Aemula Lauri

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The Royal Norwegian Society of Sciences and Letters, 1760–2010

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Preface

2010 marks the 250th anniversary of *Det Kongelige Norske Videnskabers Selskab*—The Royal Norwegian Society of Sciences and Letters. This book is a celebration of that event. And it is with our profound respect for and gratitude toward the society's founders, Bishop Gunnerus, Gerhard Schøning and Peter Suhm, that we present, for the first time in a language accessible to an international audience, a history of our Society, written by some of Norway's finest scholars.

It is no small accomplishment for a scientific society to reach such a venerable age. Nevertheless, we are aware that although we are on the verge of the second half of our third century, *The Royal Norwegian Society of Sciences and Letters* does not belong to that exclusive group of old and truly pioneering scientific societies of the scientific revolution of late Renaissance. Inevitably, in comparison with more prominent representatives of our kind, such as the illustrious Royal Society of London, ours will come across as a relatively modest society world. However, this does not belittle the feat of our predecessors who, despite the fact that they were situated in the periphery of academic Europe, have upheld, maintained and nurtured this scientific community through considerable historical changes and challenges. The history contained within the pages of this volume bears witness to the fact that our continuing existence is nothing short of a little miracle.

In 1760, the year of the founding of *The Royal Norwegian Society of Sciences and Letters*, Trondheim was a small town of some 7000 inhabitants who carved out an existence in an economy based on trading in fish, timber, and copper ore, and supplied raw materials to the larger and more developed proto-industrial economies of Europe. In this small town, without scholarly institutions beyond a cathedral school, three scientists—or in the terms of the period, natural historians and philosophers—met to practice and promote science. Bishop Gunnerus, Gerhard Schøning and Peter Suhm were the core members of what, due to the entrepreneurial spirit of the bishop, rapidly turned into an expanding society that obtained the right to the prefix "royal" in 1767, and that became one of the centers of the Scandinavian Enlightenment. These pioneering spirits took it upon themselves to introduce modern science to Norway, established a solid international network and the Society as a participant in the international scientific community of the day. First appearing in 1761, their journal, *Skrifter*, is today one of the oldest continuously running series of scientific publications.

This book addresses an international audience. Fifty years ago the first comprehensive history of the Society was written, in Norwegian, by professor Hans Midbøe. Due to the language barrier this publication has in reality remained inaccessible to scholars outside Scandinavia. For this reason, as well as for reasons of a more historiographical

nature, the upcoming anniversary was seen as an opportunity to instigate the work on a new history of the Society, but this time to be published in English. This was not only out of desire to provide Midbøe's work with an international counterpart more in line with current concerns and interests. We chose to do so for primarily three reasons. We consider this volume a contribution to a common European history of knowledge and science of the past three centuries, and that hopefully offers fresh perspectives on well known topics. Moreover it is a central part of the history of science in Norway and thus of Scandinavia. It remains a fact that this society for more than fifty years was the only academic institution in Norway—a country without a university of its own up to 1811. Not until 1857 was a second academy of science founded, this time in Oslo, or Christiania as the capital was called at that time. Finally, we believe, although maybe not completely unbiased, that ours is a history with qualities that in themselves merit the interest of the avid reader. The shifts, changes and turning points our society has undergone and survived over the span of the last 250 years—at times through metamorphoses that at a first glance may appear to have transformed it completely—makes for entertaining reading; indeed even more so, when one also takes into account its anecdotes and episodes involving an interesting and occasionally colorful gallery of persons of learning who, their differences in temper and character notwithstanding, all share a yearning to promote science under most variable conditions.

Today the academy of *The Royal Norwegian Society of Sciences and Letters* has more than 600 members, the majority being Norwegian scholars, while others come from all over the world. We organize meetings, seminars, conferences, stimulate and finance research projects and award young promising researchers. We celebrate and honor our long history, but most of all we work to stimulate the academic world to work for a better future, to expand our knowledge and confront the problems and challenges of our day and age—a type of engagement more needed today than ever before and that carries on the Enlightenment stance that two and a half centuries ago drove the Society's founding fathers.

