

KENNETH J. KNOESPEL

# Sweden and the Transformation of Northern Historiography

---

**ABSTRACT** Viewed from the Mediterranean South, the North was associated from the earliest ages with a darkness linked with strange languages, distance, alien cultural behavior, and just plain bad weather. This darkness—or the fog and mist if we use the early description of Marco Polo—was not ignored but itself became a screen upon which the South could project an ever-growing list of fantasies. While Swedish figures such as Olof Rudbeck made elaborate national projections about the role of the North in civilization, Carl von Linné and others succeeded in translating fantasies of political empire into kingdoms of knowledge. Drawing on Swedish historiography and the history of technology, this essay poses questions about the ways Sweden's often invisible presence continues to shape the formulation of knowledge.

---

**KEYWORDS** Sweden, Olof Rudbeck, Linnæus, northern historiography, Karlskrona, networks, digital technology

---

Viewed from the Mediterranean South, the North, from the earliest ages was a place of darkness associated with strange languages, distance, alien cultural behavior, and just plain bad weather.

Still further north, and a long way beyond that kingdom of which I have spoken, there is a region which bears the name of DARKNESS, because neither sun nor moon nor stars appear, but it is always as dark as with us in the twilight. The people have no king of their own, nor are they subject to any foreigner, and live like beasts. (Polo 1993: 484.)

The fog and mist—or the darkness if we use the early description of Marco Polo—were not ignored but became themselves a screen upon which the South could project an ever-growing list of fantasies.<sup>1</sup> The *Carta marina*, printed in Venice in 1539 by Olaus Magnus, quite literally put Sweden on the map and contrary to contemporary fascination with strange creatures that animate the map, it provided the first visual survey of Sweden's natural wealth that Magnus sought to use to urge the Pope to launch a counter-reformation crusade with the objective of forcing Sweden to once again become a Catholic kingdom. The 1626 map of Sweden published by Anders Bure (1571–1646), secretary to Gustavus Adolphus and chief cartographer of Sweden during the Thirty Years War, situates Sweden more exactly.

By the early eighteenth century, Swedish historiography became in-



Fig. 1. Anders Bure, *Orbis Arctoi Nova et Accurata Delineatio* (1626).<sup>2</sup>

creasingly chauvinistic and sought to develop histories that were more independent (Lindroth 1967: 158–192; Bodin 2000; Jangfeldt 1998; Klinge 1994; Kan 1996; Klindt-Jensen 1975). For Sweden, the writing of a northern history also became a self-conscious effort to graft Sweden into the histories of Europe. Sweden and the North came to identify their own unique position. After making several brief observations regarding major figures within Swedish intellectual history, I turn my attention to observations about networks, both past and present, that continue to shape Sweden's place in the North.

## Olof Rudbeck and the North

The Swedish seventeenth century Swedish polymath, Olof Rudbeck (1630–1702), has drawn my attention for a long time because *Atlantica* (1679–1718), as it is known in Latin or *Atland eller Manheim* in Swedish, provides access to an intriguing Swedish schizophrenia about the North. While Rudbeck remains the subject of ridicule for his efforts to argue that all humankind evolved from the North, he appears also as a passionate chauvinist: on one level a warning to more modern historians of the danger of northern hubris but on another celebrating with extraordinary pride what the North is able to accomplish. Rather than only viewing *Atlantica* as a work focused on an antiquarian past, I want to emphasize what we might gain from viewing it as a work directed to the present and future. A useful comparison in rethinking the direction of *Atlantica* comes from Francis Bacon's *New Atlantis* (1627), which invents an alternative history relocating Atlantis within the seventeenth century. For Bacon, Plato's Atlantis (*Timaeus* 24e–25a) provides a philosophical fable amplified into an English manifesto encouraging the techno-scientific accomplishments represented in the House of Salomon. The comparison of Bacon's work and Rudbeck's, particularly from the vantage point of the mechanical arts, invites us to glimpse the potential significance of Rudbeck's physical description of Sweden (Frängsmyr 1981).

The landscape described is hardly a romantic land of trolls, but a place rich in resources that could be used to support technological development. Given Rudbeck's hints regarding language, weather, building technology, *Atlantica* generates an agenda of research projects that may at least in spirit be compared to the *New Atlantis*. Rudbeck's work demonstrates the impetus toward engaging a living world; it is not a work embedded in the past but dramatizes the active study of history and nature.<sup>3</sup> Olof Rudbeck's redesign of Uppsala is one among many. Uppsala's *Gustavianum* still stands as an architectural symbol of Rudbeck's own plan for intellectual reform and invites comparison with the House of Salomon (Hahr 1930: 121–175). Gunnar Eriksson has argued forcefully for Rudbeck's foundational vision.<sup>4</sup>

From such a perspective one could view *Atlantica* as a kind of demonstration of an intellectual institution such as a Rudbeckian University especially if one considers the entire arsenal of knowledge contained in the work and could view it as an inspiration to spread glory and distinction in the fatherland and provide its leaders and builders with the right inspiration for Sweden's political and cultural mission in the world. (Eriksson 1988: 28 [my translation].)

