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Science, sociability, and the tools of Enlightenment – Johan Ernst Gunnerus and the Trondheim milieu

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Abstract

In this article we argue that two recent trends in Enlightenment studies are useful for understanding the establishment of the Royal Norwegian Society of Sciences in 1760. First, recent research has presented an understanding of the Enlightenment as an event in the history of mediation. Inspired by this we claim that Enlightenment practices and tools were transposed to Trondheim by the work of Johan Ernst Gunnerus and the others that took part in establishing the Society. Second, we are inspired by works that stress the importance of geography to Enlightenment thought and claim that geographies were produced by, as much as in, Enlightenment practices. By this we argue that Trondheim was neither an obvious place for setting up a Society of Science in the eighteenth century nor a peripheral town.

Through means of mediation it could set itself up as central, but it could also be rendered more peripheral by these practices, and this is what happened after the founding fathers of the Society left town or passed away. However, we argue that it is useful to look at the particularities of what happened in Trondheim as part of the practices of the Enlightenment.

Key words:

Scientific society, eighteenth century natural history, Enlightenment and mediation, geography of knowledge, Northern Norway.

Emerging from the microscopic or little enlightenments of the cafés, salons, societies, and clubs, the Enlightenment as a macroscopic phenomenon is now seen not as some mind or spirit, but rather as something projected, circulated, and negotiated day by day by agencies such as the “Republic of Letters.” (Clark, Golinski & Schaffer 1999:26)

On January the 29th in 1768, the birthday of King Christian VII, the Royal Norwegian Society of Sciences was celebrated as a *royal* society. The day before all “persons of standing, royal officials, and other distinguished inhabitants of the city” had been invited by two students who carried the invitation around town. The solemn ceremony started at ten o’clock in the morning, when music composed for the occasion was performed and two speeches were held. The bishop of the diocese and head of the Society, Johan Ernst Gunnerus, gave the first speech about the utility of a scientific society for a state. The second speech was held by the mayor of the town and Secretary of the Society, Niels Krog Bredal, who talked about the true pleasure of cultivating the sciences. It was decided that these speeches should be printed in the forthcoming issue of the journal of the Society. The venue was what was termed the “public auditorium” of the Society, which in fact was the home of fire-brigadier and town-musician Johan Daniel Berlin, who had also composed the vocal and instrumental music for the occasion. We do not know exactly who and how many attended this meeting, neither what was said apart from the speeches, but according to the protocol of the Society a “numerous audience” was assembled (Videnskabselskabets protokoll [The protocol of the Scientific Society 1768-1861]).

The entrance in the Society's minute book on which the above relations are based, plunges us into the particularities of Enlightenment practices, localities and tools. Among these we count the associational form which drew members from different parts of the society into a "public auditorium," the two speeches about the utility and pleasure of doing science, the printing of the speeches in the scientific journal, and a book of minutes to ensure the memory and official status of what happened. These practices, localities and tools all help us recognize this meeting as an event in the history of the Enlightenment. The Enlightenment is today generally understood and investigated as a manifold and heterogeneous phenomenon, broader than ideas aired in the books of the French philosophes or in conversations in English coffee houses. Pluralities of enlightenments have been proposed, highlighting geographical, confessional or class and gender divides (cf. Schmidt 1996).

For us the concept of Enlightenment is of special importance when trying to account for the work and life of Johan Ernst Gunnerus and for the establishment of a scientific society in Trondheim. Gunnerus was deemed a harbinger of enlightenment, the scientific society as an enlightened society – and their histories are tightly interwoven. An imagery of light and the word enlightenment were important both for Gunnerus and the other members of the Society. "In the North a light for sciences was ignited, the rays dispersed with fire and life and strength," the theologian Johan Nordal Brun inaugurated his poem on Gunnerus' death. He was lamenting the darkness that had occurred when the light of the North had been extinguished (Brun 1773). The historian Gerhard Schøning painted a similar picture of Gunnerus in the eulogy he authored, i.e. Gunnerus as the man who had chased the mist and darkness away from the North (Schøning 1805). When alive, Gunnerus was also understood in this metaphoric light, as a man of enlightenment. On this background we find it pertinent to look at Gunnerus, his work and life in Trondheim, and in particular the scientific society he set up in a perspective indebted to recent approaches to the study of Enlightenment. Not many years ago it was commonly considered that the Enlightenment never occurred in Norway, there were no deists, materialists, or in other regards important *philosophes* in the kingdom, and the print culture was indeed very limited. When we now want to relate the story of Gunnerus and the establishment of the scientific society, it is with a specific emphasis on the novelty and

