

## Summary:

# Leeches and leechcraft. The professionalization of the art and craft of healing in Sweden during the Middle Ages and Renaissance.

## Chapter 1: Framework and previous research

The arts of healing in the Swedish and Nordic region during the Middle Ages (from the late eleventh century until the Reformation) and the Renaissance is an issue which has previously been studied to a very limited extent. Existing research, most of which was done during the first half of the twentieth century, has habitually been done within a paradigm focused on the 'grand story' and prosperous male medical doctors.

Material culture has played a restricted role in this research. This is generally true of research in the history of medicine in the Nordic countries, as well as in a broader international perspective. It is also valid for the specific periods of interest here (the Middle Ages and Renaissance) as well as for other periods. Recent decades' international (not least Anglo-Saxon) medical historical research has to a greater extent paid attention to the art of healing in its *sociocultural context*, as social history of medicine, and it is within this paradigm that medical archaeology as a field of study has been born and shaped. This dissertation, too, is a product of this trend and the will to study the art of healing and its practitioners as an integrated part of society.

This study examines the arts of healing performed in the area of Sweden (and to some extent the other Nordic countries) during the Middle Ages and Renaissance. The chronological starting point dictated by the availability of relevant source materials (both written and artefactual). The choice of terminus is justified by the rapid change of both society and the art of healing during the seventeenth century, which gave historiography from that time onwards quite a different character. The geographical limitations are pragmatic. When it comes to the material culture from within the boundaries of modern Sweden, this is primarily available from the southern part (Götaland and Svealand) because that is where contract archaeology has been carried out. Material from the north of the country (Norrland) is very limited. Southern Sweden is thus the core area of the study. However, the written sources from Sweden from the Middle Ages are so few that I have chosen to broaden the geographical span to include material from the rest of the Nordic region as well.

The study analyses the perception and comprehension of disease, illness and afflictions,<sup>1</sup> the healing and curing forms of action which followed from these perceptions and the persons who performed these actions, all within existing sociocultural contexts. It focuses on secular arts of healing, rather than the magic or religious ones, and the arts of healing concerned with the body rather than the soul. An important subsidiary aim has been to identify, document and problematize the material culture of these arts of healing and make it visible and available for future research. The material culture and the written sources, which together constitute the source materials of this study, are both equally valued for their information potential. Using source materials that are as chronologically

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<sup>1</sup> The Swedish word used is *sjukdom*, which encompass both the English terms of the diagnosed disease and the patient's experience of illness, without distinction. Such a distinction is, moreover, not visible in the studied materials, and therefore the Swedish word is translated here by several terms in English.

and geographically close as possible to the studied period and area is methodologically important. The aim of this is to avoid an uncritical transfer of knowledge of the (perhaps better known) arts of healing of other regions and times, for example, classical or early modern medicine, as has often been done in previous studies.

The questions asked in this study can be grouped in three main themes. These are *Perceptions<sup>2</sup> of disease, affliction and injury*, *Practitioners of the arts of healing* and *Arts of healing*. Within the first of these three themes I examine the underlying perceptions or comprehensions of disease and afflictions as well as attitudes towards the afflicted. I explore this mainly from designations of disease and attitudes towards the afflicted in the written materials. Within the second theme I examine the persons who practised arts of healing of different kinds; their roles and positions in society and how this changed and was professionalized in the course of the studied period. Within the third theme I examine the actions of these practitioners in terms of treatments and other actions to cure and provide relief. In a final chapter I discuss how several medical cultures or traditions of arts of healing co-existed in society and related to each other, and how this changed over time. I also discuss the incipient professionalization of the related occupations and the consequences of this process. An important question is how the severe difficulties and decrease in population due to the Black Death and subsequent frequent outbursts of epidemics affected the course of change.

## Chapter 2: Materiality, written sources and thick contexts

Previous studies of Nordic medieval arts of healing have to a high degree concerned specific milieus (e.g. monasteries) or phenomena (e.g. phlebotomy and humoral pathology). This has often led to an affirmation of expected results. To avoid this, the data collection for this study has been extensive, covering a broad chronological and geographical span, as well as various sociocultural milieus of bygone society, within the above-mentioned chronological and geographical frames, in order to avoid ungrounded enforcements of comprehensions of where and how art of healing was practised. Extensive archaeological materials from southern Sweden have been gone through, and the relevant finds documented and studied in detail. A vast written material in published form has also been explored.

An important criticism of the material sources, which is discussed in detail, concerns what kinds of artefacts are possible to *identify* with such certainty that they allow a well-founded analysis and discussion. It is important to be aware of the qualities and possible difficulties connected with various find categories. Another point of discussion concerns what the artefacts *represent*; that is, what the presence or absence of a certain type of artefact tells us. Every artefact category thus has its specific complex of problems, which needs to be discussed and to be taken into consideration. Some tools, for example, are not identifiable because they were not yet always specialized at the time (even if specialized forms existed) – for example, knives, needles or tongs – and are therefore anonymous in the archaeological collections. Specialized instruments or vessels are more unproblematic to identify, but the question then remains of what their presence represents in terms of knowledge, skill and/or practise, as well as in terms of sociocultural heritage, occupational ethos and/or professionalism.

