The Professor and the Body Politic: Pehr Kalm and the Social Imaginary in Eighteenth-Century Turku¹

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This article investigates the representations of society in a number of mid-eighteenth-century dissertations supervised by Pehr Kalm (1716–1779), a disciple of Linnaeus and a well-known professor of economics in Turku (Åbo), against the background of the strong ties that tended to bind early modern literati to the ruling elites. The article consists of four thematic sections, which examine how the dissertations conceptualized the body politic, the powers that be, the populace and the scholars. All in all, Kalm and his students adhered to a fairly traditional social imaginary, although their renderings of their own caste, the men of learning, as indispensable for progress and the common good foreboded a later, expert-centric era.

Introduction

The purpose of this article is to analyse how society was represented in a number of mid-eighteenth-century dissertations presided over by Pehr Kalm (1716–1779), a Linnaean disciple and renowned professor of economics in Turku (Åbo), against the background of the political and social bonds that tied early modern scholarship to the powers that be. Kalm took a keen interest in economic matters, which tended to occupy a salient place on the agenda of eighteenth-century Swedish men of letters, not least at the Royal Academy of Turku (Kungliga Akademin i Åbo, Turun akatemia), a hotspot for utility-oriented efforts to improve society and enhance the fatherland. Several historians have accordingly

¹ Like most Swedish historians, the author of this article does not know Finnish; hence, there are some studies in that language that have not been used save for the occasional summary in English. If the inclusion of secondary literature in Finnish were to be a condition for conducting research on the era before 1809, when Finland was annexed by Russia, many topics would effectively be off-limits for the vast majority of Swedish scholars, which is hardly a reasonable scenario. One way to compensate for such deficiencies, however, is to allude to relevant texts on the subject matter, such as, for the present article, Niemelä 1998, Kinnari 2012 and Ahokas 2011.
portrayed Kalm as a hard-core utilitarian, as “the extreme advocate of the primacy of the economy” and “the king of the utilists”.²

Via members of its teaching-staff, the Royal Academy of Turku maintained contacts with other economic and patriotic institutions, such as the Royal Academy of Sciences in Stockholm, where Finnish literati like Kalm were elected fellows.³ In parity with seats of learning elsewhere in the Swedish realm during the Age of Liberty, when the Diet was in power, the Royal Academy of Turku had strong ties to pivotal government figures in the capital. After the ascent of the so-called Hat Party in 1739, the university came under the firm control of this constellation of politicians, officials, merchants and scholars, who ruled Sweden until the oppositional Cap Party deposed them in 1765.⁴ The Hats were united by a set of political and economic positions on a variety of issues. They tended to take a highly patriotic stance and generally held a negative view of commodity imports; one of their main objectives was to reduce the influx of foreign goods by promoting domestic production through customs tariffs, bounties, cultivation of foreign plants and other means.⁵

Like many of his peers, Kalm was enmeshed in both the public administration and an ensemble of social networks involving scholars as well as persons in authority, clients as well as patrons, individuals as well as institutional nodes. In Kalm’s case, one such node was the Royal Academy of Sciences, which originated as a result of the rise of the Hat Party and resolutely aligned itself with the powers that be and the new masters of the realm.⁶ In addition, Kalm was a client of several men of distinction, three of whom sympathized with the Hat regime. Sten Carl Bielke, a vice president at Turku’s court of appeal, belonged to the opposition, but Johan Browallius, a professor in Turku who went on to become the bishop there, was an influential Hat politician, as was Carl Gustaf Tessin, Sweden’s prime minister (kanslipresident) between 1746 and 1752 and the chancellor of the Royal Academy of Turku between 1745 and 1761. The famed botanist Carolus Linnaeus – who, together with Browallius, helped Kalm

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⁵ For the Hat Party, its policies and the political landscape in Sweden during the Age of Liberty, see Roberts 1986, chapter 3. Recently, the very existence of parties in eighteenth-century Sweden has been called into question by Patrik Winton, who has instead identified social networks as the foundation of political life during the Age of Liberty. See Winton 2006, 22–24, see also pp. 295–296, 304–305, and 308–309. To be sure, there was no ideology or party organization in the present-day sense; rather, people rallied around certain individuals and comparatively vague conceptions of the world. Still, it is possible to reconstruct a basic and predominant outlook which united the persons who came to power in 1738–1739 and was manifested in a wide range of actions.

⁶ For the political profile of the Royal Academy of Sciences, see Lindroth 1967, 3, 68; Hildebrand 1939, 340, 369, 473, 619, 622–623; Widmalm 1990, 57–60; Koerner 1999a, 105.
get his professorial chair in Turku and whose scientific dominion Kalm consolidated through explorations of Swedish provinces as well as a well-publicized journey to North America – likewise concurred with the Hats.7

Considering these affiliations and the fact that the contents of other dissertations in eighteenth-century Turku agreed with both the preferences of Sweden’s rulers and the hierarchical nature of the country’s social estates, it is safe to assume that Kalm embraced and voiced views that supported, or were at least compatible with, the tenets that held sway in the symbolic centre of the political culture and among the powers that be.8 Not for nothing was Kalm’s professorship devised by the powerful Hat politician Tessin, and, as a professor, Kalm did his best to execute the protectionist policies of the government by advancing the domestic production of silk.9 Kalm’s biographer Carl Skottsberg has hinted that he sided with the Hats, at least when it came to foreign policy.10

Even though Kalm operated in a provincial locale, his fervent utilitarian commitment and manifold bonds to erudite compatriots as well as to the powers that be made him a central figure during Sweden’s Age of Liberty, whose Zeitgeist, one might say, he embodied. Because of his centrality in those regards, Kalm, and by extension the students he tutored, provides a suitable object of study in terms of how the literati in this northern realm imagined society during the eighteenth century, a topic which has seldom been looked at in depth. Extant research has largely focused on how men of letters envisioned Sweden, as opposed to Swedish society, applying catchall phrases like ‘utilism’ (utilitarianism), ‘mercantilism’, ‘patriotism’ and ‘physico-theology’ to capture their mind set. This article takes another route to the early modern imagining of the national self and will hopefully be able to shed some new light not just on the Swedish setting, but on the surrounding world as well, since Sweden formed an integral part of a profoundly traditional but slowly modernizing Europe. To put it differently, the aim is to unearth a social imaginary, that is, “the ways people imagine their social existence, how they fit together with others, how things go

7 For Kalm’s relationship with Bielke, Browallius, Linnaeus and Tessin, see Klinge et al. 1988–1991, 135–137, 240, 629, 656, 658; Kallinen 2008, 377–378; Skottsberg 1951, 56. For Bielke’s political allegiances, see Carlquist 1924. For Browallius, see Widmalm 1990, 58. For Linnaeus, see Koerner 1999a, 16–17, 104–105, 166; Roberts 1986, 140.
8 For the other dissertations, see Lindberg 1990, 173, 181, 194–195.
on between them and their fellows, the expectations that are normally met, and the deeper normative
tonings and images that underlie these expectations”.

In the following, ‘the powers that be’ and ‘the elite’ signify the rulers of the realm and the upper strata of society – officials, noblemen, affluent burghers and clergymen – in accordance with the Swedish concept överhet. Somewhat like its German equivalent Obrigkeit, överhet could denote any person in authority and extend from princes all the way down to lower-level officials and parish priests. Men of letters could and did, of course, belong to the social and political elite. For instance, Browallius and Jacob Faggot, the director general of the Royal Office of Land Survey, were scholars as well as high-ranking civil servants. It is hence important to acknowledge that ‘the republic of letters’ and ‘the powers that be’ should be comprehended as analytical tools rather than as empirical entities mirroring a past reality: the categories can and do indeed overlap, and the way in which a specific individual ought to be defined depends on the questions the researcher poses. What is more, men of letters did not act as mere vessels of the elite; they also attempted to affect the conduct of the powers that be by wooing and educating them.

