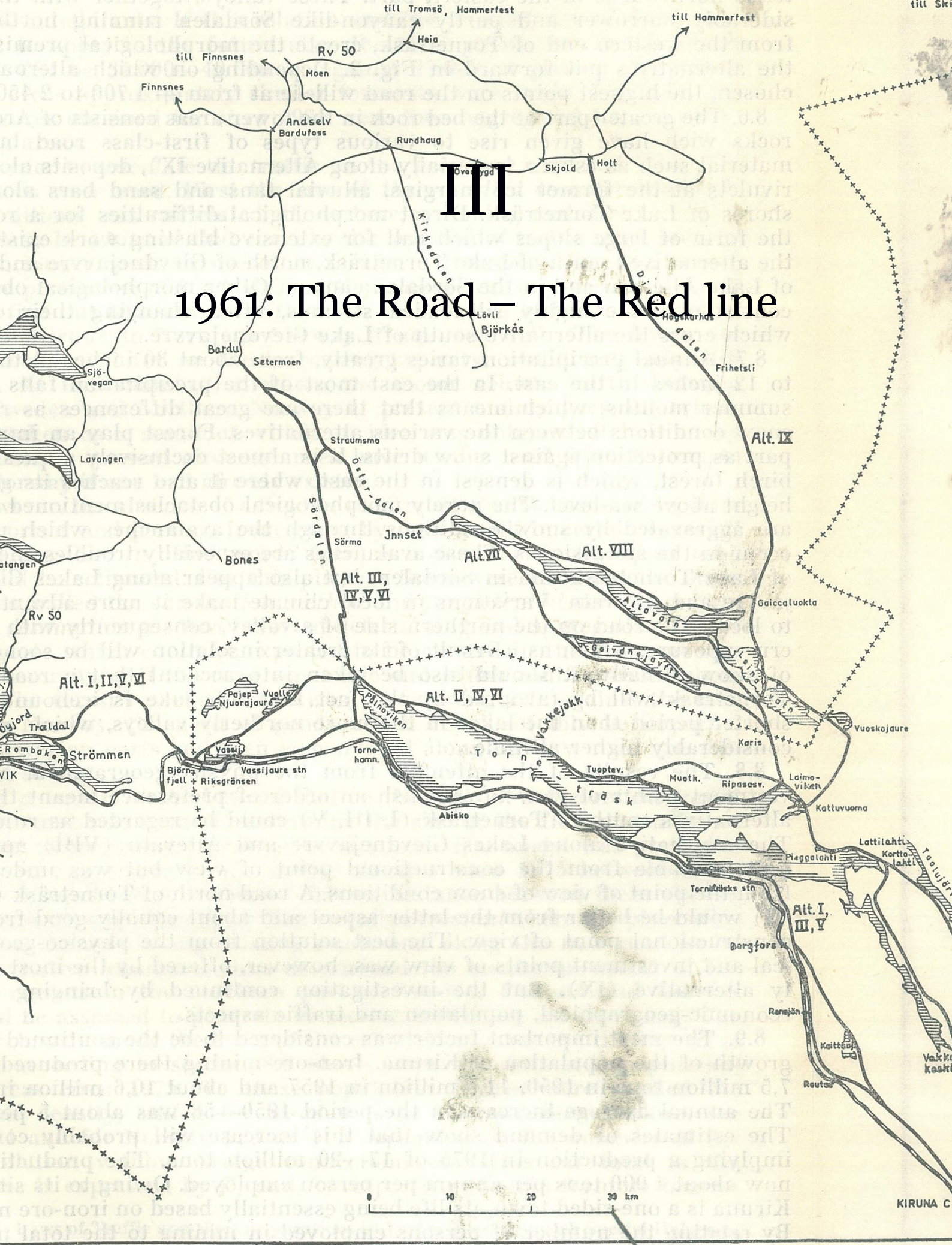


Fig. 2. The investigated area with the nine alternatives for the Kiruna—North Norway road.

Making Sweden an Automobile society

Modernism, High-Modernism and Automobility

By the late 1950s and early 1960s the nationalism dominant during earlier decades had transformed into something else. It was a modernism ideology that strived for a social-democratic classless society. To achieve such utopia, technological innovations and massive scale social engineering had a central role. I will now try to give a brief description of the modernism ideology active during the 1950s and 1960s to depict an backdrop that the Transnational 98 road project will be analyzed through.

The social anthropologist Olle Hagman has summarized the idea of modernism in a very concise way. He writes that, modernism is a set of values and visions that functions as a basis of human behavior. A sort of vision to be followed. Modernity is a complex form of proto-ideology, and can be open to many interpretations, it can be either left or right-wing. Political superstructure is in this sense only a way of achieving the underlying ideology of modernism. Although modernism can be many things it usually includes an idea of a progressive society built on technological development and rationalist science.[103] This vision is closely related to enlightment philosophy and industrialism. It envisions a society always on the move that tries to see ahead. Because of this it is inherently utopian in its form.

However, in this thesis I will use James C. Scott's definition of modernism presented in his book *Seeing like a State*. Scott tries to separate two different modernism ideologies, or at least introduce a higher form of modernism called "High-modernism."[104] Scott defines High-Modernism as a sweeping vision of how technology and science can be applied to solve problems and improve the human condition,[105] he means to say that this is the main difference between early or 'low' modernism and High-modernism:

> Simplification and rationalization previously applied to forests, weights and measures, taxation, and factories were now applied to the design of society as a whole. Industrial-strength social engineering was born. While factories and forests might be planned by private entrepreneurs, the ambition of engineering whole societies was almost exclusively a project of the nation-state.[106]

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[103] Hagman (2001), p.43-44.
[104] Scott (1998), p.88. Scott writes that: "If one were to imagine a pantheon of Hall of Fame of high modernist figures, it would almost certainly include such names as Henri Comte de Saint-Simon, Le Corbusier, Walther Rathenau, Robert MacNamara, Robert Moses, Jean Monnet, the Shah of Iran, David Lilienthal, Vladimir I. Lenin, Leon Trotsky, and Julius Nyerere, They Envisioned a sweeping, rational engineering of all aspects of social life in order to improve the human condition." James C. Scotts chapter about High-modernism: Scott (1998), p.87-102 ; See also Zygmunt Bauman's book *Modernity and the Holocaust* (Cambridge 1991). Bauman uses gardening as an analogy.
The state during the 1930's and 1940's was seen as a gardener who weeded its garden and bred better life forms.
[105] Scott (1998), p.90. "High modernism is […] a particularly sweeping vision of how the benefits of technical and scientific progress might be applied – usually through the state – in every field of human activity"
[106] Ibid. p.91.

As Scott notes, an important difference between the two modernisms is that, while the lower modernism is focused on entrepreneurs and industry, the higher form is solely a project of the state. The emerging modernist state imposed "prescriptions" to its subjects and although the prescriptions could be problematic, Scott says that: through the exercise of state power utilitarian (modernist) descriptions of a society had a tendency to bring the facts in line with their representations.[107] Scientific problems were for the technocrat a matter of interpretation.

An important part of the High-modernist society is the technocrat. Scott notes that the individual high-modernist technocrat often used democratic ideals as part of their arguments. However, this ideal was often secondary or subdued in the name of the High-modernist progress-ideals which included remaking material aspects of human life in a large scale manner. High modernism is in its essence authoritarian: it "is the ideology par excellence of the bureaucratic intelligentsia, technicians, planners, and engineers."[108] In short, the productivism that the elite tries to prescribe is politically promiscuous.[109] The technocrat can adopt any ideological idea or thinks of himself as *apolitical.* They tend to perceive their role as helping or dragging a backward society into the twentieth century as an altruist educator. Politics, with that perspective can only get in the way. Thus, Scott concludes; the technocrat is hostile to political discourse and tries to banish it.[110]

The car, and of course the roads the car must be used on, encompasses the High-modernist project. Automobility was seen as a "technological "fix" for class struggle"[111] and 1956 the Swedish Social-Democratic Party concluded that the car is no more a high-class toy, it had become a democratic force.[112] Olle Hagman wrote in his dissertation about the relation between automobile technology and modernity on micro level. For him the car embodies the modern project better than any other technological invention, it has become a symbol and carrier of what it means to be modern: "the automobile society is perhaps the closes thing humans have ever come to fulfilling the 'modern project'."[113]

The Swedish historian Per Lundin uses much similar terms when discussing how the Swedish nation could - so rapidly and without causing much stir - embrace automobility as the first principle of mid-20th century urban planning. He writes that the political actors of the 1950s and 1960s had a sincere belief in the "expertise" and their ability to objectively convey scientific results who in turn were successful in talking and presenting ideological ideals with a scientific rationale. Problems were

[107] Scott (1998), p.90.
[108] Ibid. p.96.
[109] Ibid. p.99, 88.
[110] Ibid. p.94-96.
[111] Ibid. p.99.
[112] Hagman (1999), p.32.
[113] Ibid. p.43.

handed over to the experts with the belief that they would solve problems objectively and scientifically. Thus, the political goal of incorporating the automobile society became a technical-scientific problem and not a democratic-political problem.[114] The experts themselves on the other hand managed to produce an image of automobility as a "force of nature" impossible to halt and with only one direction to go. There was no alternative to the complete automobile society and the only thing to do was to adopt and prepare the old society for the new.[115]

Godlund's ideas of Automobility in Sweden

The Geographer Sven Godlund (1921-2006) will function as the archetype of the High-modernist technocrat in this chapter. In the official government report *Road plan for Sweden 1958* (SOU 1958:1-2) he was involved as an expert on automobile statistics.[116] He is also the main author of *Traffic development and traffic investments* from 1966 which was a part of the *Long Term Report 1965* (SOU 1966:69, Appendix 5).*[117]* In *Road Plan 1970* (SOU 1969:1-2), a national road plan report for the period 1970-2000, Godlund's data is cited and used as a statistical template.[118] All these reports had the purpose of developing a plan for the automobile future of Sweden. The proposals in them were accepted by the contemporary governments, which means Godlund's ideological influence was significant during the period.[119] According to Per Lundin, Godlund's method and predictions were held in highest regard, but were at its best only professional guesses. Nonetheless they were perceived and treated as scientific truths that later became rules to be followed.[120]

Between the 1950s and the 1960s, there were few doubts that automobiles were an essential part of the modern society. Increased use of automobiles was according to Hagman seen as sign of increasing rationality and economic progress.[121] The problem was rather that it went to fast. The prognosis' that Sven Godlund and his colleagues made back in 1958 was thorough but not sufficient. The

[114] Lundin (2008), p.24.
[115] Ibid. p.271.
[116] SOU 1958:1-2.
[117] Long term report 1965 involves a whole array of reports on different subjects where the above mentioned is only a small part. SOU 1966:69, Bilaga 5.
[118]Apart from government reports he has authored several texts on automobility during the 1950's and 1960's. A few examples starting with his dissertation: *The growth of bus traffic and its role in urban influence fields* (1954), *When Railroad become Highway* (1958),*Communities, fields and surroundings* (1957), and *The Swedish Urbanization* (1964) and so on. Godlund, Sven, *Busstrafikens framväxt och funktion i de urbana influensfälten*, Lund (1954); Godlund, Sven, *Tätorter, fält och omland*, Stockholm (1957); Godlund, Sven, *När järnväg blir landsväg* Stockholm (1958); Godlund, Sven, *Den Svenska Urbaniseringen*, Göteborg (1964).
[119] *Road plan 1970* was proposed 1964 by politician Gösta Skoglund, who was by that time director of the state's communication department. The authors consisted of a large number of people with different roles. G. Skoglund stands out as the main author with Sven Gerentz, Erik Höök, Lennart Johansson and Per Olov Tjällgren and Bo Carlsund. Apart from them, a large group of engineers of different kinds and economic expertise was involved in the report. Vägplan 1970, p.7-8.
[120] Lundin (2008), p.120-124
[121] Hagman (2001), p.32.

concentration of population, urbanization, and increasing numbers of automobiles per capita called for new calculations of how the road network in Sweden should progress.[122] The average mileage for the Swedish citizens by 1970 was about 13690 kilometers per year, a number that according to *Road plan 1970* did not change significantly throughout the whole period 1960 to 1970. The swedes seemed to travel by car about the same total distance for the whole decade. [123] The dominant travel pattern for automobiles was short-distance travel.[124] All in all the authors expected that, cars, buses and trucks in Sweden would travel about 51 billion kilometers by 1975 and that the distance would increase to 72 billion kilometers by 1980. A prognosis that underscored the need for expansion and careful maintenance of the national road network.

The authors of *Road Plan 1970* estimated that the average number of automobiles for every 1000 Swedish citizens around 1969 was approximately 300. The amount of cars had steadily been rising since the 1920s, and showed little sign of decline. The future held more cars, their estimations showed 390 cars per 1000 citizens by 1975, 450 by 1980 and 500 by 1985. However, the authors of *Road plan 1970* tried to be modest in their future predictions, and did not stray further in time. But the data that they built their argument on strayed further. It was compiled by Sven Godlund in the previous report from 1966, and Godlund was a man of vision: by 2000 he thought that 600 to 650 automobiles per every 1000 citizen was a plausible development. [125] Finally, Sven Godlund asks, if we perhaps should expect at least 6 million automobiles by 1980? That would mean that more or less "every able-bodied citizen" would own a car.[126] To put these numbers in context, the actual amount as of 2012-2013 are about 400-550 depending on region. According to the Swedish political economist Björn Elsässer, by 2000 the Swedes had a total average of 494 cars per 1000 citizens.[127]

Technology and technological development as a deterministic process has a dominant position in Godlund's argument. Godlund's ideas are of course based on the assumption, very common at the time, that energy was an unlimited resource. Or at least that it would become unlimited as the problems would be solved in the near future if technological development would have its course.[128] As an introductory statement for his conclusions in the *Long Term Report* from 1965 he claims that: "we should take aim and plan for the complete automobile society." He thought of electron-controlled automobiles as the future of personal based transport. Probably in the form of smaller, short distance

[122] *Vägplan 1970* (SOU 1969:56), p.19ff.
[123] SOU 1969:56, p.10.
[124] Ibid. p.24.
[125] Ibid. p.10.
[126] Ibid. p.151.
[127] Björn Elsässer, *Bilismen* (Stockholm 2006), p.20.
[128] See Jonas Anshelm's book *Mellan frälsning och domedag: om kärnkraftens politiska idéhistoria i Sverige 1945-1999* (Eslöv 2006).

"shopping wagons" fueled by cheap batteries or fuel cells or as buses reaching speeds such as 150 kilometers per hour. For heavier transport he expected rail-bound travel with speeds up to 250 kilometers per hour. For longer distances the VTOL-technology (Vertical Take-Off and Landing) was a plausible development, reaching the staggering speed of 500 kilometers per hour.[129]

Transnational Road 98 as embodied ideology:

After the contemporary ideological backdrop has been established as well as its actors, it is time to discuss the road project. The next part of chapter III concerns the planning and construction of Transnational Road 98.

