# The Swedish Empire and Postal Communications: Speed and Time in the Swedish Post Office, c. 1680–1720

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One of Gustaf Adolf von der Osten genannt Sacken's first experiences after his appointment as governor of the Baltic island of Gotland in 1689 was of the frustratingly poor state of communication with the mainland. A royal proclamation of mourning for the late ex-Queen Christina dated Stockholm 1 May reached the governor only on 19 May. The governor's report of his first impressions of Gotland, dated 16 May, had still not left Visby harbour when he wrote his second letter on 22 May. The unreliability and inadequacies of the packet-boats were beyond description, von der Osten complained. His proposed solution was the purchase of a post-yacht for faster and more reliable communication; with it, the governor would be able to pursue the king's orders more promptly.<sup>1</sup>

Von der Osten's experience is at odds with the common view on early modern Europe communications that the most efficient transportation was waterborne, and that an island should therefore have been rather well set. Ships went faster and could carry a great deal more cargo.<sup>2</sup> In his book on transport and trade from 1431 onwards, the geographer Peter Hugill uses the three stages of 'technological regimes', originally developed by Lewis Mumford: the eotechnic, the paleotechnic, and the neotechnic. Hugill characterizes the eotechnic phase (from the Greek *eos*, dawn, and *techne*, craft) as a period of dynamism for seaborne communication by wind-powered, ocean-going ships, whereas land transport continued to be dominated by an older regime based on the use of draught animals and human muscles with limited capacities. According to Hugill, the eotechnic phase lasted from the first Portuguese ocean-going journeys in the 1430s to the invention of steam-powered railway engines and marine engines, and the electric telegraph system for communicating information, four centuries later.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Skrivelser till Kungl Maj:t, Landshövdingars skrivelser I: Sverige, Gotlands län, vol. 1, 1650-1693, RA, Governor Gustav Adolf von der Osten genannt Sacken to his Majesty, Visby, 22 May 1689, RA. Postjakt (Swedish) or Postjacht (Dutch), a small fast ship used for post conveyance over open sea.

<sup>&</sup>lt;sup>2</sup> Hugill 1993, pp. 48–50; Volckart 2007, p. 54.

<sup>&</sup>lt;sup>3</sup> Hugill 1993, pp. 6–7.

Improvements in road standards in the second half of the eighteenth century were merely improvements on the eotechnic transport system. All great economies were sea-centred – the Mediterranean, the Indian Ocean, the North Sea, the Atlantic, and the Baltic. Trading ports had their dependent hinterlands, but the trading networks fanned out across the oceans.<sup>4</sup> The economic historian Hans Westlund has described Sweden's era as a great power in the seventeenth century as first and foremost a maritime empire, where the sea connected the realm and land was a barrier. One important reason was that transaction costs for sea-borne transport were much lower than for overland transport.<sup>5</sup>

In the Middle Ages, Gotland was one of the most central places for trade in the Baltic region.<sup>6</sup> This position was long gone by the seventeenth century, but trade was still important for the island's inhabitants – and not only for the merchants in Visby, but for the farmers in the countryside as well. Gotland maintained its old Baltic network, and traded in tar, timber, and limestone. In 1640, 345 laden ships departed Gotland, of which three-quarters sailed from small harbours. Exports appeared to have increased by the end of the seventeenth century.<sup>7</sup> By way of comparison, only 175 ships departed from Stockholm harbour in 1643.<sup>8</sup> With *c.* 2,400 inhabitants in 1690, Visby was a small town by European standards, but was one of the ten largest towns in Sweden.<sup>9</sup> Gotland was not remote and isolated. It was deeply involved in the commercial relationships of the Baltic region.

Nevertheless, von der Osten's first impressions of the state of communication were merely confirmed by his later experiences. On 6 March 1691, the governor reported that it was only the day before that he had received the *bönedagsplakat*, the annual intercession day proclamation, dated Stockholm 28 January. This was the first mail delivery since eight days before Christmas, and von der Osten also reports a tragedy. The wreckage of the packet-boat from the island of Öland had been found on the shores of Gotland in January, with no survivors. Ten passengers and all the farmers on the boat had perished. This was not a unique event – similar accidents took place in 1698 with a total of thirteen casualties – while interruptions lasting for weeks were not uncommon, as the farmers waited for fair winds.

These delays and interruptions were a natural part of cargo transport in the Baltic, which was seasonal and ceased completely in winter-time. But it was a

<sup>&</sup>lt;sup>4</sup> Hugill 1993, pp. 159-166.

<sup>&</sup>lt;sup>5</sup> Westlund 1998, p. 43.

<sup>&</sup>lt;sup>6</sup> Westholm 2007, pp. 29–30.

<sup>&</sup>lt;sup>7</sup> Gardell 1986, pp. 29–38, 47.

<sup>&</sup>lt;sup>8</sup> Bogucka 2003 (1980), p. 110, Table II.

<sup>&</sup>lt;sup>9</sup> Lilja 2000, p. 405, Table 2.

<sup>&</sup>lt;sup>10</sup> Skrivelser till Kungl. Maj:t, Landshövdingars skrivelser I: Sverige, Gotlands län, vol. 1, 1650-1693, Governor Gustav Adolf von der Osten genannt Sacken to his Majesty, Visby, 22 May 1689, RA.

<sup>&</sup>lt;sup>11</sup> Rudbeck 1933, pp. 243-245.

poor standard for information transfer. In 1702, post on the Stockholm–Göteborg land route, which was twice the distance, took about four days, and the whole 'information circle' (the time taken from sending of message to receiving a reply) took about ten days. The post on this route also went regularly once a week. Anyone in the seventeenth century used to a steady flow of written information and being able to act on the basis of letters must have regarded Gotland to be in the middle of nowhere. It was also expensive to send letters from Gotland. On average, correspondents in Visby had to pay much more in postage than correspondents in Stockholm. 13

### Themes and arguments

This study asks how quickly the Swedish Post Office delivered mail. Governor von der Osten's annoyment at the slowness and insecurity of sea-mail points up a particular concern. Was it a general feature of postal deliveries that posts were carried more quickly and reliably overland? Surviving *postpass* ('hour passes'<sup>14</sup>) are the main source for a comparison between overland mail and sea-mail. If information travelled faster on land, why was that the case? What consequence did it have for the integration of societies and for the Swedish Empire in particular?

#### Communication bias

Philip II (1556–1598), the 'largest brain in the world', ruled his Spanish Empire by reading reports from his councils about information received and by writing orders. He often worked late into the night, trying to digest the incoming information and direct outgoing orders without losing any time. He possessed what was then Europe's most efficient postal service, managed by the Thurn und Taxis family, and thus often had the pleasure of informing envoys from other states of events they knew nothing about. Still, Philip II was handicapped by the time-lag in information, and above all by the unpredictability of when it might arrive. Reports to Madrid from his troublesome provinces in the Netherlands normally took two weeks, but they sometimes took several months. An order issued on receipt of information could easily be redundant by the time it actually arrived. One of the reasons for the defeat of the Spanish Armada against England in 1588 was that Philip's efforts to implement his strategy were thwarted by inadequate lines of communication to the commanders who were meant

<sup>&</sup>lt;sup>12</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, 'Post af Stockholm til Götheborg' [31 January to 8 February 1702], RA.

<sup>&</sup>lt;sup>13</sup> Simonson 2009a, Map 1.

<sup>&</sup>lt;sup>14</sup> Discussed in detail below, p. 71-72.

<sup>15</sup> Parker 1998, pp. 21-31.

<sup>&</sup>lt;sup>16</sup> Parker 1998, pp. 48-49.

<sup>&</sup>lt;sup>17</sup> Parker 1998, pp. 52–54.

to execute his orders.<sup>18</sup> The time-lag in the transfer of information limited a ruler's ability to direct events.

Receiving news via the Post Office was of great value to correspondents; the speed of transfer had an impact on their ability to act, react, or interact. For interaction, it is important to observe not only the time taken to travel from A to B, but the time taken for the round trip. This is what the Finnish historian Seija-Riita Laakso has labelled an *information circle*. When studying the postal system, interactions, and thus information circles, are as important as the one-way communication embodied by mass media such as the press.

The significance of this goes far beyond a handful of individuals gaining the edge in commercial or political decisions; it had consequences for the organization of the decision-making bodies themselves. The time-lag problem forced the English Hudson Bay and East India Companies to delegate most of their decisions to the trading posts instead. The sociologist Anthony Giddens has stressed the time-space constitution of societies, in that the power that integrates societies is mediated through time and space. He introduces the concept *time-space distanciation of societies* to express their ability to integrate. Giddens draws inspiration from time-geography and the geographer Allan Pred's use of the concept *time-space convergence* in his study of urban systems in the US. Pred uses this concept to measure the shrinking of the time needed to travel between two points over a period of five decades, and goes on to argue for the profound significance of time-space convergence for the growth of the urban system.

The globalization of the last 150 years is an unprecedented example of societies' time-space distanciation and of time-space convergence, up to the point of creating a 'global village'.<sup>23</sup> It is a consequence of improved means of communication over distance in what has become a global, real-time information exchange.<sup>24</sup> Such a 'stretch' of societies in time and space requires certain skills or technologies. Giddens emphasizes the art of writing as one of the most important means. The written word dramatically improved people's capacity to store information, and thus improved the ability of societies to reproduce over time.<sup>25</sup> It also improved the geographical exchange of information. It is here postal systems come in. In early modern Europe, the development of the postal system was an important element in the integration of Europe. Herbert Samuel (British Postmaster General 1910–1916) summarizes the impact of the postal

<sup>&</sup>lt;sup>18</sup> Parker 1998, pp. 267–268.

<sup>&</sup>lt;sup>19</sup> Laakso 2007a, p. 101.

<sup>&</sup>lt;sup>20</sup> Carlos & Hejeebu 2007, pp. 148-151.

<sup>&</sup>lt;sup>21</sup> Giddens 1981, pp. 90–92.

<sup>&</sup>lt;sup>22</sup> Pred 1973, pp. 175–185, 217.

<sup>&</sup>lt;sup>23</sup> McLuhan & Powers 1989.

<sup>&</sup>lt;sup>24</sup> Buzan & Little 2000, pp. 287–288.

<sup>&</sup>lt;sup>25</sup> Giddens 1981, pp. 94–95, 169–170.

system on integration in his introduction to A. D. Smith's research on postage, published during the First World War:

The whole of our social organization has come to depend in large degree upon the post. Commerce, in all its departments, relies upon it. All the variety of associations which are, in their wide expansion, distinctive of modern civilization and necessary to its life and energy – employers' associations, trade unions, cooperative societies, friendly societies, religious bodies, political and propagandist organization of every kind, local, national and international – the whole nervous system of the modern State, depend upon the quick transmission of information and ideas; it would never have reached and could not maintain its present development without cheap, reliable, and speedy means of communication. The indirect effect of changes – even small changes – in the postal system is often extensive and almost incalculable.<sup>26</sup>

This was the European social organization that had begun to take shape in the seventeenth century. Postal systems were not a novelty, but they had developed considerably since the end of the fifteenth century, emerging as new, institutional outfits that amounted to a truly transnational European infrastructure, supervised by the European states and protected by state privileges – but also open to public use. The German historian Wolfgang Behringer regards early modern postal infrastructure as the centrepiece of a European communications revolution, comprising as it did the distribution of printed newspapers, the organization of travel, and the creation of a public sphere in coffee-houses and similar places. Eventually, the postal system laid the foundation for institutions and a communication network that used technological innovations in a second and more powerful communications revolution from the 1830s on – from rail-ways and telegraphs to the Internet.<sup>27</sup>

In a lecture series published in 1950, the Canadian economic historian Harold Innis unfolded a theoretical approach that connected the concepts of time, space, media techniques, and power structures – or 'empires' in Innis's terminology. Innis reflected upon 'heavy' and durable materials for storing written information such as parchment, stone, and clay, which favoured decentralization and hierarchical institutions, usually supported by an ideological (for which read religious) power. 'Light' and less durable materials such as paper and papyrus, on the other hand, favoured trade and administration over wide areas.<sup>28</sup> From this observation, Innis used the concept of empire as an indication of the efficiency of communication.<sup>29</sup> The concept is synonymous with a system of social power, mediated in time–space. Innis's observation on light and heavy media

<sup>&</sup>lt;sup>26</sup> Smith 1917, 'Introduction', p. xi.

<sup>&</sup>lt;sup>27</sup> Behringer 2003, p. 42.

<sup>&</sup>lt;sup>28</sup> Innis 2007 (1950), pp. 26–27.

<sup>&</sup>lt;sup>29</sup> Innis 2007 (1950), p. 29.

pinpoints two important features of written information and its integrative aspects: information flows in space and information storage over time. He argues that the shift from parchment to paper and the printing press in late medieval Europe entailed a shift from a decentralized religious and monastic 'empire', with its bias towards integration over time, to a power structure based on trade and monarchical power, and with a bias towards integration over space.<sup>30</sup>

Like many others, not least his adherent Marshall McLuhan (author of The Gutenberg Galaxy), Innis stressed the impact of the printing revolution in transforming the media system in early modern Europe. Behringer argues against this view, claiming that it was the postal system that provided communications proper, while the printing press was merely a device for copying and storing information.31 Although Behringer in turn tends to downplay the importance of the printing press too much, his view points to an important modification of Innis's interpretation of communication bias in early modern Europe. Printing has an ambiguous part to play when it comes to integration over time or space. As a technique it was of profound importance for the spread of information, which would promote spatial extension; yet the printing of texts was also a means of conserving the message over time, especially when it was considered holy - such as the Bible. More than the printing press, the postal service was a 'light' medium for communication over distance, and lent its weight to commercial and bureaucratic geographical integration.<sup>32</sup> Rather than durability, postal systems were concerned with speed in order to overcome distance.

# Speed and synchronization

The German historian Gerhard Dohrn-van Rossum argues that the late medieval and early modern postal system contributed in two important ways to the development of modern 'temporal orders'; in trying to transfer letters as fast as possible it contributed to the fixation on speed; and in its pursuit of co-ordinating the postal network by using fixed delivery times it contributed to synchronization.<sup>33</sup>

Distances could be overcome by speed, and this became the *raison d'être* for the postal system. It achieved speed by using relays, or *posts* in the original sense, where the horse or both horse and rider could be changed: the high speed over a short distance that a single rider could achieve thus became the ideal average speed for a series of riders over a long distance.<sup>34</sup> The corollary was that the fastest possible speeds were only open to organizations that maintained the necessary relay infrastructure and supervision.

<sup>&</sup>lt;sup>30</sup> Innis 2007 (1950), pp. 172–173.

<sup>&</sup>lt;sup>31</sup> Behringer 2003, p. 15.

<sup>&</sup>lt;sup>32</sup> Simonson 2008a, pp. 254–255, 257–258 elaborates on this borrowing from Innis.

<sup>&</sup>lt;sup>33</sup> Dohrn-van Rossum 1996 (1992), pp. 324–325.

<sup>&</sup>lt;sup>34</sup> Dohrn-van Rossum 1996 (1992), p. 32.

According to Dohrn-van Rossum, the urge to co-ordinate routes came later than the quest for fast communication. He uses the example of the imperial Post Office in the Holy Roman Empire – the Thurn und Taxis postal service – in the 1590s, the period when it was reformed. The Post Office at that point was supposed to be financed by postage for private letters, and the merchants in consequence became an extremely important interest group. They wanted a reliable system. The postal system was duly restructured with numerous agreements within the imperial Post Office and between Post Offices about fixed delivery times to orchestrate post routes.<sup>35</sup>

Fixed timetables were important for administering a complex network of post routes in order to optimize time efficiency, but they also point more directly at the relationship between the postal system and its customers in the shape of publicly announced time-limits for the dispatch of letters and expected arrival of posts. Wolfgang Behringer shows that expectations of ordinary post-days had an impact on the weekly rhythm of life as early as the middle of the sixteenth century. To Correspondents had an interest in predicting the times of post's departure and arrival.