To contextualize Kalm and his pupils, the article comprises a couple of texts by Browallius and various dissertations supervised by Pehr Adrian Gadd, one of Kalm’s students who became a professor of chemistry at the Royal Academy of Turku as well as a fellow of the Royal Academy of Sciences. Like Kalm, Gadd was heavily invested in the utilitarian programme, and he has been styled as “one of the most purebred representatives” of Finnish “natural–historical economic theory”. Browallius’s texts were written before Kalm’s dissertations, while the works by Gadd and his pupils were produced after them. The inclusion of Browallius’s and Gadd’s writings will reveal whether the notions enunciated by Kalm and his respondents corresponded to wider currents of thought among the Swedish literati during the Age of Liberty. Needless to say, the analysis has been restricted to a selection of texts by Kalm’s students and colleagues. The texts all stem from the mid eighteenth century and wrestle with practical topics of regional or national relevance. There is nothing special about them; rather, they have been randomly picked from an extensive range of works and should for this reason be seen as a cross section of the greater corpuses within which they sit. For instance, of the 142 respondents Kalm

11 Taylor 2004, 23.
12 Sellin 1984, 406–407; “Överhet”, Norstedts stora svenska ordbok 1986, 1507. Compare Nordin 2009, 21. Three of the dissertations supervised by Kalm counted vicars as persons of rank. See Indrenius 1757, 8; Lindsteen 1754, 3; Leopold 1753, 4. The clerics were both public servants and spiritual guides, who, as one dissertation put it, were able to ‘implant’ desired knowledge in the uneducated commoners. See Indrenius 1757, 14.
tutored, only one had a more theoretical approach – all the others displayed a distinct, practical orientation consonant with the preponderance of tangible matters in those of Kalm’s dissertations that are investigated here.\textsuperscript{15}

Because the article explores network-related and politically motivated standpoints in a collection of dissertations, the students and their teacher are treated as a composite unit within the dissertational system. Consequently, the issue of authorship is of no concern here; suffice it to say that the main tendencies of the texts can be taken to exhibit Kalm’s overarching influence on them and his pupils, since he was a constant and the respondents varied.\textsuperscript{16} Furthermore, economists of the Age of Liberty like Kalm still abided by an understanding of dissertations as manifestations of an adherence to established academic ideals and forms of thought rather than as testimonies to originality or harbingers of novelties, while the question of authorship remained inconsequential.\textsuperscript{17} The Turku dissertations thus entailed ever-larger circles of actors, norms and attitudes, whereas individuality did not constitute a principal facet of the dissertational process.

The article consists of four thematic sections, followed by a concluding remark. The first part outlines the dissertations’ basic perception of society and centres on the recurrent motif of regular movement, which by way of analogy had intimate links to contemporary images of living organisms, not least the human body. The second part examines the renderings of the powers that be, while the third probes the representations of the populace and the fourth charts the conceptions of the scholars, since men of learning were, in effect, given an elevated status and crucial function in society.

**Imagining Society in Eighteenth-Century Turku**

**Movement in the Body Politic**

While Kalm's dissertations recognized the need for and the advantages of international commerce, they also expressed the patriotic trade policies of the Hat Party, which has usually been described as ‘mercantilist’ and ‘utilist’ in nature.\textsuperscript{18} Consistent with the economic–patriotic programme of.

\textsuperscript{15} For the practical orientation of Kalm's dissertations, see Kallinen 2008, 379.
\textsuperscript{16} This take on Kalm and his pupils is inspired by Lindberg 1990, 169–170, 172–173, and Liedman 1986, 55.
\textsuperscript{17} Liedman 1986, 113–117, compare p. 55.
\textsuperscript{18} For a recognition of the need for and advantages of international trade, see Aurenius 1753, 4; Lithander 1753, 20–21; Backman 1754, 2. It should be noted that the regime-friendly orientation of the dissertations seems to have been more tangible at the beginning of Kalm's professorship, presumably because he felt it necessary to show his gratitude for his recent promotion. To analyse changes over time, however, is not an objective of this article.
the Hats, the dissertations encouraged exportation and discouraged importation in order to boost the Swedish money stock. They pleaded for an unhampered inner movement of goods and for increased or improved domestic production and exploitation of resources, not least in connection with the manufactures, which played a key role in the utilitarian policies of the Hat Party.\textsuperscript{19} Some of the respondents promulgated other economic tenets cherished by the government, chiefly the benefits of population growth and a rigid division of labour.\textsuperscript{20}

For example, one of the Kalmian dissertations, a treatise on the founding of towns submitted by Gustav Fridrich Aurenius, emphasized the significance of internal economic movement and advocated the exportation of processed goods in order to generate a national surplus, whereas only essential commodities and raw materials required for domestic production were to be imported. Foreign plants should, whenever possible, be introduced in Sweden and adapted to its climate. The main objective was to keep the money that animated and bolstered society within the kingdom. Daniel Lithander, who defended a dissertation on the preservation of Sweden’s forests, likewise evinced hostility towards importation and sought to promote the domestic production of goods with the aim of counteracting the outflow of money, while he too offered a vision of intensified inner motion. For Lithander, the manufactures were critical to saving the fatherland from the utmost poverty, which, he argued, its foreign trade threatened to induce.\textsuperscript{21}

Like the Hats, several of Kalm’s students favoured sharp dividing lines between different trades, a conception in tune with the political and social barriers of a society divided into estates.\textsuperscript{22} Aurenius supported a strict division of labour between the towns and the countryside: the peasantry should be prohibited from meddling in urban trades and vice versa, as the blurring of boundaries led to disorder, the production of unexportable, low-quality commodities and the ruination of the Swedish realm. Lithander argued that inland boating and rural trade with the towns should be regulated through the issuing of privileges to a limited number of countrymen. A similar focus marked Jonas Andreas Norrgreen’s dissertation on agrarian reform, where the

\textsuperscript{19} For dissertations that display such characteristics, see, for instance, Indrenius 1757, 1–2, 7–8, 16; Leopold 1753, 2, 4–5, 7; Granroth 1754, 8–18; Backman 1754, 10-12; Wegelius 1755, 1–2, 6, 8; Wialenius 1760, 16–28; Enckell 1760, 6–13.
\textsuperscript{20} For population growth, see Norrgreen 1760, 7; Backman 1754, 11; Wialenius 1760, 16–20.
\textsuperscript{21} Aurenius 1753, 4–5, 38–40; Lithander 1753, 6–9, 11–12, 43.
\textsuperscript{22} Magnusson 2001, 33–34.
author showed how the swapping of field allotments (storskifte) would result in clear demarcations of properties, which could then only be changed with difficulty.\textsuperscript{23}

A conspicuous theme in Aurenius’s dissertation was the envisaging of balance and evenness. Aurenius maintained that Sweden’s foreign trade ought to be characterized by equilibrium and that its towns should be evenly dispersed. He also discussed the towns in the context of an even diffusion of goods and an even movement of money within Sweden. These and other, comparable statements in Aurenius’s work can be related to his depiction of how water effected the even distribution of blood as well as nutriments throughout the body and how it preserved the healthiness of the blood by disposing of harmful waste.\textsuperscript{24} The human body and the social world obviously reflected and harmonized with one another; by analogy, a healthy society was a society where products flowed uniformly and steadily through the body of the realm.