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<sup>2</sup> The Swedish word used is *förståelse* as in *sjukdomsförståelse*. *Förståelse* means understanding or perception, and can be verbalized and intellectual, but can just as well be non-articulated and tacit.

A wide selection of the documented material culture from towns and monastic institutions is presented in an extensive catalogue at the end of this volume, which constitutes the latter half of the dissertation. The selection of town materials is intended to ensure quantity as well as geographical and chronological spread, in order to cover the studied area and period. The selection of monastic materials is based on quantitative parameters only. The vast majority of finds are illustrated by photographs.

The selection of written sources has been based on two primary criteria, namely, the fact that the studied society had very low literacy on the one hand, and my intention to write a *social* history of medicine on the other. Foreign medical books, not used in Sweden during the studied period, are consequently of less relevance. To illustrate and explain my choice of written sources in relation to my study, I divide them into two categories, namely *the medical literature* and *the sociocultural sources for medical history*. The former consist of the contemporary medieval and Renaissance literature which deals specifically with aspects of the arts of healing and which was written or compiled in order to document or transmit knowledge and ideas within the field. This can be, for example, leech books or herbals. *The sociocultural sources for medical history*, on the other hand, consist of sources not primarily concerned with the arts of healing, but rather about other aspects of society, where leech craft or its practitioners are discernible as ingredients of that society, for example in histories, descriptions or laws. From these sources it is thus possible to study the arts of healing as part of a sociocultural whole, that is, in close relation to the society and the culture in which it was formed and practised. I use the Old Norse saga material, the chronicle of Saxo Grammaticus (*Gesta Danorum*), the medieval provincial laws of Sweden, the monastic diary of Vadstena (*Vadstenadiariet*) and Olaus Magnus' *Historia de gentibus septentrionalibus*. I also use the court records (*Tänkeböcker*) and catalogues of city plots of some cities.

### Chapter 3: Medical cultures and their encounters

The Nordic medieval and Renaissance culture was neither homogeneous nor static, but heterogeneous and in constant change – and so were the arts of healing. Some traditions are, however, discernible as more homogeneous, with more distinct framework of perception, understanding, practice and material culture. I call these *medical cultures*. Multiple medical cultures can exist in parallel in a society, as was the case in the medieval and Renaissance Nordic region. Various inconstant or changeable medical cultures met and influenced each other. New and alien cultural elements could be merged or included through processes of hybridization and creolization, but could also remain extraneous or isolated in a specific milieu if there was no foundation or motivation for hybridization/creolization in the prevailing perception of the body, its ailments and man's responsibility in the acts of healing in the surrounding society.

In the course of the Middle Ages and Renaissance, several (to us) discernible medical cultures met and mingled in the area of present-day Sweden, to form the arts of healing prevailing there. To be able to sketch a tangible and apprehensible image of these medical cultures, I have defined them as the art of healing in the Nordic region during later Iron Age, and the scholastic and partially university-based (later on, more popular) art of healing, with its roots in the area around the Mediterranean in antiquity and the early Middle Ages. The opinions of the church as to how to relate to the body and its ailments were also to play an important role. These various medical cultures were

cardinal ingredients, and had a great impact on the arts of healing that developed in Sweden and the Nordic region during the Middle Ages and Renaissance. At the beginning of the studied period it was primarily the Iron Age Nordic arts of healing that constituted the starting point. During the eleventh to the thirteenth centuries the norms and values of the Church became increasingly important, at the expense of the older indigenous cosmology, and mainly during the later part of the Middle Ages, classical and scholastic ideas were picked up and negotiated into practice. To what degree, along which paths and in what way the various medical cultures were to be influential is discussed in the following chapters.

## **Chapter 4: Perceptions of disease and injury**

The perception (or perceptions) of disease and illness embraced by a society – that is what is perceived and recognized as a disease or affliction, what causes it, how disease and other afflictions behave and are manifested – is socioculturally formed. It is not an objective approach towards abnormal or unwanted physiological or biological manifestations in the body, but a product of sociocultural circumstances, dependent on experience-based knowledge and abstract reasoning on multiple levels – such as existential matters, perceptions of the body, and scientific paradigms. Therefore studies of the perception(s) of disease and afflictions in a society are a good point of entrance to reach a better understanding of the society as a whole. The way in which disease and ailments are understood and how people relate to them and to the people who are troubled or afflicted by them, and therefore might have the right to (and are expected to) enter the sick role, reveals a great deal about the society.

