

Making Facts from Stones: Gerhard Schøning and the Cathedral of Trondheim

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In 1762, the historian and antiquary Gerhard Schøning published a large work on the Cathedral of Trondheim, *Beskrivelse over Dom-Kirken i Trondheim* (Description of the Cathedral of Trondheim). Originally the shrine of Norway's patron saint and christening king, Saint Olav (d. 1033), the building had suffered severe damage and decay since the Reformation and Norway's subordination to Denmark in 1537. As both a pilgrims' destination and a monument to Norwegian independence, it was an *elementum non gratum* in the Protestant Danish kingdom, of which Norway was now a part. In the eighteenth century, large parts of the medieval structure lay in ruins. Schøning's explicit aim with his work was to show the ancient glory of the cathedral—and implicitly of the nation. He is lavish in his praise, and quotes earlier authors who claim that the building once was without equal in all Christendom.¹ Nevertheless, he is also critical of these older texts, not least when they interpret the cathedral's decay in religious terms rather than describing what could actually be seen. Schøning wants to set the record straight and provide more precise information.

The thorough and meticulous work gained Schøning a still lasting scholarly reputation. Not only is the book used as a historical source, it is still reckoned a valuable scholarly work on the cathedral. Its scholarship is easily recognised and the text is accessible even to present-day readers. The method appears rational, the disposition is logical, the information seems exact and the interpretations are empirically well grounded. It is an impressive and very detailed work, at the same time appearing so matter of fact as to be nearly natural in its perspectives and operations. From where did Schøning get his inspiration? What sort of knowledge does this work represent, and which kinds of operations were required to produce it?

In his very thorough introduction to a recent edition of Schøning's book, archaeologist Øystein Ekroll presents Schøning's sources and discusses possible

models for the work. But while it appears obvious that Schøning on a more general level worked within a well established tradition of European antiquarianism, Ekroll has not been able to identify a more *exact* model or source of inspiration for the work. The antiquarian tradition, represented in Scandinavia by for example Olof Rudbeck the Elder, Johan Peringskiöld and the Danish Bircherod family, contains no works directly comparable to Schøning's, neither in achievement nor method. Schøning did read English, but Ekroll has not been able to confirm that he knew the works of William Stukeley or other contemporary British antiquarians.² What distinguishes Schøning's book is above all the structure, with a very thorough description of the actual building filling approximately the first half of the book. Traditionally, works in the antiquarian genre were largely occupied with documents, monuments, inscriptions and other remains that could give genealogical information about princes and nobility, while the physical buildings or remains of buildings received less attention.³ The antiquarian tradition also had an important legal strand, which meant that the genealogical investigations, the study of documents and inscriptions often were closely related to an interest in the history of privileges, property and goods. This was for example the case with the well-known Italian antiquarian Lodovico Antonio Muratori, whose works probably were well known to Schøning.⁴

Concerning buildings and their physical structures, architectural historian Françoise Choay points out that until the nineteenth century, 'conservation' mostly meant producing books of plates. Rarely was the physical structure repaired or maintained, and even highly cherished monuments—the Colosseum in Rome is a good example—were used as quarries. Such buildings were important witnesses to past glory, but to preserve them, images were long held to be sufficient.⁵ Erik Dahlbergh's enormous work from the early eighteenth century, *Suecia antiqua et hodierna*, containing 353 plates depicting Swedish castles, fortresses and towns, is the best Scandinavian representative of this branch of the antiquarian tradition.

Rather than search for exact models for Schøning's obvious interest in the material remains of the medieval building, it might prove fruitful to investigate the ideas about scholarship and scientific method that actually are expressed in his work. In the following, this will be used not only in interpreting Schøning's text, but also in discussing eighteenth-century scholarly knowledge in a wider perspective. The antiquarian work will be seen as part of a wider field, where methods, practices and discourses interchanged and intermingled, shaping ideas about 'knowledge' and 'science' as well as about the right ways to achieve them. Before doing this, however, a short overview of the immediate context of Schøning and his work shall be presented.

The Scholarly Context in Trondheim

Trondheim had been Schøning's home town since 1751, when he arrived to take up the position of rector (principal) at the cathedral school. With him came his close friend Peter Frederik Suhm, and until they both left Trondheim in 1765, the two men worked together on a number of projects, mostly related to history and the study of languages. Both published historical works based on close investigations of literary sources.⁶ Schøning's main work is his *Norges Riiges Historie* (History of Norway). The first volume was published in 1771, the third and last posthumously by Suhm in 1781. This volume also contains an obituary written by his bereaved friend. The entire work is built on the preliminary studies he conducted during his stay in Trondheim.

In his introduction to the first volume of *Norges Riiges Historie*, Schøning rather self-confidently presents his work as the first proper history of Norway, dismissing all earlier books as mere 'store-rooms' of historical material, and criticising their authors for not separating historical truth from mere fables.⁷ Schøning wants to get to the facts. His own historical presentation is above all fashioned by a detailed examination of sources. He also builds heavily on the historical studies that he has already published. It is all the more interesting to note that the work is practically devoid of references to antiquarian work or to the kinds of material remains usually examined by antiquaries—even those investigated by Schøning himself.

Parallel with his work on the history of Norway, Schøning carried out a large-scale topographic project. With funding from the King, he had undertaken extensive antiquarian journeys in Norway. The task was carried out in the years between 1773 and 1775, and a book was published in 1778.⁸ Seen as a whole, the work shows a clear development. The first part, treating the areas closest to Trondheim, has its focus on geography and economy. As Schøning's travels took him further south, his interests seem to have changed, and in the texts concerning Gudbrandsdalen and Hedmark, antiquarian interests are given a more dominant position. Comparing Schøning's different works from the same period, we can conclude that he regarded history and antiquarianism as separate disciplines. Despite the fact that he was active on both fields practically simultaneously, there is very little interaction between them in his works. He does not draw on the results from one field when working in the other.

To other Norwegian scholars, Schøning became a great and frequently cited authority. During the latter decades of the eighteenth century, a number of topographic texts concerning Norway were published, frequently treating antiquar-



Drawing of the cathedral of Trondheim as Schøning saw it. The large western front is missing, and parts of the nave are partly in ruins. Gerhard Schøning, *Beskrivelse over Domkirken i Trondheim* (1762).

ian and historical topics as well as matters of geography and economy. For the authors of these texts, usually civil servants (clergymen, judges, military officers, etc.) writing about their own district, Schøning's works were important sources of information, and his opinion counted as the final judgment in antiquarian as well as historical questions.⁹

In 1758 the two scholars in Trondheim received company. The new bishop, Johan Ernst Gunnerus, was an ambitious proponent of the sciences, and in 1760 he founded what was later to become the *Royal Norwegian Society of Science and Letters*. Schøning and Suhm were its co-founders. During Schøning's remaining years in Trondheim, the Society served as the most immediate context for his scientific work. Hence, the activities both of the Society and of Gunnerus himself should be examined when looking for the inspiration for Schøning's work on the cathedral.