While Eriksson does not compare *Atlantica* to Bacon's work, he does compare it to Virgil's *Aeneid*:

*Atlantica* is a work that would instill foundations and provide propaganda for a great power that required its own identity more than others [...] *Atlantica* played the same role for the Swedish empire that the *Aeneid* once played for the Roman empire. (Eriksson 1988: 27 [my translation].)

A celebrated example appears in the engravings in Erik Dahlberg's *Svecia antiqua & hodierna* ([1716] 1983), which present an array of perspectives of the "new" Sweden after 1709. We tend to forget how such perspectives worked as visual propaganda when travel was arduous. Comparable visions of the new Russia appear in the collection of plates prepared by the Russian Academy of Sciences to present the newly established *Kunstkammer* in St. Petersburg. Each collection shows how engravings, or visual technologies such as cartography, demonstrated the advancement of the North to the rest of Europe. Such collections reinforced Voltaire's conviction, so evident in his biographies of Charles XII (1731) and Peter the Great (1759; 1763) of the growing importance of the North.

Olof Rudbeck's *Atlantica* is a continually evolving book that sought to establish support for the thesis that the postdiluvian source for humankind could be traced to Sweden and particularly to the famous burial mounds in Old Uppsala. While Rudbeck's hermeneutical method appears disorganized, the disorientation that one experiences comes from our distance from seventeenth century scholarship which constructed arguments by stringing together copious citations from textual sources. While Bacon's work offers a useful background for Rudbeck's work, another work helps to situate Rudbeck's efforts as well. Beginning in the 1680s Isaac Newton turned his attention to an interpretation of universal history that would occupy his attention until his death in 1728. The project entitled, *Theologiae gentilis originis philosophiae* (1680?) ['The philosophical origins of gentile philosophy'] sought to demonstrate the natural philosophical principles inherent in the transmission of history (Knoespel 1999). The unfinished work comprises a thoroughgoing effort on Newton's part to demonstrate that the study of

physics was inherent in the practice of ancient religion. A letter from Newton indicates that he requested a copy of *Atlantica* in 1720 (Eriksson 1994: 183, note 28).

Research to discern patterns in universal history comprised a major agenda of research in natural philosophy and human anthropology at the time. Rudbeck's arguments are shaped by linguistic assumptions about the relation between natural languages and by ideas that urged historians to be on the lookout for common patterns or parallels between the history of one people and another. The seventeenth-century methodology that explored how language could be studied as an abstract system that carried through its words and structure the history of people underlies Rudbeck's research (Slaughter 1982).

Prompted by linguistic theory and the practice of seeking synchronisms in history associated with the Hebrews, Greeks, and Romans and the history of the North, it is hardly farfetched to think of Rudbeck arguing that universal history in the seventeenth century had become too ethnocentric or dominated by Mediterranean assumptions. The cornucopia of observations that one encounters in the text challenge the reader to expand the ways that he or she has thought about history. In contrast to universal histories that only seek to integrate multiple written records, Rudbeck's work vastly expands and validates the sources that may be used for information. In addition to written records, the reader is shown how jewelry, coins, building techniques, clothing, dialectical variations in language, geographical detail, evidence of climactic change—all provide information useful in building up an interpretive stance. The degree to which Rudbeck's text combines bibliographic study and field research that includes not only archaeological work but interviews with common people shows that beyond its *idée fixe* of Swedish origins, *Atlantica* admonishes readers to understand the land on which they see, hear, feel, and taste. While Rudbeck can be accused of a presumptuous ethnocentrism, his research provides a complex model for the study of history. Three related theses may be drawn from the work:

1. that there is a Mediterranean thesis that may be challenged and augmented;
2. that natural history (geography and especially a description of natural resources) provides an alternative schema for reading political and cultural history; and
3. that natural history provides a foundation for the growth of a nation.