According to the Uppsala University based cultural geographers Lennart Bäck and Christer Jonasson, a road reaching from Kiruna to Northern Norway had been discussed since the 1930's.[130] However, from 1958 and on, a few of these discussions has left some text material in their trail. Sven Godlund and Gunnar Rasmusson[131], situated at Gothenburg University, were commissioned 1958 by Kiruna Municipality to write a report on the possibilities of constructing a road between Kiruna and Northern Norway. Exactly to where, was not really clear at that time, but Narvik or Skibotn seemed as plausible choices.[132] The report was named *Planning a road Kiruna - Northern Norway* and was published 1960.[133] In the report Godlund and Rasmusson proposed nine different alternatives for a road but their recommendation was a road drawn on the north side of Torne Lake, not on the south side where the railroad already was situated and where the road in the end actually would be built.

Frozen ideology

Ehn, Frykman & Löfgren uses the term "crystalized" nature as they analyze of monuments, national parks and artefacts. In Per Lundin's dissertation *The Car Society* he borrows the Swedish Historian of Science and Ideas Sven-Eric Liedman's concept of frozen ideology.[134] Lundin suggests that the mid-20th century building craze in Sweden and its technical artifacts such as parking lots and parking

[129] SOU 1966:69, p.151ff. Godlund borrows the argument from an American report from 1956: R. L. Meier, *Science and Economic Development. New Patterns of Living* (New York 1956).
[130] They leave no comment on exactly how and on what level, neither do they serve the reader with any sources on the subject. Any such discussion are thus held in obscurity. Godlund & Rasmusson's report from 1960 is the first officially publicized document on the subject that I have found so far.
[131] Rasmusson was a Philosophie Licenciate and was responsible for the natural scientific parts of the main report, while the rest was authored by Philosophie Doctor Sven Godlund himself. Godlund & Rasmusson (1961), p.1 (footnote 1).
[132] Yngve Boye, *Mellanriksväg Kiruna-Nordnorge: Diskussioner, utredningar, yttranden* (Kiruna 1967).
[133] Sven Godlund & Gunnar Rasmusson, *Väg Kiruna - Nordnorge: natur- och näringsgeografisk undersökning utförd år 1959*, (Stockholm 1960).
[134] Lundin (2008), p.35-37.

houses, and huge shopping malls can be analyzed as "frozen ideology."[135] I mean to say here that the concept of crystallized nature and frozen ideology in the form of constructed technological artefacts, are two different analytical tools that in essence functions the same way. The park is an abstract object, constructed and made physical only on paper in books, laws and maps. The road, started off as something on a sketch board, an abstract idea in plans and maps, but did later get a physical existence. Physical or not, they represent embodied ideology in the landscape that can be analyzed in similar ways.

[135] Lundin (2008), p.35-37. As a definition of ideology I would like to refer to a citation made by Lundin from Sven-Eric Liedman's and Lennart Olausson's (eds.) *Ideologi och Institution: Om forskning och högre utbildning 1880-2000* (Stockholm 1998): "an implicit or explicit and often contradictory *system* of ideas, rituals and/or preparedness actions, a system that acquires its meaning in a particular society with its classes, groups, institutions, traditions and ambiguities."

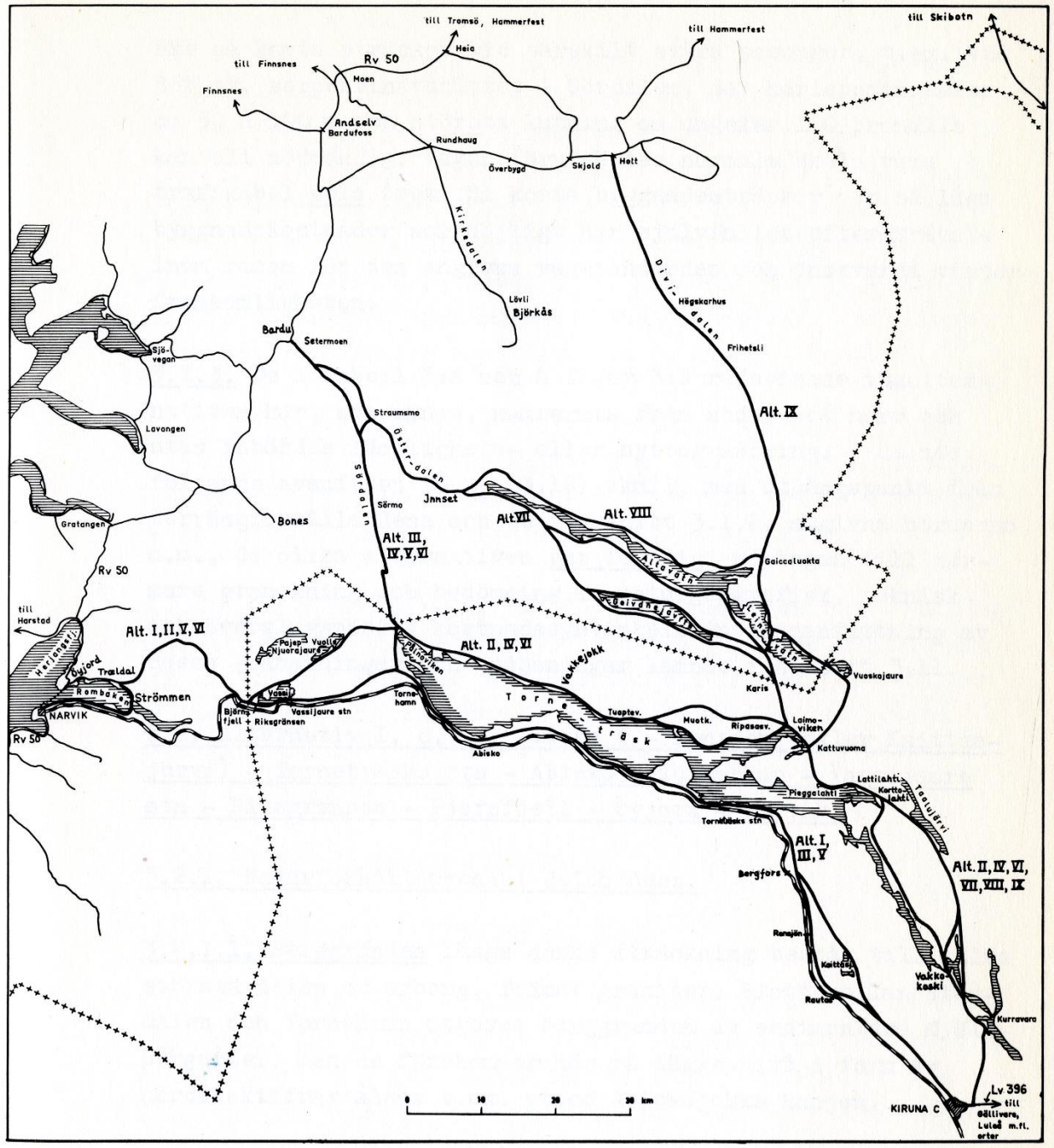


Fig. 3:B. Undersökta vägalternativ

Figure 3: Godlund and Rasmusson's map of the nine alternatives as seen in the main report from 1960. p.22, fig 3:B.

Godlund's Report

The map in Godlund and Rasumssons report: a combination of immutable mobiles

What we see above (Figure 3) is one of the maps included in Godlund and Rasmusson's shortened report from 1961. It shows the region surrounding Torne Lake both on the Swedish and Norwegian side. The dotted line stretching across the map in a wave-like pattern from lower left to upper right is the Swedish-Norwegian border and in the far upper right corner, the Finnish border is visible as well (Treriksröset).

With the map from 1909, previously analyzed, it was not hard to locate the base layer of the map's actual origins. In this case it is a different matter. Godlund claims in the report that their calculations are based on adoptions of photogrammetric work and aircraft cartography.[136] Looking closer at the larger version of the report it becomes obvious that these works of photogrammetric techniques were few and depicted sites on the Norwegian side of the border. The photos were taken by a Norwegian aircraft association, as it seems, solely for this purpose and could therefore not have been the base layer for the maps displaying the Swedish side.[137]

[136] Godlund & Rasmusson (1961), p.3. In the English summary (p.13) Godlund also claims that Norwegian maps were used.
[137] Godlund & Rasmusson (1960), p.41, fig 3:J.

After georeferencing the map and compared with a cadastral map from 2013 it fits reasonably well which must mean that it has some sort of frame that it is based on. The only visible objects that directly relates to 19th century cartography on the map are the small crosses symbolizing the border between the nations, as well as the black and white symbol for railroad. The border symbol is actually from the earlier mentioned cartographer Thulstrup's set of symbols accepted by the Swedish government 1837. In the larger report, sections of this map have been analyzed by Rasmusson, and small segments also includes topographic lines similar to those seen in contemporary cadastral terrain maps (Figure 4).[138] If I may speculate, this map is a zoomed-out adaption (the scale is 1: 1 000 000) of the new GSK's frame map series (stomkarta) that was initiated around 1953 with aircraft based photo technology.[139] What is certain is that the maps were drawn by Gunnar Rasmusson and that all the analyzing and interpretive work was done by Sven Godlund. According to the report Rasmusson has "walked ['gått upp']" large parts of the proposed road alternatives. He has also done "appropriate" fieldwork and literature studies for the assignment at hand. [140]

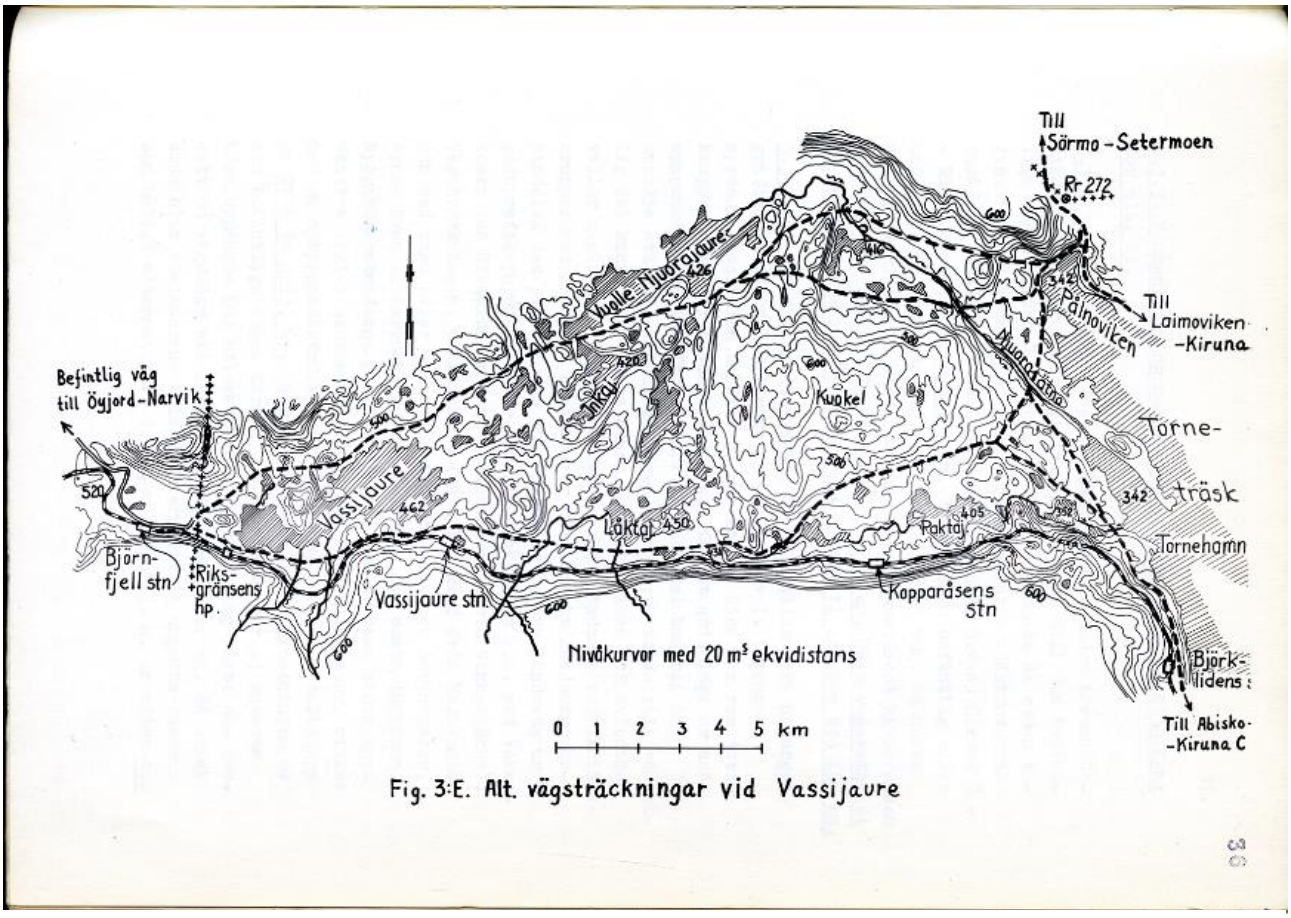
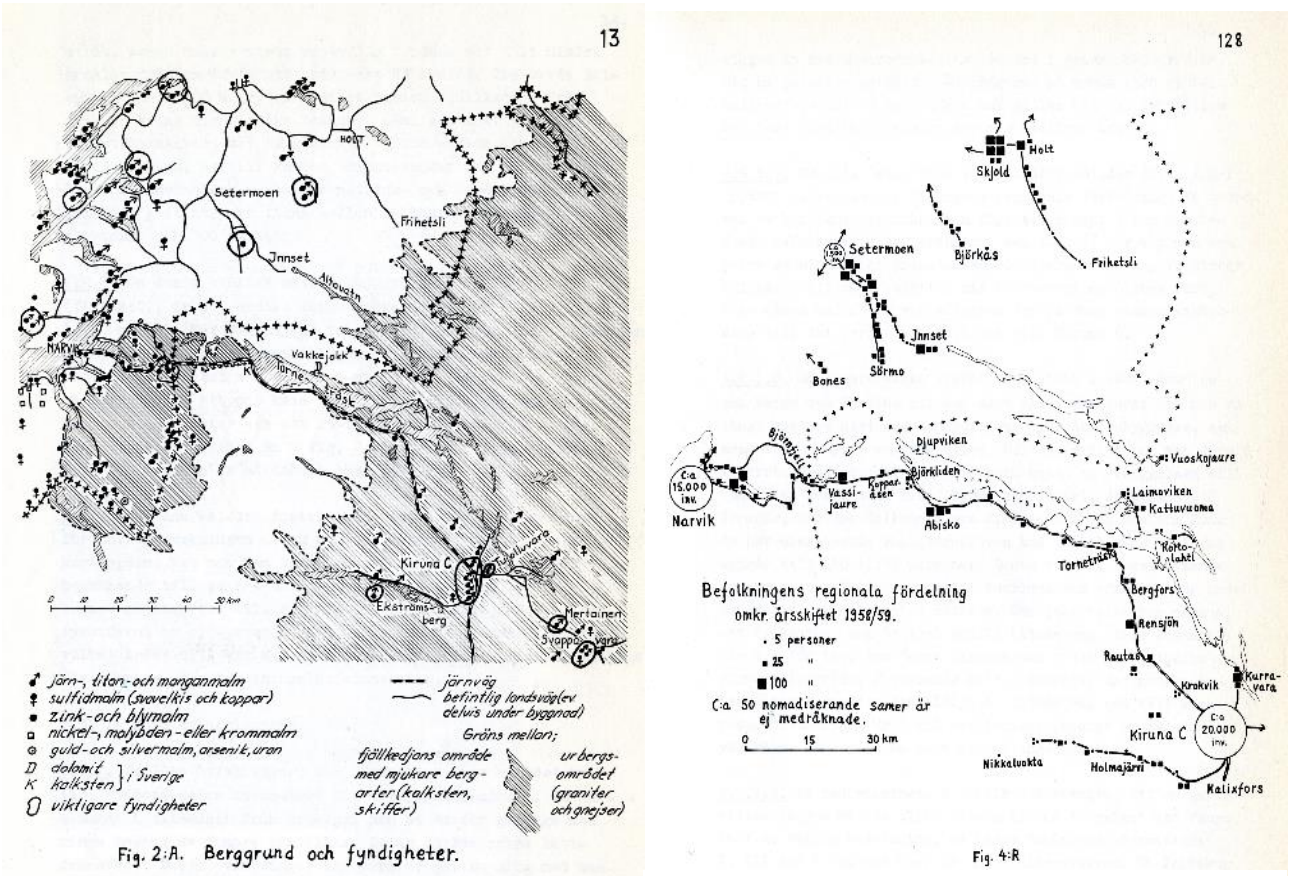


Fig. 3:E. Alt. vägsträckningar vid Vassijaure

Figure 4: Topographic map over the Vassijaure area. Godlund & Rasmusson (1960), fig. 3:E, p.30.