enlightened aspects of the activities that took place in Trondheim. When looking at the establishment of a scientific society in town, and the activities that took place there, we are ready to argue that this *is* Enlightenment.

Two recent approaches in Enlightenment studies have inspired us: First, the recent work on the Enlightenment which has theorized and researched it as an event in the history of mediation. Four changes, argues Siskin and Warner (2009:12) have established the conditions for the possibility of the Enlightenment: changes in infrastructure, in genres and formats, in associational practices, and in protocols. Following upon this, we want to stress the novelty of the tools that were introduced to the town of Trondheim when a few men started to assemble in a learned society in 1760, and not least the novelty of the convergence of these tools. The arrival of the ambitious bishop, Johan Ernst Gunnerus, in 1758 was undoubtedly a seminal event for collaborative learned work and the associational practices that were developed in Trondheim, and in this article we aim to situate his work. By means of the minutes book the Society constituted itself as a formal organization. There the names of the members were carefully recorded, and decisions and events in each single meeting were set down for posterity. Likewise, the journal that was issued from 1761 as a means of mediating the scientific activities of the Society, *Trondhiemske Selskabs Skrifter*, the very journal you are reading now, 250 years later, can help us ask how this society functioned and how it could attain its undeniable success in its early years. However, these instruments of mediation are much more than helpful tools for the historian, as they are the means by which the Society itself could work. By reading this protocol and the journal of the Society we can start interrogating the Enlightenment means by which one was able to establish and maintain a scientific society in town.

Second, we are inspired by works that stress the importance of geography to Enlightenment thought and the way that geographies were produced *by* as much as *in* Enlightenment practices. “[A] new geographical consciousness of locality and distance has been seen to have emerged in the eighteenth century as an integral part of the experience of enlightenment itself,” writes Clark, Golinski & Schaffer. “A sense of participation in the diffusion of new knowledge led both to consciousness of spatial hierarchies of origin and periphery and to reflection on the specific character of enlightenment

in particular locations.” (1999:3) Following upon this we want to approach the scientific society of Trondheim and its inhabitants not as self-evidently peripheral, but as actors on an arena for the negotiation of geographical experiences (see also Withers 2007). Even if contemporary sources highlight how the Society brought the light of science to a country which lay in the dark, the way the Society and some of its members became active members in The Republic of Letters, points to the fact that we should not take the peripheral status of the Society for granted. Indeed, the Society in this small Norwegian town acquired royal patronage before the Society for the Sciences in Copenhagen received theirs (Pedersen 1992). Further, geography was an issue in collecting natural objects, as well as in establishing contacts with people and milieus in Scandinavia and on the continent. But first and foremost the geography of Trondheim, it's different social environments and the specific natural resources that went into its making, is of interest for understanding what the activities of the Society came to be.

The learned naturalist-bishop

Johan Ernst Gunnerus arrived as the new bishop in Trondheim in the autumn of 1758. The king had appointed him to take care of the largest diocese in the kingdom, stretching from north of the Dovre mountains to the northernmost part of Norway. It would take him weeks or even months to travel from one end of his diocese to the other. It is difficult to know whether he was enthusiastic or in a gloomy state of mind about being ordered from Copenhagen and the centre of the realm to this small town far north. Some consider the appointment a graceful promotion, others an expelling from the capital (For a discussion see Andersen et.al. 2009:7-11). What we do know is that in a short time this new bishop managed to instigate a host of new activities both in Trondheim and his enormous diocese, working hard and inspiring others to do the same (See Lysaker 1987: 325-358; Daae 1863).

