English workshops, dinner tables and prison cells: *The makings and takings of an eighteenth-century Stockholm cutler*

In this paper I introduce some of the recent findings from my ongoing thesis project – 'Making metal making practices in eighteenth-century Sweden'.¹ Drawing upon the trajectory of master cutler and Stockholm manufacturist Eric Engberg (1691-1765), various aspects of the mid-century Swedish metal trades are discussed. Specifically, the focus here is on the interrelatedness of practices and performances which constituted the makings and takings of finer metal manufacturing during the period.

Introduction

The importance of iron and copper making in early-modern Sweden has recurrently been pointed out. Traditional inquiries approached the macro-economic features of an important but technically lagging iron industry, as of an ineffective and non-competitive (however heavily subsidized during the eighteenth century) domestic finer metal manufacturing.² During the 1980's this approach was nuanced by researchers emphasizing the materiality of early-modern metal making. The interwoven spheres of household and work, as well as the interregional character of the iron industry, were stressed.³ A third line of research has emerged during the last two decades. Influenced by the developments within global history, scholars have accentuated the relations between practices of metal making, enlightened scientific debates and mercantilist thinking. Localities of production and consumption have been linked to complex movements of a globalizing trade by an emphasis on eighteenth-century perceptions of concepts like 'trade' (*näring*) or 'system(s)' (*system*).⁴

Inspired by these recent approaches, the Swedish metal trades are here understood as consisting of the workshops, metal works and other practices subsumed within the Swedish manufacturing 'system' that gradually emerged during the mid-eighteenth-century. Moreover, one important feature is to highlight the connections between these practices and a wider system of metal making and trading during the period. Another critical foundation for the investigation is the use of trajectories (of things, people and ideas) – which in turn are followed over time and space. In this paper, the findings from one such trajectory is presented.

Master cutler and manufacturist Eric Engberg, born in the Swedish Finland, came during the mid-century to be involved in the attempts of promoting the domestic metal manufacturing, and especially the making and using of steel. He made two longer journeys abroad, to England and the European continent, and established a metal works (*Fabrique*) in Stockholm for the making of

¹ This project is associated to a wider project funded by Riksbankens Jubileumsfond: *Places for making, Places for taking: Metals in the Global World, 1630-1820*, headed by Göran Rydén, Uppsala University, and Chris Evans, University of Glamorgan.

² See e.g. E.F. Heckscher, 1949, Sveriges ekonomiska historia från Gustav Vasa. Tredje boken. Det moderna Sveriges grundläggning 1720-1815, Part II:I, Albert Bonniers Förlag; B. Boëthius & Å. Kromnow, 1947, Jernkontorets historia. Del I. Grundläggningstiden. Jernkontoret.

³ See e.g. A. Florén, 1987, Disciplinering och konflikt. Den sociala organiseringen av arbetet i Jäders bruk 1640-1750. Studia Historica Upsaliensia, 147; A. Florén, & G. Rydén, 1992, Arbete, hushåll och region. Tankar om industrialiseringsprocesser och den svenska järnhanteringen. Uppsala Papers in Economic History, no. 29. Uppsala Universitet, Dept. of Economic History.

⁴ See e.g. C. Evans, O. Jackson & G. Rydén, 2002, "Baltic iron and the British iron industry in the eighteenth century". *The Economic History Review*, Vol. 55, No. 4, pp. 642-665; C. Evans & G. Rydén, 2007, *Baltic Iron in the Atlantic World in the Eighteenth Century*. Brill.

cutlery according to the 'English way' (*Engelska sättet*). Master Engberg was also involved in the 'spreading out' of knowledge related to the making of steel and steel items; he instructed other artisans both in his own workshops and at other manufacturing works around central Sweden. By his death in 1765, he was however an impoverished man – something that depended both on the leavings of workers from his workshops, large debts to various institutions and persons, as well as Engberg's involvement in several political controversies.

Here, I will discuss several aspects where the makings and takings of Engberg are visible in the empirical material. The 'English workshop', the 'dinner table' and the 'prison cell' are themes used to bring light upon the complex connections between making, usage, dealing and moving that characterized the period.