In abstract terms, timetables aim to synchronize otherwise unrelated movements in space and time in order to effect complex social interactions. They are needed on occasions when people who interact are in different places and do not have direct access to one another; they are a means of mediating social relationships over large distances. The use of timetables for synchronization is typically connected with the shared use of communication systems, such as buses, railways, and aeroplanes. Paths and nodes in a network are not fixed without the existence of a timetable. As the postal network grew in complexity, with more junctions connecting different post routes, synchronization became even more important for a variety of reasons – including speed.

### The mediation of ideological, commercial, and bureaucratic power

It is no coincidence that it was the new governor of Gotland who was frustrated at the poor state of the postal deliveries, nor that this was in 1689, when Gotland ceased to be part of the late Queen Christina's endowment and began to be integrated into the bureaucratic Swedish state. Why so, when Gotland's trade continued to prosper, and its merchants seem not to have expressed any frustration over the state of communications?

The exchange of written information is a cornerstone of administrative power, especially in bureaucracies. The mediation of power over distance in a bureaucratic system builds on the accepted right for an absent superior to give orders in writing to his subordinates, who duly administer resources on the spot.

<sup>35</sup> Dohrn-van Rossum 1996 (1992), pp. 340-341.

<sup>&</sup>lt;sup>36</sup> Behringer 2003, pp. 105, 107.

When it came to decision-making, the central administration depends on a constant flow of information from within the country's borders and from abroad, and it has to be up-to-date information for decisions to make any sense. Bureaucratic power necessitates the centralization of authority and the fast and reliable transmission of information. It was in this manner Philip II ruled his empire. The Swedish historian Lennart Lundmark has also stressed the need to synchronize the flow of information within bureaucratic systems.<sup>37</sup>

The idea with commerce was to transfer commodities, while information was only a means to this end. However, the importance of business information to trade has attracted greater attention in economic history with the growing interest in transaction costs, and among them information costs. Without business information, long-distance trade could not be profitable. Improving postal networks in the seventeenth and eighteenth centuries allowed for a change in business patterns from the travelling merchant to commission trade, in which the merchant did business by corresponding with his commissaries in various locations.<sup>38</sup> This development lowered the transaction costs considerably and was thus important for the economic dynamic in early modern trade. The merchant had the same interest in the fast transmission of news as the politician, and for much the same reason: in order to react to actual circumstances and to gain the edge in a competitive environment. Nevertheless, trade could not rely solely on information transfer. Instead, commercial power built on a combination of the ability to transfer information and the ability to transport commodities.

A third ground for power, ideological power, worked in a more diffuse way, and was less dependent on the speedy transfer of information. Innis connects ideological power with durability rather than geographical reach. This does not mean that ideological power never operated through the postal organization. The regrets the governor had about the delayed arrival of the intercession day proclamation on Gotland serve as an example of how the postal service also spread ideological messages.<sup>39</sup> In his work on imagined communities, Benedict Anderson emphasizes the importance of a constant flow of news about events in the construction of national sentiment.<sup>40</sup> Still, ideological power, and especially religious power, was based on the world-views and shared practices embedded in local societies to which news flows were merely a supplement. Ideological power was less dependent on the quick delivery of news.

<sup>&</sup>lt;sup>37</sup> Lundmark 1989, pp. 144–146.

<sup>&</sup>lt;sup>38</sup> Müller & Ojala 2007, pp. 19-20; Veluwenkamp 2006, pp. 121-123.

<sup>&</sup>lt;sup>39</sup> Malmstedt 1994, p. 106, underlines that the prescribed themes for prayer served to foster national sentiment.

<sup>&</sup>lt;sup>40</sup> Anderson 1991 (1983), pp. 33-36.

### Integrative power in the Swedish Empire

Early modern Europe saw a state-building process by which political power was centralized in what has been variously labelled the absolutist state, the power state (Machtstaat), the military state, or the fiscal-military state. In the seventeenth century, Sweden developed into one of Europe's most formidable fiscalmilitary states, which managed to exploit the fiscal and military resources of a poor country, with a small and scattered population, on a scale that, apart from its hostile neighbour Denmark, would hardly be matched by any state before the French Revolution. 41 One explanation is that the Swedish state managed this because of its superior organization, its ideological mobilization under the banner of the Lutheran faith, and a political culture that involved the common people in administration and policy-making.<sup>42</sup> The state extended its power and knowledge into the individual peasants' families, thanks largely to the use the state could make of the parish clergy. The nobility became involved in state service and was generally loyal to the growth of the administrative power of the state. The central and regional bureaucracy was built up systematically.<sup>43</sup> On the local level, as pointed out by the historian Eva Österberg, state administration was integrated into the organs of municipal and parochial self-government and the local judiciary, which resulted in a political culture of mutuality and participation.44 Sweden was a much-governed and integrated state.

In contrast to this description of the Swedish state, the British historian Michael Roberts concludes that the Swedish Empire was not particularly unified. It was a conglomerate of different provinces that had little in common other than a common Lutheran faith (and even so there was the exception of the Russian Orthodox population of Ingria, who were looked on with suspicion). The commercial links between different parts of the empire were weak. Constitutionally, the relationship between the Swedish kings and their subjects varied greatly between different parts of the empire. The result was an entity that has recently been labelled a conglomerate state. Nilsson's much-governed state and Roberts's weakly integrated empire describe different geographic ranges. While Roberts describes the Swedish Baltic Empire, centred on the Baltic, Nilsson describes a state-building process that only comprised the Swedish kingdom (Sweden and Finland). Present-day political divisions and language barriers have also led Swedish historians to overlook much of the Finnish realm, thus creating an even stronger image of a strong and integrated Swedish state.

<sup>41</sup> Lindegren 2000, p. 197.

<sup>&</sup>lt;sup>42</sup> Glete 2002, pp. 210–212.

<sup>&</sup>lt;sup>43</sup> Nilsson 1990, pp. 294–300.

<sup>44</sup> Österberg 1991, pp. 177-188.

<sup>45</sup> Roberts 1977, pp. 83-87.

<sup>&</sup>lt;sup>46</sup> Gustafsson 1998, pp. 195–197; Eng 2001, pp. 41–52.

Roberts's observation that the commercial links between the different parts of the empire were weak also meant that Sweden was not, in the words of Charles Tilly, a capital intensive power (an organized power that made use of accumulated capital and commerce), but a coercive intensive power.<sup>47</sup> The Finnish historian Matti Klinge has described sea-centred empires as founded on trade and 'politics', as in the Greek city-states; and continental empires as founded on agriculture, and on ideological and administrative structures, as was the Carolingian Empire.48 He describes both the Danish and the Swedish kingdoms as maritime empires, although he also observes that Sweden was not a commercial empire, but depended more on territorial military and administrative power, like the Roman Empire. In the eighteenth century, Klinge continues, the dominant position in the Baltic passed from Sweden to the continental powers of Russia and Prussia.49 As already noted, Hans Westlund holds Sweden to have been a maritime empire, but one whose nucleus was the territorial infrastructure the Swedish state had gradually built up in the preceding centuries. After its decline in the eighteenth and early nineteenth centuries, the territory, with its landbased infrastructure first built up in the medieval age, remained.<sup>50</sup> What may seem paradoxical is that Sweden's commercial power was growing in the eighteenth century, at the same time as its maritime empire was crumbling, according to Tilly.51 I will return to this riddle of strong state and weak empire in the conclusion, for I consider the postal system to be part of the explanation, being a weak point for the integration of the empire and ultimately the defence of the empire. As Philip II found in Spain, the Swedish Empire suffered from the time-lag in its communications.

### Time-keeping versus news

Teodor Holm has considered in detail a conflict between two officials at the General Post Office in Stockholm in the autumn of 1710 that highlights the conflicting principles of speed and punctuality that were inherent in the Post Office's work. Stockholm was then in the grip of plague, and the court had fled to the safer town of Arboga two hundred kilometres to the west. The director general of the Post Office, Johan Schmedeman, had followed the court, leaving Johan Lange, the book-keeper and supervisor, in charge in Stockholm. Unfortunately, Schmedeman clearly failed to inform Stockholm's postmaster Daniel von Möller about the arrangement. This escalated an already well-entrenched personal conflict up the point where the two men each claimed that they feared for

<sup>&</sup>lt;sup>47</sup> Tilly 1992 (1990), pp. 16–20, 59.

<sup>&</sup>lt;sup>48</sup> Klinge 1985, pp. 174–180.

<sup>49</sup> Klinge 1985, p. 182.

<sup>&</sup>lt;sup>50</sup> Westlund 1998, p. 43.

<sup>&</sup>lt;sup>51</sup> Tilly 1990, pp. 133-136.

their lives.<sup>52</sup> One reason for the conflict was their different opinions about time-management. On one occasion, von Möller wrote to Schmedeman that:

[Johan Lange's] threats will not frighten me from proceeding with the dispatch of the posts at the appropriate times, not waiting on his delayed news sheets. If he then wants to break open sealed packages and posts, then there certainly will be a fight.<sup>53</sup>

von Möller thought that holding to the timetable for the dispatch of the post was a priority and that, as postmaster, it was his responsibility to ensure this. He believed his efforts were being frustrated by Lange's actions. Not only did Lange himself delay the departure of the post because he was habitually behind schedule with his newsletters, he also undermined von Möller's authority with the Post Office clerks who were meant to have the mail ready for dispatch.<sup>54</sup> Lange disregarded von Möller's precedence. A postmaster, Lange retorted, had to know how to speed up the post when it had been detained. All the occasions when the news sheets had delayed the dispatch of the post were justified, Lange claimed. He defended his authority to break 'prematurely' sealed mailbags, whenever deemed necessary.<sup>55</sup>

Lange had put his point of view in a memorandum back in 1703, in which he discussed how to inculcate respect for dispatch times with the same fervour as von Möller. Yet he drew a distinction between ordinary public correspondents and more important correspondents: the government and 'those one has to respect'. In the autumn of 1710, probably nothing appeared to Lange to be more important for the welfare of the state than the time-consuming task of serving the absent court with news. His method, the one that so annoyed von Möller, was to start working intensively on the news sheets as late as possible in order to include the very latest news. Fr

The conflict between von Möller and Lange illustrates a central ambiguity in the whole Swedish postal system – one that also affected its time management. Was it a public service institution that existed to serve the diffuse group of merchants and other private customers who financed the system? Or was it a state post that served a hierarchic bureaucracy, in which someone had the power

 $<sup>^{52}</sup>$  Three chapters in Holm's work are dedicated to this conflict (Holm 1906–1929, v. pt. 2, pp. 76–164).

<sup>&</sup>lt;sup>53</sup> The postmaster at the General Post Office in Stockholm, Daniel von Möller, to the director of the Swedish Post Office, Johan Schmedeman, 28 October 1710, quoted in Holm 1906–1929, v. pt. 2 p. 104.

<sup>&</sup>lt;sup>54</sup> Holm 1906–1929, v. pt. 2, pp. 104–105.

<sup>&</sup>lt;sup>55</sup> Holm 1906–1929, v. pt. 2, pp. 102–103, 115.

<sup>&</sup>lt;sup>56</sup> Holm 1906–1929, v. pt. 2, pp. 22–23.

<sup>&</sup>lt;sup>57</sup> von Möller complained that the clerks started work several hours late in the evenings, and were still working on the news when it was time to prepare the post for departure (Holm 1906–1929, v. pt. 2, p. 105).

to decide which messages and which users were allowed to disrupt its routines, deeming the welfare of the state to be its prime objective? von Möller was a proponent of the Post Office as public service institution, where all customers had to submit to its routines to make the system as a whole work smoothly. It boiled down to co-ordination. He was not prepared to let any one user disturb the entire system, whatever their rank or purpose, nor was there any excuse for those actually working in the organization. Lange, on the other hand, saw the schedules as applying only to the public customers of the Post Office.<sup>58</sup> When handling important official correspondence, the staff had to stay alert whatever the hour, and do what it took to ensure its quick dispatch.<sup>59</sup> The prime function of the Post Office was as a state post, with a side-line offering a paid service to the public.

Circumstances in 1710 brought this tension to a head. Usually the court was in Stockholm, Sweden's commercial centre and the hub of the postal network as well. The work compiling news for the court did not normally impinge on the routines for the dispatch of the west-going post to Arboga. But in 1710 it did. This was one of Sweden's most critical moments. The vicissitudes of the Great Northern War produced a great deal of news, little of it good – not to mention the menace of the plague.

### Imposing time discipline on state officials

In 1710, the director general of the Post Office, Johan Schmedeman, first supported Johan Lange in the conflict, probably in deference to Lange's seniority and because of his personal trust in Lange. The general tenor of the rules that governed the Post Office, however, was that people outside the postal system had to respect its schedules, regardless of their position in society. Back in 1667, Charles XI's regents had issued an ordinance forbidding postmasters to delay the post after the prescribed time of departure, whether it be on their own initiative or at the request of someone else, and whatever the pretext. Although the ordinance threatened the postmasters with punishment, its main effect was to protect their professional integrity from pressure from their 'customers' (and thus the ordinance also defined the relationship as that of postmaster and customer, or even client, and not as servant and superior). The ordinance also stressed the customers' obligation to respect the prescribed times of departure. A late letter had to wait for the next post, and not even the argument that the letter contained important news for the king would do. In urgent cases, the ordinance instead

 $<sup>^{58}</sup>$  Johan Lange's memorandum criticized the failure to fine merchants who delayed the post (Holm 1906–1929, v. pt. 2, pp. 102–103).

<sup>&</sup>lt;sup>59</sup> Holm 1906–1929, v. pt. 2, pp. 27–29.

<sup>60</sup> Holm 1906–1929, v. pt. 2, pp. 108–109, 125, 129.

recommends the use of couriers rather than detaining a large number of other important letters.<sup>61</sup>

The prohibition was repeated in 1682, probably reflecting the problems in enforcing it.<sup>62</sup> In 1683, the prohibition was repeated once again, this time when the postmasters' and post-farmers' independence of provincial governors, bailiffs, and constables was asserted.<sup>63</sup> A similar instruction in 1690 concerned the post-yacht on the new route Ystad–Stralsund, and prohibited all, save the king himself, from detaining the yachts after the post was loaded, or from commanding its departure before the post had arrived.<sup>64</sup> (Since the post-yacht also carried passengers, there might in fact be some interest in persuading the yacht to depart prematurely.) In 1685, the king also prohibited the use of the post-farmers' horses for extraordinary posts or courier traffic since this risked exhausting them, to the detriment of the ordinary post. In urgent matters, correspondents were instructed to send couriers instead and use innkeepers' horses.<sup>65</sup> Two years earlier, the king had intervened to prevent private letters being sent by extraordinary post, ordering the postmasters to let those letters wait until the ordinary post.<sup>66</sup>

It must have been tempting for regional state officials to use their power to force the postal system to suit their own time schedule. Provincial governors could both claim general social superiority and the priority of the state interests that they administered. In such a hierarchical society, prominent people could use their social superiority. This was the view that the ordinance of 1667 and the king's commands of the 1680s set out to challenge. There was no room for individual officials to give reign to their belief that their own correspondence was of greater importance. This would be an abuse of the postal system that would surely result in the delay of even more important correspondence – official *as* 

<sup>&</sup>lt;sup>61</sup> Kongl. May:ts Placat af den 13 Maij 1667 / angående postens richtige och obehindrade lopp, published in Kongelige och andra wederbörandes förordningar angående postväsendet 1707, pp. 2–4.

