# The Ever-Lasting Rules of Death?

# The Reception and Adaptation of the Pseudo-Hippocratic *Capsula Eburnea* in German Medical Literature

Chiara Benati Università degli Studi di Genova, Italy <u>chibena@tin.it</u> Recebido em: 08/04/2013 Aprovado em: 10/09/2013

**Abstract:** The so-called *Capsula eburnea* (also known as *Secreta Hippocratis*, *Analogius Hippocratis* or *Prognostica Democriti*) is a late antique short treatise dealing with cutaneous eruptions as prognostic signs, which enjoyed wide popularity throughout the Middle Ages. In Europe, this collection of prognostic rules has come down to us in Old French, Middle English, Dutch, High and Low Geman versions. This study focuses on the reception of the text within both the High and the Low German language areas, where the *Capsula eburnea* was repeatedly translated, adapted and integrated into larger medical compendia, such as Ortolf von Baierland's *Arzneibuch* or the *Düdeschen Arstedie*.

Keywords: Prognostics, German reception, Vernacular medical compendia

**Sintesi:** La cosiddetta *Capsula eburnea* (conosciuta anche come *Secreta Hippocratis*, *Analogius Hippocratis* o *Prognostica Democriti*) è un breve trattato di epoca tardo-antica in cui pustole ed eruzioni cutanee vengono interpretate come segni prognostici. Nel Medioevo quest'opera godette di grande popolarità, come testimoniato dalle versioni in francese antico, inglese medio, nederlandese, alto- e bassotedesco che sono giunte fino a noi.

In questo studio ci si sofferma sulla ricezione del testo in area alto- e bassotedesca, dove la *Capsula eburnea* è stata ripetutamente oggetto di traduzioni ed adattamenti venendo, talvolta, integrata in grandi compendi medici volgari quali lo *Arzneibuch* di Ortolf von Baierland o la *Düdeschen Arstedie*.

Parole chiavi: Prognostici, tedesca ricezioni, compendi medici volgari

### 1. The Pseudo-Hippocratic Capsula eburnea and its Tradition

The so-called *Capsula eburnea* (also known as *Secreta Hippocratis, Analogium Hippocratis* or *Prognostica Democriti*) is a late antique short treatise dealing with cutaneous eruptions as prognostic signs. Its origin can be traced back to the 4<sup>th</sup> or 5<sup>th</sup> century, when this death prognostic canon was composed in Greek in the Eastern Mediterranean area, probably in Alexandria, a city hosting an important medical school, where Hippocrates was widely known thanks to Galen and his works. The most important witness of the text's Greek tradition is represented by a 15<sup>th</sup> century manuscript preserved in Vienna, Österreichische Nationalbibliothek (Codex medicus graecus, 8), which was probably copied from an 8<sup>th</sup>/9<sup>th</sup> century (or earlier) source.

According to Sudhoff (1915/16, p.80 and following), between the 6<sup>th</sup> and the 8<sup>th</sup> century it reached the Southern part of Italy, where it was first translated into Latin, probably in the area around Montecassino. The oldest Latin manuscripts date back to the end of the 8<sup>th</sup> and the beginning of the 9<sup>th</sup> century (i.e. Glasgow, University Library, Hunterian T 4, 13 (96) and Montecassino, 69). From Southern Italy the popularity of this short prognostic treatise moved quickly northward, as witnessed by manuscripts such as the above-mentioned Glasgow (which was composed either in Northern Italy or in Southern France), Sankt Gallen, Stiftsbibliothek, 44 and 751, or Karlsruhe, Badische Landesbibliothek, Aug. 120, all belonging to the 9<sup>th</sup> century (DI CLEMENTE 2011, p. 49 and following).