A society can, as previously pointed out, encompass a variety of perceptions or understandings of disease, in the same way as an individual can adhere to several different understandings or ways of explanation. The various medieval and Renaissance expressions of perceptions of disease and other ailments, which are visible in the sources studied here, are mainly constituted by names or less settled designations of ailments, as well as expressions of (or attitudes towards) sick roles. This provides a possibility to discuss the perceptions of disease and other afflictions in the Swedish or Nordic region, and also how this might have changed over time during the studied periods.

Literacy was low in medieval and Renaissance Swedish society, and books were very rare. As the written material studied here is not primarily medical books, but sources for a sociocultural medical history, they reflect the understanding(s) and perceptions of disease and other afflictions encompassed not only by the practitioners in particular, but by ordinary people as well. One must, of course, assume that generally known names and designations of diseases and afflictions were far more numerous than what we can trace in the written sources, and furthermore that they were often not linguistically permanent and stable, but rather varied, not least amongst dialects. This does not prevent us from analysing the names and designations that are preserved to us in order to understand the formative perceptions of disease, ailments and methods of healing, which had initiated them.

If we scrutinize the various Old Norse designations, it seems as if these were often constituted by the word for ill health (*sótt*) and a word expressing the (believed) reason (or sometimes its consequence). Within the magical sphere or tradition (which is not covered in this study), a disease or affliction could be named from the magical spirit that was believed to have caused it. In the more

secular tradition the naming factors could instead be, for example, old age (as in *árs sótt* or *ánasótt*), delivery (as in *barnsótt*) or urinary stone (as in *steinsótt*). The reasons are thus diverse, but have in common that they reflect the believed cause. In exceptional cases it is instead the consequence, such as methods of treatment called for or a stay in hospital (i.e. leprosaria), that gives the name. It could be argued that designations of this form were *cause- and consequence-oriented*. Also the terminology of wounds and injuries seems to a certain extent to have been formed from words illustrating the believed cause, such as ‘cut by iron’, or consequences, such as ‘visible and disfiguring scars’. Wounds are, however, often also designated with reference to their symptoms or signs, such as bruising or localization of tissue penetration. These kinds of designations can rather be characterized as *symptom- and sign-oriented*, as opposed to the *cause- and consequence-oriented* understanding, which I will come back to.

What all the Old Norse names and designations have in common is that they reflect a to a high degree an empirical art of healing and understanding of ailments, with a way of reasoning focused on cause and consequence and what is clearly observable. There is no tendency – perhaps with the exception of some of the juridical terms for wounds and injuries mentioned in laws – to systematize ailments with regard to their manifestations (symptoms and signs). There were many strengths and benefits of such an empirically based understanding, not least because it focused on what could actually be handled and treated. On the other hand, it became mute and powerless when it came to ailments for which no clear causes were discernible. As one could only discern causes visible to the naked eye and other bodily senses, it was therefore something of a dead end. What could not be seen or otherwise sensed could not be understood – and consequently not purposefully treated. Complementary explanations based on rational reasoning were instead sought within religion, magic and astrology.

In the course of the Middle Ages, primarily during its later part, a change, however, seems to have come to pass concerning the construction of names and designations of ailments. This can be interpreted as an expression of a change also of the underlying understanding. If we consider the Latin sources from the same geographical area, which were often part of the literate ecclesiastical and monastic culture sphere, we can establish that among these it is far more common to find names and designations constructed from symptoms and signs; that is how the affliction was manifested. It might be, for example, coughing, fever, muteness, swollen skin or lameness. During the later Middle Ages we can also trace a few Old Norse names formed out of the words for symptoms and signs, such as *hórunsvide* (probably the same as the English *brenning of the pyntyl* or French *chaudepisse*), which refers to a firing or burning sensation of the flesh (in the genitalia).

These designations reflect a fundamentally different perception of disease and afflictions, which can be characterized as symptom- and sign-oriented, rather than cause- and consequence-oriented. It was probably a new way of perceiving disease and afflictions in the Nordic region. The empirical base of this study, due to the sources, is limited, but as the symptom- and sign-oriented designations are first traceable in the Latin sources and only later in Old Norse, it is possible that the explanation for the new perception is to be found in an increased influence from scholastic medicine and the Latin cultural heritage. It seems as if the perception of disease and afflictions was changed gradually from cause to symptom and sign; from a more empirical to a more abstract and systematizing approach.

When it comes to the role and situation of the sick person, it seems as if the older indigenous attitude made no clear distinction between, for example, infirmity because of old age and other kinds of disease or injury. This fluid boundary between different categories of ailments actually reflects the very core of what we in modern language call *the sick role*. It seems as if the most important thing was whether the afflicted individual could or couldn't perform his or her most important duties towards himself/herself and his/her household. According to the Danish *Law of Sjælland*, a person was ill if *he* could not defend his case at the thing or if *she* could not be responsible for the household keys and the management of domestic duties. The attitude towards sick or wounded individuals, as expressed in the *Law of Sjælland*, might seem harsh, but we have to remember that it is in that case a question of legally valid states. As a matter of fact the attitudes towards afflicted persons seem to have been rather tolerant and accepting. This goes for at least those who were seriously ill or wounded, who could receive care and tending for a considerable time, without being questioned. The ideal was to be grateful for what one had and not complain to no purpose, but on the other hand there was an understanding that healing and recovery sometimes needed extensive care and considerable time.