One a final note, we would like to extend our thanks and gratitude to those who made this tome come true: the authors, Håkon With Andersen, Brita Brenna, Magne Njåstad and Astrid Wale, as well as the editorial board that has worked closely with the authors throughout the entire process; led by professor Knut Ove Eliassen, the board has included the professors Ida Bull, Axel Christophersen, and Helge Holden. We also extend our gratitude to those who have given the economic support without which this book would not have happened: *Nordenfjelske Bykreditts Stiftelse, Adolf Øiens donasjonsfond, Det kongelige kunnskapsdepartement, I. K. Lykke, Statoil* and *Fokus bank.*

Steinar Supphellen
praeses

Introduction

KNUT OVE ELIASSEN

Tu Episcoporum omnium summus instar cometæ nova luce irradias et illuminas tenebricosa arctoa et de Te vere dici potest att det folk som i mörkret wandrar ser ett stort lius som uplyser hela werlden. Sero occidat Tua stella! The words are Carl von Linné's, from a letter to Bishop Gunnerus dated the 12th of March, 1762. An English rendering of this noteworthy passage—which begins in Latin, breaks off into the vernacular when the mode changes from direct to indirect speech, and then resumes the Latin—might be: "You the greatest of all Bishops, in the manner of a comet with new light illumine and enlighten the dark land of the North, and of You we can truly say, that the people that wanders in darkness see a great light that enlightens the whole world. May Your star go down late!"

Thus is Johan Ernst Gunnerus, the founder of *Det Kongelige Norske Videnskabers Selskab*, eulogized by the illustrious father of modern botany. Coming from a man who had been hailed by Rousseau as the greatest man living, such praise would certainly leave an impact, not merely on the addressee, but undoubtedly also on anyone else who would happen to read it (or heard it, as the 18th century's letter was, generally, a social event, read out loud to an audience, and often copied and circulated). Even if the panegyric also was the Swedish naturalist's way of encouraging his Norwegian counterpart and at the same time expressing his gratefulness for the samples he had received from him—and would be receiving in the following years—it still provides proof of his respect of Gunnerus, and an acknowledgment of his membership in the elite that is often referred to as "the republic of letters."

The Royal Norwegian Society of Sciences and Letters is a true born child of that broad European cultural, political and intellectual process called the Enlightenment. This historical phenomenon, that spanned more than a century and influenced the entire Western hemisphere, was in no way homogeneous. Hence the concerns of the French Enlightenment differed from that of its English equivalent. Marked by the political and cultural situation out of which they developed, the former was concerned with the power and ideology of the Catholic Church and the gangrenous social and political structures of feudal absolutism, while the latter—the revolution already behind it—faced religious and political problems of another kind. These differences were manifest in their respective views on the functions and value of science, as new truths and insights of the century's natural sciences were of considerable ideological consequence and more often than not considered to be at odds with those of theology—one time considered to be "the queen" of sciences.

Not surprisingly, the national accents were no less prominent in the less prestigious centers of Enlightenment: The Dutch Enlightenment differed from the Italian one, as the Scottish differed from the German, or, for that matter, the Russian from the Spanish, and so did their various understanding of religious issues. What further complicates this image is that the Enlightenment was not restricted to the capitals and centers. Enlightenment ideas were diffused and cultivated in smaller cities, in the many peripheries of Europe. Some of these places were more peripheral than others, Trondheim, a regional capital in the Lutheran Kingdom of Denmark-Norway merely a few hundred kilometers below the Arctic Circle, being an obvious case in point.

Thus, from the outset the identity and destiny of *The Royal Norwegian Society of Sciences and Letters* was marked by its geographical localization. Established in a small city, far from the dual monarchy's capital, Copenhagen, this society would become one of the centers of what one with some justification may call the "Northern Enlightenment." A particular trait of this Northern Enlightenment—and of its Norwegian version in particular—is that it was devoid of the anti-clericalism and latent atheism that fuelled its more prominent continental counterparts. Taking stock of the situation in Scandinavia, one could even be tempted to speak of a proper "Lutheran" or even "Pietistic" Enlightenment, and it has indeed occasionally been argued that the 18th century pietism of Northern Europe should be seen as an expression of an unusual and successful fusion between Enlightenment ideas, religious beliefs and political reformism. Accordingly, while the fact that one of the champions of the Enlightenment in Norway was a bishop might have appeared extraordinary from a continental perspective. From the point of view of the official State Pietism of Denmark-Norway, this was well within the order of the day.