The bishop brought with him knowledge, inspiration, and means to develop a scientific society in Trondheim. This stemmed from his studies and professional work in Copenhagen, Halle, and Jena. He brought impressions from the European world of science, and a close acquaintance with the European Republic of Letters. He also brought organizational training from taking part in establishing Masonic

lodges in Halle and Jena (see Jakobsen in this issue). One of his first actions as a bishop in Trondheim was to issue a pastoral letter, which was printed in Danish and later translated into German. This was not an ordinary practice, as a pastoral letter was after all a letter from the bishop to the clergy in the diocese, and not a “public” document. Gunnerus, however, used the opportunity not only to express his theological position, but also to announce the establishment of a learned society and to plead to the clergy to use their knowledge and position to enlighten others.

“We are called learned, well and high learned,” he explained. “Therefore, it would be a great shame for us, my brothers, if we did not aim at well-founded knowledge (Gunnerus 1758: 20).” He mobilized the clergymen by appealing to their status as university educated. He also appealed to them as the herds of the flock, as the ones that would have the possibility to enlighten others not only when it came to God and his business, but also when it came to farming and practical matters. Further they were invited to join the learned society he proposed to establish, if they were able to deliver suitable “pieces.” He particularly urged the clergymen to write; their sermons, as well as other things that could be printed. “It is rare,” Gunnerus reflected in his pastoral letter, “that one thinks through a case as carefully and properly, and ventures as deeply therein, as when one places one’s thoughts in writing, particularly when one intends to convey them in public (Gunnerus 1758: 30).” This was an appeal to establish a public literary culture, where the chief means would be the journal of the Society. In 1761 the first issue of *Trondhiemske Selskabs Skrifter* (hereafter *Skrifter*) appeared as the first scientific journal in Norway. It was, however, not only the first scientific journal, but also the first collective journal enterprise. If we compare to Copenhagen and look at Denmark-Norway as a common literary market - which is a very reasonable thing to do - we find that this journal was part of publishing trend which had brought many, often short-lived, journals into existence in the previous decades. In Trondheim however, they stressed the fact that they produced a Norwegian journal, as *Skrifter* would be.

For us, what needs to be emphasized is that the journal of the Society was planned and came to function as a means of communicating science and enlightenment. How many bought it, we do not know. Who actually read it is even harder to establish, but the ambitions of the founders were broad - the journal should be written

in a beautiful and agreeable language, without “surpassing the horizons of the reasonable untutored (Gunnerus 1758: 31).” This scientific journal was planned and produced as an instrument that could help enlighten a broad spectrum of the Norwegian society, notwithstanding that the content was all about the sciences in the broad Scandinavian and German conception as *Videnskaber* or *Wissenschaften*. The first Enlightenment institutions in Trondheim were thus based on the wish to make the sciences public. This also begs the question of who the local audience for the sciences in Trondheim was.

The town

When Gunnerus arrived in Trondheim he met a town of some 7500 inhabitants (for the following see Supphellen 1997). The dominating group in town was the merchants. Between these we find at least three groups. At the top resided a group of around 20 families of internationally oriented merchants. They controlled the export of three important products from the district: Fish from the seaside, copper ore from the districts south of the town, and timber and other products from the woods in the area. These merchants had relatively close contact with several towns and trading centres in Europe, in the Netherlands, in Northern German states and in Scotland, and many of them were from families that had immigrated to the town in the preceding century. They also sent their sons to be educated abroad, and they were well informed about much more than prices on fish, timber and copper ore. Some of them for example collected impressive libraries in their homes.

A second group of merchants operated in the districts, especially in the northern part of Norway, where they also resided a large part of the year. Generally they were collecting and sending goods for export to Trondheim, especially fish of different kinds, and then distributing imported goods from the town to the district. A third group of merchants was the small dealers in the town. Altogether these groups of merchants dominated the town.

