

Irma Taavitsainen

Professional and lay medical texts in the eighteenth century: a linguistic stylistic assessment¹

This study focuses on stylistic features in medical texts for different audiences in various channels of publication. My aim is to explore whether there are differences between medical writings for professional and lay audiences. Authors mostly belonged to educated professionals who wrote for their peers, but there are also writings for general audiences. The most important channel for communicating new medical knowledge was through monographs, but the first specialized medical journals were founded in the 1730s. The first magazine for polite society readership was established in the same decade. Texts dealing with fashionable topics like inoculation, longevity, sea bathing, air and water are compared to one another. Corpus-linguistic methods were employed first to point out features worth further study with qualitative discourse analysis, which is the main method. Writings for professional audiences rely on knowledge-based arguments, while texts for lay readers contain more emotive language use, where a polite society style of writing is present. The dichotomy between professional and lay proves problematic especially in some texts that give expression to new emergent trends. In the light of the present data, the assumption of a clear borderline between professional and lay does not hold.

1. An introduction

The eighteenth century was a transition period from the earlier thought styles to more modern approaches to medicine. It can be characterized, on the one hand, by developments towards stricter professionalization and, on the other hand, by the dissemination of medical knowledge to the larger public, both in polite society and increasingly to people at large. According to medical history, lay medicine in the Georgian period was active and adaptable, and the laity had a substantial share in forms of medicine which overlapped and interacted with professional practices (Porter 1985b). The seeds of present-day publication practices of scientific discourse communities were already present, and the first steps towards the differentiation of print media were taken. Monographs were still the most important channels for communicating new medical knowledge but journals also gained in importance during this time. The first specialized medical journals were established in the fourth decade (*The Edinburgh Medical Journal* (EMJ) 1735-), while the more general *Philosophical*

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Transactions (PT), founded as early as 1665, continued as a general scientific journal. Newspapers had already started to appear in the previous century with *The London Gazette* (1666) leading the way, and many more were established afterwards (see Fries 2012). Their coverage and geographical circulation became wider in the eighteenth century. Magazines for lay readers in polite society also gained ground and e.g. *The Gentleman's Magazine* (henceforth GM) dealt with medical topics (see Chapter 7).

The popularization of medical texts, i.e. the process of adapting texts for lay people, is by no means a novel feature of the eighteenth century: it started already in the late medieval period in a mostly illiterate society, finding most conspicuous expressions in medical poems with rhyming couplets for oral delivery, which contrasted with the more refined prose texts. The difference between lay and professional found other forms in the early modern period, but there was a “largely unregulated open-market place where the layperson and the patient had much more choice and power in relation to medical practitioners” (Wear 1992: 17); the prerequisite for the demand was that some knowledge of medical issues had already reached this wide public with varying literacy rates, so that people knew what they were after. A complicating feature is the mixed motifs that served as incentives for writing to heterogeneous lay audiences. Philanthropic ideas spread in the eighteenth century and promoted writing about medical issues for wider readerships. Commercial interests were present as well, e.g. publications of the virtues of spas were intended to attract customers. Besides such covert ways of influencing people's behaviour, more overt promotional discourse is found in medical advertisements that display the outermost end of the scale of rising consumerism in society.

2. Research questions

This paper sets out to detect in more detail how medical knowledge was presented to professional readers as compared to lay audiences, and to what extent professional and lay medical texts differ in the eighteenth century. And further, were the guidelines established for the Royal Society still followed, and does the polite society style present in GM also show in highly professional texts. In the previous century, the Royal Society had explicitly formulated a publishing policy that aimed at improving the English language of science by rejecting all rhetorical flourishes and

emphasizing clarity (Sprat 2003 [1667]: 113).² In the eighteenth century, the rules created in the previous century were still valid, but to what extent they were followed in eighteenth-century scientific discourse has not been explored (see below). Polite society developed its own style of writing, and its spread in medical discourse is of interest to this study. The development of new media prompt research questions about the dissemination of knowledge and styles of writing for different target readerships. The authors of medical texts came mostly from learned circles, although lay people were increasingly contributing with domestic health advice and recipes. The audience parameter provides the key for the present stylistic assessment (see Bell 1984): the differences between various groups are conspicuous as authors adapt their words and diction to their readers. Writers seem to have been aware of the varying literacy degrees and “capacity” of their readers, as John Arbuthnot, M.D. and Fellow of the Royal College of Physician and the Royal Society, put it in 1733:

(1) ... *Obscurity* may be taken in two Senses, as Real, or as Relative to the Understanding of the Reader; ... If *Obscurity* is taken in the second Sense ... I freely own that I had made too partial a Judgment of the Capacity of several of my Readers; ... and it was not possible to write it down to the Capacity of every Body. (John Arbuthnot, Preface to *PRACTICAL RULES OF DIET*, 1733)

The following questions are pertinent to this study: to what extent do eighteenth-century professional and lay texts differ? What linguistic strategies are used to make medical knowledge understandable and appealing to a wider readership? And, further, do different genres or channels of communication display different patterns in this respect?

3. Review of the previous literature

Popularizations occur throughout the centuries of medical writing. Some historical assessments are available, but the fairly large body of relevant eighteenth-century scientific literature, such as Atkinson (1999), and Gross, Harmon and Reid (2002), do not offer much in this respect, as they do not deal with the differences of various print media. In medical history, Porter (e.g. 1985a and b, 1995) has written extensively about the dissemination of medical knowledge through

² A language committee chaired by Dr. Wilkins was set up in 1664. Studies in the Royal Society style include e.g. Atkinson 1996, 1999; Gotti 1996, 2001, 2003, 2005, 2006; Taavitsainen 1994, 2001a; Gray et al. 2011; Moessner 2009; Banks 2008, 2017.

various channels in the eighteenth century, and his articles are very relevant to my concerns. Wear (1992) deals with the early modern period and states that a contrast is always implied when the word *popularization* is used (see also Harris 1995). The scale from elite to popular has been modified to professional versus lay in the present study, and the notion of “popular” is applied in a restricted sense (see below), as the term needs to be treated with caution.

Relevant to the eighteenth century are also Present-day English science popularization studies that focus on medical writing. A pertinent book-length assessment by Brand (2006) focuses on lexical patterns in SARS (Severe Acute Respiratory Syndrome) texts both “internally” within the medical discourse community and “externally” to the general public. The author questions the view that popular texts are “simplified” and argues for different contextualizations and different genre routines. Her results showed that shared lexical items occur in different collocations and different semantic prosodies. Another important finding was that emotional appeal with direct quotes and editorial comments is commonly employed in news media to enhance the relevance of the communicated knowledge to readers’ everyday lives. Brand argues that such emotive features are not present in texts for professional readers, which is not in accordance with the results of this study (see below).