<sup>&</sup>lt;sup>62</sup> Transsumpt af Kongl. May:tz Bref til dess Cantzlie-Collegium 1682 den 2 augusti, § 7, published in Kongelige och andra wederbörandes förordningar angående postväsendet 1707, pp. 4–5.

<sup>&</sup>lt;sup>63</sup> Extract af Kongl. Maj:tz nådige resolution, uppå några af dess Cantzlie-Collegio giorde påminnelser / angående Postwäsendet; gifwen Stockholm den 4 julij 1683, §§ 3, 4 & 7, published in Kongelige och andra wederbörandes förordningar angående postväsendet 1707, p. 6.

<sup>&</sup>lt;sup>64</sup> Kongl. May:tz Bref / Post=Jachterne angående / Dat. Stockholm den 8 Martij 1690, published in Kongelige och andra wederbörandes förordningar angående postväsendet 1707, pp. 17–18.

<sup>65</sup> Transsumpt af Kongl. May:tz nådige Resolution och Förklaring / uppå någre af thess Cantzlie-Collegio i underdånighet föredragne ährender / Postwäsendet angående / Gifwen Stockholm then 17 Martij 1685, § 11, published in Kongelige och andra wederbörandes förordningar angående postväsendet 1707, p. 8.

<sup>&</sup>lt;sup>66</sup> Transsumpt af Kongl. May:tz nådigste Bref til thess Cantzlie=Collegium, Angående Extraordin: Poster, Daterat then 28 Augusti 1683, published in Kongelige och andra wederbörandes förordningar angående postväsendet 1707, p. 7.

well as private, as the ordinance proclaimed in 1683.<sup>67</sup> Here, the king expressed a view of the postal service as a public service institution, in which public use was not only a means of financing the postal system, but an important factor in the prosperity of the realm. It was also part of the attempt to impose time discipline on the bureaucracy; officials ought to adhere to the time schedule, and adjust the time needed to solve their individual tasks accordingly.<sup>68</sup>

A survey of the correspondence between the director general of the Post Office and the governors of the province of Uppland in 1712-1716 (province of Uppsala from 1714 onwards) shows that governors Johan Hoghusen (1695-1714) and Per Ribbing (1714-1719) generally respected the Post Office's independence from provincial governance.<sup>69</sup> They had serious complaints about some of the postmasters in the province, however, which they addressed to the director general of the Post Office. Some of the remarks concerned the postmasters' time management. Hoghusen was very upset by the refusal of the postmasters in Tierp and Uppsala to carry an urgent extraordinary post in 1714, probably reporting enemy troop movements in the north. Hoghusen had been reduced to using his own couriers to carry the letter to Stockholm.<sup>70</sup> In 1716, Ribbing, his successor as governor, urged the director general to command the postmaster in Uppsala to change times for the departure of the post for Enköping. The postmaster in Uppsala demanded that post for Enköping be delivered on Monday evening for dispatch on Tuesday at noon, but because the post from Stockholm only arrived on Tuesdays at about noon (a definite falling off, the governor remarked), the governor had no time to expedite orders to Enköping in response to letters from Stockholm. Ribbing wanted the dispatch of the post for Enköping to be on Tuesday evening instead.71 Governors were not only interested in fast deliveries but in co-ordination as well. In both these cases, the governors underlined the interests of the state, as was acknowledged by successive directors general of the Post Office.

To conclude, the need for co-ordination and punctuality if the postal system was to work, and the attendant need for immunity from external pressure for the Post Office staff, were acknowledged by the government and the directors of the Post Office in the late seventeenth and early eighteenth centuries. But the Post Office was not an independent, public service institution. The welfare of the state sometimes took priority, although various ordinances tried to lessen the poten-

<sup>&</sup>lt;sup>67</sup> Transsumpt af Kongl. May:tz Bref til dess Cantzlie-Collegium 1682 den 2 augusti, § 7, published in Kongelige och andra wederbörandes förordningar angående postväsendet 1707, pp. 4–5.

<sup>&</sup>lt;sup>68</sup> Lundmark 1989, p. 27–28.

<sup>&</sup>lt;sup>69</sup> Simonson 2008b, p. 15; Simonson 2010, p. 119–120.

<sup>&</sup>lt;sup>70</sup> ÖPD, Huvudarkivet, Skrivelser från landshövdingar med flera, Uppsala län 1701 – 1792, vol E 2 B:12, Governor Johan Hoghusen to General Post Director Samuel Barck, Uppsala, 27 September 1714, RA.

<sup>&</sup>lt;sup>71</sup> ÖPD, Huvudarkivet, Skrivelser från landshövdingar med flera, Uppsala län 1701–1792, vol E 2 B:15, Governor Ribbing to General Post Director, Uppsala, April 1716, RA.

tial conflict of interests by directing particularly urgent matters to extraordinary posts or to couriers outside the postal system. This hierarchy placed the communication to and from the Post Office in Stockholm as the primary objective, to which other post offices in the network had to yield, just as the postmaster in Uppsala had to adjust his timetable for the Uppsala–Enköping route to the arrival of the post from Stockholm.

#### A new kind of time-consciousness

And as soon he [the next postrider] hears the arrival of the post blown on the post-horn, [he] prepares himself to receive the letters from him, and with that, without hesitation, night and day, whatever the weather conditions, [he] speeds on his way.<sup>72</sup>

The importance of swiftness permeates the ordinance of 1636 that marked the birth of the Swedish Post Office. The post-farmers and postriders were not meant to take more than two hours to cover one Swedish mile (§ 2 in the ordinance – a Swedish mile was just over 10 kilometres); they should use short cuts where possible (§§ 3 and 6); and they should not to stop to talk on the way (§ 8). On arrival, the postmasters in the towns had to dispatch the post within half an hour, before the next postrider departed (§ 17).

One principle of the postal system, vital both for speed and punctuality, was that the mail should get through irrespective of prevailing conditions. Natural obstacles that appeared along the road were not allowed to interfere with the rhythm of the deliveries. The postmaster and inspector in Nyköping, Leonhard Törnbohm, hurried to recommend some kind of penalty for the post-farmers responsible for a five-hour delay in 1705. Of course, he remarked, the night had been dark and wet, but the road had been hard and in good shape; the weather conditions were not a sufficient explanation. An ordinance of 1686 permitted a reduction in speed of no more than fifteen minutes per Swedish mile, from 1½ hours to 1½, due to weather conditions. That the speed demanded was faster than that in 1636 was a consequence of the shift from running to mounted postriders, as prescribed as early as the 1640s and imposed in the following decades.

This ambition also supposed a corresponding professional ethos, a certain kind of heroism, which consisted of a stoic stubbornness to deliver the post without delay, even when this meant facing inconvenience and even serious danger. The postmistress in Luleå, Anna Gjärdsdotter, noted in 1686 how on

<sup>&</sup>lt;sup>72</sup> Förordning om postbåden 1636-02-20, § 1, quoted in Holm 1906-1929, p. 90.

<sup>&</sup>lt;sup>73</sup> Postverket centralarkivet, Teodor Holms excerptsamling, Avskrifter av handlingar som har anknytning till post från 1500- och fram t.o.m. 1800-talet, juli–dec 1705, sign. Ö 1 B:35, Postmaster Leonhard Törnbohm to General Post Director Schmedeman, 17 October 1705, RA. <sup>74</sup> Forssell 1936, p. 283.

numerous occasions she had taken great risks while crossing thin ice. Two of her sons had died carrying post: one drowned, the other froze to death.<sup>75</sup> That said, the repeated complaints about postmaster Rudbeck in Uppsala suggest that there were postmasters who were less committed to such an ethos, however.<sup>76</sup>

The phrase 'night and day' in the ordinance is to be interpreted literally. The postriders really did ride through the night. This refusal to let the daily rhythm of sunlight and darkness intervene with the steady rhythm of post deliveries was probably more remarkable than their contempt for the weather. There were few organized activities that were not ruled by the simple maxim that one worked by light of day and rested at night. In Sweden, with its immense differences in daylight hours depending on the season, this also meant a seasonal difference in working time, where the summer meant long, intensive working days.<sup>77</sup> The postriders and postmasters ignored this; or at least they were expected to do so.

There were good reasons to avoid travelling at night. One has to admire the courage of the postriders, often not yet adults, who did. Neither towns nor countryside had much in the way of lighting; all one could hope for was moonlight and the stars, in winter-time helped along by the reflecting snow. Travellers could light their way with lanterns or torches, 78 but that was far easier on a coach than on horseback. The darkness brought with it dangers that were easier to avoid in daylight. There was, of course, a greater risk of losing one's way. Accidents were also more likely. Holm refers to an example where a postrider was on his way through the forest of Kolmården at dark of night, and his horse stumbled between two logs of a bridge and broke its leg.<sup>79</sup> Finally, there were the imagined dangers of ghosts, the Devil, and all the other horrors that populated the world at night.<sup>80</sup>

The posting times for letters at the General Post Office in Stockholm – the late afternoon – can be interpreted as an adaptation to its customers, the merchants and public officials, who ended their working day by dispatching the post. Johan Lange even once proposed that the posting time should be some hours earlier in winter (between Michaelmas and Easter) as the Post Offices did in Denmark and Germany.<sup>81</sup> The difference between Lange's proposal and the modern standard summer-time in use in the EU is that it is now easier to change the clocks than all our schedules.

This adaptation meant that the employees at the post offices worked night shifts. One of von Möller's complaints in 1710 was that the clerks did not even

<sup>&</sup>lt;sup>75</sup> Lundgren 1987, pp. 28–29.

<sup>&</sup>lt;sup>76</sup> For Rudbeck, see also Grape 1951, pp. 612–613.

<sup>&</sup>lt;sup>77</sup> Garnert 1993, pp. 96–100.

<sup>&</sup>lt;sup>78</sup> Garnert 1993, pp. 64–66.

<sup>&</sup>lt;sup>79</sup> Holm 1906–1929, v. pt. 1, p. 343.

<sup>80</sup> Garnert 1993, pp. 112-115.

<sup>81</sup> Holm 1906–1929, v. pt. 2, p. 23.

begin their work before three or four in the afternoon.82 This was a habit that von Möller's predecessor had also tried to stop eleven years before. The second clause in his regulations of 1699 states that clerks should be at work well before departure time, and that they should not arrive in the evening at 5 or 6 p.m. The same regulation states that the supervisor has to be at work before the packets of letters were ready, at 10 or 11 p.m., when letters from noble gentlemen were still frequently arriving.<sup>83</sup> For the employees at the General Post Office in Stockholm, the most intensive work began when most other people were preparing for bed. Johan Lange, Daniel von Möller, and the others at the General Post Office worked hours that before electric light were regarded as the middle of the night. They remind us of the overworked Philip II who a century or so earlier had sat late at night vainly attempting to clear his desk of its piles of papers before he could sleep, a victim of a flow of information that he had to consume and respond to without delay.84 In a dark Stockholm, the General Post Office house with its lighted windows must have stood out, perhaps matched only by the castle, where some of those gentlemen whom Lange insisted the post office staff had to respect finished the letters that could not wait until the next departure.

Dohrn-van Rossum remarks that the conflict between urban time, largely oriented towards daylight, and the post deliveries, riding night and day, was a recurrent theme for the Thurn und Taxis service. Swedish postriders riding at night might find the town gates closed. Often this only resulted in minor difficulties if the guard happened to be absent, to the fortified towns, passage at night was prohibited. Post-farmers had to wait out the night outside the gates of the fortified towns of Halmstad and Göteborg before they could retrieve the returning mailbags. Outside the gates of Halmstad, the farmers waited in small huts. A cable could be strung up in order to haul the mailbags over the walls. To the could be strung up in order to haul the mailbags over the walls.

The postal service even ignored the canonical hours. Ever since the Christianization of Sweden, the church had had a deep impact on the people's daily rhythm. During the Reformation and years of the Lutheran orthodoxy that followed in the seventeenth century Sweden, the number of Catholic feast-days was drastically reduced. Instead, the church and the state together imposed a steady weekly rhythm of six days of work and Sunday as the Sabbath, a day of rest and service to God.<sup>88</sup> In the central administration, a weekly schedule was prescribed, with Mondays to Fridays as working days. Working hours were thoroughly set, thus imposing a time discipline that separated working time from leisure time.<sup>89</sup>

<sup>82</sup> Holm 1906–1929, v. pt. 2, p. 105.

<sup>83</sup> Holm 1906–1929, v. pt. 2, p. 36.

<sup>84</sup> Parker 2000 (1998), pp. 29-30.

<sup>85</sup> Dohrn-van Rossum 1996 (1992), p. 338.

<sup>86</sup> Holm 1906–1929, v. pt. 1, pp. 350–351.

<sup>87</sup> Holm 1906–1929, v. pt. 2, pp. 101–102; Holm 1906–1929, v. pt. 1, pp. 351–355.

<sup>88</sup> Malmstedt 1994, pp. 81-82.

<sup>89</sup> Florén 1987, pp. 511-512.

For the farmers, such a distinction was impossible. They were more ruled by the weather and the seasons than by the clock – but they nevertheless had to observe religious time, signalled by the bells ringing from the church. For the postal system, however, speed was of the essence. The requirement to ride night and day also meant riding on Sundays. In order to investigate a delay of twenty-four hours to a post delivery in 1688, inspector Johan Lange calculated the expected delivery time from Riga to Åbo, on the basis that every Swedish mile should take a maximum of 1½ hours. By his reckoning there was no time for a day's rest on the Sabbath. Post that departed from Riga on Thursdays between 5 and 6 p.m. should arrive at Dorpat on Saturday, from whence it should depart at 6 p.m., at the very hour the church bells heralded the Sabbath. It arrived in Wesenberg on Sunday, from where it continued at 2 p.m. One week later the post arrived in Helsingfors from Borgå at midnight on Saturday, and left Helsingfors for Åbo on Sunday at 11 a.m.<sup>91</sup>

There is, however, some evidence that church services were attended – at least by the postmasters and probably by the postriders as well. In Lange's example, the post remained in Helsingfors for eleven hours before departing for Åbo at 11 a.m. His annotations do not reveal when the post arrived at Wesenberg, but it departed thence on the Sunday afternoon, well after church. In contrast to the uncommented break in Helsingfors, Lange remarks that there was time to gain by shortening a four-hour break in Nyen. Meanwhile, in the *Instruction to the postmasters* of 1707, postmasters are obliged to be on duty, ready to receive and deliver letters to the townspeople every day from 8 a.m. until dinner, and in the afternoon until 7 p.m., with the exception of church services. The instruction does not regulate specific working hours when it comes to the arrival and departure of the post, however. Instead, the postmaster was meant to be always on the alert, or to arrange for a replacement.<sup>93</sup>

# Time-keeping and technology – the use of clocks

Technological innovation has often been at the centre of new communication systems, from the telegraph and the railway in the 1830s to the Internet today. Similarly, early modern communication systems have been connected to technological innovation, be it Gutenberg's invention of the printing press, shipbuilding, or the navigation of open seas developed in the Iberian Peninsula in

<sup>&</sup>lt;sup>90</sup> Lundmark 1989, p. 30-31.