Antiquarian Affinities

Studies of antiquarianism have been heavily influenced by the work of the Italian historian Arnaldo Momigliano. His thesis is that history and antiquarianism long represented two separate strands of knowledge, two different kinds of interest in the past. While history was chronologically organised and treated political events, antiquarians used systematic structures in their presentations of names, manners and rituals, coins and medals, and so on. Not until the eighteenth century did these two strands converge, thus building the foundation for the modern discipline of history.¹⁰ Momigliano's model has been questioned by Mark Salber Phillips, who argues that the growth of a new reading public with interest in civil life and private concerns also contributed to the changes in traditional historiography. A new competence in what he calls 'sentimental and social readings' changed historiography as much as did the convergence with antiquarianism.¹¹ Other critical perspectives can be found in the volume *Momigliano and Antiquarianism* (2007), edited by Peter N. Miller, but despite these reassessments, there is no denying the influence of Momigliano's original thesis.¹²

Momigliano's model may even be questioned from the perspective of antiquarianism. To understand this tradition of knowledge, it might prove fruitful to place it in another context than the neighbourhood of history, and indirectly, Momigliano does so himself. Taking the French antiquarian Nicolas-Claude Fabri de Peiresc as his example, Momigliano describes a field of composite interests and activities. Among other things, Peiresc studied astronomy, physiology and ancient law. He collected scientific instruments. He kept angora cats and traded kittens for antiquities. He left a large collection of manuscripts, medals, coins, vases and statues when he died in 1637.¹³ Momigliano also mentions that Peiresc and his fellow antiquarians admired Galileo Galilei and probably were inspired by the new methods of natural philosophy. By means of this presentation, Momigliano conjures up a picture of the antiquarians' interests as variegated and motley, as 'chaotic activities' not identifiable with any modern scientific project or scholarly tradition.¹⁴ But the antiquarians' interest in other fields of knowledge, not least those of natural history, might be worthy of more attention than this. After all, the idea that antiquarianism 'really' is a kind of history, or that history is its closest neighbour and the discipline to which antiquarianism naturally 'ought' to relate itself, is a consequence of later developments, not least during the nineteenth century. Following Momigliano's own idea of history and antiquarianism as two separate traditions, it will be relevant to investigate antiquarianism as having oth-

er affinities and being situated in contexts that once were highly meaningful, even if they appear ‘chaotic’ today.

In an article on the development of natural history in the period 1550–1650, William B. Ashworth identifies six strands of knowledge determining the ‘cultural matrix’ of late Renaissance natural history: The hieroglyphic, the antiquarian, the Aesopic, the mythological, the adagial and the emblematic traditions.¹⁵ Of these, the antiquarian tradition made a huge contribution to the modernisation of natural history, according to Ashworth. Fully acknowledging Momiglian ideas, he points out that before the convergence of history and antiquarianism, ‘the antiquarian spirit did have a considerable effect on natural history, because the two fields overlapped considerably. There was, after all, no firm line between the Saxon urn, the stone axhead, the fossilised shark tooth, the unicorn horn, the agate’.¹⁶ Natural historians who were exposed to the antiquarian attitude toward evidence developed new understandings. When artifactual evidence was made a standard for the determination of truth, old humanist traditions became irrelevant.¹⁷ The epistemological basis for this larger field of knowledge, uniting antiquarianism and natural history, may be said to have a common basis in the so-called Aristotelian concept of history, understanding history, or *historia*, as achronic knowledge of singular facts or events.¹⁸ Even if Ashworth is discussing an earlier period, his relocation of the antiquarian tradition is of general value. He makes clear that our present landscape of academic disciplines does not always give the best point of departure for understanding past traditions of knowledge, their workings and their internal relationships.

With these perspectives in mind, we will turn to Schøning’s work. How does he explain his project? What are his ideas on knowledge, its contents as well as the ways to produce it? And, not least, what does Schøning *do*? What kind of practice of knowledge does his book represent? The lack of communication between his historical and antiquarian work pointed out above seems to confirm the Momiglian thesis of the two strands. One important implication of this is that the inspiration for Schøning’s study of the cathedral is not to be found in his historical works, but must be sought elsewhere.

The Pleasure of Humble Topics

Important clues to Schøning’s own understanding of his project are found in his introduction, where he declares that his aim is to please, particularly his compatriots and fellow citizens, but also those ‘who have a taste for books [...] and know

how to judge them'. Many people will nonetheless find his book uninteresting, Schøning remarks. This does not just apply to those lacking in judgment. The book is not written for foreigners. To an Arab, not to say a Chinese, it will be without importance. Others will find the book quite useless due to its insignificant topic. Quickly mustering a defence, Schøning asks—rhetorically—whether it is not the case

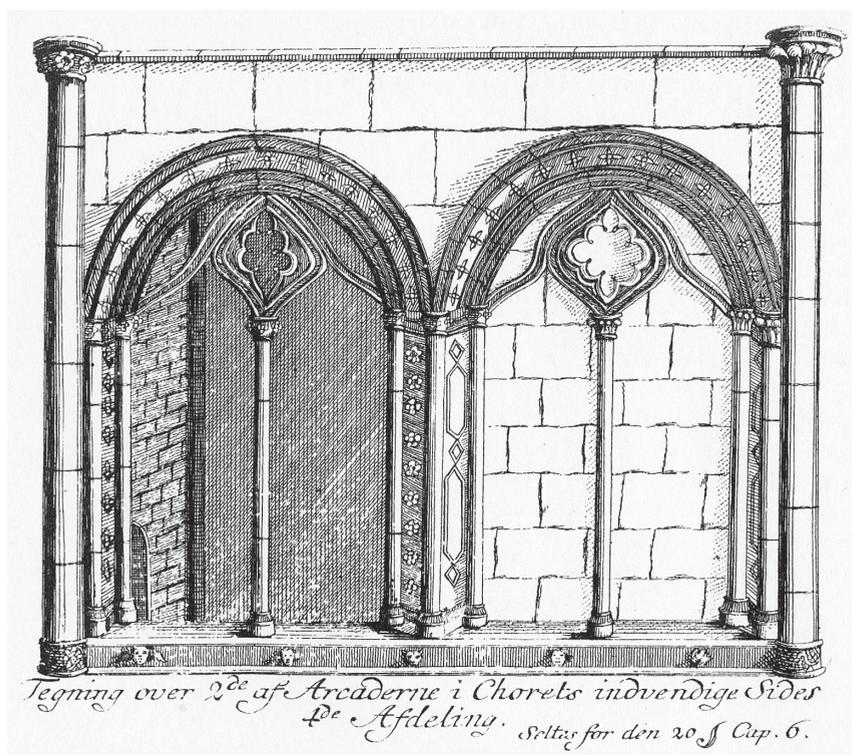
that many books have been, and still are being, written about things that at first glance, and to an unskilled eye in particular, must be regarded as most insignificant, about flies, gnats, fleas, insects, mites etc.: which still are read with pleasure, when they are well written, and are not regarded as useless except by persons who either have read just one book, or are without taste and knowledge of studies and the sciences.¹⁹

This is a defence of trifles. Schøning's argument is that knowledge of even the most humble topics can be useful and pleasurable to those who can rightly judge it, and if the books are 'well written'. In this context, the flies, gnats and so on serve as examples of the utmost trivialities. However, comparing a cathedral, albeit in ruins, to a gnat might seem a bit far-fetched, even if the aim is to create a dramatic effect. So why this preoccupation with insects? The gnats are not alone. A whole range of insect species is mentioned. Schøning's argument does not just concern the triviality of small and inconspicuous animals; in fact he refers to an entire field of knowledge: that of natural history. This field was far from unknown to Schøning.