At the same time, there were differences between groups or sociocultural milieus in society. This was partly because of the socioculturally coloured connotations that certain diseases and illnesses had, which could give a state of illness a more or less positive or negative aura. Leprosy, for example, had a strong and clearly double value in medieval Christianity. It could be perceived both as the result of sin and thereby as shameful, and as a way to personal repentance through pious endurance and thereby as venerable and beneficial for the spiritual (and social) status of the afflicted individual. Which one of these connotations was assigned to the subject depended on the afflicted individual's sociocultural context and on his or her own actions in relation to the affliction. That the afflicted individual was viewed by him/herself and the surrounding society as a punished sinner was perhaps more common in some environments, for example among the poor and socially outcast. At the same time, he or she could have an important pedagogical or moral function in warning of what might happen if you did not lead a good life. The disease or affliction could also bring secondary gain for the afflicted, in the form of an elevated status of piety. The latter may have been more common at religious institutions and perhaps in particular amongst pious women. It seems as if the endurance of bodily ailments and disease to a higher degree might have been used as a means of pious expression by women than by men in monastic institutions.

In the monastic sphere various afflictions and the sick role seem to have had different connotations from the ones in the surrounding secular world. Something that reflects this is the different expressions of pain. Physical pain, for example, is very seldom mentioned in the sagas, where we can instead trace a stoic ideal. In the double monastery of Vadstena, however, it seems as if it was more accepted to admit to pain, to speak of it – and to note it in the obituaries of the inhabitants of the institution. Perhaps this can be explained by the fact that the endurance of pain was appreciated in that context as a virtue in itself (in the likeness of Christ), which therefore could be advantageous to point out and to verbalize. During the latter part of the Middle Ages – especially in pious milieus – strong ideas of the good, slow dying (*Ars Moriendi*) flourished. A slow death was believed to provide time for spiritual preparation, and so disease or affliction could be seen as a profitable ingredient.

Furthermore, it seems as if there were, at least in pious milieus, some differences in the sick role related to gender. This might have affected when and how an individual could enter an accepted and

perhaps respected or even venerated sick role, and when a person was denied this. Variances in the material culture between male and female Cistercian institutions can be interpreted to show that physical asceticism was more common among nuns than monks. This seems to have concerned personal hygiene and tending of, for example, wounds, boils, sores, fistulas and the like, as specialized equipment for this is completely lacking in the female institutions, but quite abundant in the male ones. The neglect of these issues might have been a part of the pious practice among nuns, but not among monks.

Notes in the *Vadstena Diary* can be interpreted to mean that being a leper was an attractive sick role especially for pious nuns, and could connote a female pious ideal, perhaps formed and accentuated by pious mystics, who may have served as role models and sources of inspiration. On the other hand, it seems as if obese or heavily overweight sisters (at least considered so by the brethren who kept the diary) might sometimes have been denied the sick role, even if they were fatally ill. A possible explanation for this is that among pious persons, and especially women, there was an anorectic ideal, where the haggard and emaciated body was seen as an expression, or even a sign, of spiritual profundity and refinement. There was thus a close connection between the sisters' physicality and their spirituality.

The male sick role reflected in the monastic diary can, with support from other research, be interpreted as being perceived as especially serious if the capacity of a monastic brother to speak or act was affected, for example by muteness or lameness, sudden ill health during mass or practical work. The male sick role may to a large extent have been connected to the inability to perform the religious rites that were a central part of the monastic brethren's life and *raison d'être* in the Vadstena monastery. Male spirituality was connected to the capacity for speech and action, and so too was the sick role.

## Chapter 5: Practitioners of the arts of healing

The medieval and Renaissance arts of healing in the Swedish region were to a large extent a craft. This was especially the case when it came to the secular practices. The literate knowledge was an important part of the art of healing within the scholastic, monastic and ecclesiastical traditions and modes of transmitting and communicating knowledge. This was a major reason why the art of healing in these milieus differed from the craft-like art of healing in the surrounding society, where knowledge was instead communicated in an intimate and time-consuming process between individuals. Transmittance of knowledge within any craft is complex. By becoming aware of this complexity its qualities and obstacles become more apparent. This also helps us to search the source materials in order to identify the *carriers* of this knowledge, the individuals skilled in the arts of healing, and to understand the character of their competence.