Keeping the Northern Enlightenment's particular Lutheran and in some respects conservative character in mind the particularities of Linné's letter to Gunnerus become more explicit, and it indicates interesting aspects of the nature of the intellectual setting in which the two corresponded. The choice of language, Latin mixed with Swedish, is by itself worthy of some attention. Although most of the prominent Enlightenment figureheads were familiar with Latin, as most of them were products of Latin schools or colleges, where the classical languages still held sway as the highway to education, they generally preferred the vernacular both in correspondence and in scientific publications. Latin had become the language of an academic culture that at this time still was deeply marked by scholasticism and dogmatism. So, while Linné's choice of Latin might have to do with the fact that this was still early days in the correspondence of the two savants—they exchanged letters regularly from 1761 to 1772—it is tempting to see the botanist's use of Latin as an indication of a distinctive trait of the Scandinavian Enlightenment, that their most renowned protagonists, contrary to their continental counterparts, saw themselves not as an opposition to tradition and public authority but rather as their supporters.

Linné and Gunnerus were not adherents of "radical enlightenment;" in their world the distinction between the leaders and those led was crucial. This is curiously echoed by the shift in language; when the Swedish botanist changes perspective, and refers to

the populace's judgment of Gunnerus, he switches to the vernacular. Rhetorically the passage thereby signals the parallel existence of two cultures, the Latin of the learned world, to which both Linné and Gunnerus belonged, and the vernacular of the people who "wanders in darkness." The impression is reinforced by Linné's use of elaborated panegyric metaphors and allegories borrowed from a classical, even religious register: Bishop Gunnerus is not merely a harbinger of light, but rather himself a source of enlightenment in what apparently else would have been left to an eternal darkness. And, a few years later, the good bishop *cum* natural historian would, on his return from one of his scientific excursions in the northern part of the country, be hailed by his secretary, Johan Nordahl Bruun—himself later to become bishop of Bergen—, as the new Adam, the man who for the first time bestowed upon the creatures and flowers of God's creation their true, scientific names.

Johan Ernst Gunnerus was no revolutionary. A staunch supporter of the Wolffian-Leibnizian philosophy and an adherent to its theological companion, "Physico-Theology" (or "natural theology" as it was also known as), he made his position clear in the pastoral letter that was issued to the clergy of the diocese upon his arrival in Trondheim in 1758 and printed and made public in Danish for the public benefit. Faith itself, according to Gunnerus, does not suffice for those who would like to penetrate into the deeper truths of Theology; mastery of philosophy and metaphysics is required for those would like to arrive at true insights into the laws of nature. Such profound philosophical knowledge is a necessity, and today more than ever, as the number of naturalists, deists, doubters and religious critics found within the church is increasing, Gunnerus notes. Philosophy is a requirement for the enlightened priest that would like to fulfill his public function as a servant of the church and the state in accordance with his faith.

Gunnerus was a genuine expression of that very particular Nordic phenomenon, the enlightened cleric; he was thereby also a representative of the country's administration, a civil servant for whom the interest of the state of and those of his office converged. His office was a part of the information system needed to run the conglomerate kingdom of Denmark-Norway; the clerical network of the diocese not only provided the church with the necessary channels of communication, but allowed Gunnerus, in the capacity of Bishop, to pursue and realize his mapping of Norway's natural resources by demanding of his subordinates to serve as his "scientific field assistants." As a natural historian, collecting and receiving information as well as objects, and passing these on, Gunnerus filled a double role. He served the interests of the state as those less worldly ones of science. This combination fitted well with the ideals of the period's prevalent economic theory in Denmark-Norway, the so-called *Kameralismus*, a German and Scandinavian version of mercantilism that Gunnerus was familiar with from his study days in Germany. Religion, science, enlightenment and public office thereby fused in a manner that characterizes the particularities of the Lutheran Enlightenment.

Two decades after the letter from Linné to Gunnerus, and ten years after Gunnerus' death, another, even more prestigious representative of the Lutheran Enlightenment, the citizen of Königsberg, Emmanuel Kant, famously defined enlightenment as "man's release from his self-imposed tutelage. Tutelage is the inability to make use of his

understanding without guidance from another. This immaturity is self-imposed when its cause lies not in lack of understanding, but in lack of resolve and courage to use it without guidance from another. *Sapere Aude!* "Have courage to use your own understanding!"—that is the motto of enlightenment."