Gunnerus had originally planned his society in Trondheim 'for the beautiful arts'. The historian of ideas Brita Brenna points out that it is difficult to decide what Gunnerus meant by this designation.²⁰ When the society was established in 1760, it was called a 'learned society', and when it received royal sanction in 1767, it was as a 'scientific' society.²¹ In actual practice, natural history was given a dominant position in its work not least due to Gunnerus's own activities. Gunnerus built up an extensive collection of natural objects, and in doing so, he also developed a network of collectors. Soon after his appointment as bishop, he issued a letter to the clergy of the diocese. What was highly original in this was that in addition to expressing his theological philosophy, the new bishop also made clear his views on natural history and the importance of cultivating such knowledge. Gunnerus strongly encouraged the clergy to produce learned papers and to collect and prepare naturalia and send them to the bishop's collection, making it quite clear that this would be the way to earn promotions.²²

Eagerly responding to the bishop's demand, the clergymen did their best. Some sent barrels of butter; others sent cloud berries, smoked salmon or oysters—could a bishop want anything better? Gunnerus had to explain more precisely what he wanted and gave detailed descriptions of how to collect and prepare naturalia.²³ Thanks to his directions, local clergy became competent collectors and naturalists. They were taught the set of practices required to turn local flora and fauna into facts of natural history. 'Following orders, I send 12 stuffed birds packed in a half-barrel, small sticks are tied to their necks with numbers written on', wrote Minister Augustinus Buschmann from Nesna.²⁴ The birds had been transformed into scientific objects according to prescribed methods.

Schøning did not work with natural history himself, that is, not with stuffed birds, plants or other natural objects. Nonetheless, as a co-founder of the Society and as Gunnerus's close friend, he was well acquainted with the field and with the practices and methods that had become required to produce natural-historical



Two archades from the choir of Trondheim cathedral. Gerhard Schøning, *Beskrivelse over Dom-Kirken i Trondheim* (1762).

knowledge in the eighteenth century. It is to this kind of knowledge, and these ways of producing it, that he refers in his introduction.

The historian of science Lorraine Daston has described how the new naturalists of the seventeenth century quickly became the target of ridicule, especially due to the disproportion between their objects of study and the time, resources and passion involved. The knowledge was deemed useless, and the social consequences grave:

Too much attention paid to the wrong objects spoiled one for polite society as well as for the sober duties imposed by family, church, and state. There was a pedantry of things as well as words, and the naturalists passionate for microscopes or insects bored their interlocutors by speaking of nothing else.²⁵

Again insects, due to their size and—apparently—utter insignificance, supplied the ultimate case. But there was also another side to this. Daston points out that the naturalists thus accused of wasting energy and emotions hastened to defend their position. By the eighteenth century this defence represented a tradition of its own, not least building on connections to natural theology. The naturalists' concern that the attention they lavished on nature could border on idolatry had its answer:

Throughout the eighteenth century, natural theology—the worship of God through the study of his works—supplied the motivation and rationale for an expenditure of attention that contemporaries perceived as uncomfortably close to religious reverence. Entomologists were particularly fervent in their declarations that divine providence could be discerned in the design of a fly's wing or the industry of a beehive—in part to defend themselves against charges of triviality, but also in part to redeem even the most lowly objects as repositories of divine artistry and benevolence.²⁶

Entomology thus became the paradigmatic case for justification of the new natural philosophy. Even if Schøning's line of argument has no theological references, the logic is similar. The naturalists' defence of their pursuits supplies him with relevant and highly applicable rhetorical resources. Like the study of insects, the detailed and resource-consuming study of a ruined edifice is capable of producing insight into far larger and much more important matters, perhaps even more so than the study of conspicuous things. The work is thus not motivated by selfishness or unsuitable interests in the worthless or vain. Quite to the contrary, the utterly demanding study of humble things (gnats, ruins, etc.) conveys knowledge that is deeply useful, not just to those engaged in it, but also more generally. In

Schøning's case, this knowledge is not about God the artisan, but about national grandeur and former splendour.

Schøning then goes on to ask, again rhetorically, whether or not many will deem his work unnecessary, and answers that a number of people most certainly will. But in 'the present State of the World', so much more is required than that which is merely necessary:

A Finn [i.e. Laplander, Sàmi], a Greenlander, a Hottentot, lives in miserable tents and huts; Once people lived off the bark of the trees, or roots, and lived in caves, like foxes: Why do we not do the same? Could not our kings, like those of the ancestors, live in cottages with an open hearth and an opening in the roof, warming themselves by the fire on its floor? Could not we, like the old Brits or the ancient Germans, go about naked or clad with a tiny coat of fur?²⁷

The answers, Schøning says, he will leave to those who ask such questions. For even if the Sàmi or the Greenlander might live in their own way, without 'caring for either *Logic*, *Metaphysics*, *Mathematics* or *Physics*', who would conclude from this 'that we too can live without them?'²⁸ The sciences (*Videnskaberne*) are necessary for our kind of life. And even if Schøning concedes that Sàmis and others might live well in their own ways, his argument clearly spells out that our ways are not merely different, but also far better. Our food, our houses and our clothing are better, and they are accompanied by our—useful—sciences.

In this way of arguing for the utility of his own work, Schøning does not place it within the antiquarian tradition in particular. In the introduction, he does not refer to other works of the same kind. Yet neither does he present his own work as something conspicuously new. Nine years later, in the introduction to the first volume of his history of Norway, Schøning loudly, almost boastfully, declared the work to be the first proper history of Norway. As mentioned, he denounced all earlier works on the topic as 'mere store-rooms, at best supplying material for real history like his own.'²⁹ By this time, Schøning was a well-established scholar of great fame. However, the way he situates his project in the earlier case may not be due to youthful modesty alone. His line of argument places the work on the cathedral safely within the more extensive field of the 'Sciences', including '*Logic*, *Metaphysics*, *Mathematics* or *Physics*', as well as the study of insects—and antiquities. Antiquarian work is not singled out as something special, nor his way of carrying it out as something new, but becomes part of the knowledge that is both characteristic of advanced societies and necessary to them.

Notes on Method

Apart from its usefulness in 'our' societies, what creates the field of the Sciences and makes it coherent is above all method, which Schøning also treats in the introduction. He argues that those who will appreciate his book above all are those able to recognise the amount of work needed to produce it, in other words, those who know the methods involved. For not everyone will understand 'how carefully one must collect and seek, if anything worthy is to be gained and be as complete as possible, how carefully one has to watch, not to be deceived or to deceive others, and finally [not everyone] will understand what pains, patience and use of time all this must needs cost'.³⁰

These are the ideals to which Schøning aspires, and if they have been achieved in his work, even if only in part, he declares that he will consider his time well spent. Schøning's description and evaluation of the work correspond well to what Daston has called 'practice of heroic observation'. More than any professional status, this is what distinguished the new naturalists, and was understood as a combination of talent, discipline and method, she maintains. Observation was much more than merely seeing; it was defined as a kind of mental as well as visual dissection.³¹ In order to be communicated, observations had to be turned into descriptions, which meant rendering the dissected object into language. In this process, something happened: observations 'grew'. The texts, with all their details, became alarmingly lengthy. Moreover, their texture mirrored the structure of the observations, just as much as the objects observed. Each object was shattered into a mosaic of details where even 'the tiniest insect organ loomed monstrously large'. The parts overwhelmed the whole; the small became larger than the great.³²