Subsequently, in 642, when Alexandria was conquered by the Arabs, the Greek text was translated into the Arabic *Kit\$b al dur6* which would enjoy great popularity and inspire, among others, Avicenna's poetic work *UryHza lat0fa fi qak\$y\$ Ibuqr\$t al-jams wa-l'išr0n*. Between the 11<sup>th</sup> and the 12<sup>th</sup> century, this Arabic version also reached the Iberian Peninsula and Toledo, where Gerard of Cremona retranslated it into Latin in the second half of the 12<sup>th</sup> century. This second Latin translation of the *Capsula eburnea* spread into Europe along with the older one, which had been made from Greek in Southern Italy. From the 13<sup>th</sup> century onwards, the *Capsula eburnea* is also witnessed in Old French, Middle English and Middle Dutch (15<sup>th</sup> century).

As the variety of titles for this work may have shown, the attribution of the prognostic treatise to Hippocrates is not universal. The physician of Cos is systematically mentioned in the Greek and Arabic sources and in many Latin manuscripts, such as Montecassino 69, which has the title *Epistola, hoc est prognostica Yppogratis de signis egritudinis, id est intelligentia signis vitae seu mortis*, Codex Vaticanus 2392, Berlin, Staatsbibliothek Preussischer Kulturbesitz 60 fol., Munich, Clm 206, Erfurt, Universitätsbiliothek, Amplonianus 8° 79, which introduce the text as *Secreta (Ypocratis)*, or Vienna, Österreichische Nationalbibliothek, Codex latinus

Vindobonensis 4753, which speaks of *Liber veritatis Ypocratis*.<sup>1</sup> Other branches of the Latin tradition ascribe the prognostic treatise to Democritus.<sup>2</sup> These two attributions seem to be at least partly reconciled in Sankt Gallen, Stiftsbibliothek, 44, according to which Hippocrates wrote the treatise and then entrusted it to his student Democritus.

As far as the title itself is concerned, the text is frequently indicated as *prognostica* or *secreta*, with reference to either its content or the mysterious modality of its transmission. The form *analogium* derives from the narrative introduction to the text, where Hippocrates is said to have asked his disciples to put in his grave a small case (*analógion*) containing his works. This very object to be buried under the physician's head is referred to differently in the tradition: Sankt Gallen 751 has *diptitia eburnea*, Sankt Gallen 44 refers to *tabulae eburnae*, while Codex Vaticanus Latinus 2392 introduces the concept of a *capsa eburnea*, an ivory case containing Hippocrates' secrets (SUDHOFF 1914/15, p. 88 and following). Hence, I will use the denomination *Capsula eburnea* in this study.

The structure of the *Capsula eburnea* varies significantly in the tradition. While some sources simply include a title and a list of prognostic remarks, in other manuscripts the list of prognostic signs is preceded by an anecdotic introduction, narrating the retrieval of Hippocrates' works from inside his grave. This narrative nucleus is, in some manuscripts, enriched by the insertion of details such as the description of how Hippocrates himself had given instructions in order to have his writings buried with him in a case or engraved on ivory tablets. The discovery itself is to be ascribed to a not-better-specified emperor (Caesar), who had the grave opened believing it contained a treasure. In Sankt Gallen 44, the Greek master's works were then handed over to the court physicians who translated them. In other manuscripts and in the Arabic translation of the text, the emperor is said to have given his personal physician only the prognostic treatise. The very name of this physician changes from one manuscript to the other.<sup>3</sup>

As mentioned above, the second part of the treatise is represented by a list of prognostic signs in topographic order. The number of items included in this list varies in the various branches of the tradition: eighteen or nineteen in the Greek sources, between eleven and twenty-four in the Latin ones, and twenty-five in Avicenna's adaptation of the text. Each item follows a fixed scheme: it describes a specific cutaneous symptom and states how many days after its appearance the patient will die.

<sup>&</sup>lt;sup>1</sup> This title was first used by Gerard of Cremona for his Latin translation of the Arabic version of the text and, for this reason, became standard only after the second half of the 12<sup>th</sup> century. See also Sudhoff (1915/16, p 79-85), Grant (1974) and Sudhoff (1914/15, p. 73-82).