The expression *carriers of knowledge* aims here to emphasize how large and important a part of the healing tradition was constituted by individually possessed or *carried* knowledge. This knowledge is to be understood as different from the knowledge carried by books. As the studied region was not very literate, this kind of individually carried knowledge constituted the lion's share, while the knowledge carried by books was relatively marginal. Individually carried knowledge can consist of *knowing that* as well as *knowing how*, as opposed to book-carried knowledge, which is best suited

for *knowing that*. Individually carried knowledge also contains vast amounts of *tacit* knowledge, which can never be communicated via books.

A large part of a craftsman's knowledge is tacit. This goes for all crafts, not only leech craft. Tacit knowing is acquired through the body and all its senses. It is therefore also best and most efficiently communicated through direct communication between individuals. By communication I mean not only verbally, but also in the act of performing the craft together or observing another person's actions and imitating and reflecting upon them. This form of communication of knowledge was essential in the medieval and Renaissance art of healing. I exemplify it by the Icelandic leech Hrafn Sveinbjarnarson and his family, who transmitted their craft secrets and special knowledge from generation to generation over the centuries, in a seemingly very prosperous fashion.

The skill of healing seems to a certain degree to have been perceived as a calling, where the individual's propensity was important. His or her personal talent was decisive. People spoke of healing hands, *læcnishendr*, with a special ability to heal. This ability seems to have been thought of as partly inherited. In the light of the discussion concerning different forms of knowledge and knowledge communication, however, I would suggest that what was thought of as inherited was rather a *thick tacit knowledge*, communicated and transmitted in the compact or dense sociocultural context of, say, a family, which was the kind of context in which most healers seem to have learnt their craft. Before the birth of the clinic and organized medical education, this, besides experience of war and the battlefield, was the only way to gain the necessary quantitative experience. The idea of the healing hand (the healing capability) might actually be interpreted as an expression of skill or craft knowledge,<sup>3</sup> as a result of a successful (also tacit) interpersonal communication of knowledge. Craft knowledge was so utterly essential for the successful practice of a doctor, and so tacit, that it was understood by its contemporaries as an inherent gift or ability.

Those who were skilled in healing constituted a heterogeneous group of practitioners, who possessed different forms of knowledge, gained within various contexts and practised in varying circumstances. They were men and women, lay people and priests with medical knowledge, specialists and individuals with general knowledge, and people from most levels of society. It is important to emphasize this heterogeneity, as it contrasts to the increasingly homogenizing effect of the process of professionalization, discernible especially during the latter part of the Middle Ages and the Renaissance.

From the written sources, especially from the earlier part of the Middle Ages, it is clear that the female healers constituted a considerable share of the group of practitioners, also among those literally mentioned as leeches (*læknir*). Tending to women's diseases and obstetrics seem to have been mainly (but not solely) a women's domain, but apart from that they also performed a diversity of medical and surgical treatments. As a matter of fact, the major part of the most complicated surgical operations mentioned in the sagas is performed by women. In the sixteenth century the art and craft of healing had, however, become a highly male domain. The female practitioners seem to have 'disappeared' in the course of events. Although university medicine (from which women were excluded) did not become very important in the Swedish or the Nordic region during the periods studied here, it seems as if the process of professionalization in itself had a homogenizing and

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<sup>3</sup> The Swedish concept used is *förtrogenhetskunskap*, which means skill or well-versed knowledge gained from considerable quantitative and qualitative experience; here best translated as *skill or craft knowledge*.

excluding effect. This resulted in making the art of healing a male profession. New norms concerning the official sphere as a whole, where women were not given as much space as men, also added to this.

Priests active as healers also seem to have been an important group during the Middle Ages. They tended not only to the well-being of the soul, but also to that of the body. The methods they used were similar to the ones used by secular practitioners, but also seem to have included some elements of scholastically influenced or learned medicine. Being the group in society with the best reading abilities and scholastic training (theology was the prime scholastic genre), they could adopt the ideas communicated by the medical literature within the Latin learned world: the knowledge carried by books. During the late Middle Ages and Renaissance, however, it seems as if the priest doctors were no longer as important for physical caring as they had once been, but that they too were reduced in the process of professionalization and relegated to the area of religion and magic.

Within the monastic culture there were infirmarians, phlebotomists and medically trained monks and brethren, and less often nuns and sisters. It is possible that certain monks defied the church's prohibition on priests shedding blood and burning, but it might be more probable that the institutions engaged practitioners from *extra clastrum* for such treatments. The medically skilled people of the monasteries used special equipment of classical model, signalling which medical culture dominated there, and they may very well have been skilled within that tradition. For the most part, however, practitioners seem to have been active in towns and the more densely populated regions, where they may have run ambulatory practices. People in need also came travelling to receive treatment if leeches were not available in their neighbourhood. The material culture as well as the written sources from cities, indicate that several practitioners may have been active within a town at the same time. The written sources also repeatedly speak of doctors in the plural. People skilled in the arts of healing thus definitely seem to have been present in society and their services seem to have been available.