The image of regular movement returned in an exposition on the ideal layout of future towns. Aurenius contended that the streets should be wide enough to admit light, to help keep the urban setting clean and to allow the inhabitants to go about their respective businesses unhindered. He stressed the importance of a good drainage system to stop stagnant water from giving rise to insalubrity and the need to pave public meeting grounds to ameliorate the administration of order, so that garbage could be disposed of with greater ease. The same motif is found in the endorsement of the clearing up of rivers and the construction of canals to facilitate domestic transportation.\textsuperscript{25}

The positive stance on unimpeded movement did not imply a proto-liberal worldview, as Aurenius’s allegiance to the economic programme of the Hat Party demonstrates. Furthermore, Aurenius thought that the peasants should be forced to sell their goods at designated areas in the towns, since this would prevent the cheating which could materialize “if everyone was at liberty, to trade and negotiate in all the nooks and corners, as best he could”. A similar point was made in relation to the urban–rural division of labour: “If all industries were to be equally open to the peasant and the town dweller, everyone would be free to stick with the livelihood that pleased him, and from which he seemed to get his putative profit. What disarray such housekeeping would engender is easy to conclude.” The dissertation proceeded to enumerate the destructive

\begin{footnotesize}
\textsuperscript{23} Aurenius 1753, 4–5, 12, 35–36, 39–40; Lithander 1753, 31–32; Norrgreen 1760, 9.
\textsuperscript{24} Aurenius 1753, 7, 10, 12, 17. For one of the other students “an even and a regulated way of life” constituted an ideal. See Colliander 1760, 4, italics in the original text.
\textsuperscript{25} Aurenius 1753, 19–23.
\end{footnotesize}
consequences of this “damaging scrambling”: the best raw materials could be corrupted, key industries would be forgotten, exportation would be scant, etc.\textsuperscript{26}

Several of Kalm’s students pictured society in bodily terms, a pervasive mode of visualization which served to elicit a clear-cut distribution of rights and obligations between the estates.\textsuperscript{27} Society had for a long time been construed as a unified body, wherein these age-old corporations constituted the foremost elements and every limb had to do its allotted part for the whole to operate in a well-balanced way, something that would not come to pass without the ordering function of the state.\textsuperscript{28} In his examination of the economic usefulness of the clergy, Abraham Indrenius represented this estate as “a part of the body of the government and the realm”, while Aurenius likened the manufactures to healthy foetuses and fertile organisms that would reproduce amply if handled correctly. For Carl Fridric Leopold, who dealt with the utility of domestic floras, imports were a means for “‘the foreigner’ . . . to suck the juices of life from our Body politic [Rikskropp]”. Lithander equated foreign trade with a body or organism, since it could allegedly suffer from large wounds, and described a warped foreign trade as a disease, which must be adequately known in order to be cured. Even though the manufacture system launched by the Diet amounted to a remedy, Sweden would never recuperate as long as its imports were not reduced.\textsuperscript{29}

Gustav Friederich Wialenius, pleading for the blessings of the manufactures, asserted that the body politic required population growth and cited a speech by the engineer Märten Triewald, who elaborated upon the analogy of disease:

\begin{quote}
A multitude of idle poor is a plague in a Country and Realm. Beggars cannot be considered differently in a society, other than as gushing wounds and boils on a natural body, because when they are able to serve their compatriots in whatever purpose it might be, yet do not get employed, their
\end{quote}

\textsuperscript{26} Ibid., 21, 36–37. Aurenius was not the only one of Kalm’s pupils who explicitly denounced individual liberty. Lithander presented a distinctly negative opinion of the inhabitants of North America, who believed that they were “a free people, and might do what they want with what is theirs; hence they look only to the present, and do not care about the future”. See Lithander 1753, 35. To a student of Kalm’s colleague Gadd, freedom was nothing but “choosing what is most useful”. See Holmberg 1766, 5.

\textsuperscript{27} Melkersson 1997, 211–213; Ihalainen 2009, 317–318. During the Age of Liberty, traditional, organic conceptualizations of society were complemented by mechanical ones, which allowed for more optimistic images of the future. See Ihalainen 2009, 328–336. This new imagery, however, did not figure in the investigated dissertations.

\textsuperscript{28} Indrenius 1757, 5; Aurenius 1753, 37; Leopold 1753, 5; Lithander 1753, 6–7.
indolence is a rather difficult burden, torment and tax for the Political body, which they inflict so much impediment and damage upon, as if they wanted to tie someone dead to a living body.\(^{30}\)

Consequently, children, old people and invalids who worked at the tobacco manufactures were “useful limbs of the Republique”.\(^{31}\)

As the block quote shows, neither Triewald, nor Wialenius, nor Kalm held a compassionate view of vulnerable social groups. This attitude seems to have been fairly conventional among the Swedish literati of the time; for instance, the professor of economics in Uppsala, Anders Berch, likened the poor denizens of the realm to excrement.\(^{32}\) According to Gadd’s student Carl Henric Armfeldt, who, like Kalm’s respondents, imagined society as a body, the children of paupers were a valuable asset for the nation if used in the right – that is useful – way, but “a wasting disease, if they are mismanaged”.\(^{33}\) Not surprisingly, Kalm’s dissertations overall displayed a rather patronizing approach to common people, as section 2.3 of the article will illustrate. Before that, the study addresses Kalm’s students’ images of the powers that be in order to establish how they conceived the societal order.

**The Powers that Be**

Representations of the powers that be typified the ritual and social side of the dissertations, where the highest strata of society were routinely exalted in a more or less standardized fashion.\(^{34}\) Nonetheless, these representations also conveyed a normative idea of the proper political and social order, which is investigated below. First, however, an analysis of what the basic configuration of society looked like in the treatises is of the essence.

Aurenius presupposed the existence of a primordial natural state, when human beings acknowledged no authority but God and concerned themselves exclusively with the tending of their souls and the bare necessities of life. Some individuals defied divine and natural laws by using violence, betrayal and cunning to acquire what others had worked hard to accomplish. The

\(^{30}\) Wialenius 1760, 16.

\(^{31}\) Ibid., 17.

\(^{32}\) Liedman 1986, 164–165.

\(^{33}\) Armfeldt 1765, 32. Armfeldt asserted that “no tear is more dangerous in a body of the realm [Rikskropp], than the general destruction of morals” and listed a range of signs, such as self-interest and the extinction of true patriotism, which indicated that “harmful fluids have gotten the upper hand in the body of the State, its liberty, power, dominion and reputation are then at death’s door and draw their last breath”. See Armfeldt 1765, 5–6.

\(^{34}\) For the ritual and social aspect of the dissertations, see Lindberg 1990, 172–173.
insecurity of this situation led to the creation of ‘the highest authority’, that is, government. There 
was a general realization that the only way to bring about welfare and rectify the harsh oppression 
and multiple penuries that were reproduced along with humankind was to come together in a 
society.\textsuperscript{35}

Aurenius’s infant society “could not endure, without order, order not without government, 
government not without the right, power and authority to direct the free actions of the entire 
people, towards the common good of the people; therefore the highest authority was entrusted 
to the one or those whom the people considered to be the most capable and powerful thereto”. As 
the natural state came to an end, the people surrendered their natural rights to the powers that 
be (“Öfwerheten”). The highest authority was obliged not just to protect the subjects, but also to 
enhance the riches and power of their society by effecting and upholding a framework that made 
the populace behave in a manner beneficial for the whole.\textsuperscript{36}

The natural state as defined by Aurenius had a distinctly Hobbesian flavour, epitomized as 
it was by unrighteousness, strife and scarcity, whereas society was taken to afford a superior 
form of life in comparison to this natural state with all its uncertainties. Even so, Aurenius did 
not conjure up Leviathan, since he determined that every obligation corresponded to a right. 
Aurenius’s bleak understanding of the human condition was reflected in Lithander’s concern that 
laws would not be observed if the forests were destroyed: “at that point the one who has a bush 
of wood on his properties will not be safe from robbing, theft, etc., by those who own nothing; 
distress teaches good and evil”.\textsuperscript{37}