<sup>&</sup>lt;sup>2</sup> See, for example, London, British Library, Arundel 166, which has *Pronustica Democriti de signa mortis agnoscenda*, or Sankt Gallen 751 and Karlsruhe, Badische Landesbibliothek, Aug. 120 which speak of *Prognostica Democriti*.

<sup>&</sup>lt;sup>3</sup> For a survey of the forms present in the various manuscripts of the tradition, see Di Clemente (2011, p. 54).

### 2. The Capsula eburnea in German Medical Literature

#### 2.1. The High German tradition

In the High German language area, the Capsula eburnea is repeatedly adapted.

The first High German version we know of was composed in the Alemannic area between the 11<sup>th</sup> and the 12<sup>th</sup> century. This first translation, which is based on the older Southern Italian Latin version, is preserved fragmentarily in Bamberg, Staatsbibliothek, cod. Msc. Hist. 146 as a part of the so-called *Bamberger Arzneibuch*. This 14<sup>th</sup> century manuscript includes a series of hagiographic texts in both Latin and German, but the medical texts are contained on a fragment from a 12<sup>th</sup> century bifolio, which was cut and employed to reinforce the younger manuscript. The fragment of the Capsula eburnea can be found on the first flyleaf of the codex. Lacking both the title and the incipit, the fragment begins with the reference to someone's books being laid under his head in his own grave (alle sine buche lechin in sin grab under sin hGbet) and goes on to narrate how one of these books drew the attention of the emperor, who did not want to give it anybody but Promodosio, the physician. This introduction is followed by three prognostic signs, the first of which is characterized by pain and swelling in the face without a cough. In addition to that, the patient often brings the left hand to the chest and scratches his nose. If these three symptoms are present, the patient is going to die twenty-three days after their first appearance. The second case portrayed is that of a person with frenzy, flaming cheeks (chinne),<sup>4</sup> important swelling, who is unable to digest and has cold sweat, in addition to cold ears and teeth. This patient is going to die on the ninth day after the first symptom. The third sign is described as follows: pain in the neck veins, deafness, pustules (among them a white one) and a desire to have a warm bath or a sauna. The person showing these symptoms is going to die on the fiftieth day (PRIEBSCH 1915, p. 203 and following).

The incipit of a High German version of the *Capsula eburnea* is also preserved in Basel, Universitätsbibliothek, B. XI 8, a miscellaneous codex composed around 1400 and containing both Latin and German texts (MEYER-BURCKHARDT 1966). The initial lines of the anecdotic prologue to the prognostic treatise can be found on fol. 136r and 136v. This small portion of text introduces the three main characters of the narration: Hippocrates (*ypocras*), who wants his medical works to be buried with him; an emperor (*ein keiser*), who discovers the grave and the books; and Promodosio, the court physician. The fragment is interrupted with Promodosio receiving the prognostic (?) booklet (WILHELM 1914, p. 365).

Hippocrates' prognostic rules were also inserted in Ortolf von Baierland's *Arzneibuch*. They appear in the 72<sup>nd</sup> chapter of Ortolf's handbook under the title *Van den czeken dez todez*. No narrative on the accidental retrieval of the physician's works is

<sup>&</sup>lt;sup>4</sup> The term *chinne* is actually a misreading of *chniue* "knees", to translate the Latin *genua* (KEIL & col. 2004, p. 312).

present here. The list of signs is only introduced by a brief remark on these prognostic considerations deriving from Hippocrates' ability to foretell on which day a patient will die (*Dy konst van ypocras in synem ende, wy men erkennen sal, an wilchen dagen eyn mensche sterben sal*) (FOLLAN 1963, p. 114 and following). Not only does this short introduction deal with the text's authorship, but it also clearly states its aim and function within Ortolf's work: interpreting certain symptoms and physical signs to prognosticate a person's death. This version, which is based on the younger Spanish Latin translation of the text, includes fifteen signs, all concerning pustules (*blattere*) and cutaneous eruptions. Since five (2, 4, 6, 11, 12) of these fifteen prognostic signs include one or more black pustule as a symptom, it is reasonable to think that their insertion in the *Arzneibuch* was mainly aimed at foretelling the exact course of the carbuncle infection (KEIL & col. 2004, p. 312).