## Linnæus and the Empire of Knowledge

Carl Linneaus (1707–1778) follows Olof Rudbeck in multiple ways but especially in his emphasis on Swedish natural resources. The transformation of Sweden from a great military power to a nation seeking to redefine her ambitions after the Battle of Poltava (1709) has become a historical trope within Linnæan studies. Instead of the heroic image of Carl XII's military conquest, we are given the peaceful image of Carl Linnæus, the Swedish saint of the plant kingdom! Russia, so it would seem, sinks below the horizon and becomes a thorn in the side of Sweden or a rude nation that Sweden might interpret to the rest of the world. Although attractive, this simple narrative, ideological in its own right, unravels when we consider the continuous interaction between Sweden and Russia at the beginning of the eighteenth century. Sweden's role in natural philosophy during the time of Linnæus involves a continuous interaction with Russia. Of course, in part this interaction is defensive and involves military technology. But on other levels it involves the mutual development of Russian and Swedish scientific academies devoted to economic development. For both Sweden and Russia alike development involves learning how to use natural resources (Broberg 2006; Koerner 1994; Koerner 1999). Linnæus's multifaceted response to information supplied by the Siberian expeditions that begin in 1724 offers an opportunity to follow his interaction with the newly founded Imperial Academy of Sciences at St. Petersburg (1725) through his botanical research at the University of Uppsala. Even more substantively, Linnæus's interaction with Russian correspondents in Latin and German as well as through drawings, diagrams and physical specimens shows a growing awareness of the ways a universally shared language of natural history may replace a political empire with an empire of knowledge. Linnæus's work participates both in the stabilization of codes and the development of strategies that could be used to share information widely or gather reconnaissance selectively for the use of a particular nation.

The northern landscape is an essential part of Linnæus's work both in regard to his own expeditions in Sweden and also within the setting of Swedish efforts to understand the unique features of the North. As readers of his expeditions know, he knew very well that gathering botanical specimens also provided countless opportunities to catalog mineral resources and register technological development. In many ways Linnæus understands that rather than demonstrating strength through military conquest, Sweden has an opportunity to strengthen her place in a European network where she may both represent and present the North. Linnæus becomes part of this network through his early travels in Holland and Germany and then through his capacity to describe his own country. While Olaus Magnus



had come to represent the North for Catholic Europe through the early sixteenth-century *Carta marina* (1539) and his account of Sweden's natural wealth, the *Historia de gentibus septentrionalibus* (1555), Linnæus came to be recognized beyond Sweden as an exemplary natural philosopher from the North and also by his own countrymen as a figure who described the land in which they lived in Swedish (Frängsmyr 2000; Lindroth 1967; Olaus Magnus 1555; Olaus Magnus 1658; Olaus Magnus 1976). No matter how much Gustavus Vasa could be celebrated for creating a national kingdom, how Gustavus Adolphus or Charles XII could create a Swedish military mythos for Europe, through his travels in Sweden, Linnæus creates an account of the land in which people live (Knoespel 2011).

### Baltic Networks and the North

While both Rudbeck and Linnæus put the North on the map, they are also strong reminders of the ways the North becomes part of a complex system of networks. The Baltic Sea, of such strategic importance, remains fundamental in approaching networks. While the Baltic has been a barrier, it has also served as a common milieu, a common resource, and above all a means of transport, exchange, and communication among the actors. One might argue that the Baltic Sea is a porous line of demarcation that provides polarization on the one hand and common narratives on the other. In this sense it is a “Berlin Wall” that has existed for thousands of years. It is above all the shared narratives and representations created by the Baltic Sea that constitute the North as an object of critical scholarly interest. Instead of concentrating on “bodies of permanence”—the individual states, societies, languages, and cultures that geographically surround the Baltic Sea—it makes sense to concentrate on the Baltic Sea as a shared body of *natural* permanence, a liquid borderline that divides but also connects, protects as well as challenges the solidity of political institutions. Instead of summing up narratives produced by individual states, nations, and other institutions, we might do well to concentrate on how the sea creates a supra-institutional togetherness in change and exchange. But just how the Baltic functions as a membrane between multiple cultures offers an important challenge for multiple disciplines. The simultaneous emergence of Karlskrona and Kronstadt invites comparison. Although there is a significant prehistory of each, we must immediately notice their invention for modern strategic purposes. For example, in comparison to Novgorod or Uppsala, whose space is shaped by human habitation over an extended period, Kronstadt and Karlskrona stand out as invented or planned cities. They existed first on drafting paper. We might think of them as rendered or made possible through the science of cartography.

Karlskrona carries importance that often seems lost or hidden even in



Fig. 2. Geometrisk Grundt ritning aff Tråsön medh der omkring liggande hålmår, hwar uppå Sedermera Carls Crona bygd är ['Preliminary geometric map of Trossön with adjacent islets, whereupon Karlskrona later on is built'] (1681).<sup>5</sup>

Sweden. The frequent reference to Karlskrona being a suburb of Stockholm recognizes the number of *stockholmare* ['Stockholmers'] who have worked in Karlskrona for the Swedish navy or the defense industry. Generations of young men who served in the Swedish navy were trained in Karlskrona. The celebrations of former submarine crews of their *camaraderie* in service hints of the town's significance just as the recent publication of *Fort*