A diachronic mapping of changes in the styles of writing, defined as the co-occurrence of linguistic features over several hundred years, shows a development towards more detached writing in learned texts targeted by professional authors at their peers. Biber and Finegan (1997) investigated the most important stylistic dimensions and found that scientific writing became more informational, less narrative, more elaborated, and more impersonal after the 17th century.³ In our assessment of eighteenth-century case studies, differences were found especially in the use of involvement features and point of view, namely that the passive voice and nominal constructions increase and the focus shifts towards symptoms and medical procedures in the course of time (Lehto and Taavitsainen in this volume). In contrast, case studies targeted at lay audiences employ a more involved style with first-person narration and interactive features. Affective language use is fairly common with exclamatory sentences, direct quotes and vivid

³ Biber and Finegan (1997) based their research on the science texts contained in A Representative Corpus of Historical English Registers (ARCHER), which come from the Philosophical Transactions of the Royal Society (PTRS). Starting with the period 1650–1699, the texts are grouped into 50-year periods, and each period is represented by ten texts of about 2,000 words each. The dimensions are based on Biber’s 1988 study, and those investigated in 1997 deal with involved vs informational production, narrative vs non-narrative concerns, situation-dependent vs elaborated reference, non-impersonal vs impersonal style

adjectives, especially in first-person case narratives that advertise medicines.

4. Medical practitioners and readers of eighteenth-century medical writings

In order to probe into the issue of eighteenth-century styles of writing for different audiences the texts are related to their underlying sociolinguistic parameters. This means that both authors and readers are taken into account, though the audience factor proved even more important than the writers in the present data. The top group consisted of professional medical practitioners with university education who were often members of the Royal Societies of London and/or Edinburgh. Surgeons and apothecaries also belonged to learned practitioners and represent the professional core group. A great part of medical literature was both written by and targeted at them.

The availability of information about medical matters improved in the course of the eighteenth century and it reached wider circles with the new publication channels intended for lay readers. Newspapers dealt with current medical issues and health advice and disseminated knowledge to the population at large. In addition, *The Gentleman's Magazine* (1731–1922) was a novel medium and played an important role in society as it brought current issues of importance to wider notice in polite society. Writings published in GM show what literate mid-eighteenth-century readers were told about the recent developments in science and medicine (Porter 1985). The readers of GM included medical practitioners but the majority came from other professions, and the magazine also reached literate women; and further, the lay readership of medical texts in newspapers included heterogeneous middle class people.

Some of the monographs included in the present data were also intended for large and more heterogeneous readerships, and although prefaces cannot always be taken at their face value, they contain important information on the purpose of writing and the target audience. The emphasis on benevolence and doing good for the poor may have given some prompts to mention the least educated groups in prefaces, e.g.:

(2) For the benefit of mankind, we here furnish the public with some of the best and easiest methods of recovering and securing health, and of preserving life, which comprehend the greatest discoveries in the Medical Art. These will equally suit all ranks of people; the Poor, because the Remedies may be cheaply obtained; and the Rich, because they may be easily put in practice. (Robinson 1785: iv)

5. Materials used in this study

5.1. A subcorpus of LMEMT

A subcorpus of texts from the *Late Modern English Medical Texts 1700-1800* (LMEMT) was designed to provide the data for this study. In order to secure a solid basis for comparison (*tertium comparationis*), texts for different audiences are organized into groups that deal with the same central topics. Figure 1 shows the overall plan of the LMEMT corpus and the arrows indicate which parts are relevant for the present assessment.

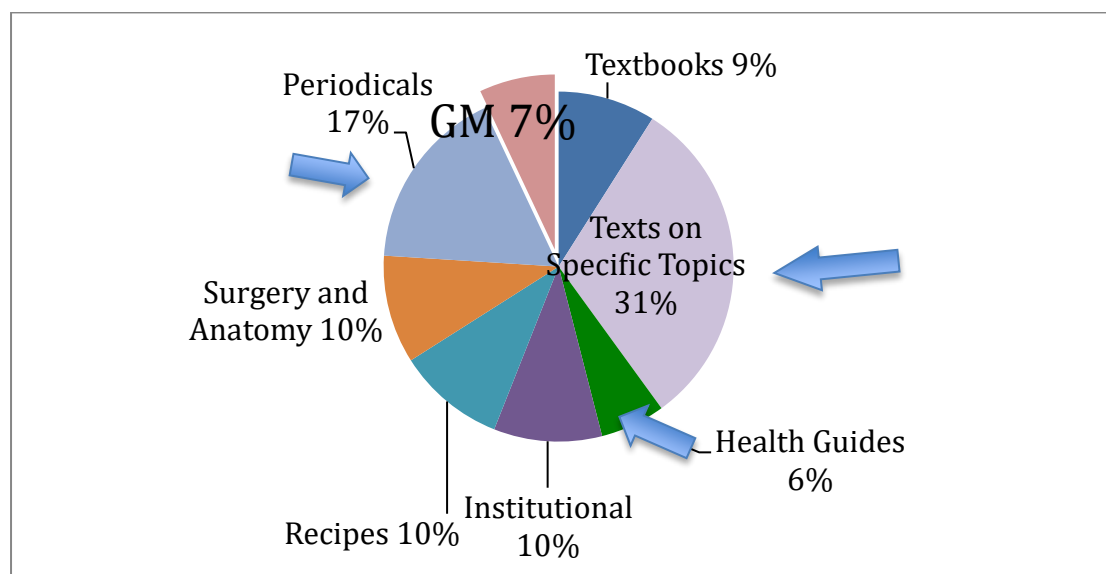


Figure 1. LMEMT overall plan and parts selected for this study.

The data included is given in Table 1. The main groups are composed according to the medical topics that attracted a great deal of attention in eighteenth-century medical texts and were widely debated in various media both among medical discourse communities and lay people. The data is divided into the categories of professional and lay except in connection with longevity (see below). The word counts of monographs are mentioned separately, but the EMJ and GM articles are of varying lengths, some short and some long, and thus their total counts should suffice. The data is fairly concise, some 135,000 words in all, but large enough to indicate some pertinent characteristics and tendencies within the two groups.

Table 1. Material of the present study.