As a chapter of Ortolf's *Arzneibuch*, the *Capsula eburnea* is transmitted with minor divergences in a large number of manuscripts, some of which show interesting peculiarities as far as the tradition of Hippocrates' prognostic treatise is concerned. This is, for example, the case of Munich, Staatsbibliothek, Cgm. 398. This 15<sup>th</sup> century paper manuscript contains a series of medical texts, which includes an incomplete version of Ortolf von Baierland's *Arzneibuch* (fol. 44r-107r). The *Capsula eburnea* represents, as usual, the 72<sup>nd</sup> chapter of the book, but it is followed by the so-called *Infektionslehre*, a list of ten possible contagion ways of leprosy (SCHNEIDER 1973, p. 149 and following).

A similar development can also be noticed in Salzburg, Universitätsbibliothek, M III 3. This 15<sup>th</sup> century medical miscellanea includes Ortolf's Arzneibuch, Konrad von Hirschborn's Ler von gesuochte, a short treatise on women's diseases and disorders also known as Frauenbüchlein, some passages from the German Lucidarius, the Von guten *Pflastern und Salben*, a lapidary, a short plague treatise and the so-called *Guldein ABC*. A series of short texts dealing with diseases resulting in cutaneous eruptions can be found in addendum to the plague treatise. One of these is Ortolf's version of the *Capsula eburnea.* In this manuscript, the order of the signs is different from that of the other witnesses of the text. In particular, the first (black pustule on the chin) and the tenth (pustule behind the left ear) signs are missing, while the sixth (black or white pustule on the thumb) and the seventh signs (pustule on the third left toe) have merged into one single prognostic consideration. However, these are not the only changes the Hippocratic text has undergone, since its position in the manuscript - at the end of the plague treatise - suggests its original meaning has been altered and its prognostic indications referred to the buboes of bubonic plague, rather than to generic pustules (KEIL & col. 2004, p. 312 and RIHA 1993).

#### 2.2. The Low German tradition

The *Capsula eburnea* also reached Northern Germany, where the younger Latin version was translated into Low German. The first Low German translation we are aware of was realized in the North Low Saxon area probably still in the 14<sup>th</sup> century. This has come down to us in two versions: a shorter one, which is included in Albrecht von Borgunnien's *Arzneibuch* and a more complete one, which has been transmitted together with the so-called *Düdesche Arstedie*. Moreover, a third Low German version of the Hippocratic *Capsula eburnea* can be found in the *Abdinghofer Arzneibuch*. This appears to be completely independent from the previously-mentioned North Low Saxon translation and represents, therefore, another branch of the Low German reception of the prognostic treatise (KEIL & col. 2004, p. 313).

Albrecht von Borgunnien was a *meyster grotliken kunstich vnde voruaren in mannigerhande kunst vnde arstedye*, that is a surgeon, who was active in the North Low Saxon or maybe North Albingian area. The name under which he is known derives from his *Arzneibuch*, where he introduced himself as a native of *Borgunnien in Vlanderen Lande*, probably identifiable with Borgoenien near Zonnebeke in Belgium. His *Arzneibuch* is transmitted in one single manuscript preserved in London (British Library, Sloane 3002), which was composed after 1400, most likely in Silesia, Jutland or Scania. Similarly to other compilations of the time, such as the *Wolfenbüttler Arzneibuch*, Albrecht's medical compendium is divided into two parts, each of which containing pre-existing vernacular texts. The first part is constituted by some chapters of a herbal, while the second includes, among others, a prescription book, a leech book, some diagnostic schemes and a *regimen duodecim mensium* (KEIL & col. 1978, p. 179).