Aurenius and Lithander’s assessments of human nature should probably be viewed in light 
of the Bible rather than Hobbes; the Fall of Man was explicitly referred to in Isaac Algeen’s 
dissertation on the many uses of weeds, which outlined Adam’s fall from grace and claimed that 
“the ruined nature” of man made him inclined to all sorts of evil and led him astray. One of Gadd’s 
dissertations likewise discoursed on “the natural mischievousness” and “the natural anxiousness 
and inborn evil desires” of man, which negated public liberty, order, security and strength. 
Reminiscent of Kalm’s treatises, the pessimistic renderings of mankind most likely had Biblical 
roots; the revealed word of God and its compatibility with reason and the judicial arrangements

\textsuperscript{35} Aurenius 1753, 2–3, compare p. 34. 
\textsuperscript{36} Ibid., 3–4. 
\textsuperscript{37} Aurenius 1753, 39; Lithander 1753, 37.
of the polity were brought up later on, as the dissertation announced a contrasting trust that children and youth would be able to overcome their vices.\textsuperscript{38}

Insofar as Kalm and his students paid heed to constitutional issues, they visibly identified with the Age of Liberty and the prevailing order, as when Indrenius highlighted the efficacy of the clergy in counteracting the lingering fad for royal absolutism:

\begin{quote}

a vicar who knows, both on political grounds and from the economic histories of several realms, what kind of insecurity in terms of both life and property the inhabitants of the countries are suspended in, where the powers that be are left to rule absolutely, and where one no longer is the owner of what one has acquired with a lot of sweat, [more] than the governing Lord himself wishes, has no difficulty in depicting this for his listeners with vivid examples, so that they are seized with a hatred of and loathing for all absolute rule.\textsuperscript{39}
\end{quote}

The powers that be were not only indispensable in that they made peaceful human coexistence possible; they also, in line with a commonplace eighteenth-century notion, functioned as the prime mover of the economy and thus of the incessant development towards national blissfulness.\textsuperscript{40} Kalm’s students frequently portrayed members of the elite as zealous economic patriots and promoters of utility. Most often, ingratiating remarks of this sort figured in the prefaces of the dissertations, which glorified the Maecenases – a motley crew of noblemen, officials, parsons and wealthy burghers – of the respondents. This was the case in Gadd’s dissertations, too; Christopher Herkepaeus even dedicated his dissertation to crown prince Gustavus (the future Gustavus III), whose utilitarian bent was complimented in the foreword.\textsuperscript{41} One of Kalm’s respondents, Johan Colliander, in a treatise on the usefulness of storehouses declared that it was a “usual and praiseworthy custom that lovers of Erudition adorned their works with the Names of Distinguished Persons”. In Colliander’s case, one of these distinguished persons was lieutenant colonel Hans Hindrich Boije, whose patriotic–economic exertions had furthered the common good. Boije’s efforts occasioned a glorification of venerable elite figures who saw to economic improvement despite having other crucial and grand matters to which they had to attend. In connection with

\textsuperscript{38} Algeen 1757, 1–2; Armfeldt 1765, 3, 5, 11–12, 14, 54, quotes on pp. 3, 54.
\textsuperscript{39} Indrenius 1757, 15.
\textsuperscript{40} For this idea, see Legnér 2004, 186, 196–197.
\textsuperscript{41} Herkepaeus 1760, preface. For other examples, see the prefaces to Hallenberg 1757, Erling 1761, Gadd 1764.
two of Boije’s fellow officers, Colliander asked for permission to embellish his dissertation with their illustrious names so that it could “borrow the radiance, which the work in itself is wanting [,] from them”, a request resonating with the idea that the upper echelons of society imparted movement to and guided the rest of the polity.\footnote{Colliander 1760, preface.}

According to Lithander’s preface, God had ensured that all of Sweden enjoyed and was grateful for the tireless and laudable fervour which Carl Gustaf Löwenhielm, an influential Hat politician and councillor of the realm, dedicated to the prosperity of the \textit{patria}. Löwenhielm was simultaneously celebrated as a superb benefactor of the sciences, in particular those involving economic utility, and of Lithander’s orphaned father, whom the high lord had aided on account of an inborn, patrician mercifulness. Lithander recounted that his father extolled Löwenhielm’s mercy, which – second to divine grace – was the reason for his wellbeing, and that the clemency of the councillor extended to the respondent, who wished that it would be a long time before Sweden and the destitute lost their precious patron.\footnote{Lithander 1753, preface.}

Kalm and his students intermittently appropriated or juxtaposed themselves to high-ranking politicians and officials who participated in the networks traversing the Royal Academy of Turku and Stockholm’s Royal Academy of Sciences. Henric Lindsteen’s dissertation on the utility of gardens began with a tribute to Johan Browallius, who was labelled a guardian of the sciences and of Lindsteen himself as well as a vital member (‘limb’) of the public. Lindsteen commemorated Browallius as a “foreman in our Society of Learning” and attributed him benign qualities that made him shine like a sun in “our sky of erudition”. This recalled Browallius’s own flattering of \textit{his} betters when he stated that schools and universities embodied “the wise care of the Rulers” and that he trusted in the “most praiseworthy and mature zeal for the common good” among his “high Foremen”, which had put the pen in his hand.\footnote{Lindsteen 1754, preface; Browallius 1737, 2, 4. Lindsteen was not the only respondent who dedicated his dissertation to Browallius. See Granroth, preface. In a way, Browallius occupied an intermediate position, since he was a scholar who had become a person of rank; yet, his being a leading Hat politician and a bishop probably meant that he had more in common with the powers that be than with the republic of letters.}

Lithander discussed and commended texts by top government officials like Löwenhielm and the prominent civil servant Ulric Rudenschöld, both of whom had allegedly given fervently patriotic orations in the Royal Academy of Sciences, while Wialenius quoted Rudenschöld’s words in the Stockholm academy at length. Leopold proclaimed that the glorious Linnaeus had infused botany with such a reputation that “the superior powers
that be have spared no cost and encouragement to promote it”. Moreover, “numerous High Lords and literate Men have, through their writings infused with light, manifested the utility which flows to the Fatherland through its cultivation”.

At times, testimonies of the economic patriotism exhibited by the elite were incorporated into the main portion of the dissertations. Aurenius reproduced a report about the visit of a delegation of renowned Hat politicians – Tessin, Claes Ekeblad and Carl Fredrik Scheffer – to a major Swedish canal, whose locks bore their names. In addition, he maintained that the court superintendent Carl Hårleman, a notable member of the Hat Party, was immensely vigilant about the welfare of the realm. For his part, Lithander complimented the elite for its passionate tending of the nation’s forests: “Many of our literate and erudite Swedish men, yes the foremost earls of the realm, for whom Sweden’s wealth has been rather dear, have showed their unceasing ardour for the fatherland in this regard as well, since they have treaded far into the forest with their profound insight”. Lithander’s patron Löwenhielm, an exponent of “congenital patriotic zeal”, belonged to this group of clear-sighted compatriots, as did Faggot, Hårleman and Rudenschöld.

Lithander also declared that the royal couple, Adolf Fredrik and Lovisa Ulrika, and the Diet had devoted a lot of attention to caring for the forests. He went on to observe that the Estates had spared the patria severe hardship by having the foresight to set up useful manufactures and that their admirable solicitousness had, by all appearances, succeeded in making the national deficit smaller than had been recognized. It is reasonable to assume that these contentions had a political dimension; the Diet with which Lithander aligned himself was controlled by the Hat Party, whose followers were exceedingly supportive of the manufacture system, while the allusion to an uninformed view of the deficit undoubtedly related to the public debate of this matter and to criticism about it from the opposition.