[138] Godlund & Rasmusson (1960), see also fig: 2:B, 2:C, 3:C, 3:D, 3:L, 3:M, 3:N. There is also a reference to RAK in the introduction claiming that all maps used are approved for proliferation by RAK according to national law. This indicates that official state maps have been used in some form.
[139] Ottoson & Sandberg (2001), p.105.
[140] Godlund & Rasmusson (1960), p.20.



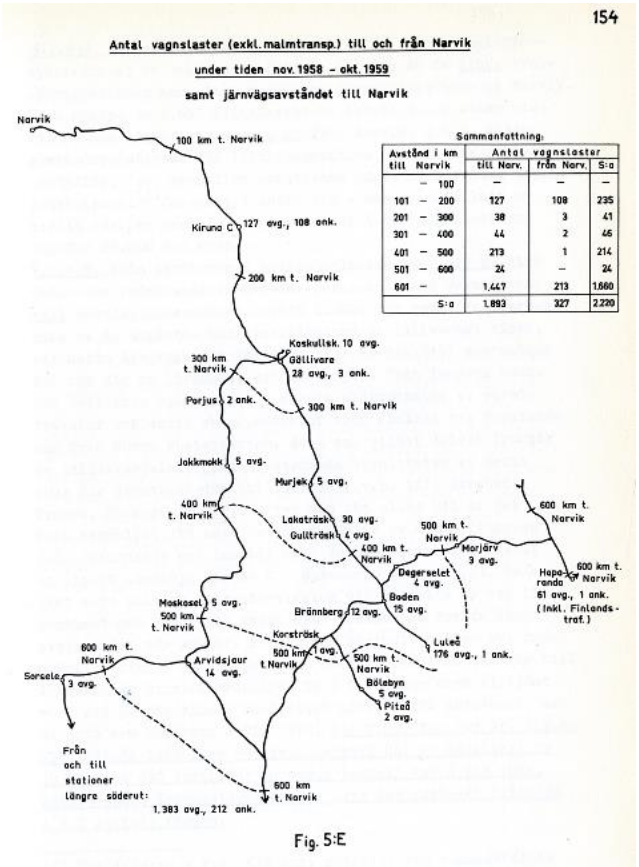


Figure 5: three of the maps used by Godlund in his argumentation. Godlund & Rasmusson (1960), p.13 fig 2:A, p.154 fig 5:E, p.128 fig 4:R.

But to track the map's origins, it is not the official state map counterpart we should look for in this case. The geographical correctness and scale provided by GSK is perhaps only a small part of the map. Taking a closer look at Godlund and Rasmusson's main report there are about 25 maps with different scales apart from the one I present here (Figure 3), there are also 6 photographs taken by Rasmusson. Furthermore, there are 41 tables displaying data extracted from the region with different topics such as amount of traffic, population amounts in villages, cities, municipalities in both Sweden and Norway. Many of the tables' data has a corresponding map. The examples above (Figure 5) are maps displaying possible exploitable rock minerals (upper left), the number of train departures carrying

different types of ores (upper right), and the third display the concentration of population in the affected region (lower left). Each of these maps have a corresponding table, and a chapter discussing the certain topics extent and importance in the region.

Godlund and Rasmusson's map of the nine alternatives (figure 3) thus consist of a convergence between the state's cartographic tradition and Godlund and Rasmusson's own research. It includes not only the details descendant of 19th century GSK drawings in the Lapland area but also economic, geological and population data gathered and concentrated by the state in both Norway and Sweden. By 1958 Godlund and Rasmusson, can interpret the data collected over time and form a 230 pages long argument. The map (Figure 3) is thus the visualization of a much longer statement, in turn built upon enormous amounts of knowledge production in several different fields.

Godlund's idea of 'need' for roads: context

The small publication here analyzed is more or less a copy of the conclusion of the complete report made 1960. Twelve pages long, it contains a concentration of Godlund's ideas and an even shorter summary in English. The only map included is of course the map discussed above. Whenever questions about his argument have surfaced I have followed Godlund's argument in the main report.

Short and simple, Godlund starts out with a clear statement: "No other areas on land in northern or western Europe, with such demographic size and relatively short distances between each other, such as this one, lack a land based communication infrastructure."[141] This quotation is the starting point of the whole argument, and as we will see later, also the core of it.

What Godlund means with land based communication infrastructure is of course roads for automobiles. However, the railroad was there, connecting the two largest nodes of commerce, Kiruna and Narvik. But as we have seen above, Godlund saw automobile technology as the future, not railroad. Railroads would simply not meet the future demands of transportation that he envisioned.

The centerpiece of Godlund's argumentation is the quite abstract concept of need of communication. Godlund writes that "between urban areas there is a need for contact". Such 'need' depends on demographic size and distances.[142] He claims it is a "natural" and "law-bound" process which due to

[141] "Inga andra områden till lands i norra eller västra Europa med den folkmändstorlek och på sådana relativt korta avstånd som det här gäller saknar numera direkt landsvägsförbindelse med varandra." Godlund Rasmusson (1961) s.2.
[142] Godlund och Rasmusson (1961), p.2,7: "Empiriska studier har visat att befolkningens rörelser mellan två orter ungefär står i direkt proportion till orternas storlek men i omvänd proportion till avståndet däremellan. Iakttagelserna är sp pass generella och lagbundna, att man kan sammanfatta dylika rörelser i en formel när det gäller vägtrafik t.ex. av utseendet." See also: "Mellan alla tätbygder finns nämligen ett kontaktbehov, vars styrka (d.v.s. faktiskt eller förväntad trafik) i första hand är avhängig av folkmängdsstorlek, behov av varuutbyte, ekonomisk standard och avstånd och som - alltefter den

a steadily rising amount of cars and trucks causes more traffic and thus needs new roads to sustain it. At first sight, the demographic size that he mentions can be questioned; on page 130 in the main report we see that the highest number of "roadless" inhabitants that can be connected with a road is actually only 735, and all of them are in the vicinity of the railroad.[143] These people are disregarded by Godlund in a quite brusque manner: "they will have to do with the existing railroad."[144]

The need that Godlund refers to is between cities and the zones of commerce around them. Thus it makes sense that the report has a 20 pages long section solely discussing the population constitution in literally all communities surrounding Kiruna and Narvik.[145] The maximum possible number of population that might be influenced by a road is the variable that Godlund looks for, he wants to establish the road's zone of influence.

The population is described through birth statistics, migration, and immigration et cetera. How these factors might progress the coming decades is also included. Most of the chapter consists of tables displaying historic numbers, contemporary population levels and also a future prediction with two different numbers for each table. One representing the lowest predicted population growth and another representing the highest predicted population growth. In table 4:U we see that Kiruna by 1958 has 27.000 inhabitants and is expected to have something between 35.000 and 41.000 by 1975. Narvik has 32.000 inhabitants by 1958, and is expected to grow more modestly to somewhere between 34.000 and 39.000.[146]

In chapter 4, "*Businesses and population",* he lists different industries and their revenue. Here we find topics related both to Sweden and Norway such as the fishing, forest industry, of course ore industry, but also tourism. The topics discuss not only what the concerned region has but also what it might need. Northern Norway for instance seem to lack timber and the export prices from the Atlantic coast are also cheaper. Swedish timber will thus create a 'need' for traffic to Norway that can be released with a road. Transnational Road 98 should thus be drawn so that the largest possible forestry areal connects with the road.[147]

The lack of communication and accessibility between the urban environments causes concepts like "blocked traffic demand"[148] that Godlund mathematically proves through his own methods and

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tekniska utvecklingen och ekonomiska integrationen - tenderar att bli oberoende av naturförhållanden och riksgränser. Det är naturligt, att detta kontaktbehov med det ökade personbilsinnehavet och lastbilens allt större roll, resulterar i en successivt intensivare landsvägstrafik och ett allt större behov av nya landsvägar, där sådana ännu saknas."

[143] Godlund & Rasmusson (1960), p.130, table 4:S.

[144] Godlund & Rasmusson (1961), p.12: "Befolkningen längs malmbanan får därvid, liksom hittills, väsentligen lita till tågen".

[145] Godlund & Rasmusson (1960), chapter 4.6: "Befolkningen", p.120-140.

[146] Ibid. p.136, table 4:U.

[147] Ibid. p.111, see also Fig 4:K on p.106.

[148] Godlund & Rasmusson (1961), p.6; Godlund & Rasmusson (1960), p.199.

models. An example is his method of potentiality (Potentialmodellen) in which the amount of existing cars is compared with distances to other places and then further compared to variables listed under "resistance" such as psychological, economic and time. For example, given that population and businesses always strive for communication, the time it will take for them to travel a particular distance constitutes a variable that result in resistance. By comparing distance and time with business and population amounts a prediction can be made of how many people owning a car or businesses owning a truck would travel between two given points. If resistance is too high there will be no traffic, if it is low there will be much traffic. Godlund uses the Swedish word 'uppdämd' to describe the pheonomenon, a word which etymologically refers to dam and 'dammed'. With this perspective, a road does not create traffic, it releases traffic. Just like opening a water dam releases water.

Godlund builds his overall argument by combining predictions of population growth, the regions resource constitution and mixing it with assumptions as: "businesses in general [näringslivet i stora drag] 'wants'" to be evenly distributed in all directions".[149] And of course, if all the predictions he made would come true, a road would be severely motivated.[150] But just like Per Lundin noted when he analyzed Godlund's national road plans: the problem here is that everything that Godlund bases his statements on are just guesses and presupposed assumptions. This means that the actual core of Godlunds argument lies with the first line in the report which claims that no other area like this does not have a road, therefore we should build one. The proposed road is thus self-referent, and building it is about fulfilling the regions destiny.

The predicted population number is regarded as a truth which the regions infrastructure development must be adapted to. The bias of Godlund become perhaps most obvious when he begins to argue that the road needs to be built because of the demographically growing Kiruna. In a tautological manner he claims that a city with an expected amount of 30 000 inhabitants in just a few years need a functioning infrastructure. However, if Kiruna is to grow, it needs to be attractive to people. The road west from Kiruna is crucial in this aspect since it opens up recreational possibilities for the surrounding population. The economy will grow, thus the road is needed, but for the economy to grow it needs a road. People coming to Kiruna will demand a road, but for them to come to Kiruna, Kiruna needs a road, and so on. [151]

In the end, Godlund's recommendation is that Transnational Road 98 should be drawn on the northern side of Torne Lake to Narvik. The main reasons for this concerned population and businesses as we

[149] Godlund & Rasmusson, (1961), p.6.
[150] With hindsight we can see that by 1975 Kirunas population was only 25.000, and since then, it has been steadily declining: SCB <http://www.scb.se/statistik/MI/MI0810/2005A01x/MI0810_2005A01x_SM_MI38SM0703.pdf>, p.51. 2013-12-04.
[151] Godlund & Rasmusson (1961), p.9.

have seen above. However, a great part of the choice of alternative II was the geographical and geological variables of the region.

Judging from his choice it seems as if Godlund believes that the landscape is not a problem *per se*. He claimed that with the help of technological development and economic integration natural difficulties can be circumvented. Using his own words, society would become independent of natural obstacles with technology:

> Between all urban habitations, there is, to be precise, a need of communication whose strength (either actual or expected) is primarily dependent of population size, need of commerce, economic level and distances, and which – according to the development of technology and economic integration – tends to become independent of natural obstacles and national borders.[152]

However, it was not that easy. Natural geographic conditions as he describes it, was in fact important in his argumentation. Although technology made the road project independent of nature, the cost of construction was a hierarchically prioritized principle. The difference is that the eventual geographical problems is instead recalculated into cost variables. In chapter 3 of the report *"The different road alternatives from a Natural Geographic and construction cost perspective*" Godlund notes that from an economic perspective the massive snowfalls and the avalanches caused some complications, and accessibility during wintertime was uncertain because of it. Road alternatives drawn on Torne Lake's southern side were especially dissuaded, they were even "completely inappropriate."[153] The foremost alternative that he recommends, alternative II, causes the least landscape related problems and perhaps more importantly: A road there would also allow for Dolomite mining by the mountain Vakkotjåkko.

A road on either side of the lake is thus theoretically possible, it is just matter of how much it will cost. If the surrounding nature creates revenue in the form of industry like dolomite mining or if nearby materials can aid the construction, these two facts results in an overall cost reduction. For instance there is a hand drawn map on page 17 that displays areas with useful grit material for use in road construction and in figure 5 we saw an overview over the regions mineral deposits.[154] But the actual consequences for the landscape or the environment is not included or thought of. The landscape

[152] "Mellan alla tätbygder finns nämligen ett kontaktbehov, vars styrka (d. v. s. faktisk eller förväntad trafik) i första hand är avhängig av folkämängdstorlek, behov av varuutbyte, ekonomisk standard och avstånd och som - alltefter den tekniska utvecklingen och ekonomiska integrationen - tenderar att bli oberoende av naturförhållanden och riksgränser." Godlund & Rasmusson (1961), p.1.
[153] Godlund & Rasmusson (1961), s.3. Such ideas are present further on, see *Roadplan 1970:* The need for new projects and enhancement of old roads were always to be juxtaposed with economic benefit "The gradation of necessity of and between road projects must be conducted with revenue as its first principle"
[154] Godlund & Rasmusson (1960), p.27, fig 2:D.

is reduced to just another economic variable to be included in the equation along with demographic constitution and business opportunities.

The connection between ideology and the map's (lack of) detail:

So, we have now established so far the ideological contemporary frame for the map as well as the technocrat Sven Godlund's role and ideas in that ideological environment. We have also analyzed the map's overall statement and what information it is based and built on. It is thus time to zoom in to see the details.

Starting with the map's frame we can see that this map is very different from the map I presented in the previous chapter. Although its use is similar, (to form an argument) it has a completely different scope. The most significant difference is that it shows not only Abisko. At stake here is the whole region between Kiruna and Northern Norway.