Even the earliest laws to be written down mention payments to leeches. This can be interpreted to show that the formation of the occupation had already begun during the early Middle Ages. In the first half of the Middle Ages the legislation concerning the art and craft of healing became more detailed, to include regulations about who could be employed in juridical matters and who was qualified enough to tend to severe injuries. These were the lawful leeches (*laga läkare*). The healers mentioned in the sagas cure both disease or illness and injury. They healed the body as well as the soul. The term *læknir* (female and male) thus denoted a broader concept than *laga läkare*, as the latter was defined for juridical reasons in connection with serious physical injuries and *læknir* was applied to different kinds of practitioners. The Nordic *læknir* was also a broader concept than the European concepts of surgeon, *medicus* and *physicus*.

The Renaissance saw an increasing segmentation of the occupation, which towards the end of the period resulted in more distinct borders, especially between apothecaries and barber surgeons. The segmentation and the clearer definition probably promoted development in the long run, but during a transitional period it might have had an obstructing and aggravating effect, by excluding a large number of practitioners who did not fit within the frames of the new system and rules. The material culture as well as the written sources from the early and high Middle Ages should, however, be interpreted as showing that specially trained healers, *læknir*, already existed at that time. They

practised in the central parts of the cities and were recognized, respected and paid for their specialized knowledge and services. The *læknir* had taken obvious steps towards a professionalization several hundred years before the more formal segmentation and regulation of the related occupations took place. The inconsistency of this process is discussed in chapter 7.

## Chapter 6: Arts and crafts of healing

The practices and treatments discernible in the sources considered within this study do not, of course, give the whole picture of the medieval and Renaissance arts of healing in the studied region. Apart from magical and religious methods, there was also most certainly a wide range of secular methods which have not left as obvious traces, if any at all. What we can trace are thus examples of what healers of the time could and would do to cure or comfort. The picture that emerges is one of a heterogeneous phenomenon, varying between milieus and over time. The differences are, as a matter of fact, considerable both concerning theoretical or abstract perceptions and practical consequences of these, so that it is impossible to speak of *one* art of healing. Instead there were *several different arts of healing* or – as I have chosen to label them – *medical cultures*. The easiest to discern are the secular as opposed to the monastic arts of healing.

Treatments with various types of medicaments, mainly from the vegetable kingdom, were a very important part of the arts of healing in all different parts of society. Knowledge of herbal medicine was significant both in monasteries and in the surrounding society, but may have concerned partly different floras. With the immigrating monastic culture, new species came to the Nordic latitudes, but by then there were already a long tradition of indigenous species that could be used as remedies for various ailments. Some forms of specialized material culture for medical and surgical treatments were, however, more common within the monastic sphere throughout the Middle Ages, even if they also can be distinguished in certain castles and urban environments. For example, the same types of vessels which are found in monasteries are found, although more sparsely, in other settings too. What these specialized vessels in ceramic (mostly stoneware) and glass signal is most likely not the presence or absence of the use of medicines, but that a specialized material culture was being used in some milieus. They might also to some extent reflect the consumption of or trade in ready-mixed, composite medicals.

Several different types of scalpels, as well as small surgical hooks, are proof that surgery was performed as well, and that it was not an insignificant part of the leech craft. The number of tools and their variety shows us that persons with surgical competence, and probably also a certain breadth of surgical knowledge, practised in society. The archaeological findings indicate that this knowledge and this surgical practice existed in most parts of society, but that it was perhaps best represented in secular contexts. The tools also indicate that surgical operations, despite the strongly limited resources for anaesthesia and anti-inflammatory treatments, were more common than has hitherto been presumed. Osteological material (NB, not examined first-hand for this study) indicates, however, that major surgery such as amputation and trepanation was rare. Surgery seems to have been performed at monastic institutions too, despite the strong resistance against actions that fragmented the body and the ecclesiastical opposition to burning treatments and the spilling of blood, at least for priests. It is therefore interesting to ponder over who did the surgery in the (male) monasteries. It might have been the lay brothers or paid surgeons from the outside community.

Some types of tools or instruments, such as probes, curettes and other specialized equipment, as well as ear scoops, seem to have been used almost solely within the male monastic (Cistercian) institutions. Apart from the ear scoops, these are intended for the treatment of wounds, sores, boils, abscesses, fistulas and similar cases, and were a heritage from the ancient Greek-Roman and Arabic medical cultures. In the Swedish region, however, it is clear that the use of these tools never spread to the rest of society. This is actually the most obvious difference in the material culture between the male monasteries and other milieus. In the medieval cases where such tools are encountered outside monasteries, it is almost always in ecclesiastical contexts (the early medieval city of Sigtuna being an exception). It is possible that the priests were culturally closer to the monastic sphere than ordinary people, partly because some of them had studied theology at European universities and there or in other ways had encountered the medical literature and practice, which the (male) monastic inhabitants also benefited from. These instruments ought to have facilitated treatment of the above-mentioned ailments, and therefore it seems peculiar that the use of such equipment did not spread more widely. I do not have an answer to the question why, but would like to suggest that the explanation should be sought in the fact that the medical culture and perception in monasteries was too different from the dominating medical culture(s) in the rest of society, and that motivation and practical incentive to adopt these tools therefore was lacking.