The Low German adaptation of the *Capsula eburnea* belongs to this second part of Albrecht's *Arzneibuch* and can be found on pages 99a-102b, between the leech book and a short treatise on the four elements (PRIEBSCH 1901, p. 31 and following). No narrative introduction or attribution to Hippocrates is present here. The beginning of the *Capsula eburnea* is marked by the indication: *Hyr begynnet eyn ander practice vnde is van mannigerhande bledderen*. The structure of the prognostic treatise diverges significantly from the tradition: the twenty signs are not ordered topographically *a capite ad calcem*, but listed without any apparent criterion. In addition to this, each sign is introduced by the indication of the anatomical part it concerns and followed by the description of at least another non-cutaneous symptom (*warteken*), which is characteristic of a disease having the same prognosis as the preceding pustule or cutaneous eruption. For example:

An den kneen. Synt grote bleddere efte swelle in beyden synen kneen, de steruet in viii. dagen. En warteken, efte he vele swetet hebbe in dem anbegynne siner suke (WARDALE 1936, p. 59).

It is interesting to notice that not all symptoms listed in this short prognostic treatise have a deathly outcome. This is the case of a patient showing a pustule on the nose, which indicates a dangerous but non-lethal pathology that can be cured: An der nese. Js ene bleddere vp der nesen, de brek dy nicht by dyneme lyue, wente se is varlich, doch mach se genesen (WARDALE 1936, p. 60).

Similarly, the presence of a pustule on the middle toe of both the right and the left foot is described as life-threatening (*de is grot synes lyues vare*), without clear prognostic indication, thus suggesting this particular pathology could be treated and the patient could, at least in some cases, recover:

An dem vote &c. Js ene bleddere vp dem luchteren vote efte vppe deme vorderen uote vppe deme myddelsten teen, de is grot synes lyues vare (WARDALE 1936, p. 60).

No therapy is, however, suggested or prescribed: the focus here is on prognosticating death and, as a corollary to that, on distinguishing between deathly pathologies and diseases, which could be cured. How to cure them is, therefore, of no relevance in this context.

The so-called *Düdesche Arstedie* is the first part of the *Gothaer Arzneibuch* (Gotha, Landesbibliothek, cod. Chart. 980). The title derives from the text's incipit, where we find *Dyt is dat erste artikel van desser dudesschen arstedie*. Apart from the abovementioned Gotha manuscript – the text's most complete witness – the *Düdesche Arstedie* is also preserved in Rostock, Universitätbibliothek, Medica 1, and Copenhagen, Universitets Bibliotek, cod. Arnamagn. 820 and, in an extremely corrupted form, in Copenhagen, Kongelige Bibliotek, cod. Thott 675. The work, which can be dated before 1400, can be described as a compilation of medical sources arranged, as usual in the late Middle Ages, following the *a capite ad calcem* scheme. In particular, the last part of the compendium includes a series of pseudo-medical treatises, which were extremely popular during the Middle Ages. Some of these deal with prognostics. In this context we also find the *Capsula eburnea*, which constitutes the 196<sup>th</sup> chapter of the Low German compilation (FREDERIKSEN & col. 1980, p. 238).

Here, the Hippocratic prognostic treatise is introduced by the Latin title *De signis mortis in pustulis*. This is followed by an abbreviated version of the introductory anecdote about Hippocrates' wish to have his writings buried with him:

Ypocras de makede eyn bok van den bledderen dar lude van krank weren, wo men dat bekennen schal in den bledderen in wat daghe eyn mynsche steruen schal de de bledderen heft. Dat bok leyt he myt sik begrauen. Dar hadde he synen knecht vmme ghebeden dat he dat bok scholde legghen in dat graf, dat yt alzo vorginghe. Do Ypocras begrauen was, do moghede sik de kneckt vmme dat bok vnde groff ene wedder vp vnde nam eme dat bok vnde lerede do de stucke de hirna geschreuen staen (NORRBOM 1921, p. 171). Consistently with the tradition, Hippocrates is said to have asked one of his disciples to bury his writings with him in his grave. What, however, differentiates this version of the text's retrieval legend is the very modality of this finding. This is not ascribed to the greed of a sovereign (the emperor) hoping to discover a huge treasure, but rather to the knowledge greed of the physician's disciple who decided to dig up one of the books in order to to learn and transmit some passages from it.