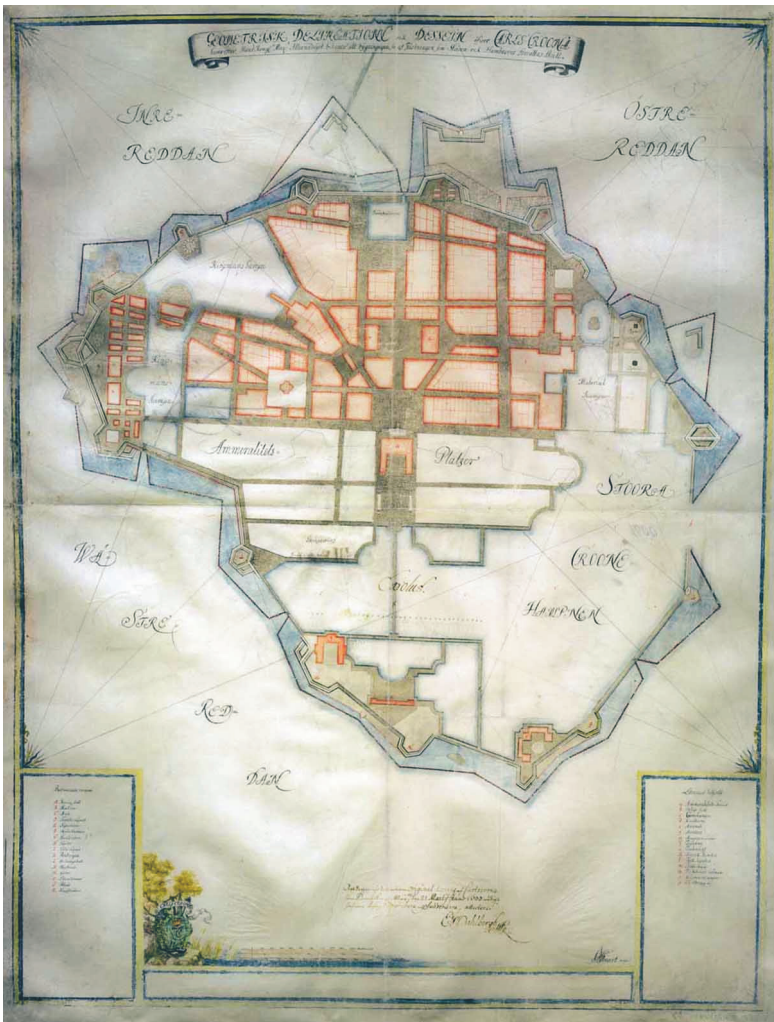


Fig. 3. Geometric city plan of Karlskrona, E.J. Dahlberg and C.M. Stuart (1683).<sup>6</sup>

*och Bunker* [‘Fortress and bunker’], a magazine devoted to publishing photos of previously hidden military sites in the Blekinge Archipelago. The connections to Stockholm and to the rest of Sweden are substantial. Charles IX founded the city in 1680 to establish Swedish sovereignty over newly acquired Skåne and to provide an early warning system for possible Danish movement along the Swedish coast. After Poltava Karlskrona became strategic not only for defense against the Danes but now against the Russians. In effect, the rapid construction of Kronstadt and St. Petersburg provokes the rapid development of Karlskrona not simply as an outpost but as

the most significant new industrial site in Sweden. Immanuel Swedenborg (1688–1772), the royal authority on all Swedish mining operations including Stora Kopparberg, supervises the blasting and construction of the dry docks. Christopher Polhem (1661–1751) and Olof Rudbeck are also engaged in the project. It is hardly an exaggeration to view Karlskrona as one of the largest industrial sites in Europe in the 1720s. Some 20,000 workers are reported to have worked either in the shipyards or in the detailed infrastructure required for the mass production of ships (Kartaschew 1999; Melin 1999).

The early maps of Karlskrona from the Swedish Military Archives (Krigsarkivet) remind us that Erik Dahlberg (1625–1703) and his colleagues were not only following aesthetic models of Baroque city planning.<sup>7</sup> The maps were also calculated to represent firing positions, and trajectory angles. In many ways, the French military engineer Sébastien Le Prestre de Vauban (1633–1707) epitomizes the connection between theoretical and practical geometry during the reign of Louis XIV. Vauban's extensive work on the development of a network of sea fortresses on the coast of France demonstrates that local defense was part of a larger strategic plan. Both the strategic plan and specific fortifications reinforce the importance of maps as means of virtual development and control. Dahlberg learned much from Vauban. Together they remind us that as we look at the early maps of Karlskrona we must give consideration to the unseen as well as the seen. The early maps show that maps are part of a network of spatial representations. But there are also "invisible" factors that were put in play. Documents show that in the spring of 1679, test firings were conducted from various points to assure that defenses would be erected in places that were virtually invulnerable to attack. Although the cost of building fortifications as extensive as those suggested in the earliest projects certainly contribute to the decision to limit the building project, it is also probable that the decision not to build a thick wall around the entire city represents a newer strategy of military fortification that reveals an increasing trust in cannon technology and the calculation of geometric trajectories. In addition to geographical survey information, we must understand that the maps were accompanied by calculations of cannon trajectories.