The 'English' workshop - A practice of interwoven imitations

In late 1735, Eric Engberg set out for England through the arrangements of manufacturist and commerce councilor Jonas Alströmer. During the following two years he visited many of the most prominent places for metal making in Britain – including Sheffield and Birmingham. During this journey Engberg had the opportunity of getting in touch with the making of finer edged steel items – as cutlery. On his way back to Sweden, he also passed through Germany and made himself further accomplished in the making of knife-steels (Backstoff- and Butscher-steel) in Solingen.⁵

Arriving home to Stockholm, Engberg commenced the establishing of a knife-works by making use of the experiences from his journeys. This was done by performing imitations – associating different practices with each other. Financial means were acquired from the newly established Office of Manufacturing (*Manufakturkontoret*), in order to purchase a suitable building plot. Specific tools, assisting devices, and materials were procured from London. These things and materials were all considered to be 'samples and models', necessary for the construction of a knife-works according to the 'English way'. Of special importance was the sharpening works, driven by a horse-mill, which made possible the making of table-knives and forks in larger quantities.⁶

When finished, the knife-works was consisting of several workshops; forging, sharpening and polishing was performed on the ground floor in the building while filing and finishing was conducted on the second floor. This was in accordance with the 'English way' of organizing finer metal making in practice. Olof Hamren claimed that the organizing of space and work so that each worker had his 'specific task (*arbetsämne*)' counteracted 'a slow and expensive work'. Employing a piece-rate organization (*Stycke Arbete*) in this way was also linked to the possibility of instructing a larger number of young apprentices. According to Hamren, these workers could

⁵ See Kommerskollegium Huvudarkivet, Kollegiets Protokoll, serie 1651-1752, AIaa:102 & AIaa:104; Skrivelser från Konsuler. London 1730-1814, EVIaa:231, Jonas Alströmer, London, 1730-1739. Riksarkivet, Stockholm (Hereafter RA). See also Eric Engberg's own application for annual pension in 1756, in which he described his journeys, Secrete Hand. och Manufactur Deput. Handling., 1756, Tom III, No. 462, fol. 371-372. Frihetstida Utskottshandlingar, Riksdagen 1755-56, Nr. 26, R. 3077. RA. (Referred to as *Engberg 1756*).

⁶ Kommerskollegium Huvudarkivet, Kollegiets Protokoll, serie 1651-1752, AIa:108; AIaa110, Protokoll d. 8 Januaris 1740. Kommerskollegiums Protokoll 1740, Nr. 1, fol. 70 (for quotations). RA; Riksens höglofl: Ständers förordnade Manufactur Contoirs Relation 1741, fol. 158-162. 1741 års Acter. Manuf. Och Hand. Deputat. Acter. Frihetstida Utskottshandlingar, Riksdagen 1740-41, Nr. 29, R. 2766. RA; Specification uppå hwad master Engberg will hafiva förskrifivit från London. Jonas Alströmer, Stockholm d. 7 Sept. 1739. Praes: d. 7 Sept 1739. Manufakturkontoret, 1739 och 1740 Åhrens Bref-Bok, No. 71, Fol. 1-2. Manufakturkontorets Arkiv, D, Vol. 165. RA.

then be assisting master Engberg in 'spreading out' the arts and sciences of knife-making to places around central Sweden known as prominent within finer metal making.⁷

In conclusion, the establishment of the Stockholm knife-works in the 'English way' seems to have depended on performing various makings and takings – on interwoven practices of *imitation*. The making of knives and cutlery seems to have been intricately linked to practices of metal making in England – as indicated by the procurement and making use of specific tools and devices, as well as by the altering of space and organizing of work by tasks. At the same time, these imitations were also linked to German practices of steel-making and to practices of *making use* of coveted knife-steels. Moreover, other materials as silver, ebony and ivory were also used in Engberg's workshops – and Engberg employed specific workers for making silver details or handles.⁸ In sum, this could be compared with what Berg refers to as the 'inventive reinterpretation which lies at the heart of imitation'.⁹ Performing imitations, thus, was an art of *making use* of various knowledge-practices by associating them with each other.

These performances must also be seen as connected to demand and changing patterns of consumption; to taste and the diversification of appearances. As such they were linked to the innovative finishing of consumer items.

The dinner table – Making use of finished metal items

As Berg has argued, the melding of a mercantilist political framework with an international commercialization during the eighteenth-century did generate various practices of imitating 'foreign luxuries'. The notion of 'process invention' must hence be complemented by one of 'product innovation'.¹⁰ The different accounts referred to above concerning the makings in Engberg's workshops could give a picture of the items produced; table-knives with blades of Backstoff-steel, handles made of ebony and mountings of silver. Briefly treating this matter, Sigurdsson has mentioned the possibility that the knives and forks were 'fitted with pressed silver-handles filled with harts'. This model was circulating out from England during the mid-century.¹¹ By studying estate inventories from the period, it could be concluded that knives and forks of this fashion also were used at some Stockholm dinner tables. In the estate inventory of late instrument-maker Daniel Ekström were mentioned '24 pcs of Knives with black [and] squared (*kantiga*) handles of Ebony and silver mountings', as well as forks with similar black