Schøning comments on these problems. Some might think the book should have been shorter, he says, and that would have saved him cost and labour. But he does not agree to the objections, and says that he cannot think of anything that might have been excluded if the text should be 'as complete as it in its kind ought to be'. The question concerns more than the size or price of the book; it is also a matter of method. It has cost him great trouble to hone the text down to be as *short* as it is, Schøning says. And if he

had thrown the one about the other, and written about everything that occurred to me, without drawing out that which was important, and really concerned my project, and that which might be worth reading, and without putting everything in its place and in due order and with due reflection, then the book would have been more than twice as large and cost me half the pains.³³

With this short exposé of what he has *not* done, Schøning presents the ideals that have dictated his work and shaped his text. His main aim is to achieve ‘completeness’. In order to reach this, certain methods have to be adhered to. Firstly, one has to make very strict and disciplined choices. The book is not long because Schøning has written down everything that occurs to him. Its completeness is of another kind. He has selected only that which concerns the project, and just as systematically suppressed and excluded all that does not. Secondly, the relevant material has to be presented in the right order, which means that it has to be put quite literally ‘in its place’. The text must correctly replicate the spatiality inherent in the observations. Thirdly, reflection must be proper (*behørig*), which seems to mean well-considered, not rash and impulsive. Thus Schøning can conclude that the extensive character of his book is not coincidental, but rather the necessary outcome of his choice to follow the ideals of a certain kind of scholarship.

In an article entitled ‘Description by Omission’, Daston argues that the idea of the scientific fact underwent a profound change between 1660 and 1730, ‘from a singular and striking event that could be replicated only with great difficulty, if at all, to a large and uniform class of events that could be produced at will’.³⁴ This change was constitutive to the emergence of the new natural sciences. However, what makes Daston’s argument interesting is not just that she points out that even scientific factuality has a history, but also that the new kind of fact, even if heavily stamped by empiricism, was created by the development of conventions for systematic omission. The regularities of the eighteenth century thus stemmed from the strategies of the systematic omission of irregularities, that is, of all local factors that could not be replicated. Schøning had no ambition to generalise his findings in Trondheim. It was the uniqueness of the cathedral that interested him, this ‘most costly, magnificent and famous’ building that had ever existed in the North.³⁵ Nevertheless, his objective is not to lavish praise on it, but to ‘go through and describe each of its parts in turn’.³⁶ He will ‘dissect’ the building, and systematically describe each part exactly as it occurs, in its correct spatial sequence. Through the use of this method a transformation takes place. The minister Buschmann had transformed birds into objects of natural history by stuffing them and attaching numbered sticks to their necks. Schøning, for his own part, makes facts from stones.

Dissection

Walking is the first step of the method. Schøning’s declared intention of ‘going through’ the building must be understood quite literally. This implies that the

dissection is structured by a movement through the church. Attention to this continual movement is maintained by regular insertions, such as ‘coming from the chapter-house we now arrive at the southern nave’, or ‘from here one ascends nineteen steps of stairs to [...]’.³⁷ This means that the physical structure of the church is systematically transformed into the physical experiences of a human body: one walks, steps, ascends, descends, arrives, meets and leaves. It thus becomes very clear that behind the observations there is an observer. Lorraine Daston and Peter Galison argue that the scientific observation so highly cherished by Enlightenment naturalists was more than a mere methodology; they also call it a genuine ‘technology of the self’.³⁸ Following Michel Foucault, they describe this as ‘practices of the mind and body (most often the two in tandem) that mould and maintain a certain kind of self’.³⁹ They point out that the observational techniques required keen senses, concentrated attention, patience and exactitude, and as examples they mention ‘the frozen pose of the field naturalist, the delicate manipulations of the microscopist, the observatory vigils of the astronomer, the lab-note-book jottings of the chemist’.⁴⁰ Schøning’s disciplined walk may easily be added to the list.

Words describing the visual experience itself, however, are very scarcely used during this exercise. Instead Schøning tells us what *is* to be found at the various locations in the church. Despite the subjectivity inherent in the method of walking from post to post, continuously taking new standpoints, the observations themselves are presented without a correspondingly subjective perspective. The elements of architecture do not appear as seen *from* somewhere, or *by* somebody, they just are there, on the spot reached by the walker. The physical presence of the observer—be it Schøning himself or his companion—is vital to rendering the structure of the church comprehensible, to transforming it from mere material to sensory data. But once there, the observer steps back for the observation itself.

Through the titles of the book’s chapters, Schøning presents the building itself as a kind of organism. While the first chapter is entitled ‘On the Origins, Growth and Bloom’ of the Cathedral, the last chapter deals with its ‘Waning’. The biological metaphors thus present the building as an organism developing from sprout to bloom and finally to decay. During the walk, this organic dimension is structured even further. The tour starts in the chapter-house, which Schøning considers to be the most ancient part of the structure. It progresses to the northern nave, presented as second in age, continues to the equally old southern nave, culminates in the highly ornate choir and octagon, which represent the ‘bloom’ of the Cathedral, and ends in the partly ruined western nave and the remains of its monumental front. Schøning does not actually say that he reckons these last parts

the youngest, but this conclusion emerges from the logic of the walk and from his explicit interpretation of the first parts as the oldest.

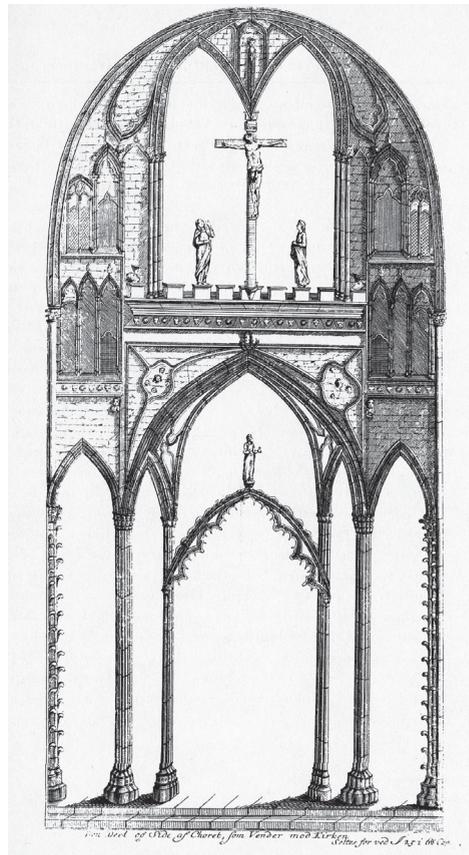
The structure gained by walking is not just a means of grasping the building architecturally and spatially, but also temporally. On the one hand, the building in its entirety is understood as an organism with a life span now past, and on the other, each part of the church represents a phase in an organic life cycle retraced by the observer who moves physically from the youth of the church to its decay and old age. In this way, Schøning demonstrates a lively interest in the temporal dimension of history. He is not merely a chronicler of names, dates, and deeds, but is also interested in change and development evolving within temporal frames.