Kant's motto has been understood as an open defy to all forms of thought monopoly and nothing less than a call to arms challenging all individuals to assume the responsibility for their own intellectual and political freedom. However, those who have read beyond the first pages of his famous essay from 1784, "Antwortung an der Frage: Was ist Aufklärung?" will know that the introduction's apparent extensive individualism is tempered by the Prussian philosopher's distinction between public and private obligations. To be enlightened implies duties towards the state and to the community. Reasoning is an act that might be exercised individually but it finds its legitimacy when it is put in service for the common good. Thus there is little reason to be surprised that *Sapere Aude!*—originally a quote from Horace—also was the motto of a secret society of German civil servants that aimed at the propagation of Wolffian philosophy.

The society of the learned civil servant can be said to be one of the most typical expressions of the Lutheran Enlightenment. Here enlightenment is a process in which men participate collectively and where they act for the common good of the state, the nation and the people. Such was also the principle that seems to have been driving the founding fathers of *The Royal Norwegian Society of Sciences and Letters*, Gunnerus, the historians Gerhard Schøning and Peter Frederik Suhm. They might all fall in under the label of "gentleman savant" as none of them were professional scientists or scholars but they did not indulge in the learned sciences as merely a pleasurable pastime; their duties were to the common good.

Like his many German counterparts, one of Gunnerus' central concerns was the establishment of a new university, but the bishop was not driven by the desire to reform the old, but instead to establish for the first time a university in Norway. Gunnerus himself was a product of the old four faculty university. There is little reason to believe that what he had in mind was something like what was to become the Humboldt University, one of the proudest products of the German Enlightenment. However, his project stranded, and it was not until more than thirty years later that Norway was to have its first University. *Det Kongelige Frederiks Universitet* was indeed to be heavily influenced by the German university reforms, but it was placed in Christiania, the country's capital after the dissolution of the Danish-Norwegian monarchy in the aftermath of the Napoleonic wars. Trondheim was not to receive its university until the 20th century.

The legacy of Gunnerus would thus not be a Norwegian university, but a scientific society with an impressive collection of naturalia, the country's largest and most modern library, and quite considerable funds. And, last but not least, a reputation that went beyond the borders of the country. Thus befitting the values and practices of its founder, what Gunnerus bequeathed on his inheritors, was an institution for the propagation of useful knowledge, for diligence and public spirit, in other words a society charged with a mission: the spreading of light under the dark heavens of sub-arctic Europe.

Unlike most of its European counterparts, the destiny of *The Royal Norwegian Society of Sciences and Letters* was to remain in the periphery. Without any university in Trondheim that could provide a steady influx of new members, or serve as a tool for the implementation of new ideas and principles, the society had no direct interface with what was now the arena of science. Moreover, there was no court that could offer protection and money in the form of interested and enlightened benefactors. And there was no public sphere of importance, coffee houses, politicians etc. Five hundred kilometers from the country's capital, in itself quite insignificant in a European perspective, the Society had to cope with what little there was.

At the beginning of the 18th century, scientific societies were no longer the avant-garde of science; science and its institutions had changed, and the society in Trondheim along with it. The spread of knowledge and the Enlightenment of the general public rather than the practice of science, was now the may concern of the Society. And the founders of the society were long dead and gone. With them, and with the particular spirit of the Lutheran Enlightenment, and the bishop who had enrolled the organization of the diocese into the service of the society, the situation was of totally different nature. The lesson, which undoubtedly Gunnerus had already learned, was that to practice science in the periphery is to have to make do with that which is available.

For the whole of the 19th century this was also the case; turning weaknesses into strength, making use of what resources were available, the board turned the Society into a charitable institution for science and scholarship, or in modern parlance, a "research council", using its considerable fortune, bequeathed upon it through donations and gifts, to found, subsidize and finance science (thus continuing and refining a practice already begun under the aegis of Gunnerus). On the European arena the scientific societies of the century of Enlightenment had been replaced by the reformed universities as the agents of research, and the gentleman savant was gradually replaced by the salaried civil servant. While most other societies were found in cities with academic institutions, and adapted themselves to the situation by becoming forums for inter-disciplinary exchanges, social mingling and alliance building, *The Royal Norwegian Society of Sciences and Letters*, in a certain sense stuck to its original calling, the propagation of enlightenment. True to the spirit of Gunnerus prizes were handed out to skillful craftsmen and diligent farmers, and scholarships and stipends bestowed upon historians, naturalists and writers. But the Society was not any longer itself an arena for science and scholarly work; it had become an institution that saw to it that science was practiced and that knowledge was disseminated, and its central protagonists did not consider themselves scientists.