Topic	Professional	Lay
Inoculation	Jurin 1724; 9,800 words Jenner 1798; 10,500 words EMJ 1777; 7,100 words	<i>Inoculation made easy</i> 1766; 3,250 words GM 1737 (561); 1000 words, GM 1755 (0502); 250 words GM 1767 (0313); 1350 words GM 1767 (0411); 1350 words GM 1767 0413); 1550 words
Sea bathing	Anderson 1795; 5,800 words	GM 1786 (1035); 1050 words
Longevity	Luigi Cornary 1702; 10,250 words Cheyne 1724; 11,750 words Trusler 1773; 8,750 words GM 1761 (0061); 750 words. GM 1780 (0280); 650 words GM 1798 (0467); 800 words	
Air	Boulton 1724; 7,350 words Beddoes 1795; 11,050 words EMJ 1780; 850 words	
Water	Johnstone (1790); 10,450 words Currie 1797; 10,350 words EMJ 1747; 7,600 words EMJ 1796; 2150 words	Smith 1723; 16,400 words GM 1761 (488); 350 words. GM 1780; 1,650 words GM 1786; 850 words. GM 1792; 460 words

Monographs: professional 54,850 words; lay 50,400 words

Periodicals: EMJ 17,700 words; GM 12,060 words

Table 1. Material of my study and wordcounts by communication channels

5.2. Topics in more detail

Inoculation was widely debated on medical, ethical, and religious grounds and provides excellent material for this study. This is perhaps the most important topic area from the present viewpoint as inoculation has been mentioned as the area where progress was most remarkable in this century. The professional side is represented by the most prominent early figure in this polemical issue. James Jurin (died 1750) was a physician and natural philosopher, Fellow and Secretary of the Royal Society, and Fellow of the Royal College of Physicians (Oxford

Dictionary of National Biography, ODNB hereafter).⁴ He succeeded in establishing the practice of inoculation in England, as he was able to convince his readers by his innovative statistical approach. His advocacy brought him widespread recognition both in Britain and abroad, and he is acknowledged for making the practice of smallpox inoculation spread in England with wide social consequences. His groundbreaking book is “[h]umbly Dedicated to Her ROYAL HIGHNESS the PRINCESS of *WALES*”. This connection with the highest social order and its implied acceptance of the cause contributed to the success of the practice (Jewson 1976: 376). The survival rates improved after 1750 and there was a rapid decline in adult smallpox victims from 1770 onwards. An EMJ article from 1777 is also included. The lay group contains the anonymous *Inoculation made easy* (1766) and articles from GM (1722, 1737, 1761).

The topic of sea bathing is represented by John Anderson’s (c.1730–1804) professional treatise from the end of the century (1795). He was a physician with an MD from Edinburgh University, but practised first in Surrey, and then as a physician to and a director of the General Sea-bathing Infirmary at Margate, Kent. His medical writings focused on sea bathing, and his audience is very clearly stated in the introduction:

(3) I have undertaken to write on the nature, power, influence, and effect of Sea-water and Sea-bathing, cold and hot, and submitted the manuscripts to be read before a learned Medical Society, in London; and also to be reviewed by sundry learned medical friends; and the reports on them are highly flattering (Anderson 1795: 2)

An EMJ article from 1796 also deals with the topic and the lay group contains a letter from 1786 published in GM that gives a more personal view of sea bathing.

Longevity is the third topic and shows a diversity of genres, writing styles and contexts. The theme of how to achieve a long life was fashionable and occurs in texts for wide circulation among heterogeneous readers. For this reason it was included in the lay group. The first text is about the famous Italian Luigi Cornaro, who although reaching a very high age was still in good shape, being able to ride and live normally until the end. The original version was written in Italian but was soon translated into English (1702). It had long-standing popularity as shown by its paraphrase in GM in

⁴ He acted as Secretary for six years 1721-27 and edited volumes 31-34 of the *Philosophical Transactions*.

1761. *An Essay of Health and Long Life* (1724) by George Cheyne (1671/2–1743) was an important signpost in eighteenth-century medical literature, written for lay readers of the aristocracy it was also among the favourite reading for the upwardly mobile social class who frequented Bath and suffered from diseases of over-indulgence (ODNB). Cheyne received his medical education at Edinburgh and his MD in Aberdeen, later becoming a Fellow of the Royal Society (1702-) and the Edinburgh College of Physicians (1724-). The book was immensely popular, reaching its seventh edition within a year and making Cheyne one of the best-known physicians in Britain. His bestseller was organized around the six Galenic non-naturals and emphasized that health was the responsibility of the individual, and that failure to maintain one's health was a sin (see Gentilcore in this volume). His book was followed by a long line of self-help texts declaring that moderation in food and drink was the key to health. One of the books was John Trusler's (1735–1820) *An easy way to prolong life, by a little attention to what we eat and drink ... collected from the authorities of some of the ablest physicians* (1773). The author was a Church of England clergyman and author who had been educated at Emmanuel College, Cambridge. He turned his attention to medicine, probably taking an MD degree at Leiden University, and described himself as “a medical gentleman”. Longevity incited admiration in other kinds of texts, too, and the subcorpus also contains a travelogue from Scotland praising the scenery as well as people who lived until old age by maintaining their health and making merry (GM 1798).

Two texts about air, the fourth topic area, are included in the professional group. The first is *Some Thoughts Concerning the Unusual Qualities of the Air* (1724), written by Richard Boulton, an Oxford student and later an author of several medico-surgical works. He was a most controversial figure who clearly had aspirations to rise high early in his career. There is no evidence of him having philanthropic interests, and it is likely that he wrote for his peers to promote his own career, in which he was partly successful (ODNB). The second text is *Factitious Airs* by Thomas Beddoes (1760–1808), a chemist and physician, who received his education at Pembroke College, Oxford, and Edinburgh. His medical therapeutics relied on gases and their curative powers. He advocated the Enlightenment idea of social medicine, being opposed to the old regime of political corruption, social disease, and medical deception and snobbery. His writings, however, became an easy target for satirists (ODNB). Articles from both EMJ (1780) and GM (1743) are included in the professional and lay groups, respectively.

The fifth topic is water. John Smith, C.M (1723; not mentioned in ODNB) wrote his text at the age of seventy-four and based it on over forty years' experience. Two texts from the end of the century are also included: James Johnstone's *Medicinal Water* (1790) and James Currie's *Medical reports, on the effects of water, cold and warm, as a remedy in fever and other diseases ... To which are added, observations on the nature of fever* (1797). The former, Johnstone (1730–1802), was a physician educated at Edinburgh University, a Fellow of the Royal Medical Society of Edinburgh and a corresponding member of the Medical Society of London.⁵ The latter, Currie (1756–1805), was also of Scottish origin, gaining a medical education in Edinburgh and an MD from Glasgow University. He practised medicine first in London and then as a physician to the Liverpool Infirmary.⁶ A text from EMJ (1796) as well as a passage from GM (1745) are also included.