Other inhabitants were largely dependent upon the activities of the merchants. We find a considerable group of craftsmen, and then a majority of inhabitants who were workers of different kinds, all sorts of servants, seamen and fishermen. The civil administration of

Northern Norway engaged some persons in Trondheim, and so did the administration of the town itself. Some soldiers lived in the town and belonged to lower strata. Their officers mingled with the better situated, and a few of them were well educated. The clergy attached to the two churches in town counted a small number, and the Cathedral School with around 50 pupils also needed educated teachers.



Bishop Gunnerus' town house in Dronningens gate 5 where his books and collections were kept, also the location for meetings of the Society. *Prospect af Boreauchef A. C. Schults Gaard i Trondhiem*. Painted by Mathias Ferslev Dalager, around 1830. Museum of natural History and Archaeology, NTNU Trondheim.

Upon arrival in 1758, the new bishop soon got acquainted with two persons who were engaged in learned collaboration. For some years they had met regularly to discuss scientific problems and to exchange information from their readings. One was Gerhard Schøning, the

headmaster at the Cathedral School and a historian, born in the north of Norway. The other was Peter Friedrich Suhm, a Danish nobleman bent on the study of history and languages, but in need of means. He had arrived in Trondheim together with his friend Schøning in 1751 with the intention of marrying the wealthiest heiress in the realm – and he succeeded (Bull 1992). Both men had studied in Copenhagen, they corresponded with learned persons and were well informed about new trends and new literature from centres of learning in Europe. Suhm, among his other activities, started the first Norwegian spectator journal in 1761, presenting no less than 833 book-reviews in four years (Hård & Aase, 1998). However, Gunnerus, Schøning and Suhm were all well embedded in the publishing systems. A drawback for them was the lack of publishing houses in Trondheim, these were located in Copenhagen. In Trondheim there was a printing-house, and Suhm's one-man journal could be printed there, whilst the journal of the Society had to be printed in the capital as there were neither means nor the technical competence to produce the copper-plates in Trondheim.

Suhm, Schøning and Gunnerus became the inner cell of the Trondheim Society from 1760, and the production of the journal was the main activity. Actually, in a recollection of how the Society started Suhm would write that bishop Gunnerus “proposed immediately after his arrival in 1758 to establish a learned society, in the manner that the three of us should immediately start writing, the one conveying it to the other, and when we had some treatises ready, then let them be printed, without waiting for other collaborators... (Suhm 1781).” A scientific society was thus tightly knit to print culture and the public realm. The task of a scientific society it seems, was to publish, the members arrived later and the question is where the members could be found.

Members of the Trondheim Society in the early years

Unfortunately we do not have complete lists of members of the Society for the first years. We have to reconstruct a list from different sources and indirect information (For sources see Schmidt, 1960). Therefore we do not know exactly who the formal members of the Trondheim Society were - if there existed a formal membership - and how membership was obtained. We are quite sure

that up to 1766 at least 18 persons had been members. Of these 11 lived in Trondheim, three in the district, one in Sweden and three in Copenhagen. The Swede was the famous Linnaeus, and his membership and engagement was highly valuable for the Society. One of the members in Copenhagen was Georg Christian Oeder, who was in charge of making a Danish flora, *Flora Danica*, and had visited Trondheim at the time when the Society started. Possibly he had pushed that process. Three were the founding fathers – Gunnerus, Schøning and Suhm. Four or five others were the Gunneri staff – young candidates engaged by Gunnerus to help him in his great variety of operations (Henrik Tønning, Cornelus Müller, Jacob Lund and Daniel Hveding).

For the prestige of the new society the mayor of town (1761-70), Niels Krog Bredal was an important member. Son of a judge in Trondheim, he went to Copenhagen to study law in 1749 and then developed many interests, especially in literature and the theatre. He had produced the first Danish “Singspiel,” *Gram og Signe*, a feat that helped him advance to the position as mayor in Trondheim 1761. This fact points to the way that persons who had excelled in art or science would be remunerated with an official post in the Enlightened Denmark-Norway. He was himself not pursuing historical, antiquarian or natural history investigations, but was firmly supportive of Gunnerus and his plans. When the Society was more formally organized in 1767 he became the first secretary, a position he held till he returned to Copenhagen in 1770 to dedicate his life to literature and the theatre (Iversen 1934). The town physician, doctor in medicine, Robert Stephan Henrici, was one of the few in Trondheim who had a University education in natural history (Grankvist 2007). He had studied anatomy in Copenhagen and Göttingen, and he taught botany at the Cathedral School. He is also said to have taught Gunnerus how to dissect both animals and plants, and he came to assist and cooperate with him in many ways.