<sup>&</sup>lt;sup>91</sup> Kanslikollegium, Estland och Livland samt inrikes, 1687–1695, vol. G 2 F:1, Kontrollören J Langes visitationsberättelser, RA.

<sup>&</sup>lt;sup>92</sup> Kanslikollegium, Estland och Livland samt inrikes, 1687–1695, vol. G 2 F:1, Kontrollören J Langes visitationsberättelser, RA.

<sup>&</sup>lt;sup>93</sup> Kongel. Canztlie-Collegy Utfärdade Instruction för samptel. Postmästare i gemen ..., givet Stockholm 16 Februari 1707. § 4, Kongelige och andra wederbörandes förordningar angående postväsendet 1707, p. 251.

the fifteenth century. The postal system represents something different. Instead of relying on technological innovations for its development, improvements came from new organizational patterns of co-ordination. It was the institutions and the sheer scale of the organization involved that characterized the system.

Anthony Giddens explores the importance of abstract expert systems, or 'systems of technical accomplishment or professional expertise',<sup>94</sup> that in modern societies keep our daily life functioning: from our electricity supply and the underground that transports us to work, to the banks that manage our transactions. Expert systems are mechanisms that 'disembed' social relationships from local contexts of interaction and are thus closely linked to time–space distanciation.<sup>95</sup> The concept suits the early modern postal system well: it was an early example of an expert system.

In his history of the Thurn und Taxis Post Office, the German historian Wolfgang Behringer argues that the early modern European postal system would prove paradigmatic for later communication systems, such as railways, air traffic, telephones, and the Internet, in structure as well as in organizational details. The postal system introduced principles such as reliability, calculability (of delivery times and price), punctuality, and equality among customers, and amongst its innovations were tariffs, itineraries, travel guides, newspapers, timetables, and tickets. Successive communication systems in the nineteenth and twentieth centuries could apply these institutional devices to new technological solutions.

Of course, technology was used, and technological standards were important for the achievements of the system, but this was rarely technology that was specifically developed for the postal system, or even the outstanding technology of the age. The Swedish evidence even indicates that the lack of financial input in the system resulted in inferior equipment. The postmaster in Nyen reported in 1701 that a postrider had got stuck in a traffic jam behind a contingent of soldiers, because he lacked a post-horn to signal his arrival. The postmaster also complained about the wooden saddles used on the route, which wrecked the horses.<sup>98</sup>

However, the postmasters and other professionals in the postal system had a special interest in the use of the most advanced machine of the time – the clock. Keeping time was an important part of the system. The postmasters had to be aware not only of which day it was, but also of hours and quarters. And they had

<sup>&</sup>lt;sup>94</sup> Giddens 1991, p. 27. The same term is used for artificial intelligence, a subgroup of computerized knowledge systems, interacting with human experts (Sagheb-Tehrani 1993, pp. 30–34). Though sharing several characteristics, Giddens's broader concept does not posit a computerized technological system.

<sup>95</sup> Giddens 1990, pp. 21-22.

<sup>&</sup>lt;sup>96</sup> Behringer 2003, pp. 42–43.

<sup>&</sup>lt;sup>97</sup> Behringer 2003, p. 683.

<sup>&</sup>lt;sup>98</sup> Postverket centralarkivet, Teodor Holms excerptsamling, Avskrifter av handlingar som har anknytning till post från 1500- och fram t.o.m. 1800-talet, 1701, sign. Ö 1 B:28, Letter to the General Post Director, 25 January 1701, RA.

to manage it not only in daytime, when they could estimate the time from the sun, but also at night.

The ordinances of 1636 and later laid down that the postmasters should not detain the post on its arrival: the postmaster had no more than a quarter or half an hour at his disposal to sort the post before its departure. Certainly this put the postmasters under pressure of time, yet it did not require recognition of the correct time of day. The time taken could be checked with an hour-glass. The 'post boy' (postpojke) at the post office turned the hour-glass when he carried the post inside so he and the postmaster could check that they were not running behind.<sup>99</sup> This time measurement served the purpose of speeding up the process, in the same way as the post-horn signalled to the postriders and postmasters to ready themselves for the arrival of the post. Neither should it be thought that hour-glasses were necessarily inferior to clocks. When measuring the duration of an event, without the need to relate elapsed time to a specific time of day, hour-glasses were then more accurate devices than most clocks, especially when measuring quarters.<sup>100</sup>

For another of the postmasters' routines, however, hour-glasses were insufficient. The postmasters needed sundials or mechanical clocks to tell the time when they filled in the hour passes that accompanied the mailbag, used to verify the speed the postriders had travelled. It was not enough to use the church-clock in a town as a local standard time; all the clocks along the whole route had to show roughly the same time. In other words, the control of speed demanded a common clock-time at different locations.

It would be almost two more centuries before the need of a national standard time was felt, even though the technology was at hand. This need was connected with the introduction of the railways. The only standardization needed for the seventeenth-century Post Office was that the clocks in the towns should show the correct local time – a time accurate to the sun's position. This sounds easy enough, but the Post Office was probably one of the few bodies who required this type of time-keeping not only locally but also nationally; not only by day, but also at night. In his study of three local communities, Henrik Ågren shows time-keeping to have been part of a social interaction that was mainly local. The inhabitants *heard* the clocks strike more than they *watched* the time; and those involved in a social interaction, such as mining or attending a sermon, all heard the same clock. Ågren finds evidence in the judicial records that the courts were more likely to ask for specific clock-times in 1730 than in 1650, but that the answers remained very vague, suggesting that time-keeping was not routine for

<sup>99</sup> Holm 1906–1929, v. pt. 1, p. 191.

<sup>&</sup>lt;sup>100</sup> Dohrn-van Rossum 1996 (1992), pp. 118, 243–245.

<sup>&</sup>lt;sup>101</sup> Holm 1906–1929, v. pt. 1, pp. 187–188.

<sup>&</sup>lt;sup>102</sup> Bartky 2000, pp. 1-2; Lundmark 1989, p. 50-58.

the witnesses.<sup>103</sup> Teodor Holm adds examples of inaccurate clocks from the beginning of the eighteenth century, and concludes that the reality did not fully meet the ambitions of the control system. The weak point was access to clocks, and the poor technical standards of town clocks. A report in 1704 showed that few postmasters owned a mechanical clock, and their sundials were useless at night and in cloudy weather.<sup>104</sup> According to the inventories, the post offices were not equipped with clocks, and some even lacked hour-glasses.<sup>105</sup> On the other hand, Holm's examples show postmasters, such as Richard Olufsson in Halmstad, who were much concerned at the problem of time-keeping and inaccurate clocks: Olufsson pointed out that a suspected slow deliveries between Helsingborg and Halmstad were rather the result of inaccurate clocks in the small towns in between. Initially, the director of the Post Office in Stockholm, Samuel Åkerhielm senior, seemed unaware of the problem.<sup>106</sup>

Olufsson and other postmasters pushed for improvements in time-keeping with mechanical clocks in the towns at the beginning of the eighteenth century. This echoed moves in the Prussian Post Office, where regulations of 1710-1712 stated that clocks that were out of sync would no longer be accepted as a valid excuse for delayed post. The postmasters had to urge officials and town magistrates to adjust the clocks according to the sun.<sup>107</sup> Technological improvements in the preceding decades had paved the way for the use of mechanical clocks for time-keeping, most notably the Dutchman Christiaan Huygens' invention in 1656 of a far more accurate timepiece, the pendulum clock, which had spread to Sweden within a couple of decades. 108 In the seventeenth century, the clockmaker's profession was close to non-existent in Sweden. Before the first Swedish clock-maker's guild was founded in Stockholm in 1695, the clock-makers were locksmiths or were included in the locksmiths' guilds. 109 In 1700 a firm in Stjernsund received privileges to produce, among other things, mechanical clocks, 110 while the early eighteenth century saw the production of pocket-watches in Sweden, suggesting a growing demand.111

The techniques for more accurate time-keeping were thus rapidly evolving at the beginning of the eighteenth century, and the Post Office responded with

<sup>103</sup> Ågren 1998, p. 235.

<sup>&</sup>lt;sup>104</sup> Holm 1906–1929, v. pt. 1, p. 189: Postverket centralarkivet, Teodor Holms excerptsamling, Avskrifter av handlingar som har anknytning till post från 1500- och fram t.o.m. 1800-talet, juli–dec 1705, sign. Ö 1 B:35 Postmaster Leonhard Törnbohm to the General Post Director, 17 October 1705, RA.

<sup>&</sup>lt;sup>105</sup> Holm 1906–1929, v. pt. 1, p. 190.

<sup>&</sup>lt;sup>106</sup> Holm 1906–1929, v. pt. 1, pp. 187–189.

<sup>&</sup>lt;sup>107</sup> Dohrn-van Rossum 1996 (1992), p. 343.

<sup>&</sup>lt;sup>108</sup> Pipping, Sidenbladh & Elfström 1995, pp. 24-25.

<sup>109</sup> Götlind 1993, p. 149.

<sup>&</sup>lt;sup>110</sup> Pipping, Sidenbladh & Elfström 1995, pp. 18–19, 425.

<sup>&</sup>lt;sup>111</sup> Small timepieces that could be worn had existed since the beginning of the sixteenth century. In Britain, the production of watches was a well-established industry by the beginning of the seventeenth century (Pipping, Sidenbladh & Elfström 1995, p. 59).

interest. One obstacle was the poor financial state of the postal system, or rather the postmasters' finances (see Droste's chapter in this volume). The use of the latest technology was too expensive to be within the reach of many postmasters; they continued to rely on the town's church-clock. Still, clocks were an indispensable technical asset for the postal expert system in its ambition to quicken and co-ordinate its deliveries.

### Delivery speeds for mail and sea-mail

Some proposals have been made based on calculations for the route via the Åland Sea and via Porkkala, with the same accuracy as one can achieve with the land post, and when, as has sometimes happened, the weather and wind have been beneficial, they have been convinced by that that the post always can be delivered at the same speed; something that on occasion proves to be wrong. 112

When it came to speeds overland and at sea, the superiority of sailing-ships was illusive, as this quotation from the Chancery Board indicates. A warship such as the French *Invincible* of 1744, or the American *Constitution* of 1797, reached maximum speeds of about 25 km/h,<sup>113</sup> but that was their maximum speed, not their average. The speed of sailing-ships was unpredictable, and from that it follows that the duration of journeys was equally unpredictable. Instead of fair winds, ships could be becalmed for weeks. Riders were not unaffected by weather, but it was usually easier to maintain a steady speed on horseback and thus stick more closely to a timetable.

The Chancery Board was experienced enough to dismiss calculations that failed to consider this drawback to transporting post by sea. In this particular memorandum, addressed to governor-general Erik Dahlbergh in Riga, the Chancery Board discussed the problems of the slow Stockholm–Riga land route via Finland. The Chancery Board mentioned the dangers inherent in the Åland Sea and Porkkala–Reval crossings as one of the obstacles. In the latter case, this often meant that by the time the post from Porkkala arrived in Helsingfors, it had missed the connection with the westbound post from Ingria to Stockholm via Helsingfors, and had to wait for the next post.<sup>114</sup> Those routes were problematic not only in the winter, but also in summer because of storms and contrary winds. Experiments with post-yachts on these routes had proved unsatisfactory.<sup>115</sup>

The problems were so difficult that an alternative route ten times as long was often used in winter-time, through sparsely populated country in northern Swe-

 $<sup>^{112}</sup>$  Memorandum from the Chancery to governor-general Dahlbergh in Riga, 6 May 1697, quoted in Holm 1906–1929, v. pt. 3 p. 7.

<sup>&</sup>lt;sup>113</sup> Hugill 1993, Table 3.1, p. 122.

<sup>&</sup>lt;sup>114</sup> Holm 1906–1929, v. pt. 3, p. 10.

<sup>&</sup>lt;sup>115</sup> Holm 1906–1929, v. pt. 3, p. 8.

den and Finland. At the end of the seventeenth century, the Post Office also considered a route from Uleåborg in Österbotten to Viborg, a suggestion that was met with scepticism in the memorandum. The route went right through wilderness, with an estimated distance of up to six hundred kilometres between post offices (in reality, the longest leg was between the post offices of Kajana and Nyslott, a distance of three hundred kilometres), with bad roads, or no roads at all, for much of the route. Both that route and the proposed sea-route were in fact realized soon after the outbreak of the Great Northern War in 1700.

### Hour passes

The question here is how fast letters were conveyed and what the length of the resulting information circles might have been. The hour passes (*postpass*) used by the Post Office to keep tabs on the postriders and postmasters are the primary source material in this study. Hour passes had long been in use, beginning in Renaissance Italy.<sup>117</sup> The postmasters wrote down the time of arrival and departure on the hour pass that was carried by the postriders along the route. Unfortunately, very few hour passes have survived. Those that have are useful tools in researching the speeds at which the postriders travelled.

Since it was the postmasters in the towns who recorded the time on the hour passes, it was not immediately obvious what had happened on the country stretches. One way of solving this was to fine all the post-farmers on that section of the route for a delay.<sup>118</sup> As we have seen already, the accuracy of the timekeeping was another problem. Despite this, the hour passes were efficient instruments of control. For the Post Office, an investigation of a series of hour passes soon revealed deviations from the ideal pattern, plus approximately where on the route the problem had occurred. The problem with time-keeping could result in extreme values. The most impressive records of high-speed performances thus have to be scrutinized, especially if they were preceded or followed by very poor speeds. There is less risk that an error would be reproduced, however, since sooner or later it would be corrected by more accurate timekeeping at a post office further along. In the end, the position of the sun could help to correct errors. Systematic cheating was difficult, for the same reason. The next postrider and postmaster in the chain had reason to protest, since it would be at the expense of their own recorded speed performance.

Hour passes are not the only valuable source, however. Alternative sources sometimes offer detailed information on the time taken over the short distances between two posts. In her dissertation on business information transmission abroad in the nineteenth century, Seija-Riita Laakso uses sailing lists as a source

<sup>&</sup>lt;sup>116</sup> Holm 1906–1929, v. pt. 3, pp. 3, 11–12.

<sup>&</sup>lt;sup>117</sup> Dohrn-van Rossum 1996 (1992), pp. 335, 339.

<sup>118</sup> Forssell 1936, i, p. 282.

to analyse information circles, after a survey of other methods and sources used to measure the speed and duration of postal transmission.<sup>119</sup> Laakso excludes hour passes from her survey (they are not relevant to nineteenth-century seamail), but the sailing lists published in newspapers resemble the kind of information that can be extracted from hour passes, with the difference that sailing lists only note dates of arrival, not hours or quarters as in the hour passes.<sup>120</sup> Hour passes are more specific than the other methods used, but they are silent about the first and last parts of the circle: from the correspondent to the post office; and from the post office to the recipient.

A limitation to hour passes as sources is that they probably survived as part of an investigation, initiated because of concerns over slow deliveries. However, this is not an insurmountable problem. Either any delay can be narrowed down to a particular post office or section of route, or the investigation was initiated because of the general slowness of deliveries. In the former case, a deviating value is easy to distinguish; in the latter, the hour pass probably survived as a representative example of a problematic route.