This short narrative introduction is followed by a list of nineteen prognostic signs, all showing the usual pattern: the description of a cutaneous symptom and of other symptoms eventually present, and prognosis, that is, how many days after their appearance the patient will die. In two cases (signs 4 and 6), however, no precise indication about the day of death is given and the patient is simply said to die soon (*kortliken, in korter tyd*):

Js in den winbrauen ene bleddere alzo ene walnut, js se brun vnde doet nicht we vnde hebben em de oghen sere joket vnde heft he se sere gewreuen, dat is eyn warteken dat he kortliken steruet (NORRBOM 1921, p. 171).

Plucket he de kledere efte kloppet he de nusterken in deme ambeginne syner suke, de street in korter tyd (NORRBOM 1921, p. 172).

These two exceptions to the usual scheme can be explained considering the two prognostic signs as additions to the preceding ones. None of them deals with a separate symptom: rather they describe an aggravating circumstance within the previously depicted case. While the third sign refers to a person showing three pustules of different colour on the eyelash, who will consequently die within twenty-two days, the fourth sign describes the case of a patient with one single big (alzo ene walnut) brown pustule on the eyelash, which does not hurt, but makes his eye itch therefore he rubbed it a lot. These symptoms indicate that the disease is at an advanced stage and the patient will live much less than the above-mentioned twenty-two days. The same can be said of the pustule on the upper part of the nose as its appearance indicates that the sick is going to die within three months, according to the fifth sign. However, if the patient pulls up his/her clothes or repeatedly taps his nostrils in the first days of his/her illness, s/he is going to die sooner. In this respect, the fourth and the sixth sign of the list cannot be considered independent as they fundamentally constitute a corollary to the third and the fifth respectively. For this reason, the number of prognostic rules included in this Low German version of the Capsula eburnea should be reconsidered and reduced to seventeen.

The prognostic signs are organized topographically, according to the position of the cutaneous symptoms, which are dealt with *a capite ad calcem*. The only exception to this rule is represented by the last symptom described – pustule on the left calf – which is treated after the pustule on the middle toe.

The *Abdinghofer Arzneibuch* is medical-pharmacognostic handbook composed in the Benedictine Abbey of Adbinghof near Paderborn and preserved in one single 15<sup>th</sup> century manuscript, Paderborn, Erzbischöfliche Akademische Bibliothek, Vva 3, 8°. The compiler aimed to put together, on the model of other previously existing Low German medical books, a series of therapeutic, iatromathematic and pharmacographic texts or parts of texts. In doing this, he adopted a mixed structure similar to that which we find in other contemporary works, such as the *Utrechter Arzneibuch*; the original alphabetical order of the drugs has been abandoned in favour of another arrangement, highlighting the origin of the drugs and their therapeutic indication. This particular structure of the text suggests it was addressed to a public – probably constituted by laybrothers – who had great pharmacologic knowledge, but were not able to perform any form of surgery. Traumata and dermatological pathologies were, in fact, treated by a professional, sworn surgeon known as Meister Konrad and repeatedly quoted in the *Abdinghofer Arzneibuch* (KEIL & col. 2004, p. 1 and following).

The adaptation of the *Capsula eburnea* constitutes the 271<sup>st</sup> and last chapter of the handbook. As mentioned, the prognostic treatise has taken here a new and original form, in which not only Hippocrates, but also *ander vele meysters* are quoted as authoritative sources of the prognostic considerations conveyed. One of these authorities, *Meyster Archim*, might be identified with the mathematician Archimedes. This hypothesis seems to be supported by the mantic value the compiler ascribes to the number three and its multiples (KEIL & col. 2004, p. 313).