Lithander was not alone in his appreciation of the royal family and the Hat regime. Colliander announced that the king watched over the welfare of the realm in the most affectionate manner, while Leopold alleged that the highest power (‘Höga Öfwerheten’) was most graceful towards

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45 Lithander 1753, 2–3, 29, 35, 42; Wialenius 1760, 16–17; Leopold 1753, 2–3.
46 Aurenius 1753, 23–24, 29. The report allegedly stemmed from a couple of letters from the vicar Magnus Asmund Carlander to the Turku professor Algot Scarin and concerned the Trollhätte kanal. For Hårleman’s political loyalties, see Nordin 2003, 71.
47 Lithander 1753, 2–3.
48 Ibid., 3, 7, 12, 44.
those who laboured to uncover the valuable novelties scattered throughout the fatherland. Norrgreen rejoiced in the many joint and monumental achievements carried out by Sweden’s magnificent king, its praiseworthy Estates and the finest men in the kingdom, and singled out the royal decree on the swapping of field allotments, where “the tender heart of His Royal Majesty for the welfare and happiness of his Subjects, and the wise steps, which the Laudable Estates of the Realm have taken for Sweden’s lasting wellbeing in the future, shine on every page.” According to Norrgreen, the Swedish rulers had plotted an admirable middle course between persuasion and coercion; “The decree contains a mixture of both, which means that Politicus should hold it to be a masterpiece of its kind.”

The positive depictions of the powers that be were supplemented by a tendency to picture them as imitation-worthy exempla vis-à-vis the populace, a mode of representation consonant with how the elite was rendered elsewhere in Europe at the time. Indrenius noticed that the lack of an adequate number of manors that the people could emulate suggested that the vicars would have to generate improvement: “The peasant preferably believes his priest. But talk and persuasion alone do not suffice: he [the peasant] is so stuck in his old custom, that it is rather difficult to draw him from it. Good examples can accomplish the best utility”, above all those of the clergy.

Lindsteen argued that the peasant and the simple-minded nourished “the not entirely unwarranted thought, not to begin something novel and formerly unusual in any economic branch, before he sees the cleric or other persons of rank commence” it, thereby illuminating the populace with their ‘good example’.

The framing of elite figures as exempla was recurrent in Gadd’s dissertations as well. One of his students held that the powers that be and the sovereigns had “in many ways left an imprint on the customs of the inhabitants of the land. The people commonly ape the habits that are introduced and favoured at Court. Those of rank want to live like the King, and the lesser, like those of rank.” Nobles and officials should consequently light the way for “the subservient part of society” by displaying virtue. On the topic of the cultivation of foreign plants, another of Gadd’s respondents represented the royal family as examples and the king’s manors, the towns, the vicarages and the houses of senior military officials as exemplary sites, while yet another treatise portrayed the

49 Colliander 1760, 5–6; Leopold 1753, 4; Norrgreen 1760, 5.
50 For this mode of representation and its foreign manifestations, see Persson 2009, chapters 4.1. and 4.3.
51 Indrenius 1757, 5–6, see also pp. 11–16.
52 Lindsteen 1754, 3, compare p. 12.
queen as a model in terms of silk farming. Nevertheless, not all exempla sprang from the elite, as commoners were also said to be able to inspire others.

Despite the fact that the elite was overall treated with reverence, Kalm's dissertations did occasionally criticize its members. Lithander felt compelled to divulge the unpleasant truth that Swedish iron declined in quality and price because the owners of the ironworks recklessly entrusted the inspection of their businesses to their servants. Indrenius pointed out that the foremost causes of Sweden's economic problems were “a harmful abundance and an inappropriate luxury”, that is, the consumption patterns of the higher social strata, and Lindsteen disapproved of the clergy for being negligent in the management of their vicarages, a defect due to rootlessness and egoism.

Kalm and his students evidently also sought to educate the powers that be and to push them in certain directions. Henric Wegelius, who focused on how to simplify shipping on the Kemi River, claimed that “a fairly wealthy private man” could afford to realize the propositions he advocated and that the reader would profit from doing so. The same line of argumentation was applied to the state, with the addendum that the prosperity of the people would benefit the elite: “when the subjects become rich and healthy, the powers that be never feel bad.”

One way to sway the powers that be was to invoke exempla from history or from contemporary society. Colliander maintained that well organized states had always erected corn storehouses, as had ‘all other nations’ of late. Wialenius made use of England and foreign sovereigns from the past and the present in his vindication of manufactures, while Lithander relayed how the most eminent of Britons made an effort to spare the forests and how distinguished members of British society estimably competed with one another when it came to planting trees. Other examples in Lithander’s text hailed from the political and judicial spheres and were probably intended to influence the Diet and the Hat Party by recording measures to preserve forests introduced by various European rulers.

Like Colliander and Wialenius, Lindsteen employed historical examples, in his case to prove that it was important and legitimate for monarchs to take a personal interest in the cultivation of trees and plants. As the reader looked at “the history of the most flourishing monarchies in

54 Löfman 1765, 14, 20; Herkepaeus 1760.
55 Löfman 1765, 13; Hallenberg 1757, 10, 20.
56 Lithander 1753, 19–20; Indrenius 1757, 2; Lindsteen 1754, 4.
57 Wegelius 1755, 6.
58 Colliander 1760, 4–5; Wialenius 1760, 18–20; Lithander 1753, 32–34.
Europe; it is not difficult to find that the establishing and maintenance of plantations, along with sciences, trade and handicraft, has contributed the most to their welfare”. Lindsteen asserted that garden allotments were ubiquitous abroad, even among crofters, and that many nations had brought the science of plantation to near perfection. Sweden was not one of these, since the regrettable indifference of its inhabitants towards gardening had just about put the country on a par with barbarians and savages in this regard. Leopold likewise pondered upon barbarian peoples, which had had the sense to exploit their plants, whereas the ancient Swedes “only grasped at alien [plants] and did not see what was at our feet. Wretched people!”

Lindsteen, Leopold and Kalm were apparently trying to procure resources from the powers that be by playing on national pride and the rivalry with foreign states. In this context, the unfavourable comparison of the Swedes with savages and barbarians served to underscore the need for reform and the urgency of the situation.

Of the Kalmian dissertations, only Daniel Andreas Backman’s treatise on the value of colonies made use of a domestic historical example. Backman represented the seventeenth-century warrior King Gustavus II Adolphus as an economic exemplum, since the great prince had laboured tirelessly to strengthen the patria, for instance by allocating commerce to the most advantageous sites. Moreover, the respondent voiced the opinion that inner discord and a flawed trade were the reasons that Sweden had been asleep until awoken by Gustavus Adolphus. The latter point should be understood not just as a recommendation to the ruling elite to emulate the exemplary king, but also as a reference to the political animosities of the Age of Liberty and as an apology for the policies of the Hat Party.