It is easy to imagine how this map could potentially be zoomed out and connect Kiruna and Northern Norway to the whole Scandinavian automobile network. In that way this map is trying to convey a much larger context than just the focus of the frame it shows. In the maps periphery on the Norwegian side we can see small arrows pointing to Finnsnes, Tromsö, Hammerfest, Harstad even Skibotn is represented in the far upper right corner although the road leading to Skibotn is ridiculously far away from the center of attention. On the Swedish side, Luleå and Gällivare are represented with arrows pointing in their direction. By displaying these small nodes of urban environments, the proposed road seems to adopt to the region like it is the last piece of the puzzle.

I showed earlier that landscape was treated as an economic variable amongst others but not an actual obstacle *per se*. According to Godlund geographic problems concerning the construction of roads in the arctic environment can be solved easily. They key was the one High-modernist abstract force of progress: technological development. The perspective is interpretable in this map. Nature as such is barely visible. In Godlund's report, neither the national parks nor the mountains, creeks or valleys are shown on the map. Even the smallest towns and roads in Norway are represented, but the considerably difficult shape of the landscape is absent. Moreover, there are two national parks present here within the parks frame. Abisko National Park, and Vadvetjåkka positioned west of Torne Lake. Both are fully ignored both in text and on the map. Possible problems as eventual environmental effects or possible gains with the parks or their protector; Abisko's scientific community seems to have been of no concern. The only landscape feature represented is water of different kind (however,

bear in mind that Torne Lake at this point had some boat traffic and can therefore be interpreted as a part of the communication network). A part from that there are no obstacles to consider.

However, the road drawings are not laid out randomly. As the map was georeferenced and compared with other maps with visible topography it soon became obvious that most of the proposed road drawings follow mountain valleys neatly. We have also seen that Rasmusson's topographic maps were included in the main report and that field studies has been made in the region. But it was not something that Godlund considered important enough to include in the final product. Nature, after all, could just be circumvented, and might at most cause a slight increase in construction cost.

The need of communication that Sven Godlund so cordially discusses is between the only things that we can see on the map, human made urban environments: places where people live and business flows and the infrastructure that connects them with each other. Abstract objects meaningful only for the social human being like the border between Norway and Sweden are also visualized.[155] The only infrastructure displayed that actually existed by that time was the railroad stretching from Kiruna (lower right) to Narvik (mid left) here seen as a shifting black and white track. On the Norwegian side there are roads meant for automobiles displayed as thin black lines.

However, the most central detail of this map is of course that it shows nine different possible approaches to building a road between Kiruna and Northern Norway. This is the layer that they have added to the map to form it into a map emphasizing their argument. The dominant, much thicker road drawings marked with "Alt" and a roman number, stretching from Kiruna to various places in Norway represent the different alternatives. The nine drawings represents Godlund and Rasmusson's interpretation of all the gathered data that made the map possible to create.

I would say that the absolute primary trait that this map has is its vision of possible automobile futures. It is a map of possibilities, not problems. But, why has Godlund chosen to depict so many proposals? If all the other alternatives except one are interpreted as inappropriate, why include them?

Per Lundin has discussed similar problems as well when analyzing the different road plans and government reports made during the 1950s and 1960s. The reports and their authors underscored the uncertainty of their analysis, and the advisory aspects of their roles. But in the end they chose to give only *one* recommendation.[156] Godlund claims that the work he has done was a mere *ranking* of different alternatives. But after all, there is only one recommendation. Reading his report closely we

[155] The choice of leaving the national border in, is also interesting. Judging from Godlund's ideological background I sincerely believe that he envisioned urban the complete automobile society as something completely independent of nation-state borders, or that the border itself was at most a variable under the category 'resistance.' However, one can imagine that there is political problems with this that Godlund has to concern himself with.
[156] Lundin (2008), p.120.

can see that there is little doubt that a road to Narvik, going north of Torne Lake, II, is the only realistic proposal, which means that only 8 out of 9 alternatives has some other function to the author.

To drench an audience in choices, as Godlund does in his report can be seen as an attempt to force the reader to choose one alternative. It does not invite the audience to consider if the road should be built at all. As a scientist and technocrat he addresses the state completely "unprejudiced and objectively" in his own meaning.[157] But the underlying motive, perhaps unconsciously, seems to have been to convey how wide eyed and including the two gentlemen had been during their research. How unprejudiced and objective they were as modern scientists. To follow their recommendation is thus to be rational.

So, by interpreting the immutable mobiles that existed contemporary to Godlund, he formed an argument with his ideological convictions as background. As the map were made, only the things Godlund considered important were added while other were removed.

Conclusion: What did building a road symbolize?

The road and automobile technology was an essential part of modernism. That ideology was active throughout the 1950's to the 1970's and left in its trail a network of roads. As we have seen, automobile technology and modernism is connected to the idea of a classless society, the emancipation of the classes. Just as Svenonious and his friends thought that the Swedish nature could form a national identity and erase political struggles, mid-20th century modernism and its expression through automobility had similar claims.

In their effort to catch on to this trend, Kiruna Municipality ordered one of Sweden's perhaps most influential geographer to produce basis for an argument to build a new road. Sven Godlunds report on the Kiruna – Northern Norway road project can be seen as a local extension of a national discourse of modernism.

The High-modernist argument expressed by Sven Godlund

In the report Godlund takes the position of a typical High-modernist technocrat. He saw it as his and the state's role to contribute, to shape this landscape into something preferable. The map forms a relation between Godlund as a technocratic system builder and the state. It is not a dialogue between Kiruna and Godlund, or between him and the inhabitants, but a dialogue between a scientist and the state, concerning a region since long incorporated into the national territory.

[157] Godlund & Rasmusson (1961), p.10.

The map in Sven Godlund's report is then an expression of a power-relationship. Godlund never talked in the name of the State in such an obvious way as Svenonious and the authors of Proposition 1909:125, but he spoke in the name of Science. This links directly to the historian Per Lundin's conclusion that the politicians during the period did little to question the 'scientific' results men like Godlund presented. He was a high-modernist technocrat in an era where they held their highest status and his map were meant to convey possibility and promise of technology in an unprejudiced and objective manner.

Godlund builds his argumentation on rationalist science. The clearly ideological backdrop behind Godlund's tautological reasoning is because he – and as Per Lundin has shown in his work - and many with him, at the time was surrounded with a discourse of economic efficiency and rationality while at the same time being heavily intoxicated by the promise of modernism. The regions development was seen as law-bound and it is thus a necessity for the coming "complete automobile society" to build the road. The guesswork prognosis of eventual traffic, population growth and businesses neatly digested through the centerpiece argument formulated as 'need of communication' functioned as a thick brush covering a purely ideological argument. For Godlund the road is a self-fulfilling prophecy and it does not need arguments and sometimes it seems as if he adds them as formalities.

As the reader might have noticed, Svenonious vision of the railroad technology as a bearer of culture and civilization, has similar traits as Godlund's idea of automobility. However, looking closer, there are some important differences. Whereas the park and the railroad was described as something that would increase tourism and science during the beginning of the 1900s, the idea of the road project 60 years later had completely different aim and relation to nature and state.

Svenonius and the early twentieth century nationalism constantly addressed nature as something wild and untamed. Technology like railroads tamed it, forces it under the crown and the people's control. Svenonious scientific research station created a spiritual fortress in midst of nature, that in the end wanted to frame it, crystalize it and make it civilization's own. Godlund's vision does not address the nature as a force or obstacle at all. In Godlund's perspective nature is completely subdued. Technology simply cuts through it.

Furthermore, the utopia presented is an urban phenomenon, a superstructure built above and independent of its former foundation, nature has no significant relation to it in ideological terms. Olle Hagman wrote that:

> When happiness is achieved through prosperity, production and economy will become its center pieces. The Enlightment philosophers' world-view could therefore be called "econocentric" or "technocentric".

> The human does not simply have the possibility to create prosperity. She also has the obligation to do so. She is imposed with a moral duty to dominate nature, to prioritize the economic and technological systems and their reproduction. The industrialization and the urbanization that followed its trail has emphasized the supremacy-attitude towards nature.[158]

Modernism makes everything around us a subject of technocratic engineering, if it so wishes, to solve problems at hand.[159] Godlund translates the landscape into an economic variable, ignores permanent settlements or Sami herding grounds. The modernist future transcends any natural object. As Godlund says: technical development tends to make distances "independent of" natural obstacles.[160] Progressiveness lies with the material and technological, the local individual is reduced in meaning. Cities, industries, roads and automobiles are modernity's manifestations. As long as there isn't any economic benefits to claim, the important relation is between them and not what the road will cut through. Be it towns or national parks. If the map of 1909 was a map of the State *taking control of* nature, then perhaps Godlund's map of 1960 is a map of Science *subduing* nature.

The ideas of the effects of technology in the landscape also reflects the difference between how railroad technology was seen in the 19th century and how automobile technology was seen in the mid-20th century. The technological artefacts built in the landscape during Sveonious era was proof of the nation-states success. The Iron-Ore railroad was owned by the state and the revenue it created as well. The taming of the wild with technology was further evidence of the state's civilizing character. The idea of the road also revolves on a nationwide ideology but is placed in a local setting: economy, internal migration, and transnational cooperation between the Nordic countries. But, even if the railroad and the automobile road is similar in its effort to convey progress, the road was connected to a discourse that treated it as a force of nature manifested in the specific region. A force of nature is by its own definition something not affected by state agency. However, if the modernist state is seen as a force of nature in itself, every initiative made by it, is law bound.

There is definitely a sort of nationalism in the form of modernism that Godlund conveys as well. The will to be technological progressive, to achieve the complete automobile society can be seen as

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[158] "När vägen till lycka går genom välstånd kommer production och ekonomi att hamna i centrum. Upplysningsfilosofernas världsbild skulle därför kunna kallas 'ekonocentrisk' eller 'teknocentrisk'. Människan har inte bara möjlighet att skapa välstånd. Hon har också skyldighet att göra det. Hon åläggs en moralisk plikt att sätta sig över naturen, att prioritera de ekonomiska och tekniska systemen och deras reproduktion. Industrialiseringen och den urbanisering som följt i dess spår har konkretiserat och befäst herradömesattityden gentemot naturen." Hagman (1999), p.88.

[159] James Scott discusses this in relation to the building of modernist cities like Brasilia and Chandigarh: Scott (1998), see chapter 4, *The High-Modernist city: An experiment and a critique,* p. 103-146; Paul R. Josephson has discussed this as use of "brute-force technology" when he discusses American and Soviet massive-scale engineering practices, such as gigantic road projects or water dam construction during the early twentieth century. For the interested I recommend reading his *Industrialized Nature* (Washington 2002), also see Timothy LeCain's *Mass Destruction* (New Brunswick 2009), and Joy Parr's *Sensing Changes* (Vancouver 2010).

[160] Godlund & Rasmusson (1961), p.1.

something being part of a much more internationally competition based discourse. Sven Godlund is citing American research results, using them as templates for his own premonitions. We find this in Road Plan 1970 as well. Scientific results from American road pressure test is presented and functions as a scientific base from which the Swedish authors drew their argument. The American development was therefore something to look to for answers.[161]

Another difference between the map discussed in chapter 1 and Godlund's map is that the idea of Abisko National Park addressed tourist from all over Sweden and also Europe and not the park's actual surrounding population. With the framing of the park, the park was taken out of its context and presented as a tourist destination to an audience without personal relation to the park's surroundings. What was outside of the park's border was not as interesting as what was inside and what that symbolized. However, the potential road's importance seems to be influential for all the small villages and cities that it refers to. Although Transnational Road 98 should be seen as an extension of a national road network, its use address only the regions inhabitants themselves and Godlund spent much time in defining who they were. The relationship between the state and the object is thus reversed. The audience addressed here are those outside of the road, and the actual physical road is only a technical detail.

Did Godlund's road ever exist?

The absolute primary trait that this map has is its vision of an automobile future. Ans after all, there was only one recommendation or one future to aim for. To read his report is to be drenched in a discourse of the inevitable future, and automobility as that future's crown jewel. However, Godlund's proposal was not accepted initially. It took 20 years before the Transnational Road 98 was finally built and then it was drawn on the south side of Torne Lake (the completely inappropriate side according to Godlund).

An interesting question is then, if the road built in the 1980s is an embodiment of Godlund's automobile future or is it an embodiment of a different ideology? When studying the report made a few years after Godlund's some things have changed. However, Godlund's ideas are still there. They worked with "influence zones" and potential traffic models using the same type of data to form similar

[161] Other countries are of course represented, but the United States stand out as the main influential nation in terms of infrastructure planning. *Vägplan 1970* (SOU 1969:57), s.28ff; I have also discussed this shift towards American culture in my last thesis "Sheltered Society: An analysis of Swedish shelter building technology and practice 1935-1950." (Master thesis 1-year,(Umeå University 2013) <http://www.diva-portal.org/smash/get/diva2:629134/FULLTEXT01.pdf> retrieved 2013-12-16. For more good reads see Kim Salomon, *En femtiotalsberättelse: populärkulturens kalla krig i folkhemssverige*, (Stockholm 2007).

arguments as Godlund did.[162] But either way, they recommended that the road should be built on the south side, so perhaps Godlund's road never existed anywhere else than in this map after all.

In that case, this map's historical importance is perhaps more an artefact of High-modernism which shows how that affected Sweden in general, than as a piece of the actual road's history. It is perhaps more a history of how self-proclaimed 'unprejudiced and objective' technocrats such as Sven Godlund used their scientific methods, translated them into visualizations and 'facts' and then used them as means of argumentation. Because even if Godlund's road was never built, men like him influenced road building practices in Sweden. More importantly, Godlund's report and the map is an example of how the constant collection, layering and combination of different immutable mobiles can extend a centralized power structure's ability to shape and reshape the landscape.

Extended state presence with more immutable mobiles

At first, I had some problems with how to analyze the immutable and mobile traits of this map. It did not have the typical GSK look (General Staff's map or *Generalstabskartan*), that was easily recognizable in the previous example from 1909. But perhaps is Godlund's map even more interesting because of that. Looking closer, not only did we find out that the state's cartographic mission during the 19th century had been involved but also that there was a whole other set of data added to it. As the road was planned, it was critical that the tradition of mapping existed so that the road could be visualized in abstract form before it was actually built.

Godlund's main report included a massive historic accumulation of data along with some contributions made by themselves. The 25 other maps and 41 tables in his report are a fantastic collection of data that was combined with state cartography. Godlund and Rasmusson's map of the nine alternatives is thus a convergence of both the GSK and the state's bureaucratic statistic machinery and scientific effort.

So, what does this say of a state's relationship to a certain place? If the details seen in GSK can be treated as *presence per se* up to 1909, the data that Godlund combines with GSK can be viewed as an *extended presence*.

From 1909 to 1960 there is thus an extension of state power over the region. This extended presence that we have seen in this chapter revolves around population and growth data and it revolves around import and export data. However, such data was of course available in some form by the early 20th century. What is fascinating though, is that all that data now could be interpreted by a single individual.