For the assessments, the data was divided into two groups, professional and lay, on the basis of the background parameters of the authors and audiences. The problem with historical data is that there is a great deal that we do not know, especially concerning the audience. The authors are better known. My division is based on the audience factor, as far as it is known, and also the medium is considered so that EMJ is counted in the professional group whereas GM is lay (see also Taavitsainen 2015). The books by known authors with a very wide circulation among heterogeneous readers are counted in the lay category, as their audience extended far beyond professional circles. More particularly, the following criteria were applied:

Professional texts: The authors in this group were highly educated physicians who had received formal medical education, were professional practitioners and wrote for professional medical audiences. Some authors belonged to the highest group of renowned physicians and all except Smith are mentioned in *The Oxford Dictionary of National Biography*. Some of the authors were controversial figures of the time but had received formal medical education at universities or other institutions. Further evidence for the professional use of the selected monographs representing cutting-edge science comes from external sources as they are mentioned as innovative and groundbreaking by medical historians. Monographs form the core of my material, and several of these texts occur under the label of an “essay” (see Taavitsainen 2017b). In addition, articles from the first specialized medical journal (EMJ) are included, as they represent writings in an innovative new medium of rising importance for communicating

⁵ Besides water, his writings dealt with fashionable topics, such as the nervous system and the abolition of slavery, and he gives Merton College, Oxford, as his affiliation when reporting on his experiments in 1787.

⁶ He was also active in the founding of a lunatic asylum (opened in 1792).

knowledge within the discipline. The EMJ policy states that the goal of the journal was to promote new knowledge, e.g. with reports on experimental inquiries that throw a “new light on intricate and important subjects” (1777: 408). But experimental reports are by no means the only genre in EMJ, as e.g. case reports and book reviews are also frequent (see the category introduction).

Lay texts: Several monographs were aimed at heterogeneous readerships. The evidence comes from both internal and external sources, mostly from prefaces and metatextual passages within the texts, but also from book history. The text from 1766 included in Specialized treatises (Category 2) is an anonymous monograph that contains a qualification “made easy” in its title. This implies “popularization”, perhaps through simplification for the benefit of lay people. Another comprehensive group of texts in the data comes from Health guides (Category 4), which are written by well-known physicians explicitly for heterogeneous lay readers. For example, George Cheyne’s famous health guide is targeted at aristocratic and upper middle class lay readers, though professionals also used it (ODNB).⁷ The new media of the period provide a large part of the data: newspapers were mainly intended for the general public, and medical items first published in them were often reprinted in GM. This new channel also published Letters to the Editor, which recorded some more personal views on medical issues, but most of these texts were, however, written by professional authors.⁸ Texts in GM show a somewhat wider array of genres than professional treatises or EMJ, as besides articles and case studies, a travelogue, an anecdote and letters are also included.

The division into professional and lay texts mostly works well, but the emergent trends of eighteenth-century medical writing, especially consumerism, make the issue more complicated. The problem cases that do not fit into the general pattern are treated separately in section 9 below. Considering the mixed nature of their discourses proved important for the final conclusions of this empirical study. I made some initial explorations by corpus-linguistic methods, The purpose was to discover some of the overall stylistic patterns that could then be scrutinized using a qualitative assessment. Non-register specific words are particularly interesting as they can reveal unexpected features of the styles of writing (McEnery 2006: 95);

⁷ The authors are found under their names, and in cases where there are several doctors by the same name, the time of writing indicates that the right person is being referred to.

⁸ No records are extant. The lack of background information makes it impossible to consider texts written by lay people as a separate group in this period.

thus verb forms, connectors and other function words are worth particular attention, One of the interesting points that came up was a difference between tenses: in the professional group contained past tense forms more frequently than the lay group that favoured the present tense instead, and in collocations those indicating vagueness were more frequent in the latter group. . A more detailed examination requires more comprehensive data in order to be reliable.⁹

6. Text analyses

The main structuring principle of this section is the dichotomy of professional versus lay, and topics form another organizing principle. Several genres like treatises, essays, dissertations and case studies are included in the subcorpus and provide a relevant variable for this study. In the analysis, text types, defined by text-internal features (see Werlich 1983), with the aim of verifying the text types, whether argumentative, instructive or narrative. On the micro level, attention is paid to the linguistic features of affect. They include the above-mentioned features and the use of the pronoun *thou*, detected by qualitative reading. Discourse forms, like questions and answers, are also of interest as interactive features vary a great deal within the data, being particularly frequent in dialogues. Involvement features that receive attention are personal pronouns, exclamations, interjections, rhetorical questions, expressive adjectives and other emotive items.

The macro level analysis focuses on the discourse forms and text types with illustrative examples discussed from a functional perspective. Attention is paid to the effect of the linguistic features and sentence forms, and how they contribute to the overall style of writing. Interactive and emotive devices are of particular interest as they serve to involve the audience and contribute to the intended goal of writing, either to influence the readers' opinions or to teach

⁹ Furthermore such a study should include data from the bottom layers of the market intended for semi-literate audiences, where humoral theory remained central e.g. in texts deriving from medieval lore of astrological medicine, still printed in the eighteenth century (see Taavitsainen 2009 and fc 2018 and note x in Chapter 2).

how to do something. A third option is available, too, as the texts may have been written to entertain by using narratives e.g. in the form of anecdotes. They could be discussed and pondered upon in company with, for example, other members of polite society.

6.1. Professional texts

Doubtless one of the most influential texts of eighteenth-century medicine is Jurin's text from 1724. It can best be ascribed to the genre of medical treatises. Its text type is argumentative and has the purpose of convincing people of the advantages of inoculation, which it achieved very well as we learn from medical history (ODNB 2004, James Worsdale, s. v. James Jurin; Crombie 1994: 1395). The text unfolds with an enumerative strategy; this text organizing structure, as well as the discourse form of questions and answers, derives from classical models.¹⁰ The Royal Society writings favoured objections and counterobjections (see above). The author proceeds cautiously, considering the evidence in accordance with the new science and placing weight on experiments. Example (4) displays both strategies, argumentative and enumerative, the writer bursting out in eloquent argumentation to convince the readers of the sincerity in pursuing truth with classical rhetorical figures, and appealing to patriotism and the noble ideas of Honour, Integrity and Humanity.

(4) This Controversy [...] seems principally to turn upon the two following Points.

1. Whether the Distemper given by Inoculation be an effectual Security to the Patient, against his having the Small Pox afterwards in the natural Way?
2. Whether the Hazard of Inoculation be considerably less than that of the natural Small Pox?