The interpretation of Backman’s historical narrative as an exhortation to the elite to act is reinforced by his later reproach of the short-sightedness of Sweden, which to its own detriment had a predisposition to concern itself solely with immediate gratification and to despise long-term gains with respect to useful institutions. The dissertation described a number of ministers in Paris who had resisted a counterproductive plan to give up the precious province of Canada to English pirates in the seventeenth century as “thoughtful” and “enlightened French Gentlemen”. Their “excellent reason, mature and well-founded thoughts” could be accessed “with the greatest

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59 Lindsteen 1754, 1–3, 9; Leopold 1753, 1–2.
60 Backman 1754, 5.
pleasure” in a cited text, which related “the most splendid character trait in a great and profound
Minister, namely, not only to have the present before one’s eyes and work with that, which almost
everyone can, but [to] put healthy plans for the future and posterity together with that”.\textsuperscript{61}

In what was probably an attempt to mitigate the tone of the dissertation and make readers
in high places take his advice to heart by appealing to their vanity, Backman stated that “the
wise and clever” powers that be could have arranged trade so that it would have profited both
the motherland and the colony, had New Sweden been retained. Movement between the old and
the new world would have been regulated by the authorities, which could easily have prevented a
harmful emigration “with as much gentleness, as carefulness”.\textsuperscript{62}

As Backman’s work demonstrates, some of Kalm’s pupils furnished their betters with more
obvious instructions, which were to some degree akin to criticism. Lithander mentioned that he
and others delighted in the mild guardianship of the powers that be as manifested by the Finnish
Land Survey Commission, but also called for more land surveyors and a prompt dividing up of
the forests between the peasants. Similarly, Lindsteen contended that the houses of learning had
not set aside enough time for horticultural education, that an inventory of the gardens at the
residences of public officials should be created and that the upper echelons of society ought to
grow gooseberries: “Why does not each and everyone, preferably persons of rank, attempt to
get these, which demand so little tending, in their spice gardens?” At the end of his dissertation,
Lindsteen posed a more direct challenge to the elite to lay out gardens: “If persons in authority in
the country, who have the means and opportunity, and know its [the garden] usefulness, wanted
to take it up, more diligently than what has hitherto come about, the country people would in time
be encouraged to do it by their example, and by the profit they get.”\textsuperscript{63}

Foreign and historical \textit{exempla} and advice bordering on criticism also featured in Gadd’s
dissertations.\textsuperscript{64} What is more, even though these treatises adhered to the economic programme of
the Hat Party and celebrated the government and the councillors of the realm, notably the Prime
ministers Tessin and Ekeblad, at least one of them contained statements which can be fathomed as
implicit attacks on the Hat regime as well as the Age of Liberty as such.\textsuperscript{65} After the Cap Party

\textsuperscript{61} Ibid., 8–10.
\textsuperscript{62} Ibid., 11, 13–14.
\textsuperscript{63} Lithander 1753, 40; Lindsteen 1754, 3–4, 7, 12, quote on p. 12, italics in the original text.
\textsuperscript{64} For foreign and historical examples, see Armfeldt 1765, 58, 66–67; Löfman 1765, 10–11, 26; Herkepaeus
1760, 2, 8–10; Engeström 1762, 1–2; Erling 1761, 1–3. For advice resembling criticism, see Löfman 1765, 22–23;
Engeström 1762, 26–27.
\textsuperscript{65} For positive representations of the Hat government, see Reinhold Bökman 1763, 5; Armfeldt 1765, preface;
had seized power in 1765, Gadd’s student Carl Gustaf Holmberg went a step further and openly denounced the trade policies of the former rulers as harmful to the common good.66

As the analysis of the images of the elite in Kalm’s dissertations shows, the powers that be were seen as the heart and brain of the body politic, whose health and growth depended on their ability to impart movement to the rest of the organism by acting as didactic examples and by taking useful measures. The article now turns to the representations of the bulk of the social and political body, the people, which, it was argued, would have to go through an elite-directed process of rationalization for improvement to occur.

The Ineptitude of the People

Kalm’s students mainly perceived the populace as a malleable object for the powers that be to regulate and edify. Aurenius inscribed the subordination of the people into the very structure of the future urban environment, since buildings inhabited by persons in authority or used by the state were given precedence over private houses and should for aesthetical purposes be situated in the most pleasant parts of towns, whereas commoners were to live in less visible spaces.67

The changes proposed by Kalm’s respondents were supposed to have substantial effects on the subjects. For instance, additional towns in the countryside would stimulate commerce and make the peasantry more attentive and industrious, while the distribution of the forests among the farms would instil a greater awareness of this valuable resource in the populace.68 In some of the treatises, the pedagogical task of the powers that be was more pronounced. Aurenius proclaimed that the higher social strata could help save the forests by instructing the people how to construct stone houses.69 Indrenius alleged that persons of rank should teach commoners how to produce wine and that vicars should show them how to build decent homes.70 Norrgreen trusted that the

66 Holmberg 1766, 3.
67 Aurenius 1753, 32–34. The wealthy and the nobility were, however, to take economic responsibility for the urban properties entrusted to them.
68 Aurenius 1753, 17; Lithander 1753, 38–39. See also Indrenius 1757, 9.
69 Aurenius 1753, 29.
70 Indrenius 1757, 8, 14, compare p. 16.
redivision of communal woodlands among the peasants would demonstrate to them just how absurd the former organization of agriculture had been and make them economize on timber. Norrgreen stressed that the actions and the authority of the powers that be along with lucid and reliable economic evidence were imperative for agrarian reform, since the common man was constrained by short-sightedness and the useless practices of the past: “But a custom, which the ignorance of the Ancestors has begotten, and the blind and undue reverence of the descendants has upheld for several ages, cannot be so easily transformed, although it is altogether harmful. Most Human beings are mostly affected by present advantages, and barely want to hear about new institutions.” Lindsteen accused the populace of ignorance and baseless ideas and blamed the neglect of horticulture in Finland on the “ingrained fancy for the usage of the father and the grandfather, from where one has not dared to depart. The dislike, I dare not say the hatred, of everything that might have the status of being new, or less common in our economy.”

Naturally, then, commoners were also taken to be incompetent, or at least less knowledgeable. From Aurenius’s perspective, a simple peasant could not be expected to grasp the intricacies of the manufactures or have time for anything but cultivation. Furthermore, some types of grass grown for medical and industrial ends required more knowledge and effort than a peasant could muster. The notion of an inept populace was most clearly expressed in Lithander’s dissertation, where the general population was charged with grave imprudence and mismanagement of the forests. The prevalence of slash-and-burn agriculture provoked a virulent attack on the uninformed populace, which was slowly ridding Sweden of its woodlands: “Except for the superfluous building, thoughtless tar production, unnecessary burning and other careless waste of wood, the peasantry has for a long time been wasting and ruining the forest through the pernicious swiddening, without the slightest afterthought and consideration of posterity.” In many locales, ‘the perverted preference’ for swiddening gave commoners little incentive to develop arable land, while the scorched forest

71 Norrgreen 1760, 9, compare p. 11.
72 Aurenius 1753, 33; Lithander 1753, 35, 42–43; Indrenius 1757, 10.
73 Norrgreen 1760, 4; Lindsteen 1754, 3.
74 Aurenius 1753, 35, 39–40.
75 Lithander 1753, 2, compare pp. 38–39 and Wegelius 1755, p. 7.
was seldom utilized to the full extent. Indrenius likewise polemicized against the penchant for slash-and-burn agriculture, which was “so to speak inborn”, while the highly injurious conviction that the forests would never be destroyed was said to, as it were, arrive with one’s mother’s milk.\textsuperscript{76}

The representations of the people as short-sighted, noticeable in the attacks on slash-and-burn agriculture, constituted a variation on the ineptitude theme. Apropos the lack of knowledge in the populace, Indrenius declared that its “attention does not extend further than to what glitters in front of the eyes”. Norrgreen argued that the communal management of woodlands and the palpability of immediate gains meant that most peasants would be completely focused on cutting down as many trees as possible, and that bringing them a healthier outlook had no prospect of success. The people were too busy providing for themselves and had no time to ponder the future. Even if a portion of the peasants resolved to leave the forests alone out of concern for what was to come, this decision would do them no good, since their callous and less thoughtful neighbours would not follow suit.\textsuperscript{77}