In his work on conceptual history, Reinhart Koselleck has discussed the new understanding of history emerging in what he calls the *Sattel-Zeit*, that is, the period from approximately 1750 to 1850 during which a number of historical and political concepts changed their meanings. Central to Koselleck's argument is that a modern awareness of history was based on the gradual separation of biological time from a specific historical temporality. He points out that 'up until the eighteenth century, the course and calculation of historical events was underwritten by two natural categories of time: the cycle of stars and planets, and the natural succession of rulers and dynasties'. Slowly, 'the naturalistic basis vanished and progress became the prime category in which a transnatural, historically immanent definition of time first found expression'.⁴¹ Schøning's description of the church as a decaying organism may illustrate the older notions of time, identified with natural processes and categories and frequently expressed in ideas on for example the ageing of the world (*mundus senescens*) and its successive 'ages'—from the golden age of the gods to the deplorable present.⁴² Nonetheless, his efforts to relate the different parts of the church to different and specific periods of time may also be seen as an attempt to conceptualise time and temporal processes in less organic and more historic terms.

Johann Joachim Winckelmann, generally acknowledged as the father of modern art history, published his work *Geschichte der Kunst des Alterthums* (History of the Art of Antiquity) in 1764, two years after Schøning's book on the Cathedral. Here he presented a model of Greek art developing through its archaic, classical and Hellenistic periods. What was new in Winckelmann's model was not so much the ideas about different phases, which correspond well to the more traditional ideas of growth, bloom and decay, but rather his conception of how these phases correlated systematically with the development of Greek society in general: The great art of the classical period could only be produced by the free citizens of a republic. This attempt at uniting an organic and a historical understanding of

artistic development left Winckelmann with a paradox, thoroughly analysed by art historian Alex Potts: On the one hand, classical art was understood as the result of a historically specific and thus non-reproducible situation, on the other hand it remained a timeless ideal to be eternally emulated.⁴³ Methodologically, what enabled Winckelmann to unite the organic with the historical understanding was a notion of *style*. It was the differences in style that separated the art of the various periods in the 'life cycle' of Greek art, while at the same time, the actual developments in Greek society found expression through them.

Schøning's attempt to historicise the cathedral in Trondheim can be seen as a project of the same kind as Winckelmann's, a product of the same transitional period described by Koselleck. But Schøning has no perspective that helps him hold together the ideas of organic and historical temporality. Even if he is very much aware of the differences in the design of the sculpture and decoration in the



Interior of the choir of Trondheim cathedral. Gerhard Schøning, *Beskrivelse over Dom-Kirken i Trondheim* (1762).

various parts of the church, he does not elaborate on style and draws no distinction between the Gothic and the Romanesque elements. Schøning declares that the entire Cathedral is a 'Gotick building, though one of the most regular'.⁴⁴ The word *Gothic* does not indicate style in a more specific way. It seems to be used traditionally, meaning barbaric and irregular, in contrast to classical and harmonious, and as a generic term for all medieval structures.⁴⁵ Instead, differences are related to the 'natural succession of rulers and dynasties', that is, to the shifting kings, princes and bishops known from documents and history writings to have contributed to the improvement and embellishment of the cathedral.⁴⁶ The crudest parts of the building are identified as the most ancient, but above all the variation is explained with reference to the respective rulers' wealth and power. The most elaborate high Gothic parts (the choir and octagon) are thus seen as being built during the reign of the most powerful bishop.

Despite his interest in the age of the church, Schøning does not develop a more truly historical perspective on it. Despite his very thorough knowledge of them, he does not relate the differences in decoration and building styles to historical processes of development and change.

From Mortar to Grammar

The results of the dissection are presented in ways mirroring the structure established through the process of observation. A randomly selected passage from the description of the northern nave will serve as a starting point:

On the northern side, the ambulatory starts with two steps, on which one enters it from the stairs of the tower, and is two feet wide, but 45 long. It has three *ARCADES*, one very tall in the middle, 16 feet wide, and two smaller ones on the sides, which are both 8 feet wide. The same have each had four pillars, apart from which there also have been two on each pillar between the *arcades*, and at each corner of the ambulatory two, which altogether makes 20; and their heads have been decorated partly by flower-works, partly by curled leaves, as also have the arches of the *arcades* with a list of the pyramidically shaped excisions, among numerous others. Over the *archivolt* of the largest *arcade* there has been, as if lying on the outside of the wall, a wide edge, which seems to bend inwards, and has, as can be seen on the outside, without doubt in the same way, where it ends, had two heads or postures.⁴⁷

With 142 pages of this kind of text, Schøning's description is very dense, and his presentation rich in detail. One consequence is, as Daston has pointed out,

that the attempt to communicate the visual dissection of the object generates texts that not only are very long, but also broken and in some way fragmented. Transformed into text, the normally hierarchical relationship between small and large, few and numerous, part and whole, becomes one of juxtaposition, with the artificial balance of apparent uniformity as its outcome. Describing an arch of sixteen feet does not take twice as many words as describing one of eight, and a tall central arch rises no higher above the lines of the page than the smaller lateral ones. Also, the (destroyed) ornamented moulding inside the church can instantly be compared to the (preserved) exterior moulding without taking the time to go out to look, while twenty identical pillars do not have to be mentioned twenty (identical) times.

When the structure of the cathedral is presented textually, it is transformed and restructured, and the greater the ambition for detail and exactitude, the more profound is the transformation. The more detailed, the more distinct is the juxtaposition of large and small, high and low, middle and lateral, the more blurred becomes the rendering of the actual physical structure of the church. Transformed into facts, the stones of the building lose their specific weight, and the spatial relationship between actual blocks is substituted by the relationship between words printed on a page. What binds the structure together is no longer mortar, but grammar.

For this change to take place, the observations—that is, the sensorial impressions—have been turned into words. Terms, concepts and definitions all represent the carvings of the dissecting knife. Arches and archivolt, pillars, columns and cornices are cut out from the mass of stones and mortar and made separately discernable, clearly distinguished facts. Some of the words in use are Latinised terms from the vocabulary of classical architecture. Schøning may have known them from international books of plates.⁴⁸ A number of these terms are explained in the text or in notes. The reader is told that a curve is what ‘we later will call an archivolt’, and that base means podium.⁴⁹ In other cases, Schøning had to invent terms. Still in the northern nave of the church, he says that its archivolt is ‘decorated with a frieze of the carving that we will call the *pyramidical*’ (sic). The italicised word is followed by a note: ‘Because it consists entirely of small pyramids or square knots, on each side of which is normally carved a triangle, or the smaller pyramids are hollowed’.⁵⁰ The composite pillars of the choir call for complicated descriptions and the development of specialised concepts. They ‘have all been of white marble, and their base an *elliptic*, and in both ends arched, circle, wherefore we shall call these pillars *elliptic circular*, to separate them from the *cylindrical circular*, of which kind all those are, of which we so far have spoken’.⁵¹

The elaborate octagon represents similar challenges. Between every second large pillar in the octagon is one smaller which is 'six-circled, or as if composed of six half-circular pillars around one circular in the centre'.⁵²

But most problematic of all are the numerous masks and figures adorning the building. Schøning calls them 'heads or postures' (*postyrer*), as in the following passage concerning two figures situated over a window in the northern nave: 'two half postures of human beings, as if stretching themselves over the wall, with their faces meeting, keeping one arm underneath themselves as if for support, and the other over their heads'.⁵³ In the corner of a small chapel in the same nave, he notices 'two postures, as sitting humans from behind, but with a deformed and 'unproportioned' head, which they keep between their legs'.⁵⁴ In the choir, one figure is 'holding a round ball between his raised hands on the one side, as if he were planning to throw it away; but on the other, another is seen holding what looks like a large leg in its hand, into which it bites'.⁵⁵ The figures seem to bother Schøning. Even if he tries to describe them, he offers no definitions and does not explain his terms. He seems to be doubtful about what they represent. In addition, his frequent use of the expressions 'like' and 'as if' may indicate that he does not approve of the figures and wants to distance himself from them. They are 'deformed' and 'unproportioned', grotesque, and in some cases slightly indecent. They are what Schøning himself could have called 'gotick': irregular and disharmonious, wholly non-classical.