A third early member of the society was Johan Daniel Berlin, a well-known person in Trondheim (Michelsen 1987). Born in Lithuania he arrived in Trondheim in 1737 as a privileged town musician. As a multitalented person without much formal education he came to perform many different functions in the town. As a town musician he became organist in the cathedral, he was an active composer, became leader of the fire-brigade, and he invented water pumps, harvesting machines and other mechanical devices. He also

practiced as an architect and a drawer of maps. Although he seems to have been a very useful member of the Society, he had no academic credentials, and he never came to possess any higher position within the Society. But the Society would use the large assembly room he had built in his house for their yearly celebration, and it seems they never paid for the services of musicians, during his lifetime.

The Trondheim Society in the early 1760s obviously had a local core, but a very small one: The three founding fathers, Gunnerus, Schøning and Suhm, three local enthusiastic members, Bredal, Henrici and Berlin, and some younger persons engaged and paid by Gunnerus to help him in different ways. As we lack formal lists, other persons should possibly be counted as members, but these 10-11 persons together with seven corresponding members, were the known base for the scientific society which applied for royal recognition and in 1767 became The Royal Norwegian Society of Sciences and Letters.

What kind of association was this? As we have seen, from the start the three founding fathers were working together producing *Skifter*. The first volume of *Skifter* contained ten articles, or “pieces” as they were called. Of the ten articles in the first volume, five were produced by Gunnerus, two by Suhm, two by Schøning, and one by missionary Eric Gerhard Schytte. These articles provide an entrance-point to understand the character of the Society and the sciences that were cultivated. Gunnerus was the author of five articles: two theological treatises, one on minerals in the north and two about different bird species. Suhm wrote two historical treatises, one commentary of the history of the world and one about the state of the sciences. Schøning wrote two historical treatises on economic issues. The final piece was an excerpt from a letter to Gunnerus, written by the missionary Schytte. This indicates that the three men initially relied on each other, not waiting for more members. The following issues were published in 1763, 1765 and 1768. These issues witnessed a small increase in the number of other authors. But altogether it is safe to say that the association as well as the journal was a three-man venture. Impressively enough they managed to produce a journal which covered a broad field of sciences.

The broad conception of the sciences, *Videnskaber* in Danish, which equals the term *Wissenschaften* in German, was evident from the first issue of *Skifter*, where everyone was invited to choose the topic of their contribution. The Society, however, underlined it

would appreciate treatises on history, i.e. learned, civil, natural, and church history. Furthermore, it would accept all parts of philosophy, in particular mathematics, natural knowledge, and its application within the art of medicine, but also economy, moral knowledge and the natural teachings on God and religion. This not being enough, the Society would also welcome poetry and the beautiful arts, as far as they deserved their name. And civil and public law would be welcomed as long as the author was knowledgeable in natural law and the history of jurisprudence (Gunnerus 1761). This was a society of the sciences that had a very wide definition of 'sciences' indeed. The translation of the Society's name into English as a society of science and letters, is a later invention, and inaccurate in relation to what 'sciences' meant to the members in Trondheim and their contemporaries.

The means

In 1765 Schønning and Suhm left Trondheim to settle in Denmark. They both would acquire important social positions, but this also broke up the initial working group. In the autumn of 1766, members of the Society took action and started planning for something which might be called a renewal of the Society. The first entrance in the minute book (which was actually started two years later) recounts a meeting in December 1766, where questions that would enhance the formal status of the Society were deliberated upon. The first decision was to appoint bishop Gunnerus the eternal head of the Society, or more precisely as the *vice-præses*, who would then act as the local head. In addition it was decided to apply for a patron, who could have the formal title of *præses*. Also, what must have been deemed central positions for the working of the Society were filled: a cashier, a draughtsman, and an inspector for the natural collection and the library. The third decision was to ask for a royal confirmation of the "conventions, laws, and articles" – and these are of importance for understanding what they were intending the Society to be.