If these two Points were effectually settled, there would, I suppose, be an End of the Dispute, at least among Physicians. For, if either of them be fairly determin'd in the Negative, the Practice of Inoculation must on all Hands be given up. And on the other Hand, if the Test of Experience should plainly declare for the affirmative Side of both these Questions, **I doubt not but that every Gentleman, who has the Honour to serve his Country in the Capacity of a Physician, will have Integrity and Humanity enough to declare himself honestly and openly in Favour of the Practice.**

As to the first, therefore, of these Questions, though it will require a considerable Length of Time, and a much greater Number of Experiments than have yet been made, before it can be absolutely determin'd; yet thus much may at present be said, that **our Experience**, as far as it goes, has hitherto **strongly favour'd the affirmative Side.** (Jurin 1724: 4)

¹⁰ The Questio-Answer sequence is frequent in scholastic writing (see Taavitsainen 1999)

The use of tables and numerical calculations in Jurin's text provides evidence of cutting-edge innovative thinking, and Jurin's contribution to progress in medical science was considerable. He pioneered in collecting data from other doctors and calculating the relative odds of dying from smallpox inoculation: (roughly 1 in 50) and natural smallpox (roughly 1 in 7 or 8), his calculations were published both in annual pamphlets (from 1723 to 1727) and in this monograph:

(5) ... 9 is the Number of Persons, who have been suspected to have died of Inoculation; so that, if this Operation was really the Cause of all their Deaths, the **Hazard of dying of the inoculated Small Pox must be that of 9 in 440, or 445, that is, of one in 49, or 50.** (Jurin 1724: 23)

The discussion on inoculation had started even earlier and continued for several decades in various channels. For example, the highly professional journal EMJ published a book review in 1777 by Thomas Fowler with a Latin title *Dissertatio Medica de Methoda Medendi Variolae* that "treats of a subject purely of a practical nature, it is, at the same time, the work of one, who, from long and extensive practice, has been enabled to deliver the result of judicious and accurate observation". The author then proceeds to evaluate the work and gives "proper rules" for "beneficial" effects to prevent the disease. The use of contrastive adjectives is powerful in example (6) and shows that the topic was current and the discussion went on even fifty years after Jurin's work, though by that time the focus had shifted to improving the methods:

(6) Although the practice of inoculation has been attended with the most **beneficial** effects in rendering the small-pox a much less **mortal** disease, yet this practice is by no means so **general**, that **bad** cases, from **accidental** infection, do not frequently occur. The **great** object of the present dissertation is to deliver **proper** rules for the treatment ... (EMJ 1777: vii)

Professional monographs on other topics include several texts from the end of the century. Currie's text (1797) belongs to this group and breaks new ground in military medicine and epidemics, which were new topics at the time of writing. Beddoes' tract (1795) discusses air with "EXPERIMENTS, CAUTIONS, and CASES, tending to illustrate the medicinal use of Factitious Airs, and of other substances, of which the application to Medicine has been suggested by modern philosophical discoveries" (titlepage).

Scientific experiments were also published in EMJ, the following text being from 1747. The author is Andrew Plummer, M. D., Fellow of the Royal College of Physicians and Professor of Medicine at the University of Edinburgh. His reason for publishing is

expressed in polite diction with double negatives, and he refers to his readers as “the Curious”, a highly specific term that was applied to the scientific discourse community. The experiment itself is reported as a first-person narrative, according to the style of experimental reports published after 1665 in PT:

(7) ... **I thought** an Attempt to discover the Nature of this celebrated mineral Water, by a chemical Analysis and other Experiments of that kind, would not be unacceptable to the Curious, and might in some measure be useful to illustrate its Effects in the Cure of Diseases.

...
I put some Grains of the fresh Powder of Galls into a small Quantity of the Water, but it did not strike a black or violet Tincture therewith, tho' **I set** the Glass in a Sand-heat for some Hours. A strong Infusion of red Roses in common Water poured into an equal Quantity of the mineral Water, was only diluted and made fainter, ...

I made a great many Attempts to fix this Sulphur, and render it conspicuous, but without Success, and therefore **I shall not trouble the Reader** with these fruitless Experiments; only there is one which had almost led **me** into a Mistake, until by further prosecuting the Experiment **I discovered** the Truth: ... (EMJ 1747: 69-77)

Sea bathing was also a widely discussed healing method and acquired a fairly prominent position to the extent that institutions were founded to provide the recommended cures. John Anderson published a text on the topic in 1795. It opens with a theoretical part written in the argumentative text type with the aim of convincing the readers of the good effects of sea bathing.¹¹ It contains a new type of modesty expression with self-criticism: the author claims earlier inexperience that had been amended by the time of writing. This is a modification of the old device, but most conspicuously the text builds on sequences culminating in quotations from classical medical authorities or literary figures like Horace, Shakespeare, Pope or Dryden. The set phrases serve to crystallize the arguments and contribute to the overall eloquence, as example (8) shows:

(8) ... **before I came** to Margate, though **I** was allowed to be fortunate, under heaven, in relieving pain and distress, yet **I wish to throw a veil over my ignorance** of the power and effects of Sea-bathing, as of those **I** recommended to it, some returned no better, some worse; ... to conclude, that all those who returned benefitted, were more indebted to chance than to any precise judgment

¹¹ Its second part contains multiple case studies and the Keywords *she* and *her* may largely be due to this text.

or theory of mine. **I have to plead** for it, **I was an inland practiser**, ... to consider the efficacy of Sea-water as any thing beyond that of a mere wash for a foul skin, whereas there is no part, **I will say**, of the whole materia medica, yet known so extensively efficacious, under judicious direction, or detrimental, under indiscreet, ill-timed management. If it was not capable of doing harm, it would be incapable of doing good. In those simples which dwell the most virulent poisons, dwell also, the most potent, salutary virtues:

There is some soul goodness in things evil, Would men observingly distil it out. SHAKESPEARE.¹² (Anderson 1795: 8)

6.2. Lay texts

The anonymous text *Inoculation made easy* (1766) provides a nice contrast to Jurin's very professional treatise (see above). This monograph is instructive, written to teach with second-person guidance, which was a common text type in handbooks and remedybooks for lay people. What is, however, more unusual is that this text also considers the patient's side, which makes it difficult to determine the exact target group, e.g. whether it be an inexperienced medical operator or the person who was to undergo the procedure. The instruction is given either in commands with bald on-record imperative forms without mitigation, or more indirectly with permission granted by *may* or in prescriptive sentences with deontic modality, *must* and *need*, as in (9):

(9) **Be careful** of the Subject which **you** inoculate from ... at the End of which time **you may** inoculate them ... **you must** make a small Incision ... **You must** abstain from all Salt ... **You must** get some Matter ... (Anon 1766: *passim*)

A lively discussion on inoculation had already started in newspapers in the early 1720s and it continued for decades with various overtones (see above). Letters to the Editor give the impression of being mostly written by professional medical doctors with effective argumentation aimed at influencing people's opinions. Sometimes these letters contain aggressive and impolite speech acts directed at the authors of previous turns in the written discussion conducted in GM.