⁷ Underdån- ödmiukaste Memorial, by Olof Hamren. Handels- och Manufakturdeputationens Handlingar, 1738, No. 65, fol. 482; fol. 484 (for quotations); fol. 486-487. Frihetstidens Utskotthandlingar, Riksdagen 1738-39, No. 33, R. 2682. RA. (Referred to as Hamren, 1738). See also Hall och Manufaktur Rättens Berättelse öfner Manufacturierne och Fabriquerne uti Stockholm, åhr 1740, No. 1, fol. 126. Hall- och Manufakturrätten. Fabriksberättelser 1740-1746/47, BIII:1-6. Stockholms Stadsarkiv; Samuel Schröders berättelse om de finare jern, stål och metallfabrique-werken i riket, 1755. Praes:t d. 28 Januar. 1755, No. 197, fol. 134-135. Kommerskollegium, Huvudarkivet. Särskilda utredningar och berättelser, 1755-1812, FIV:50. RA.

⁸ See e.g. *Hall och Manufaktur Rättens Berättelse... 1740, No. 1*, fol. 126. Hall- och Manufakturrätten. Fabriksberättelser 1740-1746/47, BIII:1-6. Stockholms Stadsarkiv.

⁹ M. Berg, 2002, 'From imitation to invention: creating commodities in eighteenth-century Britain', p. 16. In *Economic History Review, LV, 1* (2002), pp. 1-30.

¹⁰ M. Berg, 2002, 'From imitation to invention: creating commodities in eighteenth-century Britain', p. 2 (for quotations); p. 12; p. 16.

¹¹ I. Sigurdsson, 1982, 'Manufakturer i Stockholm år 1740', p. 27. Utdrag ur *Stadsvandringar*. Stockholms Stadsmuseum, 5, 1982 (pp. 9-29). Obtained at Stockholmskällan.se, 2012-02-28.

handles.¹² This is one of many examples of the interrelatedness of practices of making and using metals that developed in many intricate ways during the period.

Of further interest is the fact that manufacturists in Stockholm often wanted their workshops to be established in places where people were moving; Eric Engberg argued for example that his knife-works was better situated 'close to the port' and hence to 'each and every one that could require my work'.¹³ This could be related to Perez notion of the links between the 'rise of consumption' and a 'culture of curiosity'. Workshops and manufacturing works became sites where the 'aesthetics of utility' were exhibited to potential customers and other curious individuals.¹⁴ Moreover, the makings of metal manufacturists were not solely linked to domestic use. In 1738, Hamren related the establishing of knife-works in Sweden to the possibilities of having many skilled workers who in turn could 'with English Knives and various Steel-items not only supply the Kingdoms consumption, but also have [some] left for exportation'.¹⁵

So far, the spheres of making and usage have been stressed in different ways. Being linked to the mercantilist political framework of mid-eighteenth century Sweden, practices of metal making were however also intricately entangled with politics.

The prison cell - Making and using 'political' tools

Alder has argued for a nuanced understanding of technological change in the late eighteenth century, by stressing how 'qualities of physical artifacts' were connected to 'social conflicts' – and thereby to 'the broader reconfiguration of the polity.' This, Alder claims, also draws attention to the 'active role of technology makers'.¹⁶ This is evident in the many investigations of steel and finished steel items performed in various workshop-practices in Stockholm during the period, including artisans as well as officials from the Board of Trade or the Office of Manufacturing.¹⁷ Relating to the discussions by Evans & Withey, one could argue that practices of metal making also became sites where 'the scientific laboratory' and 'the artisanal workshop' were overlapping.¹⁸ At the same time, they were also practices where political ambitions came to be gradually integrated and where knowledge and appearance was recurrently negotiated. It could be claimed that different metal workshops in Stockholm was, if so only temporarily, *contact zones* where

¹² Inventarium...efter afledne Directeuren wid Mathematiske Instrumente Fabriqweuren Daniel Ekström, upprättat av Justitiekollegium och Förmyndarekammaren 1755. Stockholms Rådhusrätt, 1:a avdelning, EIIa12:155 (1755), bild 630/p. 770. Obtained at Arkiv Digital AD AB, 2014-04-11.

¹³ Engberg om Strömmen wid Södre Sluss, Praes: d. 28 Aug: 1739. Manufakturkontoret, 1739 och 1740 Åhrens Bref-Bok, No. 63, Fol. 1-3. Manufakturkontorets Arkiv, D, Vol. 165. RA.