Our purpose is not to go into every detail in the report of this – or other - meetings, but to point to the micro-events that made the Trondheim enlightenment and the work of the Society possible. In Trondheim they built an organization that could gather strength from the ties to the King in Denmark, to scientists from Uppsala to

Göttingen, by means of “conventions, laws and articles” that regulated and institutionalized the Society. Reading the letter of confirmation from the King, the details are astonishing. By the King’s decree, for example, the Society should meet every first Monday in the month at five o’clock. Wednesday and Saturday afternoon from two to five, the library should be kept open for all who studied. Every member should donate one or several books. During meetings the members should sit on two sides of the table, and the vice-præsides preside on one side. And so on. These conventions were central for establishing a protocol for how to behave and what to do, and not least a protocol for how to socialize among the different estates that made up the constituency in the city of Trondheim.

One last paragraph dealt with how knowledge could be made to travel – into Trondheim and around the town – as it was stated that the members would decide among themselves to subscribe to the best native (i.e. Danish) and foreign learned journals, which should be passed around before being placed in the library. After all, the Society was established, this minute book stated, to work for “the dissemination of the sciences” (Videnskabselskabets protokoll [The protocol of the Scientific Society 1768-1861]).

The first lists from The Royal Norwegian Society

In the process of reorganizing the Society to become a royal one, the number of members had more than doubled. In January 1768 we know of 45 members, and of the new ones, around 10, lived in Trondheim. New on the list was the commanding general for northern Norway, the leader of the civil administration (*Stiftamtman*), a new president of the magistrate, and four to five clergymen connected to the two churches in town. The common denominator for these was that they represented the highest authorities in the different power hierarchies in the country. Military leaders both in Trondheim and in Norway as a whole were invited, as well as prominent men from the judicial system, the head of the roads administration for example, and men of importance in other civil administrative systems. Few if any of these men was actively doing systematic investigations, their credentials were different; through them most accessible power structures were mobilized.

The renamed society now saw a large wave of new members formally included. From January 1768 to March 1769 no less than 50 new members were registered. A few of the leading merchants in Trondheim entered the list and some more clergymen from the district and other parts of Norway. Most striking is the high amount of learned persons from abroad – from Copenhagen, Uppsala and learned milieus in Europe. Some of these persons had visited Trondheim, as did the participants of the scientific expedition to the northern part of Norway to study the passage of Venus in 1769. Members of the Society had studied or worked in Germany and Copenhagen and faculty members from Universities there were elected. But most notably, they were prominent members of the Republic of Letters, “international stars” who published in the journals that the members of the Trondheim Society read among themselves. None of these members could give any direct contribution to, or take part in, the Trondheim milieu, but became corresponding members, taking part in locating the Trondheim society in the network of letters that contributed to the extension of the Enlightenment in localities like Trondheim.

Corresponding with Europe

Taking a closer look at these corresponding members we find members of Academies and professors of Universities, as well as independent gentlemen with a strong standing within their field of inquiry. The correspondence between Gunnerus and Linnaeus is well known. Linnaeus was one of the twinkling stars of science at the time, and the relation with him would also involve students travelling from Trondheim to Uppsala, as well as natural objects and scientific descriptions of specimens. Three persons from Jena became corresponding members in 1768: Johan Ernst Imanuel Walch, Justus Christian Hennings and Johann Friedrich Hirt, and in 1771 Lorentz Johann Daniel Succow and Johann Ernst Basilius Wiedeburg entered the list together with Joachim Georg Darjes, who had been the teacher of Gunnerus, then working in Frankfurt an der Oder. Johan David Michaëlis represented Göttingen on the list together with Johann Beckmann, and Johan Christian Daniel von Schreber was a corresponding member from Erlangen. Several persons of immense Enlightenment fame secured the contact with Paris: Jean Le Rond

d'Alambert, Mathurin Jacques Brisson and Bernard de Jussieu. A member from Montpellier was Antoine Gouan, and contact to Geneva and Bern was established by Charles de Bonnet and Albrecht von Haller. If we turn to England we find the names of John Ellis, Philip Miller and Thomas Pennant on the list. Many different disciplines and fields of knowledge were covered by the work of these men, but predominantly the elected members were natural historians. What is emphasized by this list of members is the high ambitions and the strong network the Society was able to set up – from a modest base of members in town.