Notwithstanding all the disparaging representations, some renderings of the populace had a more positive tone. While Indrenius assaulted the ignorance and unfruitful customs of common people as well as the pride they took in their own skills, which nevertheless obstructed improvement (“From this nothing but wretchedness and poverty can follow”), he also observed that they possessed knowledge unfamiliar to even the most erudite of men. Anything useful that was unknown to more cultivated individuals was to be documented and disseminated by the clergy. Leopold discussed the knowledge of the populace in neutral terms and like Indrenius advised that more well-informed figures, in Leopold’s case fellow scholars, should promulgate it. The data were to be sent either to Leopold’s professor Kalm or the Royal Academy of Sciences.\textsuperscript{78}

Moreover, although a couple of the dissertations portrayed the peasants as indolent and careless, the majority of the respondents seem to have assumed that the people were prone to work for the common good; all they needed in order to do so was accurate directives from the more elevated social estates.\textsuperscript{79} The only dissertation to present an unequivocally positive image of the common

\textsuperscript{76} Lithander 1753, 30–31, italics in the original text; Indrenius 1757, 12.
\textsuperscript{77} Indrenius 1757, 2, 5–7, quote on p. 7; Norrgreen 1760, 8–9.
\textsuperscript{78} Indrenius 1757, 9–11, 13, quote on p. 10; Leopold 1753, 3–5. For the Royal Academy of Sciences and its orientation towards utility, see also Wegelius 1755, 2; Wialenius 1760, 16, 19, 21, 23, 25.
\textsuperscript{79} For portrayals of the peasants as indolent and careless, see Lindsteen 1754, 9; Collander 1760, 4.
man, however, was Andreas Gudseus’s treatise on meteorological methodology, which credited the peasantry with valuable knowledge that warranted respect and consideration.\textsuperscript{80}

The predominant, patronizing attitude of Kalm’s respondents towards the populace was shared by Browallius, who deemed commoners incapable of shouldering serious responsibilities and held that “few materials can be found, who are adequately skilled to lead and teach; conversely [,] there is a multitude that needs to be led, obey and follow”. Even though Browallius recognized that the order was in practice often reversed so that subordinates controlled their superiors, the overarching image of the masses was not revised, since he simultaneously professed that most people had an inclination for occupations which were of paramount importance to mankind but entailed little reason, insight or intelligence:

Such are most of those through whom agriculture, fishing, mining, handicraft, trade, shipping and similar branches of industry are pursued; One usually finds that they believe it to be dangerous to deviate a hairsbreadth from the customs of the forefathers and what they have learned from their parents or mentors. We often wonder and get annoyed at such limited concepts and stubborn heads; but it is really for the best that they are the way they are.\textsuperscript{81}

Elsewhere, Browallius stipulated that any righteous teacher wished for the extermination of the multifarious superstitions and misbeliefs which still marked a lot of commoners, and that the vicar was ideally “a father and economist in his congregation”.\textsuperscript{82} As in Kalm’s dissertations, paternalism intermingled with a deep-seated distrust of the people, who were unable to take care of themselves and to bring about utility without supervision from their betters.

Like Kalm’s students, Gadd’s respondents displayed a somewhat more mixed view of the populace. One of Gadd’s dissertations referred to the preconceptions and adverse customs which frustrated sheep husbandry in Sweden and stated that only persons of rank were far-sighted and open-minded enough to undertake the breeding of Spanish sheep. Although the peasants were deemed capable of being educated, their hands were ultimately to be guided and forced by the state. Another treatise depicted the people as easily led, prejudiced and governed by their

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\textsuperscript{80} Gudseus 1754, 8–9. \textsuperscript{81} Browallius 1747, 23–24. \textsuperscript{82} Browallius 1737, 14, 17.
passions; as long as the commoners feared God and complied with their superiors, though, their vices would not prevail in Sweden. The same respondent also claimed that a suitable instruction of peasant children would reduce the resistance and sluggishness with which the improvement of the Swedish realm was met.\textsuperscript{83}

Having thus illustrated the images of the people in eighteenth-century Turku, the article proceeds to its penultimate section, which examines how Kalm and his pupils represented scholars, that is, their own group, in relation to the rest of society.

\textbf{The Indispensability of Scholars}

When it came to the improvement of society, Kalm and his pupils endowed men of letters with a status reminiscent of the one they ascribed to the powers that be, as the dissertations cast disciplines, institutions of higher learning and the literati in a decidedly utilitarian light. This was usually a subtle affair, such as when Lithander remarked that numerous men of letters had taken a great interest in the preservation of the forests or when Colliander divulged that clever men had put together strategies to combat famine.\textsuperscript{84} In other cases, the utility of the erudite was described in a more explicit manner. Aurenius pointed out that canals were “staked out and so fiercely defended in public writings by men of letters and sharp-witted Mathematicis” and that a number of industries could not exist or thrive without the aid, wisdom and genius of the sciences. Lithander claimed that any people ignorant of beneficial sciences dwelled in misery and poverty, while Lindsteen asserted that the sciences were one of several factors that led to national prosperity.\textsuperscript{85}

Specific disciplines were likewise promoted by the respondents. Indrenius announced that many patriotic men of learning deserved acclaim and gratitude for their support of economics, a “most necessary human branch of knowledge”, which still had a long way to go and whose shortcomings contributed to Sweden’s unbalanced foreign trade.\textsuperscript{86} Lithander assigned a central role to natural history and maintained that it would someday become mandatory for all students,

\textsuperscript{83} Engeström 1762, 2, 6–7, 25, 27–28; Armfeldt 1765, 32, 55, 69–70.
\textsuperscript{84} Lithander 1753, 38; Colliander 1760, 3. See also Algeen 1757, 4; Gudseus 1754, preface; Colliander 1760, 6; Indrenius 1757, 5, 8–9, 16, compare p 14; Leopold 1753, 2–3.
\textsuperscript{85} Aurenius 1753, 25, 35; Lithander 1753, 13; Lindsteen 1754, 2.
\textsuperscript{86} Indrenius 1757, 1–2, see also p. 16.
a development that would cut imports significantly. For his part, Wialenius explained how the manufactures stimulated scholarship and how botany, mathematics and mineralogy in turn had benevolent consequences for industry, whose practitioners should therefore acquire scientific training.\footnote{Lithander 1753, 44; Wialenius 1760, 26–27.}

In his dissertation on the benefits of mastering the cultivation of domestic plants, Henric Enckell found it indisputable that the sciences had their “great and manifold use; there are however many enough, who cannot accept to give this truth assent. Ignorance, and the contagious and attached poison, biases and prejudices, which rule a multitude of mortals, are the foremost sources from which such weakness wells.” Enckell contended that sciences with a less tangible utilitarian potential – mineralogy, entomology, botany – were denigrated, and for this reason he ventured to upgrade these disciplines by underlining their immense usefulness. Botanists were framed as patriots who had disclosed that Sweden’s God-given plants were intended for its inhabitants and that much of the domestic flora could be exploited by dye works, which meant that botanical findings might help reduce the outflow of gold. Enckell also mentioned that the Collegium Medicum had recently produced a list of edible plants and that thousands of Swedes would escape death by starvation if this information became widely available. Enckell’s morality, erudition and zeal for the common good were hailed in an afterword by one of his friends, who invoked the reward learning and virtue should bestow upon the author.\footnote{Enckell 1760, 2–3, 9, 13–14, 16.}

The most straightforward and elaborate account of the favourable corollaries of science was featured in Leopold’s treatise, which elucidated how

\begin{quote}
Our Botanici here in Sweden have now, through diligence and toil [,] within the past 20 to 30 years not only discovered almost more Economic and Medical utilities, than all that were previously known, but also impressed a fire and heart for Knowledge about nature in a large portion of the youth, so that people have now [,] like out of an inborn instinct [,] begun to strive after a more detailed acquaintance with plants, as well as with their economic suitability.\footnote{Leopold 1753, 3.}
\end{quote}

If the botanists of the past had contented themselves with classification, their successors were as captivated by utility as they were by taxonomy, because “the knowledge is of little use
without the utility”. Yet, a lot of work, maybe most of it, lay ahead, as much remained shrouded in mystery.  