However, the Society's role as a research council was also to come to an end. Once more it was the relation to the university that became decisive, this time in the shape of two young scientists, arriving in Trondheim more or less straight out of the *Det Kongelige Frederiks Universitet*, and bent upon turning the resources of the DKNVS into a true scientific institution in line with what the times considered to be state of the art, namely a museum. With the avant-garde's disrespect for tradition and what was conceived as the dilettantism and amateurism of their forerunners, Wilhelm Storm and

Karl Rygh undertook the establishment of a museum that true to their respective trainings—as well as to the interests of the Society's erstwhile founder, the Bishop Gunnerus—in that its focus was on natural history and antiquities and archeology, respectively.

Even though the two had little respect for their scientific contributions of the predecessors, including the efforts of the first generation, they nevertheless continued that parallel perspective of natural history and history proper that had also been the main interests at the time of Gunnerus. Nevertheless, this meant the end of the prize competitions and no more prize money were handed out to the diligent and ingenious farmer who might have come up with a new way of tilling the earth, thatching the roof, or a new way of setting up the loom. This did not mean, however, that this was the end to the Society's civil responsibilities and its calling to educate the populace. The new museum became extremely popular among the citizens of Trondheim who crowded the site in numbers beyond those that any other regular attraction had managed.

The museum might have been the terminal station in the permanent metamorphosis undergone by the Society since its inception, had it not been for the establishment in Trondheim in 1910 of a polytechnic university, The Norwegian Institute of Technology, five years after the dissolution of Norway's personal union with Sweden. For the first time in its history the Society would have to coexist with a university college. The society had, however, changed character completely, all its resources over the last decades having been invested in the establishment and running of a research museum. The end result of several years of conflicting interests between the newly arrived scientists, eager to revive the Society as a forum for multidisciplinary exchange as well as a social arena, and the champions of the museum bent on safeguarding and continuing the research center they had succeeded in establishing, was a structure that was to remain, although modified, throughout most of the century: The museum and the library on the one hand and the Society on the other, all of them, however, rightful heirs to the name, *Det Kongelige Norske Vitenskabers Selskab*. As a consequence of the process of the reorganizing of the university in Trondheim in the 1970's and 1980's, when both the museum and the library became separate institutions within the larger institutional framework of the University of Trondheim, are the remaining parts from 2002 again united under a common board as an academy and a foundation.

It might be a difficult task to identify the large patterns underpinning and remaining constant through the many shifts and changes in the history of *The Royal Norwegian Society of Sciences and Letters*. Various interpretations may present themselves. Changes in structure as well as in the activities undertaken are considerable, and are also behind the organization of this book into four parts: From enlightened scientific society to research council and then museum before finally settling into the form of a 20th century academy. The different nature of the four quite distinct periods notwithstanding, a few constants might be discerned in the Society's history. First and foremost of these is doubtlessly the Society's peripheral position. At the same time a resource and a challenge, periphery on the one hand meant a privileged access to natural data and objects that were considered both exotic and important by the rest of Europe. The pioneers of the Society were thus in possession of assets that made them attractive partners

for more centrally placed participants of the Enlightenment. On the other hand, periphery also meant limited resources both monetary and intellectually, not to mention slower and more limited access to the new insights of science. Moreover, the society has throughout its history, shown a remarkable reluctance to involve itself in explicit political issues; the civil servant, in both the usual and the literal sense, as the server of the public, has delivered the role model of the society's leading men (and occasionally women). Finally, and this might have to do with the last point, the levelheaded mentality of the that particular Nordic Enlightenment might really be the trait that on the most profound level, links the Society's activities from the 18th century to the 21st. This book, taking the society's motto, *Æmula Lauri*, "The Rival of the Laurel Tree," as its title, recounts the story of this less than ordinary scientific society located three degrees below the Arctic circle.

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