The Society at work

We have pointed to the way the society worked the first years, by forming a group that used their energies chiefly at making a journal. Through this period natural history became the most cherished subject, in articles, and in the actual practice of the Society. The articles that were read in their meetings attested to this, but clearly this side of the activity was strongly connected to Gunnerus work as bishop *and* natural historian (see Andersen et.al. and Brenna 2011). As bishop he urged both the clergy and the congregation to study the second book of God, Nature, as well as the Bible. He was able to establish contacts with clergymen from all parts of his diocese, and these served him with observations and specimen. He asked for interesting species of all kinds in the nature, and he could assemble them in his own natural-cabinet. Both for clergymen applying for promotion and for lay people needing support of some kind, it could be of value to have provided some interesting items for the bishop and his society. Thus he built a collection which could serve as a site of investigation, and in his writings he frequently made references to the objects he had assembled. He also started the work of establishing a botanical garden on his farm Berg outside the city, but this plan had to be abandoned.

In Trondheim the Society was building up both a library and a collection of items from nature – fishes, birds, plants and other specimens of many kinds. At the same time the local members of the Society did their own investigations, either in history, antiquarianism or in natural history and natural philosophy. The small group led by the bishop performed dissections, they registered and systematized,

and they wrote about their findings. These writings were distributed to the learned world through their journal. Collected material from the North could also be used to establish exchange contacts with other societies and persons in other parts of Europe. The nature of the North was a valuable asset that the Society could harness to get contacts and specimen from other parts of the world. For Gunnerus this position could be used to recruit new members to his society, to exchange natural objects and thus enrich his own collection, and also to take part in new knowledge and follow new trends in the world of learning thus changing the geography of Trondheim, from the periphery to a more central position in Europe.

The Society in the town

Up to the death of bishop Gunnerus in 1773 almost 200 persons had been registered as members of The Royal Norwegian Society of Sciences and Letters, and as far as we can see, there were never more than a small group of possibly 15-20 persons who participated in the work and ordinary meetings in the society. With all high officials in the town on the list of members, the Society must clearly have obtained status in Trondheim. A few of the merchants also obtained membership, probably because of studies at the university and general interest in science. But the Society remained an arena for the few, with the bishop and his closest helpers in focus. Those who could take part in actual learned activities were few.

Many other societies and clubs were established in Trondheim in the last part of the eighteenth century. They were mostly for the social and economic elite, the leading merchants being the dominant part. Splendid parties were held, and a solid economy was needed to participate, since you had to take your turn and host the arrangements at intervals. In this milieu, this broader social setting, the bishop and his closest helpers was not, as far as we can see, included or integrated. Gunnerus got a fairly solid salary as bishop, but his economy was never good. Most of his resources were spent on activities connected to natural history. When he died he had a personal debt of around 9000 riksdaler, which was in fact an enormous sum. We think it is fair to say that the leader of the scientific society neither had the personal economy, the spare time,

nor the personal ambition to play a prominent part in social life in the town.

The Bishop's society

The scientific society was often referred to as the bishop's society. He was the dominating man, controlling an impressive network, and he surely was a talented organizer. As long as he lived, no one challenged his leadership. He was the lifelong leader. He and the Society were firmly connected. In this first period the Society was more definitely tied to a person, to the bishop, than to a locality – Trondheim. The bishop could plan to take the Society with him, and in fact he did so twice. In 1771 he was called to Copenhagen to work out new plans for the university (see Collett this issue). He used the opportunity to propose plans for a university in Norway, but located in Christiansand, arguing that the short distance to Denmark from this southernmost town in Norway demonstrated that the intention was to connect the two countries, not to separate them. Gunnerus would willingly move to Kristiansand and offered to take his society with him to help create the new university. These plans were cancelled when Struensee fell, the person who had engaged Gunnerus for the job. When other plans concerning a move of bishop Gunnerus from Trondheim to Christiania (Oslo) came up, this included a move of the Society as well. Thus we see an acceptance of the conception that bishop Gunnerus could dispose of the Society almost as he pleased.