It is possible, of course, to consider an even larger sequence of maps that move to satellite imagery found on Google Maps. But as we reference satellite imagery, we shift scale considerably. But well beyond the shift from geometric maps to satellite technologies, we have generations of technology that not only visualize space but indicate what is concealed. Each generation of technology suggests a desire to mark space that may be defended. The early maps of Karlskrona are closely related to ballistic tests of seventeenth century cannons. Satellite technology suggests technological de-

velopment required to detect possible missile launches. Each generation of technology results in the reconfiguration of space. Northern historiography was hardly a matter of antiquarian interest but a means to express political authority and recognize the ways horizons were being changed by technology. Swedish publications in the seventeenth and eighteenth centuries abound with examples of the ways the landscape was being changed in quite literal ways. We have already activated networks that pertain to comparative anthropology of the North and the South. Given the works of Clifford Geertz, Bruno Latour, Pierre Bourdieu, to name only a few, we know that it is necessary to talk about layers of networks that may or may not communicate with each other directly or indirectly (see Geertz 1983; Bourdieu 1991; Bourdieu 1993; Bourdieu 1998; Latour 1993; Latour 1987; see also Alexandrov 1995: 62–91).

The very concept of a Baltic landscape depends on one's point of view. The layered multiplicity of landscapes is also changing. Some are in the process of emerging while others are dying out or are already skeletons and fossils. Bruno Latour's *Janus-Face of Science* applies to the Baltic, for it is possible to speak of a "Ready-Made Baltic" as well as "A Baltic in the Making" (Latour 1987; Latour 1993). The distinction is heuristic for it makes us recognize the ways in which the personal landscapes of the Baltic may collide with the emerging ideas. For example, what is our objective? Do we want to integrate the Baltic into the history of Sweden or Russia or Finland? What about the Baltic States, Poland, East Germany, Denmark? What kind of history do we have in mind? How are geological networks different from tourists' networks? Is an overall "history" even possible? Latour is helpful: "We are never confronted with science, technology and society, but with a gamut of weaker and stronger associations;" or, "History of technoscience is in large part the history of the resources scattered along networks to accelerate the mobility, faithfulness, combination and cohesion of traces that make action at a distance possible" (Latour 1987: 259). But even though there are many networks that may seem to proliferate under our noses, we must remind ourselves that it is our task to put together and explore the networks that appear to us. There are, of course, many in addition to those already mentioned: geology, flora and fauna, trade and economics, technology, knowledge structures (education, research structures, military science). Discerning networks is similar to being given a box of track for a model railroad. We count the track and begin to imagine the shapes we can make long before we have placed an engine on the track.

Universities are critical nodes in what I have called an empire of knowledge. They have also undergone a substantial realignment in the past thirty years. Programs in digital media throughout Sweden have provoked a re-

cognition that the economic consequence of university research is an increasingly vital component. It is useful to remind ourselves that universities since the fifteenth century have been not simply an idealized part of the North but a presence that in many ways has affirmed a network of research intended to reinforce ongoing economic development. The importance of Königsberg, not as Kant's home institute, but as a vehicle for techno-scientific transformation of the Baltic region deserves to be recognized far more fully. At a time when university reform with its inevitable emphasis on economic development becomes criticized for giving up the ideal of the human sciences, it is useful to remind ourselves how centers of learning have always been at the service of the kingdom or the state. The renewed interest in entrepreneurial alliances also deserves to be recognized ideologically. The strategic importance of Karlskrona has changed since the collapse of the Soviet Union. The significant reduction of Swedish military involvement led to a strategy for the development of regional education that could also contribute to the development of the local economy. In effect, the military networks associated with Karlskrona became a potential link in the strategic development of Baltic networks. These developments have considerable importance for Sweden's rethinking of the Baltic itself.

It would be possible to review this transformation even more but I would like to emphasize a particular advantage of Sweden. The creation of networks through rail, electricity, telephone, and language has allowed the development of the mobile telephone network. The network is not only developed but has in effect transformed Sweden into a network laboratory in education, entertainment, and social experimentation. It is precisely "laboratory Sweden" that has reinforced the development of media programs that meld the relationship among business, industry, and university research. We are in a setting where it is quite appropriate to think of a new Bauhaus—a digital Bauhaus. The digital transformation of society has shaped a new class of digital worker for whom the economic market appears to have an almost insatiable appetite. The demand for these new digital workers has encouraged the development of a range of new programs in digital media that are educating a new class of technicians capable of building new applications. Digital media have also shaped entirely new environments for creativity and discovery where we may shape and build objects that have never before existed.