What follows is concerned with the speed of deliveries, but is also partly inspired by Laakso's method of studying information circles. While it has not been possible to count the number of consecutive information circles annually, given the fragmentary sources and the limited scope of the survey, hour passes lend themselves to measuring the time for a single information circle. Laakso stresses that the length of an information circle not only depends on the duration of the two separate deliveries, but also on the frequency of sailings (for which read departures from post offices) and whether there was enough time for the recipient to write an answer.<sup>121</sup>

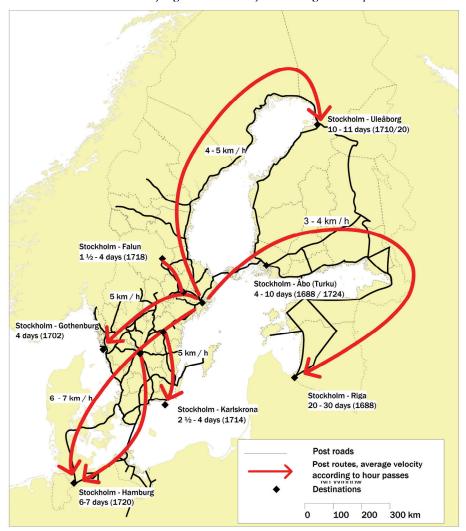
## Average speed overland

In the surviving hour passes the average speed between post offices ranged between 3.5 km/h and 8.1 km/h. In some it is possible to calculate the speed on the road (the total time, including stops at post offices to sort packets of letters and fill in the hour passes). On the road, the average speed was never below 4.6 km/h (Table 2.1). Speeds below 3 km/h on the road were unusual, and must have involved some kind of interruption, not just slow horses ambling at a walking pace. Postriders sometimes got lost, or disregarded their responsibility to ride in night and day, or were not prepared when the post was handed over.

<sup>&</sup>lt;sup>119</sup> Laakso 2007b, pp. 29-40; also Laakso 2007a, pp. 85-87, 99-100, and Table 6.1.

<sup>&</sup>lt;sup>120</sup> Laakso 2007b, p. 37, passes over the more detailed but less accessible sources.

<sup>&</sup>lt;sup>121</sup> Laakso 2007a, pp. 101-102.



Map 2.1 Average speed and duration for postal conveyance to and from Stockholm, in the late seventeenth and early eighteenth century, according to hour passes

Source: ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1; Kontrollören J Langes visitationsberättelser, Estland och Livland samt inrikes, 1687–1695, vol. G 2 F:1, RA.

About 10 km/h was also a rather uncommon upper limit. The speed of 16.6 km/h between Arboga and Köping in 1711 casts some doubts over the accuracy of the time-keeping, but is not impossible. There are records of Charles XI riding at speeds of 19 km/h in the same region. The impressively slow deliveries between Västerås and Enköping in 1718 (0.5 km/h) involved a delay of three

<sup>122</sup> Retsö 2007, p. 88.

days at the Västerås post office, probably awaiting the post from Göteborg. It reveals the problem of co-ordination that seems to have been an important cause of delay on those routes that were not regarded as main routes. When co-ordination across the network did not work out perfectly, the hierarchy of routes and destinations decided which posts had to be held up. Stockholm was the destination at the top of the hierarchy.

Table 2.1 Overland speeds

•	Average km/h*		Min km/h*		Max km/h*		
	total	road	total	road	total	road	n
Åbo-Riga (1688)	3.5	4.6	1.0	1.8	5.4	10.7	21
Stockholm-Karlskrona (1714)	3.6	4.9	1.9	3.9	6.0	6.0	7
Åbo-Villmanstrand (1724)	4.0		2.0		6.0		81
Gävle-Stockholm (1720, 1722)	4.4	4.6	2.9	3.8	5.4	5.4	10
Uleåborg-Gävle (1710)	4.8	4.9	3.8	3.8	7.4	7.4	9
Ystad-Växjö (1716)	5.4						2
Stockholm-Falun (1718)	6.0	7.2	0.5	5.0	7.6	10.7	12
Stockholm-Göteborg (1702, 1711)	6.2	6.6	3.1	3.3	15.8	16.6	41
Stockholm-Karlshamn (1720)	6.5	7.6	2.8	4.9	10.7	10.7	6
Stockholm-Helsingborg (1714)	6.6		3.8		9.3		21**
Hamburg-Assensfæhr (1709)	8.1		6.2		10.0		18

<sup>\*)</sup> Average, minimum, and maximum values are speeds measured for actual travelling time. Total = overall speed including stops at relays (departure–departure); road = speed achieved by the postrider on the road (departure–arrival).

Source: ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1; Kanslikollegium, Estland och Livland samt inrikes, 1687–1695, vol. G 2 F:1, Kontrollören J Langes visitationsberättelser, RA.

Though these are figures well below top speeds for horseback travel in early modern Sweden, they are faster than the common speed of travelling – and conveying letters – from the fourteenth to the early sixteenth centuries, according to calculations by the Swedish economic historian Dag Retsö, using both travellers' accounts and dates from letters as his sources. Retsö reckons a maximum day's journey was about 70 kilometres, or a little less than 3 km/h when including the hours of rest. The average length of a day's journey was much less: between 30

<sup>\*\*)</sup> Several other hour passes on the route from 1720–1721 show only small variations in the hours taken.

and 40 kilometres.<sup>123</sup> Some evidence referred to by Retsö from foreign travellers from the late sixteenth to the early eighteenth centuries indicates that the standard length of a day's journey had not change much, although they occasionally rose up to 160 km.<sup>124</sup> For comparison, horse-drawn vehicles in early nineteenth-century England had an optimum speed of *c*. 4–4.5 km/h. A higher speed could be accomplished, but this meant that more of the horses' energy had to be used just to keep them moving. More horses had to be harnessed, changes of horse had to be more frequent, and consequently the costs grew exponentially against the gain of only marginally faster speeds.<sup>125</sup>

### Days of departure

It was not the speed of the deliveries alone that decided the duration of an information circle; the frequency with which post was dispatched was as important. 126 Correspondents in Riga were fortunate in this respect at least in 1688 – if they were prepared to produce an answer within twenty-four hours. After a journey that lasted 21 days and 15½ hours from its dispatch from the Stockholm post office at 10.30 p.m. on 6 March, the post arrived at the Riga post office at 2 p.m. on 28 March; it then left Riga again for Stockholm at 2 p.m. on 29 March, and arrived a month later. 127 In this case, the days of dispatch had little impact on the duration of the information circle. In the case of the post from Stockholm to Göteborg in 1702, the post left Stockholm at 12.30 a.m. on 30 January and arrived in Göteborg 99 hours later at 3 a.m. on 3 February; the correspondents in Göteborg then had 36 hours to respond before the return post to Stockholm at 3 p.m. on 4 February, where it arrived 100 hours later. 128 Here the elapse before the post's return to Stockholm played a bigger part in the information circle, since the time on the road was shorter. As in Riga, correspondents in Göteborg, far from being annoyed by the wait, probably had to hurry to pen their responses. They probably had less than 24 hours from retrieving a letter at the post office to handing their answer to the postmaster.

<sup>&</sup>lt;sup>123</sup> Retsö 2007, pp. 57–59, 61.

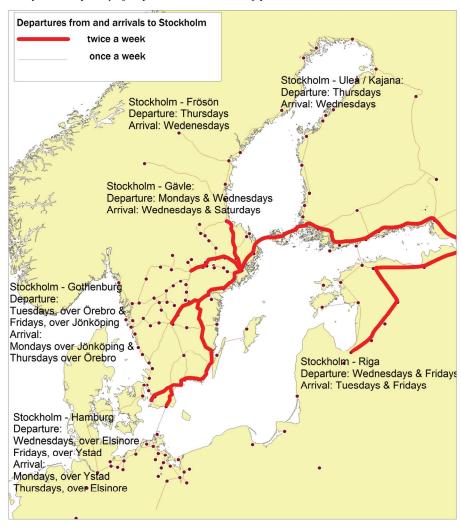
<sup>&</sup>lt;sup>124</sup> Retsö 2007, pp. 100, 106.

<sup>&</sup>lt;sup>125</sup> Gerhold 1993, pp. 188–189.

<sup>126</sup> Laakso 2007a, p. 94.

<sup>&</sup>lt;sup>127</sup> Hour pass, Stockholm–Riga, 'Postpass ifrån Stockholm öfwer Åhlands hav', Kansli-kollegium, Estland och Livland samt inrikes, 1687–1695, vol. G 2 F:1, Kontrollören J Langes visitationsberättelser, RA.

<sup>&</sup>lt;sup>128</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, Fasc. 1: Stockholm – diverse orter, Hour pass, Stockholm–Göteborg, 30 January to 4 February 1702; RA.



Map 2.2 Frequency of departure and arrival of post to Stockholm, ca 1700

Source: Underrättelse om postgången [...] med hoos fogad Bref-taxa, Kongelige och andra wederbörandes förordningar angående postwäsendet 1707, pp. 81-82

The general postage tariff, in use since 1693 but only published in 1707 (with some modifications), also records the days of departure and expected arrival times of post to and from the Stockholm post office. The timetable was designed to give one day's time between arrivals and departures (see Map 2.2). The tariff does not record the other post offices' timetables, but the evidence from the hour passes suggests that the final post offices on a route such as Göteborg and Riga designed their timetables in the same manner. In the beginning of the

 $<sup>^{129}</sup>$  Underrättelse om Postgången ... med hoos fogad Bref-taxa, Kongelige och andra wederbörandes förordningar angående postväsendet 1707, pp. 81–82.

eighteenth century, departure times were supervised by the director of the Post Office in Stockholm, but it had also evolved from local practices in the various post offices, as indicated by the correspondence between the director general of the Post Office and the governor, referred to above.

When the postal service was organized in the 1630s and 1640s, the ordinary posts went weekly. In the 1650s, post on the Stockholm–Halmstad route went twice a week, and in the 1680s twice-weekly post was introduced on a number of other routes. Map 2.2 gives the routes from Stockholm with ordinary post twice a week. The Stockholm post to and from Göteborg and the towns in Skåne, Hamburg, and the German provinces went twice a week, but travelled by different routes. South-going post either took the route to Ystad and then by sea to Stralsund, or went via Halmstad to Helsingør in Denmark. Post to Göteborg was sent either via Örebro and the province Västergötland, or to the south to Jönköping and then westwards.

The introduction of several routes with an ordinary post twice a week was a major contribution to time-space convergence, and its effects must have been most obvious on routes where deliveries did not take long. When deliveries took a month, as between Riga and Stockholm in 1688, the option of sending two letters a week affected the information circle less than on the Stockholm-Göteborg route, where delivery took only four days. The ordinary twice-weekly post meant above all that south and central Sweden experienced a time-space convergence in the 1680s. It also meant a convergence on a number of 'highways' leading to Stockholm. The network's byways that did not include Stockholm generally maintained a weekly ordinary post, although a twice-weekly post was introduced on the west coast from Halmstad to Strömstad.

The post office in Älvkarleby serves as an example of the distances that can be measured in information circles. Although not even a town, Älvkarleby had a central position in the belt of iron-producing industries that were built up in the seventeenth century and became important iron exporters above all to the Dutch Republic and Britain.<sup>131</sup> With the general postage tariff introduced in 1693, correspondents in Älvkarleby could reach close to 80,000 townspeople in their network at the low postage rate of 2 silver *öre*.<sup>132</sup> The post office in Älvkarleby was also well sited for the quick transmission of letters. Two hour passes for the Gävle–Stockholm route from May 1720 and May 1722 show that the post from Älvkarleby to Stockholm took about 24 hours, although the post in both cases had been much delayed on the Uppsala–Stockholm run (on one occasion, the

<sup>&</sup>lt;sup>130</sup> Forssell 1936, i, pp. 92-94.

<sup>&</sup>lt;sup>131</sup> Florén & Rydén 1992, pp. 100–102.

<sup>&</sup>lt;sup>132</sup> Figures are estimated from an analysis of the reconstructed population in Lilja (2000, pp. 404–406), and the postage tariff for Älvkarleby (*Underrättelse om Postgången ... med hoos fogad Bref-taxa*, Kongelige och andra wederbörandes förordningar angående postväsendet 1707, pp. 84–85).

horse had thrown its postrider and bolted into the woods). <sup>133</sup> The Älvkarleby–Hamburg information circle would have been about two weeks. The post went twice a week, arriving at Stockholm on Wednesdays and Saturdays; from there it was dispatched on Thursdays and Mondays, thus allowing an information circle of about three days. If not delayed, post from Älvkarleby could depart from Stockholm with the south-going post to Hamburg on the same day it arrived at the Stockholm post office. <sup>134</sup> Ideally, the route to Hamburg or Stralsund via Ystad would take about six days. <sup>135</sup>

The information circles from Älvkarleby to the neighbouring provinces of Dalarna and Västmanland were probably longer than from Älvkarleby to Stockholm, despite being closer to Älvkarleby as the crow flies. The post either had to go via Stockholm and Västerås, or north via Gävle. This caused problems of co-ordination. In one of the hour passes, the post to Stockholm had been detained in Gävle, as the postmaster there had waited in vain for the post from Hedemora to the west. The post from Falun to Stockholm in December 1718 had been detained in Västerås for the same reason, and in the opposite direction its delivery took 104 instead of 38 hours.

Twice-weekly post brought with it a time-space convergence within the Swedish Empire, especially in Stockholm's communications with southern and central Sweden. However, the frequency was still modest compared with the standards for other countries. Johan Lange reports on post days from a number of European post offices in 1694. From Paris, post departed northwards to Spanish Flanders (Brussels, Antwerp, etc.), Picardy (Arras, Ypres, etc.), and a number of major towns (Cambrai, Condé, Valenciennes etc.) at noon seven days a week. To Lorraine in the east, the post departed at 8 p.m. daily except Thursdays. Post on other routes departed Paris less frequently – twice or three times a week. In sum, fifty-two posts departed Paris every week. Paris had a bias towards communication with Northern Europe and the northern parts of France. The 'Spanish post' was not considered an ordinary post, and left only every fortnight. From Berlin, thirty posts departed the Brandenburg Post Office every week. Sweden lagged far behind the French and Prussian information circles.

<sup>&</sup>lt;sup>133</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, Fasc 1:2 'Stockholm – Div. orter 1703 – 1762. Hour passes Gävle–Stockholm: 31 May–1 June 1720, 14–16 May 1722, RA.

<sup>&</sup>lt;sup>134</sup> Underrättelse om Postgången ... med hoos fogad Bref-taxa, Kongelige och andra wederbörandes förordningar angående postväsendet 1707, pp. 77, 80, 82.

<sup>&</sup>lt;sup>135</sup> Reconstructed from surviving hour passes, Stockholm–Helsingör, Stockholm–Ystad, Hamburg–Assensvehr [Assensfæhr], ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, 1702–1761, vol. E 3 H, RA.

<sup>&</sup>lt;sup>136</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, Hour pass Gävle–Stockholm, 30–31 May 1720, RA.

<sup>&</sup>lt;sup>137</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, Hour pass Stockholm–Falun, 9–16 December 1718, RA.

<sup>&</sup>lt;sup>138</sup> Kanslikollgegium, Kontrollören J Langes visitationsberättelser, vol. G 2 F:2, Fasc 1, Pommern och Wismar, 1694, 'De förnembste utlandske Post-ordningar med sine föresatte

### Speed, infrastructure, and the post-farmer system

The agrarian economy was the basis of the infrastructure necessary for Sweden's postal traffic. There is a correspondence between densely populated regions in southern Sweden, Livonia, and Estonia, and the fastest post routes. These were regions with greater potential to provide a good infrastructure. Compared with the standards attained by the Thurn und Taxis organization, the Swedish Post Office's achievements were not very impressive. The main reasons for this are to be found in the state's means of command evident in the post-farmer system and the limited resources invested in the system.