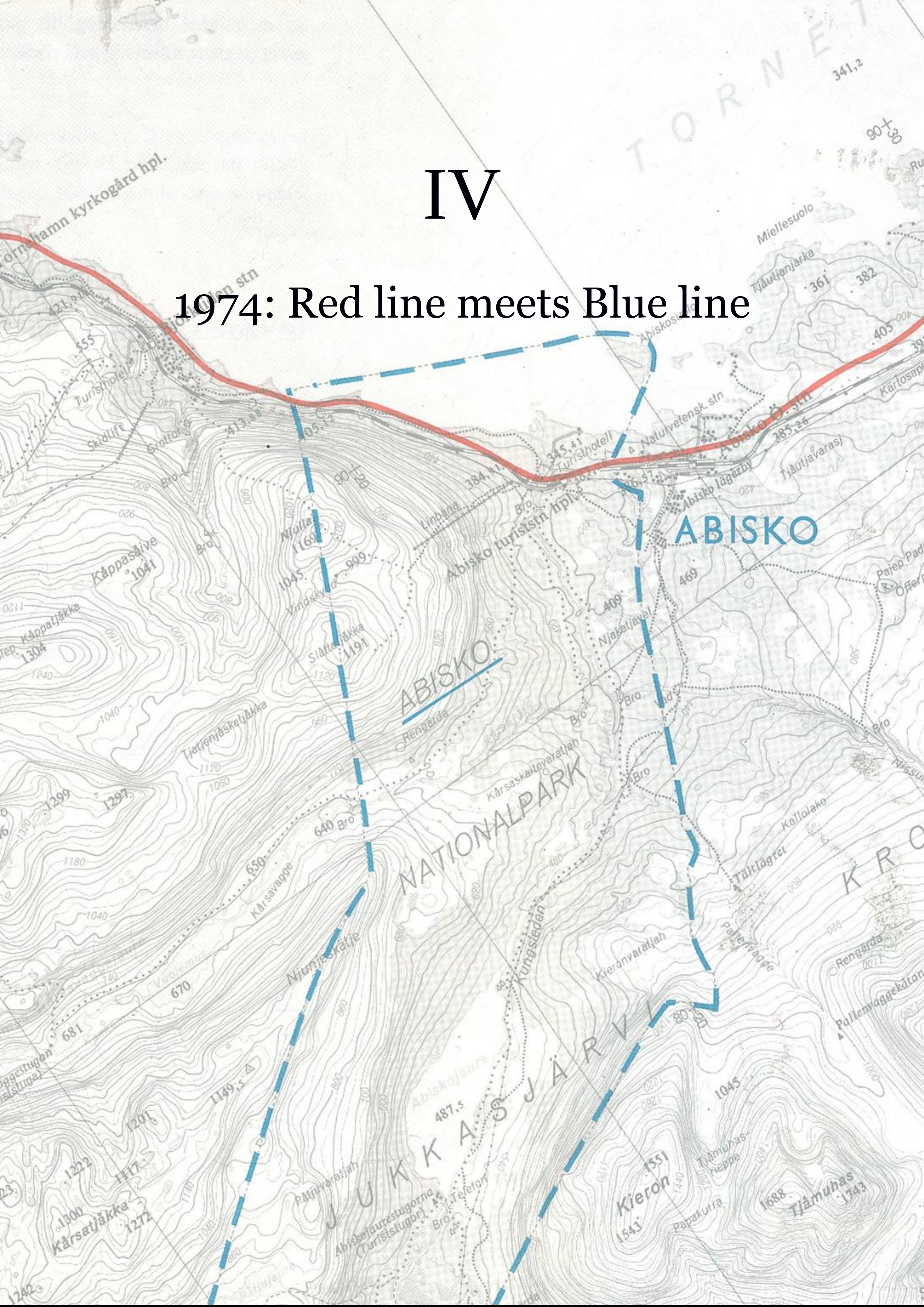
[162] Boye (1967), p.33-52.

The extended presence of state in the landscape of Kiruna Abisko and Narvik is thus also shown to be a centralization of data.

I find it mesmerizing to imagine that all this information has been gathered and moved at some point to a single spot, where Godlund could transfer his ideological interpretations and produce the artefact here analyzed.

IV

1974: Red line meets Blue line



The conflict between Nationalism and Automobility

Automobility challenged in the new environmental discourse

During the late 1960s and early 1970s, a new environmental discourse took more space in public debate. The oil crisis during 1973 ultimately broke 30 years of economic upsurge since the Second World War. Problems remained although 'progress' had been doing its work for 30 years. The industrialisms' environmental backside started to beg for attention. This is when the first really productive critique against nuclear energy started and with that the dreams of unlimited energy shattered.[163] The housing mega-projects of the 1950s and 1960s turned out to be not as liberating as first thought.[164] Both Jonas Anshelm and Sverker Sörlin means to say that the United Nations conference in Stockholm 1972 was a breaking point when emissions and other problems moved from being local and regional to global.[165]

Another important reason behind the new environmentalist discourse was the scientific expansion of biology and its different branches such as ecology. The relation between emissions and environmental problems became understood through scientific results and the scientists realized that ecological systems could be irreversibly ruined due to human activity.[166]

As a symbol of modernity and progress, the car became an obvious target for the new criticism.[167] Emissions were already from the beginning one of the most important elements in this new critique. Carbon monoxide caused some scare, sometimes referred to as garage-death, but also lead. Lead was added to petrol fuel to increase octane rating. However, lead was known to have significant poisonous effects. According to Hagman the problem of emissions and lead was dominant in environmental issues during the late 1960's to late 1970's.[168]

The car, or perhaps automobility in general, generated critique in other fields as well. The technocratic rule by experts and scientist was one of them, and according to Lundin, during the late 1960's a critique formed against modernity in general when some of the effects in Swedens city cores became visible. Even some of the old experts began to shift in opinion. A notable book on the subject was *Should we cover Sweden in asphalt?* authored by a group of economists as a response to the release

[163] Jonas Anshelm, *Mellan frälsning och domedag: om kärnkraftens politiska idéhistoria i Sverige 1945-1999* (Eslöv 2000), p.115-118.
[164] Scott (1998), p.103-146, especially p.127-130 and p.132-139.
[165] Anshelm (2000), p.116ff; Sörlin (1988), p.259ff.
[166] Hagman (1999), p.103.
[167] Ibid. p.106.
[168] Ibid. p.110.

of *Road Plan 1970.* However, these ideas were generally voiced by a few clamorous academics and did never really root in the general public.[169] Automobility as a concept was not yet broken, but at least challenged.

The conflict between ideologies becomes a political conflict

Godlund's report did not settle the dispute if the road should be built or not. By 1967 another report authored by a Swedish-Norwegian work group was published.[170] The report was commissioned by the Nordic Council 1965 in close cooperation with Swedish and Norwegian governments and traffic departments as well as the local municipalities. Interestingly enough this report did not find it feasible to complete the road project from a transportation-economic perspective, something that Godlund stressed sincerely. Although this was the case they did not say that the road should not be built at all. Instead, the new report recommended that the road should be drawn on the south side of Torne Lake, and that the reasons should be to differentiate and stimulate the economic situation in the Kiruna region. There was also more obscure political goals that would appeal to mine-workers in Kiruna. Such goals was discussed as expanding possibilities for recreational activities in the Torne Lake area with emphasis on hiking and especially fishing in Norwegian ocean waters.[171]

I have seen little actual sources showing how this road became something of a political controversy. However, both Bäck & Jonasson and their EIAR, Redin & Forssell, Bernhard and Theander's books claim that it was mainly a dispute of environmental problems.[172] By 1974 there seems to have been a fright that cars would bring pollution and put a halt to about 75 years' worth of research conducted at Abisko Scientific Research Station (shortened ANS). Some of the proposed alternatives according to Redin & Forssell was expanding the railroad track instead of a paved road, which would make possible an increased rail based passenger traffic.

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[169] Lundin (2008), p.281-283.
[170] Yngve Boye, *Mellanriksväg Kiruna-Nordnorge: Diskussioner, utredningar, yttranden* (Kiruna 1967) <http://libris.kb.se/bib/9179094>; Nordiska rådet, *Mellanriksväg Kiruna-Nordnorge: redogörelse* (Stockholm 1967) <http://libris.kb.se/bib/908460>.
[171] Bäck & Jonasson (1998), p.1-4.
[172] In a short telephone interview with both the authors of *Nästan allt om Abisko* they claim that most of the inhabitants of both Abisko and Kiruna were pro-road and the people opposing it were from the south of Sweden and mostly active in Kiruna. Furthermore, I have also heard rumors from other people of some unorganized resistance from Abisko villagers, such as pulling up stakes and road markings as the road was being planned. In a small community as both Kiruna and Abisko it is possible that these historical memories and rumors are centered on a few clamorous persons and that the local resistance was in fact very little. However, a more detailed answer to this question of local controversy will have to be explored in another thesis or perhaps dissertation.

The only sources I have found on the controversy, is one on a national level. That is Proposition 1974:107 and the Riksdag debate that it evoked (Riksdagsprotokoll 1974:89, §5). The proposition had the purpose of ratifying an intrusion of Abisko National Road to be able to build the road between Kiruna and Narvik. Since Abisko National Park was taken as the Crowns land by 1909, an official act had to be agreed upon. The bureaucratic apparatus and public debates was thus set into motion: remittances, research, writers, statistics, and the politicians behind every step now had to consider and choose exactly what this landscape was supposed to be and for who. However, in the end, the Riksdag decided that the road was prioritized and the road was built straight through the park. By this point the road had been staked out by the Traffic department on the south side of Torne Lake and it would be met just on the national border in Riksgränsen by a Norwegian road from Traeldal up to Bjørnfjell.

The government at that time consisted of a Social-democratic and agrarian center coalition with Olof Palme as prime minister. The proposition was composed by Department of Agriculture after several remittances. Six out of eighteen departments and organizations opposed the road project but the proposition was passed with 246 votes against 53. Taking a closer look on the protocol from the Riksdag discussions on proposition 1974:107 and the remittances, a few things becomes noticeable. The persons advocating that the road project should be scrapped or remade are from the conservative right. The organizations that had similar attitudes, were organizations who have deep historical connections with either late 19th century – early 20th century upper middle-class tourism, natural science or the national park themselves such as Royal Society of Sciences (Vetenskapsakademien), Swedish Tourist Organization (STF), Swedish Environmental Protection Association (Svenska Naturvårdsföreningen) and Swedish Local History Association (Samfundet för Hembygdsvård).

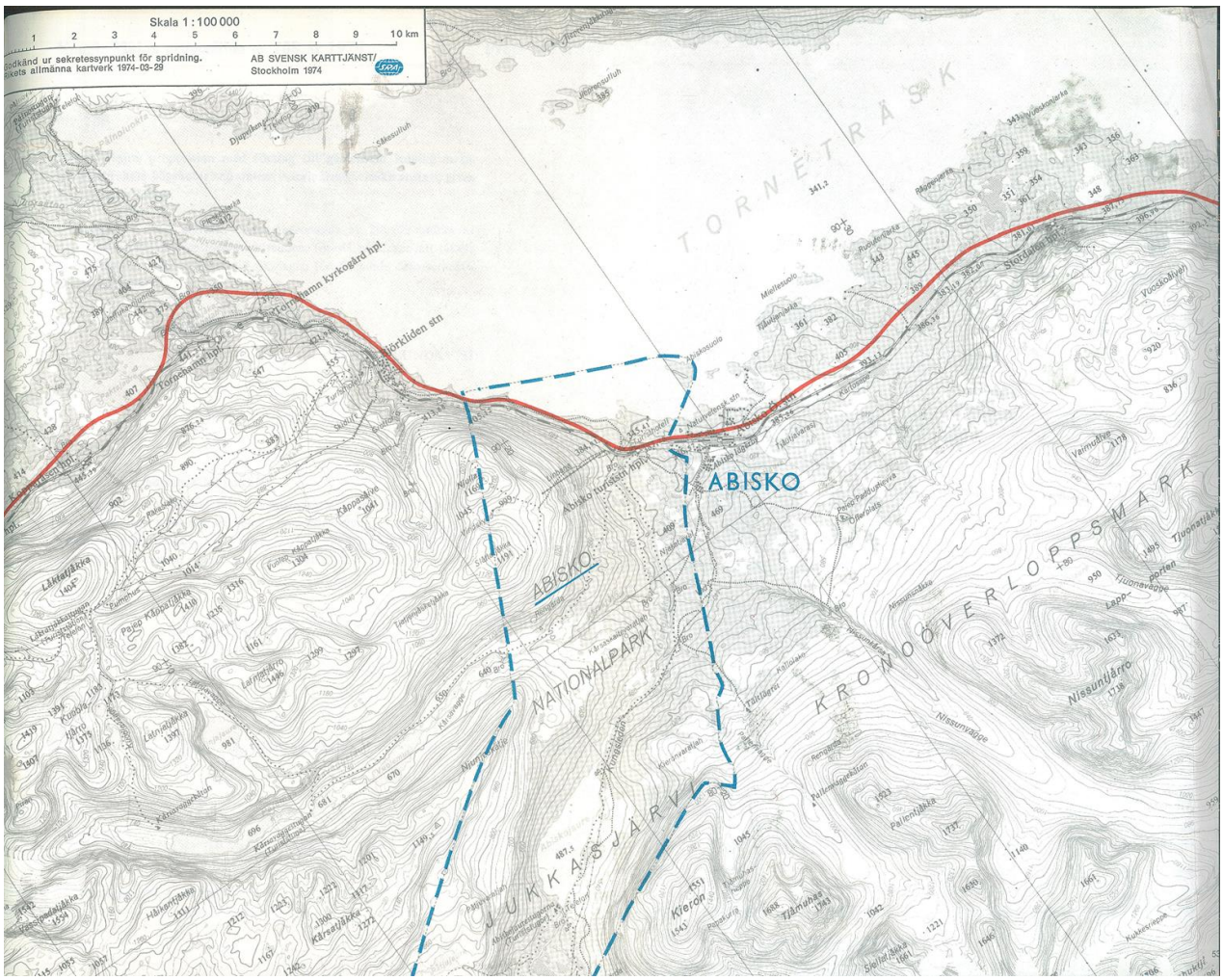

Figure 6: Map found in Proposition 1974:107, appendix.

Proposition 1974:107

Proposition 1974:107: The immutable mobile behind it

This map (Figure 6) was included in the appendix of proposition 1974:107. The base map was distributed by Aktiebolag Svensk Karttjänst (SRA).[173] At the time (between 1963 and 1973) SRA had a monopoly on distributing what was called "General Maps [Allmänna kartor]."[174] General Maps was a term used since 1966 for official maps made by the state. This map series was further branched off into yet another map series called *Grundversionen* (*Basic version*), which was made 1966 to 1971. Grundversionen was colored in three colors; black, blue and red, and scaled in 1:100 000. However, during the 1960s, RAK also distributed a new set of maps named *Topografiska kartan (Topographic map).* I have studied a printed version of this map series distributed 1968 over the region, and it is

[173] Freely translated Swedish Mapservice Company.
[174] Ottoson & Sandberg (2001), p.71, also p.162.

very similar although it is colored. The fonts are the same, and the details corresponds with the above map.