We speak of spheres of influence but they are not simply cultural phenomena associated with language but matters of technological expansion. I have used the term *canopy* in my own research to describe the complex layering of information used to define, defend, and shape space. Initially, the term was useful in describing the use of "covering fire," in my work

on Karlskrona. Covering fire describes the range of artillery that might be used to protect and defend a fortification. While it might be used literally to describe the effect of firepower during an engagement, it is frequently geometric calculation that indicates whether a target may be in range. The strategic coastal fortifications that ring the Baltic Sea demonstrate the rapidly changing capacity of weapons systems. The term *canopy* invites us to consider the extensive spectrum of ways that cultures identify, protect, and preserve space through the use of technologies that range from cartography to language. The expansion of the canopy becomes associated with the development of multiple technologies that permit one to see the invisible. Radio transmission, radar, sonar, and satellite imaging are all means of expanding a protective canopy. Several years ago, I attended a conference that reviewed satellite-imaging technology directed at the Baltic. It was noted that every 90 minutes the eye of the satellite wakes to register the presence of sunken reactor piles from Soviet submarines. I recently had the opportunity to sail across the Baltic in small boat. When we reached Utö in the Åbo/Turku Archipelago, my fellow sailors and I were confronted by an older woman speaking Swedish as we came out of the small grocery store near the harbor. After describing her education in Sweden she demanded to know why Sweden had abandoned her! Such examples serve as cultural markers. We may well be justified in asking how such techno-cultural markers are also linked to the very function of language as a canopy itself. It may not at all be farfetched to think of radar as being grounded in cultural linguistics. Quite literally, the development of the North may be viewed as a direct consequence of building and extending cultural and technological canopies that overlay each other.

The Sweden of Rudbeck and Linnæus has expanded well beyond Sweden's territorial boundaries. The influence of Swedish companies is well known. The global society in which we live is actually a set of complex canopies superimposed over each other. Space has become more and more precisely defined and varied. The "North" itself is a space within space. The 2008 Swedish film by Daniel Alfredson, *Varg* ["Wolf"], represents this well as it tells the story of an application of Swedish national laws protecting the wolf that turns the film into an Icelandic saga. Among an older generation, writers such as Sara Lidman and Per Olov Sundman also explore this clash and, in the case of Lidman, discover a solidarity between Sweden's far North and the European hunger for natural resources in Africa. The North—whether considered through Icelandic sagas, Rudbeck, or Linnæus has importance for the rest of the world not simply as abstract "knowledge" but through the individual communities identified with the rest of the world. These local northern canopies resonate with others (Knoespel 2004). Umeå's sister city is Petrozavodsk in Karelian Russia and in my visits there I have become



aware not only of a geographical identity but also of a will to political independence.

## Conclusion

While I began by reference to the Northern darkness described by Marco Polo, I would conclude with reference to a fish, more precisely the fairytale flounder in Günter Grass's novel of that name (Knoespel 2013). The Baltic Sea found in Grass may well be associated with fantasy and abstraction, a blending of Mediterranean and Northern material that shapes a common mythological identity. But such mythological integration through a common heritage of storytelling has been far less possible than the powerful integration found in the development of science and technology. Should we wish to explore narratives of technological integration in the North, it is necessary to look at places such as the Uraniborg of Tycho Brahe, the Danzig of Helvelius, and the Königsberg of Kant. As we track and register the networks of the North, we really discover what I refer to as a Northern epic of technology. Indeed, for the nineteenth and twentieth century Kant's work itself provides a powerful narrative of integration. It may be possible to think of such a philosophical epic as a canopy in its own right. Kant's work shaped the transformation of education in ways that again and again affirmed that the future of European civilization existed in the ongoing realization of reason through the practice of science. From the vantage point of Königsberg, Kronstadt and Karlskrona were hardly just new locations on maps but places associated with technological achievement. Of course, Kronstadt was linked with Petersburg and Karlskrona with Stockholm. However, in each case, such apparent associations also concealed connections that were even more significant in the ongoing science and technology of the Baltic region. In the rise of Peter's city from marshland and the blasting of granite to shape Karlskrona, we witness the importance of what lies under the earth. Trolls, niebelungen, dwarfs, each have their story to tell but the story of what lies beneath must wait for another day.

## NOTES

<sup>1</sup> Another version reads: "Because for the most part of the winter months the sun appears not, and the air is dusky, as it is just before the dawn when you see and yet do not see" (Polo 1993: 485 note). See also John Larnier 1999. An effort to counter misconceptions of Sweden appears in Olaus Magnus (1555) *A Compendious History of the Goths, Swedes, & Vandals and Other Northern Nations*. It first appeared in English in 1658 and should be read with the *Carta marina*, his famous map of Scandinavia prepared in Danzig and published in Venice in 1539.