Anecdotes about the history of inoculation were published in lay channels to provide interesting reading for edification and amusement. Sometimes lay texts contain almost xenophobic nuances, as in the following piece (11), reprinted in GM in 1733 from *The Grub-Street Journal*. The author was obviously opposed to the suggested new practice as he calls inoculation a "Mahometan" practice, which "can never suit a freeborn English Constitution" and

¹² *Henry V* (Act 4 Sc 1)

adds a reference to the Bible as further proof of the supremacy of the Christian faith. The effect of the cumulative list of positive adjectives *learned*, *noble*, and *wise* is eloquent, especially as the people described thus are compared to “Advocates ... of manslaughter”:

(10) Mr Bavius,

The Doctrine of the Bow-string and of inoculating in the Small-pox, are both of **Mahometan Original**, and **can never suit a freeborn English Constitution**. As to Inoculation, if it be said, that many of the Learned, the Noble and the Wise are for it, I answer, many are against it too. But if ... ; and till **the Advocates for this sort of Manslaughter** can produce some **Text of Scripture**, to warrant our giving ourselves a Distemper we might never have, or not till a more proper season, they do nothing. – **Would these Gentlemen**, if the Plague was amongst us, **inoculate for that?** The same reason holds good in both ... (GM 1733: 197)

To continue the discussion, the Editor of *The Grub-Street Journal* “subjoins a short History of Inoculation pretended to be written by the famous *M. Voltaire*” (also published in GM). The anecdote narrates how inoculation was introduced into England and the tone of voice is completely opposite to the previous extract. The story given in the following passage (12) resembles a fairy tale: it is situated in an exotic foreign country and connected to the theme of social rise by marriage – a market where a girl’s beauty is the currency. The passage is full of stereotypical collocations (*poor but beautiful*, *honourably and virtuously*, *fondle and caress*). The turn of the plot is introduced with a discourse marker *now* to attract the reader’s attention (see Taavitsainen and Hiltunen 2012); the calamity is the Small-pox infection that could ruin one’s looks and have undesired consequences. The rescue comes from Lady Wortley Montague, who acts like a Fairy God Mother by introducing a remedy to this danger, namely inoculation. The story finishes by emphasizing the benevolence and favourable disposition of the highest aristocracy towards the new practice.

(11) The Circassians being **poor**, and having **beautiful** Daughters, furnish the Seraglios of the Turkish Sultan, of the Persian Sophy, and of those who are **wealthy** enough ... These maidens are very **honourably** and **virtuously** instructed to fondle and caress Men, ... in the same manner as little Girls among us repeat their Catechism. Now it often happened, that after ... the utmost Care of the Education of their Children, they were frustrated of all their Hopes in an instant. **The Small-pox** getting into the Family so **deformed** their Daughters that the **unhappy** Parents were **completely ruin’d**. ... And in the Reign of K. George I. the **Lady Wortley Montague**, being with her Husband, who was Ambassador at the Port, **inoculated her Infant** of which she was deliver’d at Constantinople, which had **the most happy Effect**. ... she communicated the Experiment to the **Princess of**

Wales, who immediately caus'd an Experiment to be made on four Criminals sentenced to Die ... and since that Time,** 10,000 Children, at least, of Persons of Condition owe ... their Lives to her Majesty, and the Lady Wortley Montague, and as **many of the fair Sex are oblig'd to them for their Beauty**. (GM 1733: 197)

Another item in GM, reprinted from the same source four years later (1737) contains a description of the disease and gives us a glimpse into the fear that this “Distemper” caused in people. The article is composed following the enumerative text strategy. The emotive colouring of passage (13) builds on several negative qualities and near synonyms of fear and dread (*disturbing, troublesome, affective*). The negative prosody of the passage is striking, and it is further enhanced by contrasts to positive adjectives and nouns (*acceptable, Beauty*). Vivid verbs (*seizes*) contribute to the tone, and the grand opening *All Mankind, once in Life* acquires Biblical overtones:

(12) Of inoculating the Small-Pox; occasioned by its now raging in several large Towns.

1. **ALL Mankind** (very few excepted) being **once in Life** liable to the Small-Pox, the Fear thereof is to many a one a great **Uneasiness**, and even that **Fear** alone so very disturbing, that a **Remedy** thereof must needs be very acceptable.
2. If the **Dread** of that **Distemper** only be so very troublesome, the **Danger** must be much more affecting.
3. It seizes the Beauty, the pregnant, the young, the Adult, and the Aged; Travellers also, when abroad, in dangerous Times and Circumstances; who then (and Reason good) think their Non-inoculation an Omission, and wish it had been duly done.
4. Whenever it comes, there is always Pain more or less in it, and often Danger. (GM 1737: 561)

The discussion pro and con continued for decades, but a new tone was introduced in the latter half of the century. The following letter from 1750 advocates common good in accordance with the rising spirit of philanthropy. The first passage in (14) lists the duties by enumerating five different aspects of promoting happiness. The second passage begins with a bald on-record statement, but continues with disagreement wrapped in politeness:

(13) Mr Urban,

IT certainly is the duty of every man to promote the happiness of his fellow creatures as far as comes within his power; to propagate useful knowledge, to cultivate a particular art of science, to clear up a doubt or difficulty in it, or to communicate the least improvement, are influences of a noble mind, whose endeavours merit the attention and respect of the public.

In this view I consider the Remarks upon the practice of Inoculation in your Magazine

for April p. 147-8. And in this view I hope the anonymous author of them will consider me, tho' I cannot approve of what he has advanced upon the subject. – There is a strange propensity in the mind of man to mere speculation in Physic: such and such a thing, we say, would be beneficial in practice because it is highly rational, when at the same time there is no standard for truth, for what seems rational to one man may not appear so to another. (GM 1750: 256)

Different veins and overtones can also be found in writings about longevity, or how to live happily to old age. The earliest text of the group reveals features of emotionality with exclamations, rhetorical questions, and other eloquent devices. It addresses Italy with the vocative *O* and continues with personification. The personal pronoun *thou* had already fallen out of use (e.g. Walker 2003: 340) but survived in religious language and in poetry. Collocations like *war and famine*, and a great part of the vocabulary belong to religious language use as well, and contribute to an affective tone of sentimentality in this early text from 1702. The blame on Italian overindulgence in worldly pleasures can also be read as an early manifestation of the rising patriotic trend (see above):

(14) O unhappy Italy! Dost thou not perceive that Gluttony and Excess robs Thee every Year of more Inhabitants than Pestilence, War and Famine could have destroyed? Thy true Plagues are thy frequent Feastings, which are so extravagant, ... Number of Dishes which Prodigality lays upon them, but they are forced to be heap'd upon one another in Pyramids. What Madness, what Fury is this? Regulate this Disorder, if not for God's sake, yet for thy own. I am sure there is no Sin, that displeases him more, nor any Voluptuousness that can be more pernicious to thy self. ... Let us only give it what it requires, ... The Rules of Temperance are derived from those of Right Reason. (Cornaro 1702: 4-6)

The most influential treatise on this topic was, however, Cheyne's health guide from 1724 (see Gentilcore in this volume). The text gives advice about living a healthy life and ties up with other popular topics and long traditions, e.g. the following example (16) has predecessors in late medieval regimen texts. The author enumerates the three most important aspects to be taken into account when choosing the site of one's residence.