¹⁴ L. Pérez, 2008, 'Technology, Curiosity and Utility in France and England in the Eighteenth Century', p. 35. In B. Bensaude-Vincent & C. Blondel (Eds.) *Science and Spectacle in the European Enlightenment* (pp. 25-42). Science, Technology and Culture 1700-1945. Ashgate.

¹⁵ Hamren, 1738, fol. 483.

¹⁶ K. Alder, 2010, *Engineering the Revolution. Arms & Enlightenment in France, 1763-1815*, pp. 87-88. The University of Chicago Press, 1st paperback ed.

¹⁷ See e.g. S. Schröder, *Dagbok rörande Directeurs-Sysslan öfiver Jern- Stål- och Metall-Fabrikerne i Riket*, Vol. I, 1753-1756, fol. 27 etc. Kungliga Biblioteket, Stockholm, X. 283. In this entry, Schröder (*Directeur* or supervisor of the finer metal making in Sweden from 1753) described the testing of crude steels in master Engberg's knife-works.

¹⁸ C. Evans & A. Withey, 2012, 'An Enlightenment in Steel? Innovation in the Steel Trades of Eighteenth-Century Britain', pp. 549-550. *Technology and Culture*, Vol. 53, No. 3, pp. 533-560.

knowledge-practices intersected and were reconfigured by the movements of materials, items, devices and practitioners.¹⁹

Steels, tools and finished items not only became increasingly subjected to attempts of political control in Sweden during the 1740's and 50's. They were sometimes also 'political' in other ways. The escape of General Charles Emil Lewenhaupt from imprisonment, the night before his execution in July 1743, clearly exemplifies this. Lewenhaupt was being kept in a building called *Kastenhof* situated by what was then *Norrmalmstorg* (today Gustaf Adolfs torg in central Stockholm). According to documents from the Royal Superior Court, the General's servant had succeeded in entering the room directly beneath the prison-cell. He had then made a 'hole in the floor' through which the convicted man was pulled down. In order to perform this bold rescue, the servant had access to specifically adequate tools. Soon it was revealed that these had been made finished by Eric Engberg in his workshops. Moreover, the master cutler had assisted in the further escape of the General from the town by rowing-boat. The coup was revealed and Engberg was accused of having 'assisted the prison-break with [a] drill, 2 Knives and Compass-saws' – one of the knives had been specifically 'adapted for this purpose'. The involvement in this political coup resulted in master Engberg himself later being sentenced to prison.²⁰

This example shows in a much concrete sense how artifacts were political. In this case, the knives and tools were given political meaning by the way they were *made* and how they were *used*. Furthermore, these tools was later used as evidences against Engberg, making them even more into objects of the social and political conflicts that characterized the period. Perhaps it could be claimed that the specific performance of *making political tools* in this case was interwoven with broader patterns of political debate and social negotiation by which tools were *made political*.

Summing up

These three brief examples have been outlined in order to highlight the importance of approaching eighteenth-century metal making, as well as early-modern manufacturing in general, by taking notice of various entangled and interrelated practices, performances and circulations. Interrogating the multi-faceted meanings of eighteenth-century concepts like the 'English way' is one way of doing this. One other is to view the spheres of making, taking, dealing and moving as interwoven; thereby linking aspects of production, consumption, commerce and politics in a way not predetermined by modern conceptions of these dimensions. In conclusion, this approach opens up a potential for understanding the interplay between official *strategies* and *tactical performances* so vividly constituting the makings and takings of the mid-eighteenth century metal trades within and beyond the borders of Sweden.²¹

¹⁹ C.f. K. Raj, 2007, Relocating Modern Science. Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900, p. 13. Palgrave Macmillan.

²⁰ Uppå Kongl: Öfwer Rättens wägnar, fol. 1; fol. 2-3 (for quotations). Undated copy of writing by U. Gedda and G. af Trolle regarding the escape of C.E. Lewenhaupt. Militaria, Ryska Kriget 1741-1743, Vol. 11, Rättegångshandlingar i målet mot generalerna Buddenbrock och Lewenhaupt. Riksarkivets ämnessamlingar, M:1594. RA.

²¹ See M. de Certeau, 1984, *The Practice of Everyday Life*, pp. 34-39; pp. 117-118 University of California Press.; K. Sennefeldt, 2011, *Politikens hjärta: medborgarskap, manlighet och plats i frihetstidens Stockholm*, pp. 36-37; p. 88. Stockholmia Förlag.