- <sup>2</sup> Krigsarkivet ['the (Swedish) Military Archives'] (SE/KrA: 0400/01A/016).
- <sup>3</sup> Rudbeck's annotations on Olof Verelius' translation of *The Hervarar Saga* from Icelandic (Verelius 1672) offers a good example of the fusion of northern myth with the representation of Swedish history. Verelius' dedication to Magnus de la Gardie ("Vi i vårt Fosterland hafwa Malmgrufwor ...") ['We have iron mines in our native land ...'] celebrates the power of Sweden based on iron ore and how men like De la Gardie were using Sweden's resources as means for shaping Swedish influence in Europe (Verelius 1672: N.P).
- <sup>4</sup> "Man skulle i det här perspektivet kunna se Atlantican som ett slags demonstration av vad en kunskapsinstitution som Universitas rudbeckiana, om hela dess arsenal av vetande togs i anspråk, kunde åstadkomma för att sprida ära och glans över fäderneslandet och ge dess styresmän och inbyggare en rätt inspiration inför Sveriges politiska och kulturella mission i världen" (Eriksson 1988: 28). "*Atlantican* är ett verk för uppbyggelse och propaganda i en stormakt som mer än de flesta kunde behöva en egen identitet. [...] *Atlantican* skulle få samma uppgift i det svenska imperiet som *Eneiden* en gång gjort i det romerska" (Eriksson 1988: 27).
- <sup>5</sup> Krigsarkivet ['the (Swedish) Military Archives'] (SE/KrA: 0414/0013/0027); see also Svanberg 2003: 53.
- <sup>6</sup> Krigsarkivet ['the (Swedish) Military Archives'] (SE/KrA: 0424/063/023); see also Lepas-son 2004: 24.
- <sup>7</sup> For detailed maps and drawings pertaining to Karlskrona, see Krigsarkivet ['the (Swedish) Military Archives'], Band 13: *Delineationer och grundritningar fästningar och fort* (Dahlberg) (0029–0043); *Ritning öfver Fästnings Arbetet wid Siö Castellet Drottning skiär för Åhr 1747* (SE/KrA: 0424/063/004); *Fortifikationens ritningar. Relationer. Relations Ritning öfver verkställt Arbetet uppå Sjö Castellet Drottning skiärs Donjons Tak År 1804* (SE/KrA: 0424/063/016a); *Karta öfver Karlskrona. Strålgator och nord-sydgående axel markerade*, Nils Gustaf Werming 1813 (SE/KrA: 0431/014).

## REFERENCES

### Archives

Krigsarkivet ['The (Swedish) Military Archives'].

### Literature

- Alexandrov, D.Z. (1995). "The historical anthropology of science in Russia," *Russian Studies in History*, 34:2, pp. 62–91.
- Bodin, P.-A. (2000). *Ryssland. Idéer och identiteter* ['Russia. Ideas and Identities'], Skellefteå: Norma.
- Bourdieu, P. (1991). *Language & Symbolic Power*, Cambridge: Harvard University Press.
- (1993). *The Field of Cultural Production*, New York: Columbia University Press.
- (1998). *Practical Reason*, Palo Alto: Stanford University Press.
- Broberg, G. (2006). *Carl von Linné*, Stockholm: Swedish Institute.
- Dahlberg, E.J. [1716] (1983). *Suecia antiqua et hodierna* 1–3, Stockholm: Wahlström & Widstrand.
- Eriksson, G. (1988). "Rudbeck och Linné. Enmansinstitutioner" ['Rudbeck and Linnæus. One-man institutions'], in *Kunskapens trädgårdar. Om institutioner och institutionaliseringar i vetenskapen och livet*, Uddevalla: Atlantis, pp. 17–39.