At the end of the seventeenth and beginning of the eighteenth centuries, the Post Office put immense effort into improving the speed of its deliveries. When responding to von Möller's accusation that he had detained the dispatch of the post in 1710, Johan Lange repeated his long-since proposed remedy for slow deliveries: pay post-farmers a decent fee and supply them with good horses.<sup>139</sup> Lange's proposal fell on deaf ears, for the Post Office could not afford such expenditure. At the beginning of the eighteenth century, the chosen solution was not to allocate more resources to the post-farmers, but to improve the means of control and of time-keeping – hour passes being but one example.

On some routes, the Post Office tried using men hired specifically as postilions instead of the post-farmers and their postriders. The postilions were stationed at the post offices in the towns, often riding through the whole province, changing horses at the post-farmers' farmsteads. They had the additional task of checking on the post-farmers and reporting negligence to the post-masters. Postilions were introduced in 1673, when 18 of them were employed at a salary of 52 dr sm per annum.

The main reason for using postilions was the suspicion that the post-farmers were too cautious with their own horses, and that it was possible to ride them harder. There were consequently complaints that postilions were riding horses into the ground. <sup>140</sup> During the period, the number of postilions remained roughly the same, and it never became an institution that covered more than a small proportion of the post routes. In spite of its proven efficiency, the Post Office was never prepared to change to the more expensive postilions as a general system.

The strategy of the post-farmers – dictated by bare necessity for the poorer ones – was to escape as cheaply as possible, just like the Crown. Teodor Holm offers examples that show the ways in which such strategies worked against swift deliveries. It was unusual for post-farmers to ride with the mail themselves; in-

post-stunder til posternes afgång …', inneliggande i handlingen 'Underdån- och ödmiukaste Relation och Deduktion' ang. Postvisitationen till Pommern och Wismar, Johan Lange, Stockholm, 30 March 1695 fos. 11v–12r, RA.

<sup>&</sup>lt;sup>139</sup> Holm 1906–1929, v. pt. p. 103.

<sup>&</sup>lt;sup>140</sup> Forssell 1936, i, pp. 286–289.

stead, they used the individuals who the farm could more easily dispense with, often small boys or girls. As the Post Office lamented, children were too small to ride fast, to lift the heavy mailbags back onto their mount if they fell, or generally to take care of themselves. On the other hand, boys were said to have an advantage over full-grown men, as they were not so heavy.<sup>141</sup> The fear of overburdening reveals something of the size and strength of the horses. The carthorses on Swedish farms were considerably smaller than horses today. Farmers usually kept the animals on the brink of starvation when they over-wintered them in stables.<sup>142</sup> The various accounts of wretched horses, especially in spring, were not just examples of occasional mistreatment.<sup>143</sup> Like Johan Lange, one of the postmasters, Johan Sundell, suggested in a letter to director general Schmedeman in 1706 that post-farmers should have special mounts for the post that should always be shod. Schmedeman rejected the idea, commenting that post-farmers could never afford to keep horses just for use in the postal system, since their compensation was too small.<sup>144</sup>

If one reason for the institution of the post-farmers was its historical legacy of *corvée* (the obligation to perform unpaid labour), it also implies another and more forceful demographic reason for their use. Fernand Braudel deemed Scandinavia (Sweden, Norway, and Finland) in the period 1300–1800 to be too thinly populated to maintain a civilization at all; Scandinavia was caught in a retarded medieval era on the periphery of Europe, with only limited parts of the region partaking in the life of European civilization. <sup>145</sup> Certainly, Sweden was a sparsely populated country with a low and uneven rate of urbanization. The peasant population typically lived in hamlets and solitary farmsteads, rather than in villages that might have served as social nodes. A relay system simply had to rely either on the scattered peasant population and their farmsteads as a resource, or on the expensive alternative of building its own relay system from scratch.

The quality of the roads was another issue. At the beginning of the seventeenth century, some Swedish roads were little more than bridleways, and utterly unsuitable for coaches. They did not have ditches for drainage, nor were they metalled, and so they could easily turn into mud when it rained. During the seventeenth century, roads did improve somewhat, however, and are said to have reached an acceptable standard by the end of the century. Road maintenance depended on the resources available in the local peasant communities, since it was they who were responsible. Thus the quality of the roads must

<sup>&</sup>lt;sup>141</sup> Holm 1906–1929, v. pt. 1, pp. 332–336.

<sup>142</sup> Gadd 2000, pp. 165-166, 176.

<sup>&</sup>lt;sup>143</sup> Holm 1906–1929, v. pt. 1, p. 339.

<sup>&</sup>lt;sup>144</sup> Holm 1906–1929, v. pt. 1, pp. 339–340.

<sup>&</sup>lt;sup>145</sup> Braudel 1982 (1979), p. 49.

<sup>146</sup> Westlund 1998, pp. 39-40.

<sup>&</sup>lt;sup>147</sup> Westlund 1998, pp. 39-40.

<sup>&</sup>lt;sup>148</sup> Westlund 1998, p. 40.

have been very dependent on local population densities. This may well be another reason why post travelled more slowly in sparsely populated areas. The geographer Nils Friberg certainly argues this point, although he notes the difference in effort required in winter, when modest depths of snow reduced the need for maintenance. As with ships and seaways, the preference for winter roads was often prompted by cargo transport, the efficiency of which was determined more by the maximum weight of the load than by its average speed.

In a letter of 1706, Johan Rydström, the postmaster in Umeå in the northern province Västerbotten, complained of his troubles with winter routes. In contrast to southern Sweden, where the winter roads were in daily use, one or two weeks could pass between travellers on the northern roads, while more than a metre of snow could fall in a single night, which made it hard to keep to the time-limit of 1½ hours per Swedish mile, Rydström explained. The post did not so much travel along winter roads as plough through snowdrifts.

Rydström's letter prompted Johan Schmedeman to consider skis as an alternative to horses. <sup>151</sup> At least to outdoor-loving contemporary Swedes, this alternative may seem rather obvious. In the seventeenth century, however, skiing was nothing like as common as it is today: it was more associated with the Sami people and their Swedish and Finnish neighbours in the roadless interior. <sup>152</sup> The weight of the mailbags would also have been an obstacle. It is more likely that post-farmers used horse-drawn sledges when possible.

In Swedish historiography, winter roads trafficked by sledges generally have the reputation of being far superior to the summer roads. Overland cargo transport was often preferred in winter-time. The winter roads had good, hard surfaces once there had been sufficient frost. Frozen lakes were also well suited for cargo transports, 153 yet while efficiency called on cargo carriers to maximize loads and accept slower speeds, the assumption in this survey is that this did not apply to postal deliveries. The arguments for the superiority of sledges have recently been scrutinized by Retsö, who finds them unsupported by the evidence, and true only under certain, rather limited conditions. The popularity of sledges was more due to their greater comfort than their speed. Moreover there was a physical limit to the speeds that could be achieved, for while the sledges needed a surface with little friction, the horses needed traction in order to pull them. 154

One of the post routes most remote from civilization, in the sense of an urbanized and densely populated area, was the one established in Finland at the outbreak of the Great Northern War in 1700, which ran between Nyslott in the

<sup>&</sup>lt;sup>149</sup> Friberg 1951, pp. 269-272.

<sup>&</sup>lt;sup>150</sup> Holm 1906–1929, v. pt. 1, p. 337.

<sup>&</sup>lt;sup>151</sup> Holm 1906–1929, v. pt. 1, p. 337.

<sup>&</sup>lt;sup>152</sup> Berg 1950, pp. 56–57, 60–61; Olaus Magnus 2001 (1555), p. 193.

<sup>&</sup>lt;sup>153</sup> Retsö 2007, pp. 85–88.

<sup>&</sup>lt;sup>154</sup> Retsö 2007, pp. 108–113.

south-east and Uleåborg in the province of Österbotten in the north: from Nyslott it went north through the Lake District, running 300 km before it arrived at the small interior town of Kajana. After the territorial losses in the peace treaty with Russia in 1721, the route instead began in Villmanstrand in the south-east of the country. An hour pass for an extraordinary post in 1727 records that it had left Villmanstrand at 9.30 p.m. on 19 February and arrived in Uleåborg at noon on 26 February – a journey of seven days. 155 This means it held a speed of about 3.5 km/h. Another hour pass from the same year reveals the distrust the commander in Villmanstrand, one Frisenheim, felt towards the post-farmers along the route. He instructed Lieutenant Granberg to accompany an extraordinary post packet destined for Stockholm all the way to Uleåborg, to urge the post-farmers to act with more than their 'usual negligence' and so prevent delays. In Uleåborg, Granberg was then to wait until he received an answer from Stockholm, and then return with it to Villmanstrand. 156 Frisenheim's distrust of the post-farmers in effect meant that he returned to the older courier system by which the post-farmers only provided horses.

Perhaps Granberg's presence did indeed speed up the deliveries. Compared to the other routes in the north and east, an average speed of 3.5 km/h was not particularly slow. The Swedish Post Office in fact achieved what Braudel thought impossible, and connected the Swedish realm, even the remotest parts, with European civilization.

# Average speeds of sea-mail

The surviving hour passes offer some information about the traffic across the Åland Sea and through the archipelago between Åland and Åbo. The Åland Sea route connected Stockholm via Grisslehamn to Åbo on the Finnish side, the distance in the archipelago being about sixteen Swedish miles, and was already established in 1638, having grown out of an existing ferry service. The route was organized along the same lines as the overland routes, with the difference that the post-farmers here used boats instead of horses; they were obliged to transport travellers and post in their own boats, <sup>157</sup> which, being small and open, were not suitable for long distances. <sup>158</sup> The route across the Åland Sea was continuously open, and an ordinary post did indeed manage to operate along it. It

 <sup>155</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, Fasc.:
Stockholm – Div. orter 1703 – 1762, Hour pass Villmanstrand–Stockholm: 'Extra postpass från Willmanstrand till Stockholm', 19 February 1727, RA.

 <sup>&</sup>lt;sup>156</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, Fasc.:
'Stockholm – Div. orter 1703–1762', 'Instruction för Hr Lieutnanten Granberg', 19 February
1727. RA.

<sup>&</sup>lt;sup>157</sup> Forssell 1936, I, pp. 100-101.

<sup>&</sup>lt;sup>158</sup> Rudbeck 1933, p. 172.

was a notorious route because of the dangers the post-farmers encountered and the heroism they showed: fatal accidents were common.<sup>159</sup>

Such examples as do exist are few, and are barely sufficient for statistical analysis (Table 2.2). What we can learn is that post-boats across the Åland Sea were no faster than land transport. In fact, sea-crossings often meant that the post was slowed down. The hour passes of 1724 record a series of ten transfers from May to July. The fastest speed, 13.8 km/h between Grisslehamn and Ekerö on the *c.* 40 km route across the Åland Sea, may be evidence that the post-farmers' boats were able to perform well in fair weather. On the other nine occasions, however, speeds were in the range of 2–7 km/h (1–4 knots); this equalled but did not surpass overland deliveries.

Table 2.2 Sea-mail speeds

	No. of hour passes	Average km/h	Min. km/h	Max. km/h
Norrtälje-Kastelholm (1688)	2		0.5	2.1
Kastelholm-Åbo (1688)	2		3.2	2.9
Grisslehamn-Åbo (estimated) (1700)	1	3.0		
Norrtälje-Grisslehamn (1724)	10	4.6	0.6	10.4
Grisslehamn-Ekerö (1724)	10	5.4	2.0	13.8
Ekerö-Kastelholm (1724)	10	3.0	0.4	4.9
Kastelholm-Åbo (1724)	10	2.6	1.9	3.3
Helsingborg–Helsingør (1720–21)	4	1.9	0.4	4.0

Source: ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1; RA, Kanslikollegium, Kontrollören J. Langes visitationsberättelser, Estonia och Livonia samt inrikes, 1687–1695, vol. G 2 F:1, RA.

The problem was not the crossing itself, but having to wait on the weather, as is indicated by the sometimes very slow transfers Norrtälje–Grisslehamn, Kastelholm–Ekerö, and Åbo–Kastelholm. On 19 May, the post was delayed 47 hours in Grisslehamn, and on 2 June it was detained for 61 hours. The actual crossing took a matter of hours, but waiting for the correct conditions could take several days. In April 1688 the transfer from Kastelholm to Norrtälje took ten days; it seems likely that on that occasion the post-farmers on Ekerö had had to wait eight or nine days for fair weather.

<sup>159</sup> Rudbeck 1933, p. 171.

hour passes 20 May 24 June 2 May 18-May 31-June 08 June 1-12 June 14. 25 June 09-18 June 21-29 June 15 June 28-July 08 hours 60:00:00 120,000,00 Stockholm-Norrtälje 🔀 Norrtälje-Grisslehamn-Ekerö Ekerö-Kastelholm Grissle ham n ☐ Kastelholm-Åbo Abo-Villm anstrand Source: Fasc, Stockholm-Villmanstrand, 1724, in Postlederna till och från Stockholm.

Figure 1. Duration for one way conveyance Stockholm-Villmanstrand, May-June 1724

vol. E 3 H:1, Postpass, Överpostdirektörens arkiv, huvudarkivet, Swedish National Archives.

Figure 1 shows the time taken in hours on the Stockholm-Villmanstrand route in 1724 (the second posts indicate the returning post from Villmanstrand to Stockholm). In one case, the journey between Åbo and Villmanstrand took fully 169 hours, in another it took 118 hours, but the other eight show a fairly stable time of about four days (96-105 hours): the short Stockholm-Norrtälje stretch (c. 70 km) was less significant, even though its duration ranged considerably from 14 to 19 hours; instead, it was the Norrtälje-Åbo route, which included crossing the Åland Sea and the archipelago, that made the difference. For the post from Villmanstrand to Stockholm, the Åbo-Norrtälje transfer took only 74 hours; for another post on 14-25 June it took 169 hours. With the exception of the first recorded post of 11-20 May, when the Åbo-Villmanstrand stretch was

covered particularly slowly, it was the speed of the sea-passages that determined whether the post would be delivered quickly or not.

Hour passes for Stockholm–Helsingør give similar evidence of the hazards of sea-crossings. Sea-transport over the Danish straits was organized differently from that in Åland. Danish ferrymen were hired in Helsingborg and Helsingør (to cross the Sound), in Korsør and Nyborg (the Great Belt), and in Assens and Assensfæhr (the Little Belt), financed by the Swedish postmasters in Helsingborg and Helsingør, and by the resident responsible for the Swedish post in Hamburg. The Swedish Post Office was free to contract ferrymen outside the ferrymen's guilds, who held the privilege to all ferrying in the Danish towns, an opportunity that seems to have attracted high-ranking Danish burghers. The financial conditions varied. While the ferrymen contracted for the Little Belt crossing were paid 208 dr sm per annum in the 1680s and 1690s, those at the Great Belt were paid more, a figure that increased with every new contract, from 900 dr sm in the 1680s to the 2,400 dr sm paid to the widow Apollonia Lund in 1704. In Helsingborg, the ferrymen were paid half a dr sm for every journey. 160

The ferries over the Sound at Helsingborg–Helsingør, about 10 km wide at that point, appear to have been far slower than the boats crossing the Åland Sea. Maybe this was due to the fact that the records are from the autumn and winter, and that the shortness of the distance could distort the figures – time-keeping at a harbour in the beginning of the eighteenth century probably lacked the accuracy we expect today. On two occasions, the post was detained in Helsingborg because of the weather. On 10 October 1720 the hour pass records that the darkness of the night had delayed departure by several hours. It seems as if it finally sailed in the middle of the night, which seems a bit puzzling. Presumably the shipper was waiting for moonlight. On 20 November 1721 the postmaster in Helsingborg remarked that the post had been detained for a day because of stormy weather and contrary winds. <sup>161</sup>

Although the hour passes give only a few examples of sea-passages, the delays are so common that it must have been reckoned a more or less normal condition. In the timetable included in the Stockholm tariff, it is stated that the post from Finland is expected on Tuesdays and Fridays 'if it is not hampered by contrary winds and on the sea'. <sup>162</sup> In no other case does the timetable express such doubts about the day on which the post will arrive.