Given the emphasis on the capacity of science to illuminate useful matters, it is not too far-fetched to conjecture that Leopold and Kalm’s record of the state of the art in botany involved a bid for more resources from the powers that be. This interpretation is underpinned by the fact that the next page in Leopold’s dissertation narrated how Finnish students struggled to remedy the lack of knowledge. A corresponding approach is found in Norrgreen’s dissertation, whose very first passage considered the accomplishments of and enduring challenges facing scholars:


Although one plainly finds, that the Economy has through the measures of literate and diligent Men within a short period risen to such a height that one had not been able to assume it Thirty years ago, and had hardly dared to wish for such a bright era Fifty [years] ago; one must however admit, that many obstacles still lie ahead, which mean that the Economy still needs constant improvements.

The promise of science-driven progress made in Kalm’s dissertations related not just to the allocation of resources, but to the issue of authority as well. By representing the republic of letters as essential to the advancement of the patria, Kalm and his respondents in effect placed the scholarly community and themselves alongside or even above the powers that be, who could not efficiently and properly fulfil their obligation to enhance the fatherland without input from the erudite class.

An analogous outlook on the importance of the literati was communicated by Browallius, who declared that the ingenuous and intellectually superior led and assisted the rest; it was a remarkable sign of divine grace that “one readily asks and the other readily speaks”. Science and brilliance engendered welfare and improvement, and Providence had every so often made the powerful encourage the arts and sciences. This guaranteed that there would be no dearth of geniuses, who were, as a result of God’s wisdom, rare, but also “far greater and should be held in far higher esteem” than others.

90 Ibid., 3. The notion that much remained to be done resurfaced later on in the dissertation. See ibid., 6.  
91 Ibid., 4.  
92 Norrgreen 1760, 2.  
93 Browallius 1747, 10–11, 14, 24, 35, quotes on pp. 11, 24.
Not surprisingly, Browallius’s own discipline, natural history, was pictured as economically vital and remunerative. All of the estates and a variety of officials, not least clerics and judges, should hence obtain some knowledge of natural history. This was even more crucial with regard to the upper levels of public administration and the rulers, who inevitably had to familiarize themselves with Swedish nature. Like Kalm’s respondents, Browallius clearly tried to guide the powers that be in a certain direction, an enterprise which became particularly conspicuous as he delineated his vision of introducing foreign plants with the aim of limiting imports and increasing exports: “What an opportunity would not they, who rule the Realm in general and especially, Collegia and high-ranking officials, yes the Powers that be themselves, have, to improve our poor country as they wished, if they had the whole country for their eyes, as if they themselves had visited and evaluated each and every part of it?” In another context, Browallius notified his “Maecenases” that he was delighted they would be honoured for instituting historia naturalis in the town of Västerås and that posterity would be utterly thankful for this magnificent measure. Natural history was simultaneously portrayed as a poorly financed discipline, which together with the compliments indicates that Browallius was seeking to secure support for his field.94

Gadd and his students to all intents and purposes shared Kalm’s and Browallius’s opinion of the grand mission and great weight of the literati with respect to human destiny. Armfeldt proposed a reinforcement of the public education system, not least through the founding of public libraries of science, and called attention to the need for skilled teachers with decent pay. He went on to portray science and erudition as the lodestars of mankind and the lights of society, and asserted that they could not suffer any compulsion. Without them, there would be no virtue, honour or happiness, only darkness. A second dissertation argued that the legislative power must grasp economics in order to arrange things for the best, while a third began with proclaiming that the most blissful states were those in possession of well-read men of letters and that scholarship had improved Swedish economy and society. The next section of the preface reiterated the standpoint that countries with a flourishing erudition were fortunate and added that the sciences required help from “Diligent, Honest Men deserving of the common good” if they were to blossom.95

94 Browallius 1754, 3–4, 8–9, 16–21, quotes on pp. 9, 21.
95 Armfeldt 1765, 22–24, 29, 31, 56; Timm 1765, 8–16; Bökman 1763, preface. In a fourth treatise, men of learning like Triewald, Kalm and Gadd himself were directly or indirectly identified as contributors to the common good with reference to the planting of mulberry trees. See Herkepaeus 1760, 4–6, 14, 17.
Conclusion

The society discernable in Kalm’s dissertations was an unrealized ideal as well as a reflection of the social and political realities that confronted the Turku professor and his students. For all the talk of a cosmopolitan republic of letters, the Swedish literati – like many other European men of letters at the time – generally depended on tenacious patronage structures and an expanding public administration for their subsistence. There was not much room for criticism of the prevalent order, let alone for any kind of radicalism that seriously questioned the ancien regime.

Bo Lindberg has aptly postulated that eighteenth-century Turku epitomized an antiradical, Christian enlightenment that was preponderant in Sweden as a whole and centred on science, knowledge diffusion, progress and utility.96 Lisbet Rausing (previously Koerner) and Knut Ove Eliassen have identified similar enlightenments – a “Baltic” and a “Northern” enlightenment, respectively – which allegedly encompassed the Swedish realm.97 Irrespective of how this mode of enlightenment is labelled, Kalm doubtless personified it as he went about propagating the policies of the government and his benefactors Browallius and Tessin. It is fairly obvious that the patron–client relationships and Hat-dominated networks to which Kalm belonged had a profound impact on his dissertations; so did the political climate at the Royal Academy of Turku, where both Tessin and Ekeblad served as chancellors.

Accordingly, the society imagined by Kalm’s respondents was to a significant degree an idealized version of a traditional society composed of social estates with its hierarchies, bodily analogies, reverence for higher social strata and ingrained distrust of the people. However, Kalm and his students also inserted a new element into the mix by elevating the erudite class to a level of influence formally reserved for the powers that be, the heart and brain of the body politic. As far as Kalm was concerned, men of letters apparently constituted the real source of improvement and utility, the meta-movers behind the elite that was to convey motion to the populace and engage it in the overarching, patriotic reform project. From this perspective, Kalm’s dissertations heralded a later age and society, typified first by ‘mandarins’ and bureaucracy, then by experts and technocracy.

96 Lindberg 1990, 205–206.
97 Koerner 1999b, 389; Eliassen 2009, x–xii.
The mandarin type can, in fact, be detected already in the early modern state, where an insistence on the supremacy of knowledge and its bearers accompanied its growing status and power:

if industrialization is slow and state-controlled, if the traditional social organization persists for a long time, then burgher intellectuals are more likely to concentrate attention exclusively upon the rights of the learned. They will seek to constitute a kind of nobility of the educated to supersede the ‘merely traditional’ ruling class, and they will try to establish a system of educational certificates which can testify to the bearers’ position as men of intellect. Their leaders at the universities will speak for all graduates in demanding that public affairs be put increasingly into the hands of the educated few, rather than being managed by the untrained and intellectually as well as morally backward nobles.  

Arguably, this description is wholly applicable to Kalm, the social imaginary in the dissertations he presided over and the body politic he and his students endeavoured to sustain and improve upon.

References


98 Ringer 1969, 7–8.


Engeström, M. 1762. Tankar om schäfferiernes uphjelpande i Finland. Turku.


Granroth, E. 1754. Enfaldige tanckar om caffe och de inhemska växter som plaga brukas i des ställe. Turku.