The definitions in the text work two ways. They explain the part of the church in question, informing the reader what words like *cornice* (*karniss*) or *podium* actually mean, or how the elaborate composite pillars actually look. At the same time, precisely by being defined and explained they make it clear that they themselves are not mere words, but rather tools to be applied in very specific procedures. With their help, most of the building is cut into neatly distinguishable pieces, each with its name and character, and the enormous edifice becomes a large but manageable quantity of elements, parts and units. Once established, the terms and tools can then be employed to create elaborate descriptions:

At last we come to the upper or second part of the outermost wall [of the choir], which at its foremost edge, towards the church on both sides, has two very tall *elliptic*-circular pillars, and their capitals embellished with two rows of flowers. The two windows on the south-eastern side have all together three *cylindrical*-circular pillars, with double flower-works above them, and their arches one row of the hollowed pyramidal carving between two rounded edges; above which, as well as up under the vaults, is another closed arch, with the same decoration and two pillars underneath, whose capitals also are embellished by double hollowed flower-work.⁵⁶

In this way the dissected building can be reassembled, this time not as mere stonework, but as a masterpiece of systematic and well-defined anatomy. Only the 'postures', in all their meaningless irregularity, escape this procedure.

While definitions and nomenclature are vital to Schøning's dissection of the building, omissions form an important but less visible line of operation. Ekroll points out that Schøning's description excludes all elements that are not medieval.⁵⁷ Moreover, the structure of the book as such may be seen as the result of a process of omission. Even if it does not imply downright exclusion, the choice to apportion as much as the first half of the book to the (medieval) physical remains alone, and reserving everything about altars, donations, Saint Olav's shrine, monuments, funerals, inscriptions and so on for the second, confers a very strict order of presentation. It means that large parts of what traditionally would have been understood as the *historia* of the church are relegated to the latter and secondary section, and that the primary half is virtually purged of all narrative elements.⁵⁸ Its character is purely systematic.

Even if it is mentioned in the second half of the work, the rich legendary material about Saint Olav is reduced to a short history of how the miraculous events succeeding his death led to the development of a sanctuary. The protagonist of this story is neither the saint himself nor the pilgrims who flocked to the shrine, but the political agents of the period: kings, nobles and bishops. Schøning also gives some information about the costly shrine, presented as the church's main source of income. Some other treasures and altars are mentioned as well. But very little is said about the church's role as a pilgrims' destination, that is, about the practices that generated the wealth. This may in part be due to a Protestant dislike of Catholic piety, but it is remarkable that Schøning also excludes narratives that more directly pertain to the physical structure of the building. At one point, describing the chapter-house, he refers to a legend about the miraculous sound of one of the church bells.⁵⁹ In a note on the description of the main tower, he also says that according to an old legend, there was a luminescent carbuncle-stone in the spire, its light visible from far away. But he expresses his doubts, not only about the truth of the story, but also as to whether carbuncles really exist.⁶⁰ And perhaps more importantly, the legendary tradition about a giant (*troll*) being the master builder of the Cathedral is completely omitted.⁶¹ The structure of the so-called well of Saint Olav is meticulously described, but the only thing said about the miracle-working powers of its water is that it 'without doubt has been presented as the place where the body of Saint Olav was first buried, and where a well later sprang up'.⁶² The clear traces of the frequent use of the well are commented on, but nothing more

is said about its religious significance or the reputed effects of the water that could work wonders.

The legendary traditions concerning the saint and his cult, the building of the church and the miraculous well, have been well known and are documented in written sources, as well as in oral folklore. Considering Schøning's very thorough work on the church, it is highly unlikely that they were unknown to him. The omissions are thus the result of a clear choice. Viewed together they make it very clear that the relevant information about the cathedral is to be found in what can be seen, in the concrete, physical remains of the church—not in myths, legends or miracles. Stones can become facts when observed and dissected by words. Tales cannot.

Shapes, Numbers and Epistemic Virtues

By means of words, the stones of the cathedral are hewn out to become facts. But what kind of facts do the words actually produce? Above all, Schøning is concerned with shapes, and with numbers. The terminology he develops in such expressions as 'pyramidal carving' or 'elliptic circular' pillars is first and foremost about forms and shapes. The 'postures', despite the way they draw attention to themselves, have no easily detectable form, and therefore remain a problem. The phrases 'like' and 'as if' make it clear that—contrary to arches, pillars and capitals—they are not facts.

Once the shapes have been defined and given their names, they can be counted. Schøning seems obsessed with numbers. In every section of the book, elements are counted, as shown in this passage from the description of the choir:

The interior wall of the choir also is an octagon, and has, when seen from the outside, three windows in each of its five sides, of which the middle one is higher, while the two others, which are closer to the eastern nave, have only two each, making altogether nineteen. [The arches of the windows reach the cornice, ending] with five ARCADES, the one taller than the next, and the one in the middle tallest of all, supported by 12 very tall and slender pillars, three and three together under each point of the *arcades*, though the edges or sides closest to the eastern nave each have only four *arcades* with nine pillars [...].⁶³

This way of looking at the church presents us with a last connection to the period's new natural philosophy. Schøning conducts his research like any Linnean botanist would. With his definitions and terms, he establishes a taxonomy

of the church, fixing its genera and species, and even in some cases proposing a binomial nomenclature: ‘elliptic circular’, ‘cylindrical circular’. Within this taxonomic framework, he counts the cathedral’s arches, pillars, windows, capitals and so on as if he were counting the petals and stamens of a flower. He describes the shapes of its carvings, profiles and friezes. Using this method, his 142 pages reach a conclusion: the Cathedral of Trondheim has 3361 columns and pillars. It also has 316 windows, 40 sculpted figures and 343 smaller ones (though the original number of figurines must have been almost double this, according to Schøning).

In a modern assessment of Schøning’s work, this conclusion is little more than a curious detail. The result 3361 is not part of what makes Schøning’s study so—apparently—modern, and what has secured its reputation as a still valid scholarly work. Nonetheless, reaching these very precise results must have entailed a tremendous amount of work. It has not only required counting, re-counting and adding up, but is also fundamentally based on the extensive taxonomic work of providing definitions and nomenclature. In order to arrive at these numbers, it is necessary to begin by deciding what is what. Which elements belong to which category, and what *are* the categories? The numbers were no mere trifle to Schøning, but a real and significant result of his work. More than anything, they demonstrate that imposing an understanding of the book as a piece of modern architectural history *avant la lettre*, is an enforcement.