(15) And therefore it will be of the utmost Consequence to every one, to take Care what kind of Air it is they sleep and watch, breath and live in, and are perpetually receiving into the most intimate Union with the Principles of Life. I shall only take Notice of three Conditions of Air.... The first is, That when Gentlemen build Seats, they ought never to place them upon any high Hill ... Secondly, the Winds that are most frequent, and most pernicious in England, are

the Easterly... Thirdly, from the beginning of November till towards the beginning of February, London is cover'd over with one universal nitrous and sulphurous Smoak, ... (Cheyne 1724: 17)

The topic of longevity receives attention in a few GM articles as well. Luigi or Lewis (as he is called in this text) Cornaro's life is summarized almost sixty years after it was published. The passage contains anecdotes embedded in the story. Again, adjectives are prominent, and a cumulative list of increasing age from 70 up to 91 acts as the structural backbone of the passage (17), and finally a pious wish provides an uplifting end.

(16) Mr Urban,

THE precarious state of old people ...is indeed a melancholy truth... I will, however, give you the authority of one at his age, and older, who undertakes to inform mankind, **how to attain extreme old age**, without being subject to those gloomy terrors of sudden death. A man who at the age of **70**, which 'twas thought he could not survive three days, could say to Death, keep thy distance; and to the physician, I have no need of thee... At **83** years of age, he could mount a horse without help, was always merry, always pleased, always in humour. ... He could see and hear as well as he ever did in his life, and all his senses were perfect. ... In the **86th** year of his age, his constitution was good, his teeth, his voice, his memory, his heart, were in as good a condition as ever they were in the briskest days of his youth, nor had his judgment lost any thing of its clearness or force. Instead of drowsiness after meals, he was rather more chearful; ... At **91** years of age, he continued healthful, brisk, and airy, relished his food, slept quietly, and what is very remarkable, his voice grew more tuneable than ever, ...**He concludes wishing, that all like him may live to a happy old age** ... (GM 1761: 61-62)

Another GM longevity text is written as a travelogue with first-person narration and is obviously intended for amusement. It contain several expressive adjectives and nouns often in collocations like *bold and romantic*, *pomp and luxury*, *honest and virtuous*, and *healthy and vigorous*. Features of emotionality also include rhetorical questions and a romanticized view of peasant life, such as "I cannot express the delight I felt". Politeness phrases like "I had the honour of..." are also employed.

(17) Mr. Urban, Banks of Ken, May 1.

BEING fond of travelling, **I lately amused myself** in a short excursion through the Western parts of North Britain. **I cannot express the delight I felt** in contemplating the bold and romantic scenery ... Familiarized merely to the pomp and luxury of the 'great City,' ... **Let him view the Scotch peasant on his native mountains, and he will perceive the same honest and virtuous heart**,.... It is not a very unusual thing in this

part of Scotland, to see a peasant healthy and vigorous in the 80th year of his life. I had the honour of being one of the party at this rural feast. Observing a groupe of old men making extremely merry..., **I enquired** ...who they were, and why they were placed together? He informed me, that they were 17 old men,..., whose ages exactly amounted to 1264 years. (GM 1798: 467)

The above text is probably by a lay author. Another text by “a temperate Englishman”, can almost certainly also be ascribed to a lay person as it presents a personal view of sea bathing (example 19). The sender of the letter relates his own experience with a patriotic tone of voice that resembles the xenophobic passage quoted in (11):

(18) Mr. Urban,

I BELIEVE that the fashionable practice of sea-bathing ought to be used with more precaution than it is. A thin, muscular man, as **I** am, may use freedom with cold water, when a fat, corpulent man should not. **I** have frequently gone into the water in a profuse perspiration, ... It sometimes had the sensation of so many pins stuck in every pore of **my** skin; when, dressing **myself** immediately, and resuming my exercise, I soon recovered my former heat. **I** took these liberties with myself, because **I did not apprehend that what an old Roman, or a savage American, could safely bear, would do a temperate Englishman any hurt.** ... Though **I am only telling** what a lean, temperate man has safely practised on himself, **I believe** that ... (GM 1786: 1035)

7. Professional and lay, polite society and styles of writing

The examples in this section will show some problem cases concerning the dichotomy revealed by the qualitative analysis. One of the earliest texts with more mixed aims is Smith’s treatise (1723), which is of a general nature and the underlying motivation is promotional. It discusses plain water as a panacea:

(19) **FOR the Benefit of Mankind** in general, I have taken pains **to give the World** an Account of what I have found written in the Works of **the most eminent Physicians** concerning the **Good that Mankind** may receive from the Use of Common Water, and of the Informations I have had concerning the Benefits thereof from others by word of mouth; and of what I have discover’d by my own Experience ... this **excellent** Remedy, which will perform Cures **with very little Trouble, and without any Charge**, and is also to be had **wherever** there are any Habitations, which is what can hardly be said of any other thing: so that in some sense, Water may **truly** be stiled **An Universal Remedy**, since the Diseases it either prevents or cures may have this Remedy applied **to all Persons, and in all Places** where Men do inhabit. (Smith 1723: 1)

The text opens in a grandiose style with features of sales jargon and hyperbolic language use,

(see the highlighted phrases above.). A closer scrutiny reveals the work to be a compilation of the earlier literature with passages from and references to older and more recent medical literature, composed according to the medieval scholastic genre script of compilations, mixed with commentaries, as the author's own opinion is given at places. Similar "afterlives" of scholastic top genres are fairly common in early and late modern medical texts, especially for lay people (see Taavitsainen 2018).