- (1994). *The Atlantic Vision. Olaus Rudbeck and Baroque Science*, London: Watson Publishing International (Science History Publications).
- Frängsmyr, T. (1981). *Framsteg eller förfall. Framtidbilder och utopier i västerländsk tanke-tradition* ['Progress or collapse. Projections of the future and utopias in western intellectual thought'], Stockholm: Liber Förlag.
- (2000). *Svensk idéhistoria. Bildning och vetenskap under tusen år. 1. 1000–1809* ['An intellectual history of Sweden. A thousand years of science and education. Part 1 1000–1809'], Stockholm: Natur och Kultur.
- Geertz, C. (1983). *Local Knowledge*, New York: Basic Books.
- Hahr, A. (1930). "Olof Rudbeck d.ä. som arkitekt" ['Olof Rudbeck the elder as architect'], in *Rudbecksstudier. Festschrift vid Uppsala universitets minnesfest till högtidlighållande av 300 årsminnet av Olof Rudbeck d.ä.s födelse*, Uppsala: Almqvist & Wiksell, pp. 121–175.
- Jangfeldt, B. (1998). *Svenska vägar till S:t Petersburg* ['Swedish routes to St. Petersburg'], Stockholm: Wahlström & Widstrand.
- Kan, A. (1996). *Sverige och Ryssland. Ett 1200-årigt förhållande* ['Sweden and Russia. A relationship of 1,200 years'], Stockholm: Almqvist & Wiksell.
- Kartaschew, K. von (1999). *Karlsborgs fästning och Vabergets. Historik och beskrivning* ['The fortress of Karlsborg and that of Vaberg. History and description'], Stockholm: Militärhistoriska förlaget.
- Klindt-Jensen, O. (1975). *A History of Scandinavian Archaeology*, London: Thames and Hudson.
- Klinge, M. (1994). *Östersjövärlden* ['The world of the Baltic'], Stockholm: Atlantis.
- Knoespel, K.J. (1999). "Interpretive strategies in Newton's *Theologiae gentilis origines philosophiae*," in *Newton and Religion*, eds. R. Popkin & J.E. Force, Dordrecht: Kluwer Academic Publishers, pp. 181–204.
- (2004). "The edge of empire. Olof Rudbeck and Mikael Lomonosov and the historiography of Northern Europe," in *Search of an Order. Mutual Representations of Scandinavia and Russia during the Early Age of Reason* (Södertörn Academic Studies 19), eds. U. Birgegård & I. Sandomirskaja, Huddinge: Södertörns högskola, pp. 129–154.
- (2011). "Linnæus and the Siberian expeditions. Translating political empire into a kingdom of knowledge," in *Languages of Science in the Eighteenth Century*, ed. B.-L. Gunnarsson, Berlin: De Gruyter Mouton, pp. 207–226.
- (2013). "Günter Grass and the pirates. The stuff of myth and the Baltic Sea," *Baltic Worlds*, 1, pp. 26–27.
- Koerner, L. (1994). "Linnaeus' floral transplants," *Representations*, 47, 144–169.
- (1999). *Linnaeus. Nature and Nation*, Cambridge: Harvard University Press.
- Larner, J. (1999). *Marco Polo and the Discovery of the World*, New Haven: Yale Nota Bene.
- Latour, B. (1987). *Science in Action*, Cambridge: Harvard University Press.
- (1993). *Petites leçons de sociologie des sciences*, Paris: Éditions La Découverte.
- Lepasson, U. (2005). *Örlogsvarvet. Ett världsarv i Karlskrona* ['The naval dockyard. A Universal Heritage in Karlskrona'], Hedemora: Gidlunds.
- Lindroth, S. (1967). "Svensk-ryska vetenskapliga förbindelser under 1700-talet" ['Swedish-Russian scientific contacts during the seventeenth century'], in *Löjtnant Åhls äventyr*, Stockholm: Wahlström & Widstrand, pp. 158–192.
- Melin, O. (1999). "Kungsholms fort" ['The Kungsholm fortress'], in *Karlskrona – ett världsarv*, pp. 66–106.

- Olaus Magnus. (1555). *Historia de gentibus septentrionalibus*, Antverpiæ.
- (1658). *A Compendious History of the Goths, Swedes, and Vandals, and other Northern Nations*, London.
- (1976). *Historia om de nordiska folken* ['History of the Northern Peoples'], 1–2, Stockholm: Gidlund i samarbete med Institutet för folklivsforskning vid Nordiska museet och Stockholms universitet.
- Polo, M. [1871, 1875, 1903] (1993). *The Travels of Marco Polo. The Complete Yule-Cordier Edition*, 2 vols., New York: Dover.
- Rudbeck, O. [1679, 1689, 1718] (1937–1950). *Olaus Rudbecks Atlantica. Svenska originaltexten* 4 ['Olaus Rudbeck's Atlantica. The Swedish original text'], ed. A. Nelson, Uppsala & Stockholm.
- Slaughter, M.M. (1982). *Universal Languages and Scientific Taxonomy in the Seventeenth Century*, Cambridge: Cambridge University Press.
- Svanberg, T. (2003) *Fortifikationsbefälhavarna i Karlskrona* ['The fortification commanders in Karlskrona'], Malmö: Anläggnings- och Fastighetskontor Region Syd, Försvarsmakten.
- Verelius, O. (1672). *Hervarar Saga på Gammal Götska* ['The Hervarar Saga in old Geatish'], Uppsala: Henricus Curio S. R. M.

*Kenneth J. Knoespel* is McEver Professor of Engineering and the Liberal Arts at Georgia Institute of Technology in Atlanta. He holds an honorary doctorate from Umeå University, Sweden. During fall 2010, he was a visiting senior professor at the Center of Baltic and Eastern European Studies at Södertörn University College, Sweden, where his research focused on Kronstadt and Karlskrona as case histories in Baltic networks.

kenneth.knoespel@iac.gatech.edu