The rigorously systematic character of Schøning’s work makes it clear that antiquarian work in this period was something other than merely the neighbour of history, and something more than just one of two twin traditions converging some decades later. Its affinities to the field of natural history are of vital importance. The connections can be discerned on the practical and methodological level of how to carry out an investigation through attentive observation, ‘dissection’, and the production of a text virtually devoid of narrative elements. But more important to a genuine historicisation of this kind of antiquarian work is the way this methodology on a deeper level reflects a certain set of what Daston and Galison call *epistemic virtues*. This idea is based on Foucault’s notion of technologies of the self, described above. Daston and Galison say that ‘epistemic virtues in science are preached and practiced in order to know the world, not the self’. But ‘as long as knowledge posits a knower, and the knower is seen as a potential help or hindrance to the acquisition of knowledge, the self of the knower will be at epistemological issue’. They conclude that ‘epistemic virtues are virtues properly so-called: they are norms that are internalised and enforced by appeal to ethical values, as well as to pragmatic efficacy in securing knowledge’.⁶⁴ The technologies

of the self, as well as the actual methodology in use, can thus be understood as a means of realising the epistemic virtues held valid and obligatory. This not only implies producing knowledge that is valid, but is just as much about shaping and maintaining a certain kind of scientific self.

In their discussion of objectivity, Daston and Galison show how epistemic virtues, and the accompanying scientific selves, are historical and changing. New epistemic virtues emerge, and even if the older ones do not automatically disappear, they acquire new meanings in the new context. Daston and Galison show how the ideals of objectivity developed during the latter half of the nineteenth century, supplanting those which they call 'truth-to-nature'. The epistemic virtues of truth-to-nature are described by Daston⁶⁵ as being characteristic of natural philosophy and the new natural sciences in the seventeenth and eighteenth centuries, that is, those also shown to be at work in Schøning's investigation. His way of working as well as his way of explaining his project—and of course his results—must therefore be seen not just as being based on the use of certain methods, or even as the results of certain technologies of the self, but more fundamentally as the materialisation of these historically specific virtues. Schøning not only fulfils his aim of showing the ancient glory of his fatherland and its most important cathedral, but also demonstrates his competence in producing knowledge and shaping a scientific self according to valid ethical claims.

Notes

1. Gerhard Schøning, *Beskrivelse over Dom-Kirken i Trondheim 1762*, ed. Øystein Ekroll (Trondheim, 2004), p. 8.
2. Øystein Ekroll, 'Gerhard Schøning og domkirken i Trondheim', in Schøning 2004, p. xxxii. The antiquarian tradition in Norway is discussed in Anne Eriksen, *Topografenes verden: fornminner og fortidsforståelse* (Oslo, 2007). A presentation of antiquarianism in Denmark and Funen in particular is found in *Fynske antikvarer: lærdom, fortid og fortolkninger 1550–1850*, ed. Janus M. Jensen (Odense, 2008).
3. Scandinavian antiquarians working according to this method are for example the Bircherods in Funen (See Birgitte B. Johannsen in Jensen 2008, or the thesis on Vreta monastery, defended by Magnus Borænius under Fabian Törner's presidency at the University of Uppsala in 1724. Modern translation from Latin: *Klostret i Vreta i Östergötland*, ed. K. Bergman (Vreta Kloster, 2003).
4. Schøning worked in close collaboration with his friend Peter Frederik Suhm. Hence, books on the reference list in Suhm's *Om de Nordiske Folks ældste Oprindelse* (1770), prob-

- ably also were available to Schøning, even if we do not now when each book was acquired. One of these is Lodovico Antonio Muratori's *Novus Thesaurus Veterum Inscriptionum* (1739–1742).
5. Françoise Choay, *L'Allégorie du patrimoine* (Paris, 1999), p. 66 ff.
 6. E.g. Gerhard Schøning, *Forsøg til de nordiske Landes, særdeles Norges, gamle Geographie* (Copenhagen, 1759); Peter Frederik Suhm & Gerhard Schøning, *Forsøg til Forbedringer i den gamle Danske og Norske Historie* (Copenhagen, 1757).
 7. Gerhard Schøning, *Norges Riiges Historie*, introduction to vol. 1 (Sorø, 1771). See also Anne Eriksen, 'Det sanne, det gode og det skjønne: noen trekk ved Gerhard Schønings historiesyn', *Historisk Tidsskrift*, 2–3 (2002), p. 297–317.
 8. Gerhard Schøning, *Reise som giennem en Deel af Norge i de Aar 1773, 1774, 1775 paa Hans Majestets Kongens Bekostning er gjort og beskrevet af Gerhard Schøning* (Copenhagen, 1778); 'Gerhard Schønings Rejse til Stikkelstad', *Topographisk Journal for Norge*, no. 12 (1795), p. 63–123.
 9. Eriksen 2007.
 10. Arnaldo Momigliano, *The Classical Foundations of Modern Historiography* (Berkeley, CA, 1990). For the influence of this thesis see e.g. John Greville Agard Pocock, *Barbarism and Religion*, vol. 1–2 (Cambridge, 1999); Rosemary Sweet, *Antiquaries: The Discovery of the Past in Eighteenth-Century Britain* (London, 2004).
 11. Mark Salber Phillips, 'Reconsiderations on History and Antiquarianism: Arnaldo Momigliano and the Historiography of Eighteenth-Century Britain', *Journal of the History of Ideas*, vol. 57, no. 2 (1996), p. 310.
 12. *Momigliano and Antiquarianism*, ed. Peter N. Miller (Toronto, 2007).
 13. Momigliano 1990, p. 54 ff.
 14. Momigliano 1990, p. 55.
 15. William B. Ashworth, 'Natural History and the Emblematic World View', in *The Scientific Revolution*, ed. M. Hellyer (Blackwell, Malden, 2003), p. 136.
 16. Ashworth 2003, p. 152.
 17. Ashworth 2003, p. 153.
 18. Gianna Pomata & Nancy G. Siraisi, *Historia: Empiricism and Erudition in Early Modern Europe* (Cambridge, MA, 2005); Per Landgren, *Det aristoteliska historiebegreppet: historieteori i renässansens Europa och Sverige* (Göteborg, 2008).
 19. Schøning 1762, unpag. (This and all subsequent translations are by the author): 'om ikke mange Skriver ere skrevne og endnu skrives om Ting, som ved første Øiekast, i sær i ukyndiges Øine, maae ansees for meget ringe, om Fluer, Myg, Lopper, *Insecter*, Mider &c: som dog læses med fornøielse, naar de ere vel skrevne, og som ikke ansees for unøttige uden af Folk, som enten have kun læst een Bog, eller have ingen Smag og Indsigt i Studeringer og Videnskaber'.
 20. Brita Brenna et al., *Aemula Lauri: The Royal Norwegian Society of Sciences and Letters, 1706–2010* (Sagamore Beach, MA, 2009), p. 15–16.
 21. Brenna et al. 2009, p. 18.