The problem of boats having to wait to leave was not unique to the Swedish Post Office. Seija-Riita Laakso notes that in 1825 the delays to packet-ships sai-

<sup>160</sup> Rudbeck 1933, p. 7.

<sup>&</sup>lt;sup>161</sup> ÖPD, Huvudarkivet, Postpass, Postlederna till och från Stockholm, vol. E 3 H:1, Fasc. Stockholm-Helsingör, Hour passes Stockholm-Helsingör, RA.

<sup>&</sup>lt;sup>162</sup> Underrättelse om Postgången ... med hoos fogad Bref-taxa, Kongelige och andra wederbörandes förordningar angående postväsendet 1707, p. 82. '...så wijda den eij af motwäder och på hafwet hindras'.

ling from Liverpool to New York ranged from one to twelve days, the average being four days. <sup>163</sup> The Liverpool–New York run, a privately-owned enterprise when it opened in 1818, was also the first Atlantic line that even bothered to schedule its departures; its General Post Office forerunner, based in Falmouth, had sailed monthly in the eighteenth century, but on exactly which day of the month was never made clear in advance. This made it hard for Atlantic correspondents to forecast the departure and arrival of the post. <sup>164</sup>

In Sweden, the strategies for solving delays on land were better supervision, discipline, time-keeping, and co-ordination – organizational innovations, in other words. Improved conditions for post-farmers, with their poor horses and inadequate equipment, were more a distant thought, hard to realize within the limitations of the Post Office's finances. With sea-traffic, technical standards and the weather imposed certain limits on what could be accomplished. Interruptions in maritime postal traffic could last for months, as the evidence from the Kalmar–Visby route in the 1690s shows. In 1712, there were post-yachts trafficking the Stockholm–Gotland route, but a letter from the island's new governor shows that they were little better since winter often made the journey impossible. At the end of March he wrote that he had not received any letters from Stockholm for four months, despite the numerous post-boats that had arrived from Kalmar and Öland in that time. He suspected the reason to be that all letters from Stockholm had been loaded on the post-yacht, and that the post-yacht had not been able to depart because of the ice in the Stockholm archipelago.<sup>165</sup>

The Ystad–Wittau/Stralsund route enjoyed the greatest success with post-yachts. In the timetables, the post-yachts were expected to depart Ystad on Thursday evenings and arrive at Wittau, c. 100 km distant, the next morning. 166 The crossing normally took 24 hours, albeit a little faster with favourable winds. Of the post-yachts, *Posthornet* sometimes made the journey in 10–14 hours, and *Postryttaren* went even faster, on one occasion managing to make the journey in 8½ hours. 167 From Wittau, the post travelled an additional 50 km by sea or land before it arrived in Stralsund on Friday afternoon. The return post from Wittau to Ystad left between Monday evening and Tuesday morning. 168 In good conditions the journey would thus be accomplished at a speed of about 8–12 km/h, which meant that the performance of the post-yachts was far better than the post-farmer's boats on the Åland Sea, and better than most overland deliveries. The entire Stockholm–Stralsund run was said to take six days. 169 This was a time

<sup>163</sup> Laakso 2007a, pp. 94-95.

<sup>&</sup>lt;sup>164</sup> Laakso 2007b, pp. 49–52, 55–59.

<sup>&</sup>lt;sup>165</sup> Skrivelser till Kungl Maj:t, Landshövdingars skrivelser I: Sverige, Gotlands län, vol. 4, 1710-1712, Governor Nils Posse to Kungl. Maj:t, 31 March 1712, RA.

<sup>&</sup>lt;sup>166</sup> Rudbeck 1933, pp. 32–33.

<sup>167</sup> Rudbeck 1933, p. 60.

<sup>&</sup>lt;sup>168</sup> Rudbeck 1933, pp. 32-33.

<sup>&</sup>lt;sup>169</sup> Köppe 2006, pp. 118–119.

one had to expect on the Stockholm-Åbo route, which was only one-third of the distance.

However, it is obvious that the post-yachts did not always manage to do the journey in one night. The timetable even left it open whether the post-yacht would arrive at Wittau on Friday *or* Saturday morning. It was co-ordinated to fit in with the post leaving Stralsund for Hamburg at 4 p.m. on Saturday. The postilion on Rügen was instructed not to wait for the post-yacht beyond Sunday morning before proceeding to Stralsund.<sup>170</sup> When facing contrary winds, the journey took 2–3 days, sometimes up to 5–6 days.<sup>171</sup> Thus to minimize the problems caused by the weather, the route required three post-yachts, one held in readiness in Wittau if the arriving post-yacht was too delayed to return with the post on Monday evenings.<sup>172</sup>

When the sea froze, the route was interrupted. This was a common event, both in Ystad and on Rügen. In the cold climate of the seventeenth and early eighteenth centuries, sea-ice was more common than it is today. <sup>173</sup> In six of the first ten years of the route's existence, 1683–1692, the route was interrupted for two or three months in the winter-time. <sup>174</sup> In the winter of 1708–1709 the sea-ice stretched tens of kilometres from both coasts. Parts of the sea were frozen as late as 20 April (O.S.), but by then the post-yachts had resumed. <sup>175</sup> On land, cold winters did not hamper the post in the same way, although the postal system seemed not to have been able to use its potential to facilitate travel to the full.

With favourable winds, the post-yachts were superior in speed to the post-farmers' deliveries on horseback as well as with the post-farmers' boats. However, the co-ordination of post routes in Stralsund needed a margin of 24 hours to work, which in practice reduced overall performance. Three post-yachts were sufficient to ensure that single delays would not accumulate. In contrast to the Åland Sea, the climate was often beneficial enough to allow winter traffic, but even so, in many winters it was interrupted for months, and Swedish connections with Continental Europe became completely dependent on the traffic across Denmark.

## Slow and irregular sea-traffic – a common European experience

Weather conditions other than ice, such as contrary winds, flat calms, or storms, hindered sea-going traffic everywhere, not just in the Baltic. Unpredictability was the common problem. Eighteenth-century figures for correspondence between Sweden and Swedish consuls in the Mediterranean confirm that letters

<sup>170</sup> Rudbeck 1933, pp. 32-33.

<sup>171</sup> Rudbeck 1933, p. 60.

<sup>172</sup> Rudbeck 1933, p. 44.

<sup>&</sup>lt;sup>173</sup> Lilja 2008, pp. 72-76.

<sup>174</sup> Rudbeck 1933, p. 60.

<sup>&</sup>lt;sup>175</sup> Rudbeck 1933, pp. 82–83.

conveyed as overland mail arrived quicker than sea-mail, despite crossing the entire Continent. It was obstacles other than the weather – poor organization or war – that sometimes made the seaways better. During the bellicose early eighteenth century, Swedish consuls in Lisbon had to send their correspondence by boat: the time the post took from Lisbon to Stockholm was anything up to 4 or 5 months, compared to 40 days overland. For its correspondence from India, the English East India Company often preferred the long sea journey via the Cape of Good Hope to the land route, but that was for reasons of security, and despite the fact that the alternative overland route (Bombay–Basra–Aleppo–Constantinople–Venice/Marseille) was faster and unaffected by the monsoon season. To

Few cities can have been better placed for sea-mail than seventeenth-century Amsterdam. About 5,000 ships arrived at the port every year. Already in the sixteenth century there was a regular, even timetabled, traffic with barges on the Dutch rivers. Unlike Sweden, Amsterdam and the Dutch Republic were densely populated and highly commercialized, which guaranteed large volumes of mail. The merchants in Amsterdam originally used ships for their correspondence with Baltic ports, yet when the postriders on the route began to ride instead in the mid seventeenth century, they were chosen instead. The Dutch historian Clé Lesger remarks that Amsterdam was fortunate to have access to sea-mail that went only slightly slower than mail overland - thanks to the large numbers of ships entering the port of Amsterdam. 178 Milja van Tielhof shows in her research on the Dutch Baltic grain trade that communications between Dutch towns and Danzig improved considerably in the second half of the seventeenth century, when merchants could rely on a regular overland postal service instead of deliveries of letters by ship. At the end of the sixteenth century, the sea-passage between Danzig and the Dutch town of Delft varied from less than ten days to more than fifty days, with the majority of letters taking more than twenty days; it was slow, irregular, and dependent on the season (April to August were the best months to send a letter). In 1751, using overland postal services, deliveries took about ten days; sometimes less, sometimes more, but never as many as twenty days. And the post arrived equally quickly year round. 179 As soon as a postal system reached a certain level of organization and could work in a reasonable secure and peaceful environment, its efficiency overland was greater than by sea. The Swedish Post Office was not unique in this experience.

176 Müller 2007, pp. 267–268, 273.

<sup>&</sup>lt;sup>177</sup> Carlos & Hejeebu 2007, pp. 146–147.

<sup>&</sup>lt;sup>178</sup> Lesger 2006, pp. 238–243.

<sup>&</sup>lt;sup>179</sup> van Tielhof 2002, pp. 161–164.

## Efficiency and costs of sea-mail

The historian Ian Steele suggests that there was a process of trans-Atlantic integration between Britain and its American colonies in the period 1675–1740, and that the postal service was part of that integration. The postal service to the Lesser Antilles and other small islands in the Atlantic is an example in miniature of the efficiency of water transport, according to Steele. No post office, no post boys, no roads were needed, just a ship that was already set for the Lesser Antilles and its sugar trade. It is indeed a good example, but it also demonstrates the limitations of sea-mail. Had there not been an extensive trade with the Lesser Antilles, then there had been no justification in sending a post-boat to the few correspondents on the islands, still less to maintain a frequent postal traffic that ensured a regular flow of news to the islands. The case of the Stockholm–Visby route demonstrates this well. In 1689, the Chancery Board doubted whether the enterprise suggested by governor Gustav Adolf von der Osten genannt Sacken of post-yachts between Stockholm and Visby was warranted:

For our part, a further obstacle is that the establishing and maintenance of such a route [with post-yachts], would demand greater expenses than the expected income; because the postage earned from Gotland would not yield more (especially at first, as the inhabitants are used to sending their letters with shippers) than needed for salaries for the deliveries, and because with passengers and freight, we cannot reckon that sufficiently large incomes would be attained to maintain the route, let alone to cover the costs of the building or purchase of a post-yacht. <sup>181</sup>

The Chancery Board estimated the costs of buying a small yacht of the same model as those used on the Ystad–Stralsund route would be 500–600 rdr, with an additional 150–160 copper daler monthly for the maintenance of the yacht, excluding the extra costs for repairs. Still, in its answer to the king on the governor's proposal, the Chancery Board found that the administration's need for good communications with Gotland might justify the reallocation of resources from other post offices to a post-yacht. According to Johannes Rudbeck this was a usual decision. Sea-mail often ran at a loss, but was maintained because of the need for good communications. In those cases strategic need, not profit, kept the sea-routes running.

Strategic reasons had also been important for the decision to establish the Ystad–Stralsund route in 1683. There, however, the route could prosper because

<sup>180</sup> Steele 1986, p. 119.

<sup>&</sup>lt;sup>181</sup> Kanslikollegiet, Skrivelser till Kungl. Maj:t, vol. 1, 1656–1695, Kanslikollegiet till Kungl. Maj:t 26 June 1689, RA.

<sup>&</sup>lt;sup>182</sup> Skrivelser till Kungl. Maj:t, Kanslikollegiet, vol. 1, 1656–1695, Kanslikollegiet till Kungl. Maj:t 26 June 1689, RA.

<sup>&</sup>lt;sup>183</sup> Rudbeck 1933, p. v (preface).

of an inelastic demand for communication to Hamburg that allowed them to charge high postage. <sup>184</sup> In the 1693 balance sheet for the Ystad post office, the income from freight on the sea-route (passengers and cargo) gave a small surplus that year (Table 3); but while freight was profitable, the costs were high as well. In comparison, the important post office in Narva paid a large amount in salaries, amounting to 216 dr sm for postilions with three horses in addition to a salary for the postmaster (most other post offices escaped the costs for postilions because the post was carried by post-farmers instead), a cost that was four or five times as high as in Ystad. Costs for supplies were fifteen times as high.

*Table 2.3 Income and costs of the post offices in Narva and Ystad, 1693 (in dr sm)* 

	Narva	Ystad
Income:		
Postage / freight	1270	2892
Sale of the post-yacht <i>Theresia</i>	_	1175
Costs:		
Salaries	376	1743
Purchase of supplies	16	240
Repairs to post-house, quay, yachts	_	868
Balance	1704	5603

Note: 1) The table does not present the complete account for the two post offices. Surpluses, arrears, claims, and assignments of money for purposes outside the postal system are excluded, but were included in the respective balance-sheet totals.

2) Some of the posts from Ystad were reckoned in Pomeranian riksdaler, converted into Swedish dr sm.

Source: ÖPD, Postkammarkontoret, Huvudböcker, Konceptexemplar, 1693, vol. G 1 A:11; RA.

In studying the financial accounts of the Ystad–Wittau/Stralsund route of 1683–1693, Johannes Rudbeck has observed a slight deficit, but assumes that there was income concealed in the book-keeping, including revenue from postage, that could in fact have generated a profit.<sup>185</sup> The income from postage from the route cannot be estimated from the books for a single post office, since most of the letters were posted and paid for at other post offices. In 1698, however, about 10,000 chargeable letters left Stockholm for destinations in Continental Europe south of Denmark (more than 6,000 of them were destined for Hamburg or Amsterdam, and *c.* 1,500 were addressed to towns in Western Pomerania).<sup>186</sup> The postage to the German towns was 15 öre (of which 11 silver öre was the postage

<sup>&</sup>lt;sup>184</sup> Simonson 2009a, pp. 13-14.

<sup>&</sup>lt;sup>185</sup> Rudbeck 1933, pp. 58-60.

<sup>&</sup>lt;sup>186</sup> Nylander 1928, p. 17, Tab. A.

for the Baltic crossing). <sup>187</sup> The same year, only 302 letters were sent from Stockholm to Visby, and only 63 of those paid full postage. <sup>188</sup> The Chancery Board thus had reason to be concerned about the costs of a Stockholm–Visby post-yacht.