The Society came to stay in Trondheim, although it took time before the Society was firmly connected to the town. It did not die with the dominating bishop, as could have been expected, but became gradually integrated and adopted as an important element in the town. It can hardly be said that the scientific milieu in the town grew to great heights, but the Society became part of the identity of the town. Gradually, after the bishop's death in 1773, the Society seems to have become one civic club in town among others. But they had some important assets that would make their continued existence possible. An important event was the building of the new Cathedral School in 1787 (Baustad 1986). The building was constructed to comprise special rooms for the Society, both for meetings and for the

library and the collections. This meant a factual connection to the town, and a geographical site to work from and in.

After the founding of the first Norwegian university in Christiania (Oslo) in 1811, strong forces tried to move the scientific society, arguing that the university and the Society ought to join forces (see Andersen et.al.). That had surely been an aim for Gunnerus. Now these plans were opposed by both leading members of the Society itself and representatives from the town. At this time, after 50 years, The Royal Norwegian Society of Sciences and Letters had become such an important part of the identity of the town that it was worth fighting for its permanent location in Trondheim.

The bishop and the milieu

The milieu bishop Gunnerus met in Trondheim around 1760 did definitely not invite him to start developing a scientific society, even though there were a few individuals who were eager for such a development. Gunnerus on his side chose to invite widely to help him build such a society. His inspiration did not primarily stem from the richness and activity in the local milieu, but from his own experience, curiosity and dedication to academic work. In addition the bishop obviously was a very talented organizer. He engaged the very meagre learned milieu in the town to join him, and got important support. But when it proved possible to run a society of this kind, it heavily depended on suppliers of interesting objects from the North, and the recruitment of corresponding members from intellectual centres far away. It took its time to really root the Society in Trondheim. This underpins the picture of the founding father and his activity as crucial and decisive for the start of the Society. The Trondheim milieu gave a modest contribution.

Trondheim as a place of enlightened associations and scientific publishing was thus produced not so much by the location, but by the geographies that the Enlightenment helped produce. Trondheim was a large town according to Norwegian standards, among the four biggest towns in the country. Through the merchants there were good contacts with the North, there were also important connections to other North-Atlantic cities. But there was no particular reason why a scientific society should be set up here, rooted in geography or social milieu. However, through sifting on to and establishing networks

where natural objects, observations, historical treatises and academic knowledge could travel – the Society took part in forming the Enlightenment geographies of knowledge. This was also dependent on the means by which the Society was established. Protocols and organizational forms imported and translated by Gunnerus and others were fundamental for the establishment and work of the Society. Furthermore, the journal as a means of making knowledge travel was decisive in making the Society known, and in knitting the Society tightly to the intellectual development in other parts of Europe. In the end, Trondheim was produced as a place of Enlightenment through the mediations. When the Society became a civic club among others and the scientific activity dwindled, there can be different grounds for this. Maybe the Trondheim milieu was changing, or just as important, the international network was undergoing changes that would have lasting impact on the Society. It could well be argued that the increasing specialization of science by the end of the eighteenth century, must have made the work in Trondheim more difficult as the town did not have any institutions of higher education. This would render it more difficult to keep in touch with the developments in different fields of knowledge. But one should not underestimate the importance of the reputed Gunnerus. “Fame was the currency of the realm in the Republic of Letters,” Lorraine Daston has stated (1991). After Schøning and Suhm left town and Gunnerus died, nobody filled the role of being a well-reputed learned and member of The Republic of Letters in the Society of Trondheim. It seems evident that Gunnerus had made himself and not the Society the most important local node in the network, and thus the relations were cut as Gunnerus passed away. Thus the Society also became more of a peripheral phenomenon, changing its geographical location.

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