22. Brenna et al. 2009, p. 11.
23. Brenna et al. 2009, p. 51–53.
24. After Brenna et al. 2009, p. 46–47.
25. Lorraine Daston, 'Attention and the Values of Nature in the Enlightenment', in Lorraine Daston & Fernando Vidal, *The Moral Authority of Nature* (Chicago, IL, 2004), p. 104.
26. Daston 2004, p. 105.
27. Schøning 1762, unpag. introduction: 'En Fin, en Grønlander, en Hottentot leve i elendige Gammer, Telte og Hytter; der har været den Tiid, da Folk har nærret sig med Olden paa Trærne eller Rødder, og boet i Huler, som Ræve: hvorfor giøre vi ei det samme? Kunde ikke vore Konger; ligesom deres Forfædre fordum have giort, boe i Røgstuer med et Hull paa Taget, og varme sig ved en Stok-Ild paa Gulvet i samme? Kunde ikke vi, som de gamle *Briter* eller som de gamle Tydske, enten gaae nøgne eller med en liden Skind-Pels paa?'
28. Schøning 1762, unpag. introduction, italics original.
29. Gerhard Schøning, *Norges Riiges Historie*, vol. I (Copenhagen, 1771).
30. Schøning 1762, unpag. introduction.
31. Daston 2004, p. 109 f.
32. Daston 2004, p. 112.
33. Schøning 1762, unpag. introduction: 'havde kun kastet det eene om det andet, og anført alt hvad som kom mig for, uden deraf at udtrække det Betydelige, det som egentlig angik mit Forehavende, og det som nogenledes kunde være værdt at læse, og uden at bringe hvert til sit Stæd og i den behørige Orden med med behørig Eftertanke, havde Skrivtet kunde blevet meer end dobbelt saa stort, og kostet mig dobbelt mindre Møie'.
34. Lorraine Daston, 'Description by omission: Nature Enlightened and Obscured', *Regimes of Description: In the Archive of the Eighteenth Century*, ed. J. Bender & M. Marrinan (Stanford, CA, 2005), p. 13.
35. Schøning 1762, p. 1.
36. Schøning 1762, p. 27.
37. Schøning 1762, p. 42, 54.
38. Lorraine Daston & Peter Galison, *Objectivity* (New York, 2007), p. 234.
39. Daston & Galison 2007, p. 198.
40. Daston & Galison 2007, p. 234.
41. Reinhardt Koselleck, *Futures Past: On the Semantics of Historical Time* (Cambridge, MA, 1985), p. 33.
42. Cf. Tore Frängsmyr, *Geologi och skapelsestro: föreställningar om jordens historia från Hiärne till Bergman* (Stockholm, 1969).
43. Alex Potts, *Flesh and the Ideal: Winckelmann and the Origins of Art History* (New Haven, CT, 1994).
44. Schøning 1762, p. 28.
45. Choay 1999, p. 56 f.

46. Koselleck 1985, and above.
47. Schøning 1762, p. 55, italics and bold in original: 'Paa Nordre Side begynder Omgangen med tvende Trin, paa hvilke man fra Taarn-Trappen stiger op i den, og er tvende Fod bred, men 45 lang. Den har trede ARCADER, en meget høi i midten, 16 Fod bred, og tvende mindre paa begge Sider af den, som ere i Bredden hver 8 Fod. Samme har hver for sig havt fire Pillarer, foruden hvilke der endnu paa hver Pille mellem *Arcaderne* have været tvende, og ved hvert Hjørne af Omgangen og tvende, hvilket bliver tilhobe 20; og har deres Hoveder været stafferede deels med Blomster-Verk, deels med krusede Blade, ligesom og *Arcadernes* Buer med en Liste af den piramidiske Udhugning, mellem adskillige andre. Oven omkring den største *Arcades Archivolte*, har gaaet, ligesom uden den paa Muren, en bred Kant, der ligesom bøier sig ind ad, og har, som uden til sees, uden Tvil paa samme Maade, hvor den endes, havt 2de Hoveder eller Postyrer'.
48. Ekroll 2004, p. xxviii.
49. Schøning 1762, p. 47, and note 10.
50. Schøning 1762, p. 48, note 12.
51. Schøning 1762, p. 75, italics in original.
52. Schøning 1762, p. 91.
53. Schøning 1762, p. 49.
54. Schøning 1762, p. 57.
55. Schøning 1762, p. 77.
56. Schøning 1762, p. 88, italics and bold in original: 'Nu komme vi endelig til den yttre Muurs øverste eller anden Afdeling, som i de foreste Kanter mod Kirken har paa begge sider tvende meget høie elliptisk-runde Pillarer, og deres Hoveder zirede med to Rader Blomster. De tvende Vinduer paa Sød-Østre Side har tilsammen Tre *cylindrisk*-runde Pillarer, med dobbelt Blomster-Verk over, og deres Buer en Rand af den hule piramidiske Udhugning mellem to runde Lister; over hvilke, saa vel som op under Hvelvningen, gaaer en anden lukt bue, med samme Staffering og Tvende Pillarer under, hvis Hoveder og ere zirede med dobbelt hult Blomster-Arbeide'.
57. Ekroll 2004, p. xxx.
58. Cf. Gianna Pomata & Nancy Siraisi, 'Introduction', in Pomata & Siraisi 2005, p. 4 f.
59. Schøning 1762, p. 35.
60. Schøning 1762, p. 68, note 1.
61. Knut Aukrust, 'Troll, kirker og St. Olav', in *Nytt lys på middelalderen*, ed. Jørgen Haavardsholm (Oslo, 1997).
62. Schøning 1762, p. 83 f.
63. Schøning 1762, p. 81, italics and bold in original: 'Den indere Choret's Muur er ogsaa en Ortekant, og har, saa vidt deraf udvendig kan sees, i hver af de fem Kanter tre vinduer, hvoraf det i Midten er det høieste, men i de tvende andre, som ere det Østre Kors nærmest, og vende derimod, kun tvende i hver, tilsammen Nitten. Over Vinduerne i hver Kant gaaer fra begge Sider af dem en Afsats eller Liste op i en spids til det øverste af Muren under

Carntisen af Taget, og gjør en spidsig Fronton, med fem ARCADER under, den ene høiere end den anden, og den i Midten høiest, understøttet af 12 meget høie og smale Pillarer, tre og tre sammen under hver Spids af *Arcaderne*: dog har de tvende Kanter eller Sider, som ere det Østre Kors nærmest, kun hver for sig fire *Arcader* med Ni Pillarer [...].

64. Daston & Galison 2007, p. 39 ff.

65. Above and e.g. Daston 2004.

Summary:

Making Facts from Stones: Gerhard Schøning and the Cathedral of Trondheim

In 1762, the historian and antiquary Gerhard Schøning published a large work on the Cathedral of Trondheim. Originally the shrine of Norway's patron saint and christening king, Saint Olav, the building had suffered decay since the Reformation. In the eighteenth century, large parts of the medieval structure lay in ruins. Schøning's aim was to reveal the ancient glory of the Cathedral—and, implicitly, of the nation. His meticulous work gained him a still lasting scholarly reputation. While antiquarian studies normally were occupied with documents, monuments, inscriptions and other remains that could give genealogical information about princes and nobility, Schøning's work is distinguished by the attention given to the physical structure of the building. Even if Schøning earned great renown as a historian, the article argues that there are important affinities between his ways of producing knowledge about the cathedral and the new natural history. By the means of systematic observation and careful description, Schøning 'dissects' the different parts of the building, making facts from stones.

Keywords: Gerhard Schøning, the cathedral of Trondheim, eighteenth century antiquarianism, antiquarianism and natural history, epistemic virtue.