The costs for the repair of the post-house, the quay, and the post-yachts, only found in the Ystad accounts, were more accidental, as was the income from the sale of a post-yacht. However, they illustrate the level of investment required for sea-mail. A post-yacht had a short life. By 1696, not a single original post-yacht from 1683 was in service, and while the income from the sale of one old post-yacht that year was 325 dr sm, the contract for building a new vessel the same year fixed the price at 2,275 dr sm.<sup>189</sup>

Economic considerations had an impact not only on the decisions to open a route, but also on the speed of the post deliveries along it. As indicated in governor Gustav Adolf von der Osten genannt Sacken's proposal and in the Chancery Board's response, passengers and freight were the means to profit by post deliveries. Apropos the Atlantic postal traffic, Laakso concludes that the shortest information circles were obtained where there were two competing companies that specialized in postal traffic, but where postal deliveries were combined with cargo or passenger traffic, the shippers' interest in quick delivery times dwindled.<sup>190</sup>

In the event, the Ystad-Stralsund sea-route found passenger traffic and information transfers a happy combination, for passengers did not interfere with the demands for speed and reliable schedules for the post. But in the case of Gotland, where the postal traffic had to rely on freight rather than on small numbers of occasional passengers, the combination failed. The Chancery Board's advice in 1689 marked the beginning of a series of short-lived experiments with post-yachts to Gotland: they all failed because of the Post Office's unwillingness to take economic risks or to contract private entrepreneurs instead. One of the more lasting enterprises was when the inspector Samuel Hansten was contracted to maintain a postal route with a post-yacht in 1714-1717. The Post Office eventually abolished the contract because of the slowness of deliveries. One crossing was estimated to take an amazingly long 12 to 16 days (an average speed of 0.6–0.8 km/h). In addition, Hansten had the right to remain in harbour for twelve days for lading and unlading. All in all, the length of the Visby-Stockholm-Visby information circle was five to six weeks. 191 The basic problem was an imbalance between strong administrative ties and weak commercial ties between Visby and Stockholm.

<sup>&</sup>lt;sup>187</sup> Underrättelse om Postgången ... med hoos fogad Bref-taxa, Kongelige och andra wederbörandes förordningar angående postväsendet 1707, p. 79.

<sup>&</sup>lt;sup>188</sup> Nylander 1927, p. 16, Tab. A.

<sup>&</sup>lt;sup>189</sup> Rudbeck 1933, p. 71.

<sup>&</sup>lt;sup>190</sup> Laakso 2007b, p. 408.

<sup>&</sup>lt;sup>191</sup> Rudbeck 1933, p. 247.

An initially reluctant Chancery Board finally launched the various sea-mail connections between Stockholm and several Baltic ports in the east and south suggested by governor-general Dahlbergh – a necessary measure to maintain communications after the outbreak of the Great Northern War in 1700. Some years later Johan Schmedeman, the new director general of the Post Office, reported success in the quest for fully laden post-yachts, and even foresaw the post route between Riga and Stockholm becoming profitable. At the same time, however, postal deliveries had had to adopt the logic of commercial cargo transports. Harbours were chosen ad hoc, wherever the cargo was to be found, and the post was forced to follow the seasonal nature of trade, since no merchant was willing to risk his or her goods in a hazardous crossing in winter-time.<sup>192</sup> This was the same limitation that was imposed on the Atlantic postal traffic in the eighteenth century. The cheapest alternative – private shipping – neither provided a regular schedule nor a fixed harbour, while shippers were obliged to deliver letters in the first port they reached.<sup>193</sup>

It was probably also because of the Post Office's concern with profitability that the post-yachts had problems gaining the respect of the Swedish trading vessels with whom they competed. On several occasions in 1707 and 1708, post-yachts clashed with trading-vessels that had not signalled their proper allegiance to a royal ship, which even provoked the post-yachts to open fire on the merchantmen. A complaint from three post-shippers to the Chancery in 1707 states that the captains and crews on the merchantmen challenged a letter of protection dated 30 May 1703, and repeatedly made a mockery of the royal pennants that symbolized the post-yachts' dignity. The main purpose of the letter of protection was to grant the post-yachts immunity from officials outside the Post Office who tried to use them for other purposes, but it also granted post-yachts priority in the harbours, and exempted them from all fees other than customs on the freight they carried.

The overall economy of the postal system was a balance between economies of scale, which rendered a single letter cheaper because it was transferred in a packet with other letters, and the value of the information, which was dependent on fast delivery: news was like dairy produce.<sup>197</sup> The superior carrying-capacity

<sup>&</sup>lt;sup>192</sup> Holm 1906–1929, v. pt. 3, pp. 13–27.

<sup>193</sup> Laakso 2007b, p. 42.

<sup>&</sup>lt;sup>194</sup> Holm 1906–1929, v. pt. 3, pp. 66–69.

<sup>&</sup>lt;sup>195</sup> Kanslikollegium, Skrivelser från postbönder, postförare, postskeppare, postiljoner och kurirer, vol. G 2 G:2, Fasc.: 'Postskeppare', Till Kungl. Maj:t, 1672–1800, Letter from Erik Djurström, David Blanckenhagen, and Andries Nebbe, 'Underdånigt Ödmiukt Memoriale', 17 June 1707, RA.

<sup>&</sup>lt;sup>196</sup> 'Kungl. Cantzlie-Collegii resolution och förklaring angående Kongl. Post-Galleothernes och jachternes sampt dhe der wedh warande Påst-Betienternes, Skieppares och Båtzfolcks beskydd och säkerhet, skrifwen Stockholm den 30 maij 1703', *Kongelige och andra wederbörandes förordningar angående Postwäsendet* 1707, pp. 35–36.

<sup>&</sup>lt;sup>197</sup> Simonson 2009a, pp. 4–5, develops this argument further.

of a ship was what made sea transport cost-effective, but it took time to make up a ship-load – it would have taken years, had the cargo been only letters. Per voyage, a ship with its crew was far more expensive than a mounted post-farmer or a postilion. The land-bound economy of scale allowed for more frequent information transfers, once the infrastructure was in place.

The mechanism of different tipping points in its economies of scale was further strengthened towards favouring of overland deliveries, because the Post Office itself had to bear all costs for the post-yachts (the harbour, building a post-yacht, salaries for the crew), but only a minor proportion of the costs for maintaining post-farmers and the infrastructure on land. Although the decision-maker in postal matters up to 1698, the Chancery Board, had a general responsibility for decisions about the Crown's allocation of its resources, the internal accounting system invoked a logic that made all investments in postal services beyond the post-farmers more expensive and exposed to market-regulated mechanisms.<sup>198</sup>

As long as commercial links and the postal network coincided, and as long as there was no demand for more frequent or regular communication than that provided by the occasional merchantship arriving in harbour, sea-mail could be as cheap as Ian Steele assumes the post to the Lesser Antilles to have been. When commerce and correspondence did not coincide, sea-mail became expensive to maintain. In the Swedish Empire, the match between commercial links and the administrative need for frequent and regular communication was poor. As Michael Roberts pointed out, the commercial links within the empire were weak. In the 1690s, the governor in Visby was alone in his need for frequent correspondence with Stockholm. Gotland's commercial links faced southwards instead, following the old Hanseatic network.

## Conclusions

I have suggested here that Sweden's postal service was above all a prerequisite for administrative or bureaucratic power, inspired by Giddens's concept of the time-space distanciation of power relations and by Harold Innis's concept of imperial communication biases. Central to bureaucratic power is a need for a fast and reliable information flow and for open lines of communication. Although the Swedish fiscal-military state is frequently looked upon as an efficient bureaucratic organization in the raw, as indeed it was in many respects, this present study reveals an administration and an empire that suffered from an information problem: the information flow was slow and insecure. Post-days were infrequent, only once or twice a week, and deliveries were slow on several routes: 3.5–4.5 km/h or about half the standard speed of 7.5 km/h referred to in

<sup>198</sup> Simonson 2009a.

most of the European postal instructions. In a vast empire, this resulted in information circles that stretched over weeks, even months; a grave disadvantage for centralized decision-making in Stockholm, particularly during periods of crisis. In other words, the slowness of the post weakened such integration of the Swedish Empire as was brought about by administrative power. Sweden also suffered from the precarious situation of its information flow to and from the economic and political centres in Europe. Before the Stralsund–Ystad sea-route was established in 1683, Sweden was overly dependent on the route through often-hostile Denmark, which until 1689 prohibited mounted Swedish postilions, and consequently slowed the post considerably.

A hypothesis confirmed by the study is that the preference was for overland transport, by wagons or postilions on horseback. The superior carrying-capacities of ships were of little use here, since the logic of information transfer instead demanded the frequent and steady flow of transmissions. Punctuality at sea was harder to achieve because of the hazardous weather conditions. In winter, sea-traffic could even be interrupted for months at a time. Land transport could better meet the requirements of the synchronization of postal routes. With small volumes, sea transport also became expensive to maintain. Moreover, there was a mismatch between Swedish ambitions to maintain its Baltic maritime empire and the achievements of the postal services. Even if there was a general problem with speed and punctuality in the case of the Swedish Post Office, efforts were made in the last decades of the seventeenth century and the first decades of the eighteenth century to improve its performance. Seapassages over the Baltic, however, continued to be a problem.

Two qualifications of this conclusion must be added. First, it is very likely, although it is not established here, that the postal service in the long run *did* contribute to a time–space convergence around the Baltic rim as well; that both Finland and the Baltic provinces of Estonia and Livonia were less 'distant' from Stockholm by the end of the seventeenth century than they had been at the beginning. Droste refers to a telling example of the Swedish efforts in espionage against Poland in the 1610s, which failed not due to a lack of useful information but because their communication lines were so bad that it took too long, was too insecure, and cost far too much to receive the information in time for it to be of any use.<sup>199</sup> Without doubt, the situation had improved by the end of the seventeenth century, yet one effect of this was that the time–space convergence proceeded much faster in central Sweden and the newly conquered provinces in southern Sweden. Similarly, the time–space convergence with the commercial centres in Northern Germany and the Dutch Republic was if anything more dramatic. The efforts to improve the Swedish postal system were directed at the

<sup>&</sup>lt;sup>199</sup> Droste 2007, p. 217.

politically and commercially important parts of Europe. In contrast, post routes to the Baltic provinces were slow.

One may observe a parallel discussion about the British Atlantic as a community. Historians have pointed to the developing postal networks in Britain and its American colonies in the eighteenth century as an element in the political and economic unification of Britain and the colonies respectively, and ultimately a structural reason for secession and the War of Independence. This view is questioned by Ian Steele, who argues that it ignores improved communications over the Atlantic, which contributed to the integration of Britain with its colonies. Obviously, the communication over the Atlantic improved in the eighteenth century. However, in relative terms, the integration process *across* the 'English Atlantic' lagged behind the integration processes at work on either side of it in the colonies and in Britain: in the seventeenth century, there was no postal system connecting the colonies; in 1770, the colonies were connected by a network consisting of 65 post offices. On the developing postal system connected by a network consisting of 65 post offices.

Second, my argument is not that Sweden was a poorly integrated empire in every respect. Information problems were the chinks in the armour of a strong state in many respects. In more recent Swedish historiography, great emphasis has been placed on the ideological aspects of integration and collective identities,<sup>202</sup> matched by an interest in constitutional matters and political culture. In marked contrast to the description of Sweden as a power state, or a fiscalmilitary state, the Swedish state has been conceptualized as a conglomerate state in which various realms had their own special relationship to the Crown.<sup>203</sup> Within this debate, the position of Finland in the Swedish kingdom has been singled out. In his dissertation, Jonas Nordin claims that although Finland (here referring to the larger geographic entity, roughly conterminous with contemporary nation-state Finland) was not a separate entity from Sweden constitutionally, they were nevertheless perceived as two separate entities; indeed, increasingly so during the eighteenth century. Nordin criticizes the idea of a conglomerate state that considers southern Finland to be a central part of the Swedish state as embracing uncritically Matti Klinge's perception of Sweden as a maritime empire, connected by the sea. True, seaways would facilitate economic integration, but there are other issues, as Nordin argues - adducing the military mindset that sought 'natural borders' along coastlines, rivers, or mountain ranges.<sup>204</sup> Nordin has in turn been challenged on the basis of empirical evidence

<sup>&</sup>lt;sup>200</sup> Steele 1986, pp. 113–114, 131.

<sup>&</sup>lt;sup>201</sup> Lesger 2006, p. 275.

<sup>&</sup>lt;sup>202</sup> Gustafsson 2006, pp. 14-17; Nordin 2000.

<sup>&</sup>lt;sup>203</sup> Eng 2001.

<sup>&</sup>lt;sup>204</sup> Nordin 2000, pp. 321–327.

that Sweden and Finland were not separate entities in a conglomerate state-building exercise.<sup>205</sup>

This study of time-keeping in the postal system supports Nordin's interpretation to the extent that it underlines the problems of maintaining communications over the Gulf of Bothnia. However, it also shifts the focus away from collective identities and political culture as constitutive for integration in the Swedish Empire: the postal system brings integration as a consequence of geographical interaction to the forefront, and thus gives primacy to the integrative force of agency in administrative and commercial networks.

In a dissertation on the integration of Gotland in the second half of the seventeenth century, Jens Lerbom shows how the Swedish state succeeded in integrating the island by implementing a fiscal and judicial system that created a direct relationship, and which allowed for participation and negotiation between the state and its subjects. Furthermore, state religion and the church were used to introduce ideological messages - and Swedish as a language. Much of this is concerned with a relationship between subjects and state-representatives on local and regional levels: the central government ruled largely by delegating decision-making to the regional level, and exercised control by auditing the regional finances after the event.206 I would claim that in the case of Gotland we see the strong side of the Swedish central administration in Stockholm. It ruled in the same manner as a firm of accountants, and less as stockbrokers immediately reacting to a market. In this, the Swedish control mechanisms paralleled the systems of performance evaluation that the Hudson Bay and East India companies built up to control their agents at their far-flung trading ports, who because of the time-lag in information had a great deal of authority.<sup>207</sup> Integrating power in Sweden, as elsewhere, was also built on an ideological appeal to locally entrenched world-views. Lutheranism and the rule of law were important ingredients in a kind of civic attitude that in the Swedish Empire also extended to the peasantry.208

What the Swedish Empire lacked was economic integration. Significantly, Lerbom also concludes that Swedish policy on Gotland did not change its economic conditions much. Trade with the Swedish mainland continued to be of minor importance, and this chapter has indicated the difficulties in maintaining sea-mail routes in the absence of commercial links. This was a general problem for postal traffic in the Swedish Empire. The strength of the early modern European postal system was to a large extent built on the joint interests of business and political correspondence, but in the Swedish Empire the two networks did not coincide. This was most detrimental for postal communication overseas,

<sup>&</sup>lt;sup>205</sup> Eng 2001, pp. 291-298.

<sup>&</sup>lt;sup>206</sup> Lerbom 2003, p. 125, summary pp. 225–232.

<sup>&</sup>lt;sup>207</sup> Carlos & Hejeebu 2007, pp. 152-158.

<sup>&</sup>lt;sup>208</sup> See Glete 2002, pp. 189–191; Eng 2001, p. 295.

which depended on combining postal deliveries with cargo traffic to keep down its costs. Economic integration was insufficient for a profitable postal service over the Baltic.

The Achilles' heel of integration – a slow, disruptable service provided by the Post Office - was most likely to be felt at times of stress. In the Great Northern War of 1700-1721, Sweden lost both its Baltic provinces to Russia and its position as a European great power. Michael Roberts has claimed that the loss was a consequence of a strategic mistake on the part of Charles XII: the neglect of the defences of the important Baltic provinces. The king was looking in another direction.<sup>209</sup> To define and rank the causes of defeat in a war, with its different agents, their preconditions, and a very complex chain of events, is almost impossible. Nevertheless, I would suggest that the Swedish Empire's information problems were an important cause. With an information circle lasting two months just for Stockholm-Riga, royal neglect is not entirely surprising. With his repeated warnings before the war, the governor-general in Riga, Erik Dahlbergh, was a lone and very distant voice that caught little attention in Stockholm, and his suggestions to improve the postal route were met by the director general of the Post Office, Samuel Åkerhielm senior, with what the postal historian Teodor Holm has called a 'tight-fisted book-keeper's attitude'.210

<sup>&</sup>lt;sup>209</sup> Roberts 1979, pp. 147-150.

<sup>&</sup>lt;sup>210</sup> Holm 1906–1929, v. pt. 3, p. 12.