One practice which did spread, however, was phlebotomy. The imprecise datings of archaeologically found phlebotomy irons make it difficult to survey how and when this practice was adopted in different milieus. The design of the phlebotomy irons from various milieus suggests that the practice was somewhat more refined in monastic institutions than in most other environments, as their instruments are finer. The number of irons in monasteries and nunneries also indicates that it was a more important form of treatment there than in the rest of society. This is not surprising, as the practice seems to have been important in most monastic orders. In secular society the practice of phlebotomy can mainly be connected to the bath-houses and sweat-houses and leprosaria, but to some extent also to the upper social strata, as in castles and forts. One single phlebotomy iron, from the city of Sigtuna, has been dated securely to the thirteenth century, but the practice of phlebotomy does not seem to have been more widely spread until the end of the Middle Ages, perhaps during the fifteenth century.

The question is how the practice of phlebotomy spread to the secular parts of society. The fact that the material culture of monastic medicine, besides phlebotomy irons, did not spread *extra claustrum* justifies questioning whether the practice of phlebotomy was actually extended from the monasteries. It may instead have disseminated from secular practice in, for example, Germanic and Anglo-Saxon lands. The secular practice of phlebotomy in Sweden may in that case have been somewhat different from the learned or monastic practice when it comes to underlying ideas and theoretical or abstract reasons, and may rather have been a popular 'humoral pathology', perhaps nourished by the general fascination with blood in different aspects at the time. Phlebotomy practice seems also to have been somewhat separated from the art of healing proper, and not primarily performed by leeches. Instead, it seems to have been performed by special (male and female) phlebotomists.

The broad overview given in chapter 6 indicates that the differences between various sociocultural milieus could be significant when it came to preferred forms of treatments, as well as the skill with which these treatments were performed and the material culture used. These differences remained

all through the Middle Ages, but during the later part or the end of the period, a certain tendency towards homogenization may have taken place, for example as phlebotomy became more widely spread. After the Reformation the monastic institutions eventually disappeared; first the male ones and in the course of the sixteenth century the female ones as well. At the same time the secular arts of healing were professionalized, which is obvious not least in the development of the material culture, which served the need or will to develop methods and practice and to signal a new and more distinct occupational *ethos*. The translations and compilations of foreign herbals can also be seen as an expression of this.

## Chapter 7: Practitioners, treatments and change

The material culture explored in this particular study is mostly only very roughly dated and the written sources of varying character unevenly spread over the studied time span. This makes it difficult to discuss the chronology. However, as has already been suggested above, differences can be discerned between the former half of the Middle Ages and the later part of the period and the Renaissance. Advanced wound surgery can be confirmed during the former part of the Middle Ages, but it is not possible to detect any major advancements or developments of tools and instruments until during the sixteenth century. Phlebotomy, as mentioned, still seems to have been extremely rare during the thirteenth century, but more common during the fifteenth century. The knowledge of herbs, which in written material from the earlier Middle Ages refers to ancient indigenous tradition and mythological authorities, shifted to referring to foreign classical authorities, also in popular herbals, during the fifteenth and sixteenth centuries. All the various discernible traces of change and stagnation should be regarded together, as they can all be traced to the period from roughly the fourteenth century to the middle of the sixteenth century, with a vague centre of gravity in the fifteenth century.

This is probably not a coincidence. A possible explanation is that the aggravating life circumstances from the middle of the fourteenth century onwards, in the form of the Black Death and subsequent epidemics, fundamentally affected the arts of healing. In particular, the massive reduction of population from 1350 and through the fifteenth century, with its recurring epidemics every few years, must have had a fundamental and devastating effect. My interpretation is that it gravely inhibited the relatively successful art of healing which had prospered until then, so that not much new happened for some time, as such a population reduction must have meant a disastrous loss of individually carried knowledge, as discussed above. The recurring epidemics during the fifteenth century must have obstructed the efforts to recover. It made the odds of saving the individually carried knowledge for the younger generations close to zero and the possibilities to develop it even smaller. It was thus a catastrophic loss of a knowledge that had been collected and improved by generations of leeches. The knowledge lost in this way was lost forever and took considerable time to rebuild and replace with new knowledge.