The map we are seeing here is not named, but since it is clearly distributed by SRA, has the same color and scale as the Basic version map, and the same font and details as the Topographic map we can deduct that this is an adaption or updated version of map nr. 3. Abisko (as 3. Sjangeli was renamed 1928)[175]. If it is an adaption of the General map or the Topographic map or a combination I cannot specifically tell, but its origin is in either case a direct descendant of the GSK from 1886 discussed in chapter I.

The debate in Protocol 1974:89

As I have mentioned, three years before the road project would finally be realized, some things needed to be resolved. The most urgent of them was to ratify the breach of Abisko National Park. 27th of May 1974 proposition nr 107 was thus taken up for discussion. The proposition was presented by the Minister of Agriculture, Svante Lundkvist (1919-1991) [176] and would ultimately go through parliament with 246 votes against 53. In this last empirical chapter I will now outline some of the contents of the Riksdags debate concerning the soon to be started road project Transnational Road 98.

The case for – the red line

Kiruna Municipality, the Labour board (Arbetsmarknadsstyrelsen), Agricultural Board, The state's Environmental Protection Agency and the worker union's TCO and LO were all in favor building Transnational Road 98. The road would most likely serve two main purposes, an economic and a recreational. The economic argument was built upon the idea that the road would support a more diverse economic situation for the Kiruna region. The Kiruna Region had been suffering from a global economic recession, especially because of its mono-industrial character, and the road project was perceived as a regional help-measure to stimulate economic growth. The argument was backed by the workers unions. [177] Not only would the road construction itself create jobs, but the long term effect of such road would stimulate the economy.[178]

[175] Ottoson & Sandberg (2001), p.88.
[176] Nordisk familjebok (project Runeberg) <http://runeberg.org/vemardet/1977/0687.html>
[177] "The Labour board stresses the necessity of [employment supporting measures?] in this region for the foreseeable future" Proposition 1974:107, p.4.
[178] Protokoll 1974:89, p.32.

This argument is neatly expressed by the left wing communist politician Eivor Marklund[179] in her reply to the conservative politician Hans Wachmeister[180] during the discussions:

> Experiences from other areas has nurtured hope that a new communication medium would give rise to new industries. A new road would make the region more accessible, improve communications and make import and export cheaper. And new industries is naturally what this region need if it is to survive with some stability with the prospect of declining Ore-assets.[181]

In Marklunds statement the argument includes a trans-national perspective. With its scope of regional development this argument relates to the ideas brought up by Godlund in 1960. She includes Narvik and let the road contain a symbolic meaning of cooperation between the nations sharing Nordkalotten as a geographical region.[182]

Apart from the regional economic stimulation, the recreational argument was important. The road would open up the whole region west of Kiruna for everyone living close by to experience. A region considered one of Sweden's most beautiful. This was brought up by Kiruna Municipality especially. The state's Environmental Protection Agency held similar opinions but relate the region to a wider national perspective. They claimed that some areas must be made available for tourism and that it is desirable that already exploited areas develops in an appropriate manner.[183]

Although the question of accessibility and recreational activities is only briefly discussed in the proposition, it became the most important problem in the Riksdag discussions. The most vivid argument addresses clearly subjective opinions of the dark and dirty mining industry. Eivor Marklund talks of the hard working miners, constantly underground in the dark; they all deserve something new during their free time. An important note is that she mainly addresses activities like fishing along the Norwegian coast here and not necessarily Abisko National Park as a target for this new worker's tourism.[184]

The Social-democrat Thure Dahlberg[185] uses similar arguments. He says that every year billions of crowns are taken out of Norrland's iron-ore findings, and people work under harsh conditions.

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[179] Eivor Marklund, (Communistparty) born 1930, active in Norrbotten County. Interested in industrial regional questions and social welfare problems. Wrote motions about mining, uranium mining, iron ore processing, regional planning, cars for the impaired and healthcare aid. *Register 1974*, Riksdagen, (Stockholm 1974).
[180] Hans Wachtmeister (Moderate Coalition Party) born 1913 active in Blekinge County. Interested in agriculture and biology related questions like bee diseases, agriculture, forestry and environmental preservation. Wrote motions about game diseases, environmental preservation fees and culture related politics. *Register 1974*, Riksdagen, (Stockholm 1974).
[181] Protokoll 1974:89, p.32.
[182] Ibid. p.31ff.
[183] Proposition 1974:107, p.4f.
[184] Protokoll 1974:89, p.32f. Magnusson, from the Agrarian center addresses similar opinions but includes the national perspective as well, the road will allow tourist to experience the landscape but it is not necessarily the Kiruna mining workers. Protokoll 1974:89, p.34.
[185] Thure Dahlberg, (Social-Democratic Party) born 1914, active in Norrbottten County. Mainly interested in traffic related questions. *Register 1974*, Riksdagen, (Stockholm 1974).

Usually most work is conducted below ground and therefore Dahlberg would like to see that "these people will get the possibility to spend their pastime traveling to other places and getting out in the wilderness."[186] There has to be a possibility for them to use their cars and other vehicles to get to the Norwegian fjords which would function as an outlet for the energy and outdoor-spirit that are apparent.[187]

Dahlberg is also creative in using the old railroad as a way of historically placing the new road project as something necessary and inevitable. He finds similarities in the resistance of building it, and reminds the audience that the railroad is probably the most successful infrastructure project ever ratified by the Swedish Riksdag. So then, Dahlberg continues, because of the railroad we have people living there, because of the iron ore export growth less space is left for passenger transport. It is thus necessary to expand the possibilities of transport.[188]

The Agrarian center politician, Filip Johansson,[189] expresses that this is mainly a question of a secluded Kiruna. The economic argument is for him exaggerated by the Communists who has "used the situation to bring up the whole regions economic development."[190] For him this is a matter of mobility. For a long time Kiruna's (hard working-) population only had one way to go with their cars: "They should be given the opportunity to go westward with their automobiles to experience the rich recreational possibilities in the region"[191]

Johansson, particularly polemic in this debate, addresses their opponent Wachtmeister and his arguments on several points and uses mainly a center-periphery perspective. He thnks that the arguments against the road are too focused on the park and its future, while the road would clearly benefit the people actually living in the region near Abisko National Park on a day-to-day basis. Quite arrogantly he says: "I would like to give some advice for the environmental protection-interested in the audience that they should in greater extent use the any of the land in Norrbotten that has no communication infrastructure what so ever. We have lots of that."[192] As a final point Johansson turns the problem around and wonders why the unique archipelago close to Stockholm hasn't been apt for research? "[It seems] The only areas that they consider having "national-value" are the areas

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[186] Protokoll 1974:89, p.39. I have translated the expression "skog och mark" (literal translation: woods and fields) as "the wilderness" since the term 'skog och mark' is a idiom which more or less refers to unexploited nature.
[187] Ibid. p.40.
[188] Ibid. p.38f.
[189] Filip Johansson (Agrarian Center Party), born 1920. Mainly interested in industrial and agricultural questions. Wrote motions about forestry, mining, agriculture education, financial aid for agriculture and dog related questions. *Register 1974*, Riksdagen, (Stockholm 1974).
[190] Protokoll 1974:89, p.35.
[191] Ibid. p.35.
[192] Ibid. p.34.

comfortably far away from themselves so that no considerable sacrifice must be done by them to keep the parks preserved."[193]

Another Agrarian center politician, Einar Larsson i Borrby[194] agreed both with Marklund and Johansson. He joined in with Johansson's center-periphery perspective:

> We have built 350 km roads below ground, and against that there has been no complaint, and it has been healthy for our balance of trade [handelsbalans]. Would you consider, down there in Stockholm and Skåne and other parts of the world, that we might also be allowed to build a road so that we can travel during our pastime?[195]

Larsson claims that you cannot look past the social and economic benefits of building the road. But there is also the psychological argument. He then asks if Mr Wachtmeister have ever thought about how things are when living on the "edge of the world."[196]

So what we have seen here is arguments of economic growth, of post-colonial relations between state and its periphery, of Kirunas dark and dirty mining industry, of recreational activities during pastime, and of course that of (auto-) mobility. It seems also as if the proposition is not balanced against what is really said in the discussions in Riksdag. The proposition talks more of economic gain and growth, while the discussions underscores how it feels like living on the fringe of the world, using keywords like darkness, underground and seclusion.

At the core of the pro-road argumentation is definitely the concept of automobility, it is the one thing that will solve all these other things. Through a road, there will be more jobs, the Kiruna inhabitants will experience sense of psychological freedom and so on. The freedom in itself is not place-specific. In Johansson's reply to Wachtmeister he does not address a specific goal to go to, it is a question of being able "to use their automobiles", to be free to move about. Johansson just points out a direction westward, kind of saying there is no road in this direction, we might want to drive there. For the left wing politician it is sort of a similar logic but more embedded into Marxist-discourse, there a heavier focus on industrial growth. The dirt of hard work, the darkness of the underground will be compensated through the automobile, the workers will be liberated with it. In both the center and left-wing political discourse the car is thus something emancipatory. It functions as the technological fix we have read about earlier. Through it, the feeling of seclusion will be solved. But exactly where the road should lead is not an issue.

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[193] Protokoll 1974:89, p.35.
[194] Einar Larsson i Borrby (Agrarian Center Party), born 1925, active in Skåne. Interested in international whalehunting, environmental problems and agriculture. Wrote motions about entrepreneurship and business. *Register 1974*, Riksdagen, (Stockholm 1974).
[195] Protokoll 1974:89, p.37.
[196] Ibid. p.37.

In both chapter II and III, we have seen how technology has been an important bearer of ideological meaning. The left wing communists and social-democrat uses the old railroad as a symbol to create a historical narrative out of. Dahlberg in his speech begins with drawing up the main historical turning points in Kiruna and the railroad's history. Marklund gives the impression that the road is necessary to invite new industries to the region. Marklund and Dahlberg talk about industrialization, of production, of growth, and how the new technology of roads and automobiles are just an extension of a development that began with industrializations first embodiment: the railroad.

As a consequence, nature itself becomes distant in their argumentation and we recognize the same view as were present in Godlund's utopian texts from the early 1960s. Technology is placed on top of the landscape, connecting population hubs, driving development and civilization forward.

Any threat against the road project is perceived as an act of post-colonial interference. Nearly all the politicians giving reply to Wachtmeister uses the center-periphery perspective. Claiming the economic importance of Norrland, and how the state should be willing to sort of 'pay back'.

The case against – the blue line

The Department of Domains [Domänverket], the National association of Swedish Sapmi, Swedish Tourist Organisation, Swedish Environmental Protection Organisation, The Royal Academy of Sciences and Swedish Local history association [Samfundet för Hembygdsvård], they were all against the road project crossing Abisko National Park. The main argument against is that of "secondary effects"[197] and the consequences of them in relation to scientific research. Such effects are littering, wear, and increasing disruptions due to snowmobile traffic. The Royal Swedish Society of Sciences is particularly keen to point out that the whole purpose of having a research station in the area might be compromised and that compensation in the form of other unexploited areas has to be acquired if the road is to be built.[198]

Reading the protocol, the only person who emerges as the standard-bearer for the resistance to any intrusion of Abisko National Park was Hans Wachtmeister from the conservative Moderate Coalition Party. He was of course in minority and was replied, as we have seen, by an array of politicians from the left and the agricultural center. This blue-blooded man took it as his duty to stop the road project for several reasons.

At the core of his argument is the question of what is supposed to be the point of having a national park if it is to be intruded from time to time? He mentions other parks such as Padjelanta and Stora

[197] Proposition 1974:107, p.5.
[198] Ibid. p.5.

Sjöfallet. Parks recently exploited with water dams and other things. "It is, to say the least, regrettable that the proposition that we now consider further confirms that the definition of National Park established in New Delhi 1969 by IUCN[199], is of no value for Sweden." Wachtmeister continues with saying that our international reputation would become even more tarnished when our country is prepared to do such an act of intrusion in Sweden's most internationally renowned Park, and that he has received letters "from the other side of the world" asking if this project truly will be completed.[200]

In his responses he further explores Abisko's uniqueness; it cannot be compared with its American counterparts, the sub-arctic character is completely unique. As of emissions, it is the lead that will cause the worst consequences. It might even mean that 70 years of research might be lost.[201]

Finally Wachtmeister brings forth the military's earlier hesitation, and asks if this road really is an intelligent solution and thus invokes a sense of national threat.

The region is not only meant for "Norrbottningarna" [read: Northerners], or for us Swedes for that matter, but for Europeans in general. Wachtmeister brings this up as a matter of "international solidarity"[202] but exactly what sort of international solidarity he means is not discussed.

As Wachtmeister adresses Marklund, Dahlberg and Johansson, some ideas become visible of which type of person he thinks will actually use the road. He clearly states that the Kiruna population must understand that with the road "they will not have the region between Torne Lake and Stordalen for themselves anymore. They will have to share it with lots of tourist from all kinds of places."[203] What exactly does Wachtmeister mean by "sharing" and "lots" and "other places"? Digging deeper into his replies we find another example directed towards Johansson and his question why scientists does not research areas close by Stockholm. It is not preservationists [naturvårdare] that litter, he replies. It is not preservationist that will litter The Kings Trail[204] (Wachtmeister uses here another idiom: "grisa ner" which means something closer to *littering like a pig*), such littering comes from "completely different people."[205]

What Wachtmeister really means by these "completely other people", "sharing" and "lots," is the threat to a national heritage through intrusion of peoples without the proper appreciation of what they are experiencing. They are not like him, a "botanist" or preservationist, a person who puts the

[199] International Union for Conservation of Nature.
[200] Protokoll 1974:89, p.30.
[201] Ibid., p.41.
[202] Ibid. p.31.
[203] Ibid. p.41.
[204] Kungsleden – a famous hiking trail leading from Hemavan to Abisko and which is known to be Sweden's finest hiking trail, <http://www.svenskaturistforeningen.se/en/Discover-Sweden/Facilities-and-activities/Lappland/kingstrail/> retrieved 2013-12-16.
[205] Protokoll 1974:89, p.41.

uniqueness of Abisko above all else. Especially not in exchange for "a few minutes of saved driving time."[206] But still, Wachtmeister sincerely wants people to come there, and it is important that the park remains untouched in an act of international solidarity, so that these people that Wachtmeister approves of will keep coming. The invitation is clearly excluding. It is a question of class formulated through knowledge and education. People driving cars is clearly not amongst those invited.

For Wachtmeister the road seem to function as an omen of an intruding working class. The road symbolizes littering and polluting mass tourism, traveling from anywhere, without appreciation and regard of the national holy ground they are walking on. The early 20th century educated middle-class tourist is here invoked in Wachtmeister's gist. The enlightened scientist, at the same time the responsible tourist, experiences the landscape with knowledge of what he sees and cares for it accordingly. But this is not to be expected from others, the naïve Kiruna population will lose their privilege of these beautiful lands.

This is really a continuation of Svenonius heritage from 1909. Sörlin, Ehn, Frykman and & Löfgren showed that tourism was in rhetoric inclusive, but addressed class specific strata, and this is what Wachtmeister invokes.