According to the sociopragmatic approach (see Włodarczyk and Taavitsainen 2017), the findings of the analyses need to be related to their sociohistorical and cultural contexts, as well as to the disciplinary frame of the eighteenth century. The data of the study has been carefully selected to provide a solid basis for comparison and focuses on topics of importance to medical history. The issues of inoculation, longevity, sea bathing, air and water were widely debated in various types of writing: they occur in several genres and media of communication and show how medical knowledge disseminated in eighteenth-century society. A large-scale mapping of the various trends (see Chapter 3) revealed the movement towards stricter professionalization; this is shown e.g. in keyword analysis items like *Dr.*, an address term and title belonging to professional practices. Likewise the qualitative study revealed how several passages enhance enquiry, experience and observation. The old reliance on authorities is not present as such, but some names occur in the reviews of the earlier literature or the sayings of ancient authors. Most conspicuously, however, this study shows that renowned literary figures are employed as a stylistic device to provide culmination points in carefully constructed rhetorical discourse, as in example (8), demonstrating how literary styles had an influence on medical writing. Eloquence and amplification were not in accordance with the rules set as Royal Society guidelines from the 1660's onwards, but provide a new eighteenth-century feature in line with the more rhetorical polite society diction.

Throughout the century, monographs were still the most important forms of publishing new knowledge, but periodicals were rising as novel media for communicating medical issues to both professional and lay readers. The function of writing, whether opinion-forming, instructive or entertaining, shows in the text types and casts some new light on the prevailing patterns. The author parameter is important: though mostly the authors of LMEMT are professional medical practitioners, as a rule the audience factor is even more significant. This parameter served as the dividing line between professional and lay, but in the light of the qualitative assessment, the issue proved more complicated.

The following passage (21) comes from a book review published in the lay publication channel of GM. It demonstrates the blurred edges between the categories. As in the EMJ sample (7), the text discusses waters of some well-known popular spas, and reports on experimental laboratory methods used to examine its quality. This is a very professional topic and introduces a new emerging locus of medical advancement, namely the laboratory (cf. example XX from EMJ above):

(20) ... The author, however, finding himself under some sort of engagement to satisfy the curiosity of friends, and reflecting that no accurate analysis of the Tunbridge waters had hitherto been given, **now offers to the publick these pages, as the result of careful experiments**; wishing, at the same time, **not to appear to have been inattentive** to this particular subject, since **it is not unreasonable** to suppose that **a scientific inquiry** into the component parts of these springs may, in some measure, assist us with respect to the right application of them in medicine. (GM 1792: 447)

As in many other examples, double negation is present, though it was an undesirable feature in scientific writing according to the earlier guidelines.¹³ It serves a particular function of supporting the author's claim to fame, i.e. that his careful experiments revealed significant new aspects. A more direct bald on-record statement would change the speech act to boasting, which was to be avoided. The professional new channel of EMJ and the equally novel magazine (GM) come very close to one another and even overlap in some cases.

8. CONCLUSIONS

The research questions of this study focused on the extent to which eighteenth-century professional and lay texts differ from one another, how medical knowledge was made appealing to a wider readership, and whether the Royal Society recommendations on style had an influence in eighteenth-century texts. In general, writings targeted at professional readers enhance knowledge-based arguments and aim at increasing the expertise of the readers and communicate the favourable effects of the new cures in argumentative prose. The first statistical assessments of medicine appear in highly professional writings such as Jurin's treatise from 1724. Texts for heterogeneous lay readers show more affective features and rely on rhetorical devices, and the trend of

¹³ Tieken-boon van Ostade (2010) discusses normative attitudes and Fitzmaurice (2012) provides a sociolinguistic assessment of eighteenth-century double negation; scientific and medical writing remains outside their studies.

new sentimentality comes out in them as well in emotive language use and personal affect features.¹⁴ Anecdotes and other narratives were used to make medical knowledge more appealing to wider audiences.

Popularization means different things and finds different expressions in various periods of the history of English written documents: in the period of vernacularization of medicine and science (1375-1550), oral culture was still strong and rhymed couplets served to convey medical knowledge to illiterate or semi-literate people. In the early modern period (1550-1700), medical information was an essential part of almanac literature and contained e.g. astro-medical information in an easily digestible form, often with schematic illustrations. This material goes underground in the late modern period (1700-1800), but continues in print (see note x in Chapter 2). Earlier studies suggest that texts in the almanac tradition continue in the old humoral vein with adaptations e.g. to sexual matters as in *Aristotle's Masterpiece*¹⁵ (Taavitsainen 2009, 2018 fc). Thus *popular* must be interpreted in the sense of 'with wide appeal'. In the present study, the readers of lay texts, as noted in connection with Cheyne's health guide, came from the upper layers of society, from aristocracy, educated men and literate women. In the emergent consumer society people were enthusiastic to learn more, not least in the field of medicine (Porter 1995: 135). It is likely that promotional literature of propriety medicine with the new aims of consumerism in the medical market display features of affect even to a greater extent than in the present study (see the category description 2c). But there is an overlap, as example (20) in section 9 showed. The question about the Royal Society style of writing can also receive a partial answer. Reports on experiments continue most conspicuously in EMJ (example 7), but they are also found in monographs.

The overlap of professional and lay has been discussed in the earlier literature by Porter (1985) who endorsed an earlier study by Jewson (1976). Both researchers consider the situation to be unique to the eighteenth century. Jewson argues that the physician's social advancement depended upon the patronage of his clients and this relationship prohibited the emergence of a scientific community dedicated to the analysis of medical problems; he concludes that medical knowledge was a form of social interaction. Porter based his opinion on the changing policies of GM in the nineteenth century with a dramatic decline in the frequency of medical advice,

¹⁴ The trend is most prominent in verse texts on medical topics in GM.

¹⁵ It was first printed in 1684 and was a bestseller with multiple reprints for several centuries.

inquiries and remedies after 1810. The focus of the magazine shifted to historical and antiquarian topics. Porter claims that the change influenced the relations between professional and lay medicine, and the latter did not have the same role as before in providing feedback and informing the faculty of the needs and wishes of the floor.

The present study gives empirical evidence of a considerable overlap between professional and lay, and it also shows how the polite society style of writing with fairly elaborate rhetorical devices spread to professional texts. Andersson's sea bathing (1795) exhibits an architectural structure with literary culmination points. This style is far from simple and is almost opposite to the Royal Society programme, which had denounced rhetorical "amplifications" and "swellings of style" a hundred and thirty years earlier. Multiple negations were commonly employed to give a less assertive and more polite tone to the statements. The interaction between professional medical doctors and the laity was lively, as being familiar with medicine was not an individual and private matter in the eighteenth century, but was integral to the public role of "the well-informed, public-spirited, and responsible layman" (Porter 1985b: 163). A patriotic feeling is prominent in several texts and doubtless it also contributed to the creation of a health-conscious public spirit, which was concerned to promote charitable hospitals and dispensaries and improve the miserable conditions found in various institutions. This feature was also peculiar to the eighteenth century, as the public welfare initiatives declined soon after.