The population decrease not only reduced the number of skilled leeches. It also reduced the group of potential patients, which was so important for the practitioners to gain the necessary quantitative experience, in order to develop their skill. To some extent this might have been compensated by the fact that people in the aftermath of the Black Death increasingly seem to have sought each other's company in towns and more fertile agricultural areas. This may have helped to create a 'critical mass'

in some regions, although it did not entirely suffice. It may be in the light of these circumstances that we should understand the changes of the arts of healing that took place during the latter part of the Middle Ages: as a phase of reorientation, necessitated by the fact that the very foundation of the older art of healing had been swept away. At the same time as it was a catastrophe, it might thus have created room for new thoughts and change, even if this may have occurred with some delay because of the continued harsh living conditions. When the older knowledge was literally buried during the fourteenth and fifteenth centuries, the void needed to be filled with something else – because man always needs to feel there is an art of healing. This ‘something’ seems to a great extent to have been sought in the medical literature, where the knowledge had been preserved, regardless of the great human mortality and regardless of whether anyone had read it or not for a while.

The professionalization process of the arts of healing was equally non-linear or continuous. It seems to have been interrupted as well – and taken a partly new direction – some time during the high Middle Ages. During the sixteenth century, as mentioned above, the related professions began to be more formalized and segmented into several different occupations with distinct areas of responsibility and practice, such as apothecaries and barber surgeons. This was a process more or less contemporary with similar processes in other parts of North-western Europe. At the same time, these new occupational identities or ethoses and related professional aspirations were increasingly being expressed in the material culture in the form of new tools and instruments and new forms of vessels.

It is, however, possible to discern a phase of professionalization previous to that. It seems to have begun already during the early Middle Ages (perhaps earlier, although written sources are lacking and this goes beyond the chronological framework of the present study) and continued during the thirteenth century and perhaps the earlier half of the fourteenth century. This makes sense. The twelfth century was a highly dynamic period of population growth and rapid change in society (such as the beginning of urbanization, altered trade systems, the change of religion, and new ways of looking at the individual). Already at that time there were practitioners called *læknir*, who were specialized within their occupation, who seem to have had a professional identity in the practice of arts of healing and who were paid for their services and specialized knowledge. They were not organized in guilds or regulated by formal colleges, but their knowledge was communicated and passed on within the tradition of a venerated craft, important in society.

We can thus distinguish two waves of professionalization. As already suggested above, it seems as if the women healers became fewer with the second wave, even if they did not disappear entirely. It is possible that the changed role for women in general in society, with more restricted access to the public sphere, affected this. Perhaps this in turn should be understood as a consequence of the increased value and effort placed on the continued existence of society through reproduction and the raising of children in the domestic sphere to ensure that they reached adulthood. If this was seen as a higher priority in society, it might have changed the attitude towards women working in the public sphere, so that it may have been thought of as less suitable or at least less desirable.

The role of the priests, too, seems to have been diminished in relation to the art of physical healing. Perhaps it was seen as increasingly unsuitable for them to tend to the body, and more appropriate for them to concentrate on the health of the soul. I would suggest, however, that their exclusion had the same reason as the exclusion of quacks and others who did not fit within the more limited

professional frames; namely that the professionalization process in itself slimmed the group or groups who were accepted as healers, thus making it more homogeneous. This was part of the formation of the new occupational ethos of the time.

The most important conclusions of the study could be summarized in the following seven points:

- The medieval and Renaissance art of healing was a heterogeneous phenomenon and consisted of several different arts of healing or medical cultures.
- The perception and comprehension of disease, illness and afflictions shifted during the Middle Ages from a domestic *cause- and consequence-oriented* perception towards a more *symptom- and sign-oriented* perception, through the influence of the understanding of the literate and learned scholastic culture.
- The character and the conditions for the sick role varied within society, between men and women, between pious and ordinary people, between rich and poor.
- The knowledge most highly valued in the secular practitioners seems to have been 'know-how' and craft knowledge, that is, experience-based, individually possessed knowledge, rather than book-learned 'know-that'. The difficult living conditions and major population reduction in the fourteenth and fifteenth centuries, therefore, had devastating consequences in the form of loss of vital knowledge, and so had thoroughgoing consequences for the turn the development of the art of healing took as a field of knowledge and as a profession.
- The influence of scholastic medicine was probably quite limited, especially during the earlier part of the Middle Ages. Phlebotomy seems to have been more widely spread in society only during the latter part of the period, and then as a kind of popular humoral pathological practice, rather than as an expression of a learned humoral pathology. The practice of phlebotomy does not seem to have been properly integrated in the rest of the secular art of healing during the studied period.
- The secular tradition differed considerably from the monastic tradition. The latter seems to have had only a limited influence *extra claustrum*, which is indicated by the fact that its material culture did not spread in the surrounding society.
- The professionalization of the art of healing was not linear. A clear tendency towards professionalization can be discerned during the early Middle Ages and through the thirteenth century. A new wave seems to have gained momentum during the latter part of the Middle Ages, which led to more formalized occupations, the formation of new occupational ethos and the development of new material culture to go with that. The role of the monasteries in the development and professionalization of the secular art of healing in the Swedish society was probably quite limited.