The Red line meets the Blue line: the details of the map

So at this point we know something of the maps origin, where it is situated in time, and what the discussions concerning it was about. But what exactly is it that we see on the map? It has a similar frame to the map of 1909. It shows Abisko and the Abisko National Park, and some details in their vicinity. A few things stand out however. The prospected road is shown here as a red thick line and the borders of the National Park has been colored with blue. Because the whole map has been shifted a few degrees counterclockwise so that the map can be fitted into the style of a proposition, 'Abisko' has been added in the same blue color. So at this point I guess my quite plump uses of the metaphor blue and red line might be obvious to the reader. I have used them as metaphors to illustrate the ideological conflict that was played out in the Riksdags debate. Apart from the objects they are trying to convey, the symbols that we see here also have a history of their own that relates to the conflict.

There were two large organizations, both founded during the late 19th- and early 20th century, which had some relevant connection to cartography. One was the previously mentioned STF (Swedish Tourist Organization founded 1885) who since the distribution of map 3. Sjangeli by 1886 began to use it for tourist purposes. The other is Kungliga Automobil Klubben (The Royal Automobile Club,

[206] Protokoll 1974:89, p.41.

KAK) founded 1903, and who in 1911 began to work together with General Staff's lithographic institute (Generalstabens litografiska anstalt, GLA) to add automobile roads marked with red to the GSK map. Both these organizations were the first ones to produce maps for civil use based on the official GSK. The cooperation between GLA and KAK continued from 1911 to 1963, and stopped when GLA was remade into SRA. After that the use of red color for roads became tradition. When the Basic version-map was officially announced 1966 by SRA it was the GSK-map wrought by KAK, with its red color for roads that was used as template. SRA simply bought all the originals from the former GLA.[207]

The choice of the broken line with the color blue was added to the cartographer Thulstrup's set of symbols that we have tracked since the beginning of this thesis. From 1915 the border-symbol for national park is present in the map legend as a blue small broken line (ironically the same symbol as a shooting field). This probably means that the symbol was added sometime after 1909 when the parks were instigated.[208] There are also other symbols present that we can trace. The topographic information has been updated with topography circles to increase accuracy. Note also that the symbol for the railroad is thinner, even thinner than the prospected road. Symbolically, the automobile infrastructure has taken over the railroads role as the front piece of cartographic details.

So not only does the map above have its ancestry in 19th century state making, but the objects, the blue and red colored lines on it, relates in several ways to the very emergence of both nationalistic modernism discussed in chapter II and High-modernism automobility discussed in chapter III. The objects themselves have in their very making a connection to the symbols they represent. Moreover, the map's existence is a result of cooperation between the two actors.

Conclusion: Why did Abisko National Park and Transnational Road 98 conflict in Proposition 1974:107?

The red line in the map of Proposition 1974:107, symbolized the Social-democratic and Agrarian center coalition and their vision of the road as a bearer of technological prowess and democratic emancipation. The blue line symbolizes the early 20th century upper-middle class nationalism trying to preserve natural scenery to maintain national pride. The Road and the Park thus represents ideology emanating from a state power relationship different from how things worked in the 1970s. The conflict 1974, emerges because the two different discourses surrounding each object in the landscape have different solutions to similar problems. The park was to solve a problem of national identity and the parks meaning was attached to a nationwide problem. The road was to solve a problem concerning

[207] Ottoson & Sandberg (2001), p.189-193.
[208] Ibid. p.120.

the specific region's economic problem as well as through materiality achieve an emancipation of the classes.

As the two ideologies met, a third map was made to visualize the conflict and give it context. As an immutable mobile it reflects its origins neatly. It is a direct descendant of the map from 1881. If SRA's map from 1974 is compared with the map that were used as template for Proposition 1909:125, we can see the progression distinctly. As we compare them we see that since 1881, the map's level of detail has been heavily increased. Houses and other structures, navigational grids, electrical lines and cultural heritage sites have been added to it. The symbols that I have used as metaphor for the context was also shown to have a direct link with the regions past and its different interpretations. The red color came about in cooperation between the Royal Automobile Club and state cartography institutions. The blue line was added sometime just after the park were instigated.

The map is thus included in a cartographic tradition carried forth by the agency of the state throughout the 20th century. However, even the oldest form of geographical endeavor is visible in the Sami place names inherited into the state's official definitions. The chronological depth of this final map is therefore considerable. At first glance it tries to convey a frozen time at the time of its printing, but the inherited and layered details on the map functions as a pair of binoculars visualizing human presence from its very beginning.

Descendants of automobility and nationalism

I have earlier explained how the early 20th century type of nationalism was occupied with the goal of constructing a national congregation by pointing out and crystallizing the unique nature. The scientist and the territorial land that the scientist work and act on, have a key position in the nationalist ideology. The nationalist state was also a paternalistic state. It took care of, and educated its subjects. To achieve nationalist goals the citizen needed to do things with his or her body and mind; read, travel, work, exercise, fight, research, experience, perceive and understand. Nationalism viewed nature as a purely separate world from that of humans. It formed a relation to nature as something wild and untamed, an object to be respected. But also to be used as means to reach new heights of glory of the state. Technology could tame and colonize it, but to understand and fully exploit it, nature had to be researched and experienced.

I would like to see both Wachtmeister and the organizations opposing the road project as heirs of this early 20th century ideology. They brought the park and its history to life during the talks in Riksdag and reminded the political center and left that there is still a connection between National heritage and nature. The wild and untamed, unexploited - although framed and catalyzed through science and

scientific results - was still used as a tool of nationalist discourse. Wachtmeister refered to himself as a botanist and therefore as a person with a scientific interest that could – just like his early 20th century counterpart Svenonious – appreciate and experience the park in a proper way. With emphasis on *proper.*

Additionally, some of the organizations opposing the road project were created during the same period as the park: Swedish Tourist organization 1885, Swedish Environmental Protection Organization 1909, (this organization claim that one of their founders were behind the proposition forming the earliest Swedish national parks[209]), Swedish Local History Association was created 1916 ("as a protest against industrialism"[210] according to their present webpage) and National association of Swedish Samí was founded 1918.

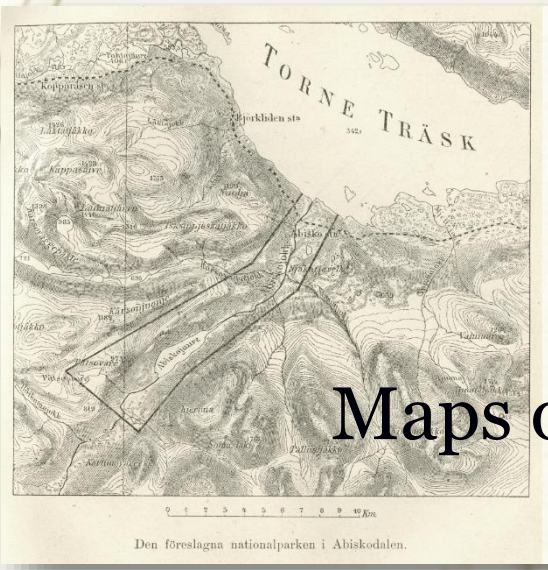
The park is also important in an international context for Wachtmeister. His statements addresses a clearly international audience and he uses words like 'reputation' to invoke a feeling of the nation being watched and measured from outside eyes. Abisko National Park still was a sort of crown jewel of Sweden's landscape resource by 1974 and it is obvious that Wachtmeister feels as if there is a national pride to be maintained and that the road would by all means ruin this. The military hesitation about building any road at all was also brought up and reminded of an outside military threat towards the nation. Moreover, Abisko National Park is related to American parks like Yellowstone. There were national parks in more places than Sweden and America by that time, choosing Yellowstone as comparison reveals what Wachtmeister really wishes things to be like; how he thinks the state should position itself in an international environment. In this case, it is like America.

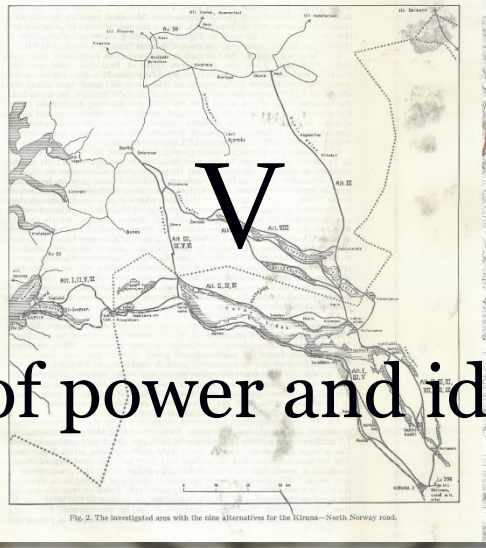
High-modernism had another set of tools for achieving national prosperity than nationalism. For example, the automobile and its liberating functions was material means to achieve progressiveness. Hagman describes the car as an extension of the body. With the car the individual can go farther and carry more. The freedom thus lies intimately with the material aspects of the car. It is not enough to feel healthy by hiking in the mountains, or fully understanding how Swedish you might be through close study of cultural heritage. You must buy, use and own technology - the tools of the future - to be truly liberated. The old embodiment of industrialism - the railroad - became more an historical artefact symbolizing a sort of technological progression and continuity (to this point we only had big and clumsy rail-bound trains. Now we have the free-moving automobiles!).

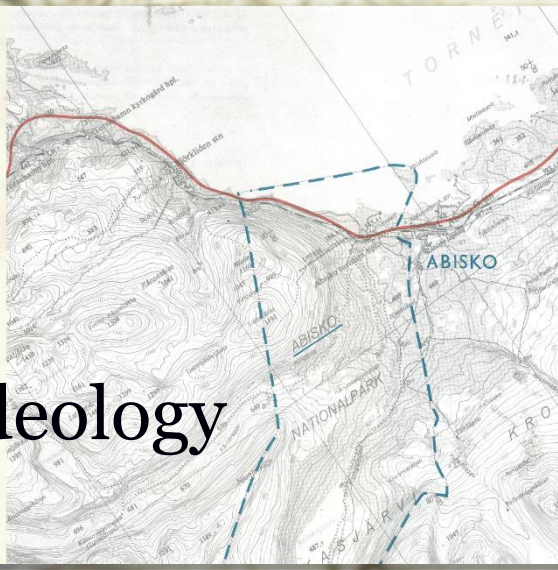
[209] Association of Environmental Protection [Naturskyddsföreningen] <http://www.naturskyddsforeningen.se/om/var-historia> retrieved 2013-12-16.
[210] Swedish Local History Association [Samfundet för hembyggdsvård, today renamed Hembyggdsföreningen] <http://www.hembygd.se/sida/om-shf/historik/> retrieved 2013-12-16.

Automobility was seen as inevitable and the rhetoric used in Riksdag have similarities with Godlund's ideas from his report published 1960. In Godlund's report automobility was explained as a natural force, let loose by building roads. Such ideas were carried forth by both the center and leftwing politicians in different forms. The leftwing politicians stressed industrial and business growth while the center politicians wanted simply to be able to move west with automobiles. It mattered not were, the freedom of the automobile relied on the *possibility of*, but not actual communication. There were also a visible element of center-periphery problems in the discussions by pro-road politicians. This problem is a result from the regionalism aspect of automobility that Godlund discussed 1960. The road is made for the people living in the region, it is not a part of a national romantic narrative like the park. Marklund, Dahlberg, Johansson and Larsson all looked inwards to the regions development when envisioning the road in the landscape. The road were supposed to minister further industrialization and with it economic growth, as well as recreational possibilities for the worker communities. Wachtmeister looked outwards, he worried about the nation's reputation towards an international audience. The conflict between those two different meanings embodied into the objects caused a renewal of a colonization rhetoric between the politicians.

We have now reached an end point in the empirical part of this thesis. In the next and final chapter, I will try to sketch how the structure and process of place making looks as well as the map's role in it.







V

Maps of power and ideology

Maps, Landscapes and State Power

In what way are the symbolism of Abisko National Park and Transnational Road 98 connected to state power and what is the map's role as an immutable mobile?

At three different times, 1909, 1960 and 1974, immutable mobiles were taken out of their context by political actors and used with ideological intent. The first occasion was the instigation of Abisko National Park, a park which symbolized early 20th century nationalism. The blue line that visualizes the park on the map of 1974 was in Riksdags protocol 1974:89 fiercely defended by a contemporary political actor who invoked classic nationalist ideas that could be traced to the park's very founding. The second occasion was the planning of Transnational Road 98. The ideology surrounding the road project reflected itself in the red line of the map of 1974. The breach of Abisko National Park with the purpose of building the road was advocated by Left-wing and center politicians, and these actors invoked a typical modernist discourse were automobility functioned as a centerpiece of their argumentation. The third is of course the map included in proposition 1974:107 in which the other two converges.

Each of these ideologies that the objects embody emphasized different perspectives on the landscape. They differed in scope concerning how the landscape was meant to be used and develop in the future. The two different meanings caught up with each other in 1974 and emerges as a political conflict in Proposition 1974:107. Expressed in other words; the objects were surrounded by two different discourses, which as they met conflicted.

The conflict between the road and the park exists in several different layers. It exist in material form as the actual breach of the park with a paved road. It exist as a conflict between politicians 1974 trying to practically enforce their political ideologies. The conflict existed in an abstract theoretical level in between the philosophical structures of the different ideologies (Nationalism emphasis individual experience while modernism emphasizes materiality, nationalism framed nature like a postcard to be sent out to the world while automobility concerned the region around the actual road). But most importantly, the conflict also exist in the immutable mobile that is the map since neither the road or the park would exist without a preceding map.

The process of placemaking

This thesis has functioned partly as an exploration of what a map is, and how they can function as a tool for historical analysis using Bruno Latour's concept of immutable mobiles. To include maps of different kinds as a historical source is of course nothing new, but what I have tried to do here is to

put them in the foreground and use them as bus stops throughout my historical narrative. The cartographic activities in the region has functioned as a backdrop on which ideological place making occurs. I have used three examples to break open the structure of this process.

I have used the textual discourse surrounding the maps in reports and proposition and connected it with the maps and their details. I have explained what the authors of the reports and propositions aimed at and how it was translated into visualized form. What this thesis has shown is thus how the Swedish state has shaped the landscape in the Abisko region depending on the dominant contemporary ideology throughout the 20th century. These ideological goals have then shifted and conflicted with each other as time progressed.

I argue that the map is the absolutely most important factor that allowed this conflict to happen. Perhaps the most concrete example of this is the fact that the conflict was visualized on the descendant of the immutable mobile that had once given life to the park. A very effective way to practically enforce a power relationship over a peripheral region is through the use of maps. The map allows the state to draw lines, to make borders and encircle important objects. Thus the map is a tool for enforcing laws and regulations. The possibilities does of course not restrict itself to regulations. The maps help the state to plan roads, compare and add data from other sources and juxtapose different drawings.

The agents with their ideological convictions behind the actual propositions and reports have to form a relationship with the state to enter the center of the knowledge production. In here the political actors can 'tap' into information and extract for example maps. With it they can visualize the future of a region without ever having to go there and thus use the immutable mobiles as a part of a political argument.

As the maps are used as a part of an ideological argument they function as a substitute for the real landscape. The map is just never a representation of the physical landscape but is often used *as if*. It provides a sketch board where the discourse and its actors can shape and reshape the landscape. When an idea become formulated by a political actor in the discourse, the map can translate them and their utopian ambitions into visual form which later is turned into material fact.

There is also a link between the map and the individual experience. Since map is referred back to as a representation of the physical reality of the place and is used to impose laws and regulations, it has direct consequences for the individual moving through the landscape. To break a kindling in the valley can be an infringement of regulations at one site, but 15 meters away it can permitted. There is in other words a direct link between the discourse of a place and the individual experience of that place with the map functioning as a mediator.

It has been obvious throughout the thesis how the political actors used the maps and reshaped them to display just about only what they wanted the maps to display. And it shows that the map is intrinsically a political object that cannot be taken out of that context. The first map I used from Proposition 1909:125, is perhaps the most obvious use of state power over territory. The borders drawn were made in the very same manner as the state borders of USA or in colonial Africa. The rectangular shape indicates the godlike perspective. The act of making borders becomes very easily visualized: a human being standing over a map with a ruler and a pen.

There is nothing philosophically flimsy or abstract about this process. The maps are no wardrobe door to a historical Narnia and I do not want to claim that the maps that I have showed here is in any way the *source* of any state power or that the historical agency lies within some deterministic cartographic craft. What I do want to say is that the maps are tools for the state and the agents in favor of it. They function as the mediator between ideological discourse and actual practical politics. Their practical and simple form allows place making in a very concrete way. Moreover, by studying the cartographic craft and tradition through the artifacts it produces, this process of *place making*, can effectively be understood.

Figure 7 visualizes the process. In a circular fashion we can see how the process of place making occurs.

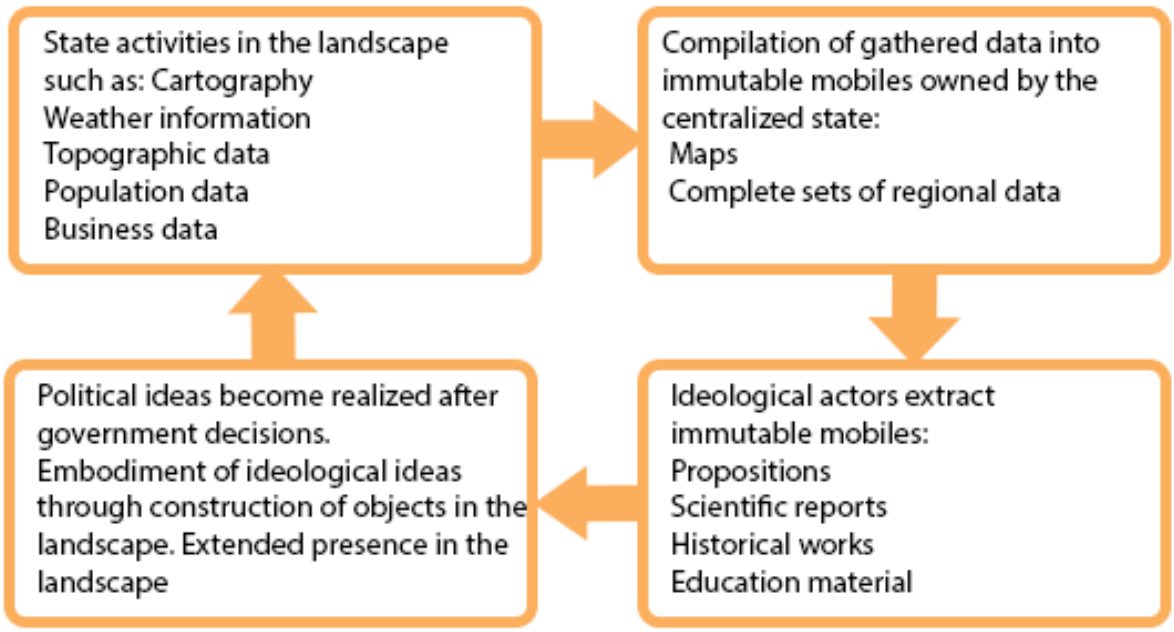


Figure 7: The process of place making

Note however that there is a third dimension in this process that is hard to visualize concretely which is time. There can be a significant difference in time between all these steps. For instance, the data collector in the upper left box can be active 100 years before the ideological actors in the lower right box.

I have managed to trace the immutable mobile that all of the maps used in this thesis somehow relates to. It traces back to the Kingdom of Sweden's very first efforts in trying to take control over its territory. The map 3. Sjangeli, distributed from 1886, was a prototype that would be used as a template for Sweden's first complete map of the whole country. It was a geographical baseplate created during the early 19th century, made by the scientist and cartographers of that age. The maps might not look similar in juxtaposition, but all the other maps depend on the earlier model. The immutable mobiles that the maps constitute is inherited and layered with new objects, and with them, new meanings.

Since the different objects and their manifest ideologies depend on the same immutable mobiles it seems that the state faces its own institutional memory in the conflict between the road and the park. The states historical endeavor to map and make Swedish territorial periphery a piece of national pride had become an obstacle and the complaining agents gave echo to the old state's suppressed ideology. In that sense, the Riksdag by 1974 not only confronts its own institutional memory, but also its very practical knowledge-gathering activities through the whole century. The specific goals, as well as methods to achieving the goals that the region or the state faces, are different. But at the same time they were created by the very same state. Even though the actors within the state machinery might be different, the information gathered, compiled and kept by the state is administered by the same institution in the very same way as a book in a library survives the librarian. The immutable mobiles have transcended time in that aspect. The map included at the end of Proposition 1974:107 is then, regardless of its clearly underrated position as a piece added to the appendix, the most important artefact of the whole controversy.

These three maps and their origins thus tell not only a story of how Abisko, Abisko National Park and the European Route 10, became what they are throughout the 20th century. But also how Sweden managed to take control over its periphery, how a specific site could be integrated into a national narrative and derive its meaning from contemporary ideology. The maps, the objects on them, and the context were they occur have in different ways crystalized or frozen the ideas of their time. Contemporary discourse has been translated into visualization and then reshaped the actual landscape.

Epilogue

So what is to be learned from this? In the introduction I mentioned how local people and their knowledge was invisibilized. As centralized power took control over territory the influence of the local individual diminished and an example was made with the research made by the historian May-Britt Öhman. For Abisko's case it is perhaps possible to make a similar point as well. The indigenous

Sami population is barely present either in the sources I am using or in the thesis itself. I would like to cite William Cronon in this context as he discusses Chicagos early 19th century history:

> Henceforth the Potawatomis played only the most marginal roles in the marketplace they had once dominated. The proof of their tragedy is that the history of Chicago can be written from 1833 forward as if they had never lived there. But as we watch the speculators and their frantic efforts to start Chicago down the metropolitan path of its boosters, we could do well to remember that the place had once been occupied and possessed in a way that cherished no such visions of urban empire. At precisely the moment that Charles Butler imagined the little village to be "a great commercial point," he averted his eyes and the Indians disappeared. The dream would not contain them.[211]

I claim that the very same problem is applicable to the kind of history I am writing right now. The information gathering tradition that has formed the immutable mobiles used by centralized power and its actors have not included the local people as a matter of interest throughout the years. The ideologies used to interpret the immutable mobiles didn't either. The park, the railroad and later the road, did all infringe on their life but their opinions have not emerged as an important matter to be concerned with in the sources.

What has happened then is that the selective process of information gathering did not include them or at least devalued their role as an actor in the region. By studying maps and their context we can thus see how this happens in a very practical manner. 19th century and early 20th century nationalism can perhaps tell us the ideas behind *why* the Sami's were in a sense 'colonized'. This thesis also shows *how* this practically happened. However, I do not want to claim that this argument is complete but I think that this poses questions that point in the direction that there is more to study about Sweden's intra-national colonial past.

The idea of immutable mobiles as a part of the place making process feels almost trivial when I think about it. But the gain is obvious. The focus on knowledge production as the basis of every political venture invites new perspectives on spatial history. What can or do the political actors know about a place, and how do they interpret it? Such a simple question allows long perspectives as well as connects local state activities to a much wider national ideological scope. It can be described as a sort of common sense theory which can link postmodernist fields as social constructivist discourse and ideology studies with the spatial and more pragmatic historical studies.

[211] William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York 1991), p.54.

Bibliography

Primary sources

Proposition 1909:125 *Kungl. Maj:ts nådiga proposition till Riksdagen angående åtgärder till skyddande af naturminnesmarken å kronans mark samt afsättande af vissa nationalparker.*

Godlund, Sven & Rasmusson, Gunnar, *Väg Kiruna - Nordnorge:natur- och näringsgeografisk undersökning utförd år 1959*, (Stockholm 1960).

Godlund, Sven & Rasmusson, Gunnar, *Planering för väg Kiruna-Nordnorge: ett bidrag till den tillämpade geografin*
(Stockholm 1961).

SOU 1958:1*Vägplan för Sverige D.1*, avgivet av delegationen för översiktlig vägplanering, Kommunikationsdepartmentet.

SOU 1966:69, Bilaga 5 *Trafikutveckling och trafikinvestingar*, avgivet av Sven Godlund, Finansdepartementet.

SOU 1969:56 *Vägplan 1970*, avgivet av vägplaneutredningen, Kommunikationsdepartementet.

Proposition 1974:107 *Kungl Maj:ts proposition angående intrång i Abisko nationalpark.*

Riksdagsprotokoll 1974:89, §5 *Intrång i Abisko nationalpark.*

Other sources

Nordisk Familjebok (projekt Runeberg) <http://runeberg.org/nf/> retrieved 2013-12-12.

Statistiska centralbyrån (Statistics Sweden)
<http://www.scb.se/statistik/MI/MI0810/2005A01x/MI0810_2005A01x_SM_MI38SM0703.pdf>
retrieved 2013-12-04.

Swedish Tourist Organization's web page:
<http://www.svenskaturistforeningen.se/en/About-Us/The-History-of-STF/> retrieved 2013-12-13.

Association of Environmental Protection's [Naturskyddsföreningen] web page:
<http://www.naturskyddsforeningen.se/om/var-historia> retrieved 2013-12-16.

Swedish Local History Association's [Hembyggdsföreningen] web page:
<http://www.hembygd.se/sida/om-shf/historik/> retrieved 2013-12-16.

Literature

Anshelm, Jonas, *Mellan frälsning och domedag: om kärnkraftens politiska idéhistoria i Sverige 1945-1999,* Eslöv 2006.

Baraldi, Enrico, Fors, Hjalmar & Houltz, Anders (eds.), *Taking Place: The Spatial Contexts of Science, Technology and Business,* Sagamore Beach 2006.

Bauman, Zygmunt, *Modernity and the Holocaust,* Cambridge 1991.

Bernhard, Carl Gustaf, *Abisko Scientific Research Station,* Stockholm 1989.

Bodenhamer, David J., Corrigan, John, & Harris, Trevor M., (eds.), *The spatial humanities: GIS and the future of humanities scholarship,* Bloomington 2010.

Boye Yngve, *Mellanriksväg Kiruna-Nordnorge: Diskussioner, utredningar, yttranden,* Kiruna 1967.

Bäck, Lennart & Jonasson, Christer, *Miljökonsekvensutvärderingar kring väg E10 mellan Kiruna och Riksgränsen,* Uppsala 1998.

Castensson, Reinhold & Windahl, Urban, *De historiska Göta Kanalkartorna: design, tekniskt utförande och nyttjande av kartwebben,* Linköping 2001, <http://liu.diva-portal.org/smash/record.jsf?pid=diva2:375797> retrieved 2012-12-12.

Cronon, William, *Nature's Metropolis: Chicago and the Great West,* New York 1991.

Ehn, Billy & Frykman, Jonas & Löfgren, Orvar, *Försvenskningen av Sverige,* Stockholm 1993.

Elsässer, Björn, *Bilismen,* Stockholm 2006.

Gissibl, Bernhard, Höhler, Sabine & Kupper, Patrick (eds.) *Civilizing Nature: National Parks in Global Historical Perspective,* New York & Oxford 2012.

Guldi, Jo, *Roads to Power: Britain Invents the Infrastructure State,* London 2012.

Hagman, Olle, *Bilen, Naturen och det moderna: Om natursynens omvandlingar i det svenska bilsamhället,* Stockholm 2000.

Josephson, Paul R., *Industrialized Nature,* Washington 2002.

Latour, Bruno, *Science in Action,* Cambridge 1987.

Latour, Bruno, "Visualization and Cognition: Drawing things together," in *Knowledge and Society Studies in the Sociology of Culture Past and Present,* vol.6, 1986, p.1-40, <http://www.bruno-latour.fr/sites/default/files/21-DRAWING-THINGS-TOGETHER-GB.pdf> retrieved 2013-12-17.

LeCain, Timothy, *Mass Destruction,* New Brunswick 2009.

Liedman Sven-Eric, & Olausson, Lennart, (eds.) *Ideologi och Institution: Om forskning och högre utbildning 1880-2000,* Stockholm 1998.

Lundholm, Kjell (ed.), *Malmbanan 100 år,* Luleå 1988.

Mauch, Cristof, & Zeller, Thomas (eds.), *The World beyond the Windshield: Roads and Landscapes in the United States and Europe,* Athens 2008.

Naum, Magdalena & Nordin, Jonas M. (eds.), *Scandinavian Colonialism and the Rise of Modernity: Small Time Agents in a global Arena,* New York 2013.

Ottoson, Lars & Sandberg, Allan, *Generalstabskartan 1805-1979*, Stockholm 2001.

Parr, Joy, *Sensing Changes,* Vancouver 2010.

Scott, James C., *Seeing like a State*, New Haven 1998.

Sörlin, Sverker, *Framtidslandet: debatten om Norrland och naturresurserna under det industriella genombrottet,* Umeå 1988.

Winther Jørgensen, Marianne & Phillips, Louise, *Diskursanalys som teori och metod,* Lund 2000.

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Appendix

The Road in the Park

State power and ideology during the 20th century seen through Maps of the Swedish subarctic Abisko

by

Peter Bennesved

Abstract

The scope of this thesis is to show how the use of maps in political and scientific arguments functions as a mediator between ideological discourse and the physical landscape. This is done by studying three maps displaying the same geographical region but from different times and with different motifs. The maps were studied by operationalizing the French Sociologist Bruno Latour's concept of immutable mobiles into a methodological toolset.

The thesis shows that the cartographic tradition of the Swedish state throughout the 20th century functioned as an immutable mobile that ideological actors could use to form political or scientific arguments. An almost trivial point to make. However, the problem is the great distance between state and the place, which in this case is about 1400 kilometers. Thus, the map allows a remote power relationship. As the state-owned immutable mobiles were extracted, they were interpreted by the politicians and scientists ideological perspectives. The ideological interpretations were then used in government propositions and reports and thus resulted in actual political decisions that affected the physical landscape.

The creation of Abisko National Park is one example of how this process can look. The park was instigated with a specific set of political goals to be achieved. The political and scientific actors used the immutable mobile that is the map and formed a proposition with it. The act of instigating and upholding the Abisko Valley as a national park is thus a manifestation of both state presence, its supremacy over territory as well as its contemporary ideological context. Moreover, it would be impossible to instigate a park without the use of maps to define its borders. The planning and ratification of Transnational Road 98 can be seen as another example of the same thing, but with a different contemporary ideology as background.

The thesis results in an explanation about what the maps role is in a stately place making process. Additionally the thesis shows what happens over time as different ideological embodiments in the landscape conflict with each other because of their different visions of how the landscape should be used and by whom.