Unlike in the *Düdesche Arstedie*, in the *Abdinghofer Arzneibuch* the *incipit* of the Hippocratic prognostics is not constituted by the anecdote about Hippocrates' last will, but by the episode from Pliny's *Naturalis Historia* about the basilisk, the mythological snake which was considered to have the power to cause death with a single glance.<sup>5</sup> The basilisk is, in fact, compared to a pustule called *vr fana*. As the basilisk dies when it sees itself (in a mirror), human beings die, when they see this pustule:

<sup>&</sup>lt;sup>5</sup> See Plinius, Naturalis Historiae, VIII, 78: Eadem et basilisci serpentis est vis. Cyrenaica hunc generat provincia, duodecim non amplius digitorum magnitudine, candida in capite macula ut quodam diademate insignem. sibilio omnes fugat serpentes nec flexu multiplici, ut reliquae, corpus impellit, sed celsius et erectus in medio incedens. Necat frutices, non contactos modo, verum et adflatos, exurit herbas, rumpit saxa: talis vis malo est. creditum quondam ex equo occisum hasta et per eam subente vi non equitem modo, sed equum quoque absumptum. atque huic tali monstro – saepe enim enectum concupivere reges videre – mustellarum virus exitio est: aedo naturae nihil placuit esse sine pare. infeciunt has cavernis facile cognitis soli tabe. necant illae simul odore moriunturque, et naturae pugna conficitur; XXIX, 66: Basilisci, quem etiam serpentes ipsae fugiunt alias olfactu necantem, qui nomine, vel si aspiciat tantum, dicitur intere mere, sanguinem Magi miris laudi bus celebrant: coeuntem picis modo et colore, dilutum cinnabari clariorem fieri. attribuunt ei successus petitionum a potestatibus et a diis etiam precum, morborum remedia, veneficiorum amuleta. quidam et Saturni sanguinem appellant.

Item eyn blader heitet vr fana, welche mensche de blader kreget, de steruet vp der stede der blader, die blader geliket basiliscus van naturen, de basiliscus de steruet, wan he sich selues sut, also doet auch der mensche, want he de blader sut, dar vmme heitet se vr fana (TEMMEN 2006, p. 390).

This introductory simile is followed by a series of considerations on the nature and origin of the various typologies of pustules. According to Hippocrates and many other authorities (*vele meysters seggent*), there are three kinds of pustules and they can be ascribed to lust (*vnkuscheit*), as well as to unhealthy habits (*wan eyn mensche sere wandelet vnd drincket vil vnd pisset wenich, dat is vngesunt*). As pointed out by Temmen (2006, p. 247), these kinds of considerations about the possible causes of disease represent an innovation in the tradition of the *Capsula eburnea*.

Since not all pustules are the same, it is extremely important to distinguish them, in order to be able to predict the course of the patient's disease. Not all pathologies taken into consideration in the prognostic treatise have a lethal outcome. Sometimes the patient will suffer from the long-term effects of his/her condition, such as the one who shows a pustule on the eye and will remain blind forever:

Item wert eynen menschen eyn blader vp sinen augen, dat bedudet, dat he in der cranckheit blint wil werden er den dode (TEMMEN 2006, p. 392).

In other cases a complete recovery is possible. When a patient has a fever, a pustule under the tongue, pale lips and a white tongue, he is going to die within fifteen days. If, by contrast, his/her lips are still reddish, s/he can be cured and will recover completely:

Ichteswanne so wert eyn mensche cranck in eyner hitte vnd der menschen lang liget. vnder willen so wesset dem crancken eyn blader van hitten vnd vnder willen so weset se em vnder der tunghen, is et sach das der mont bleych ist vnd de tunge wijt ist, so steruet der seken bynnen viffteyn dagen. Ist et auer saken, dat de mont noch roet ist vnd wal eten mach, so bedutet vorwandelinge also des blodes nicht vele en ist, ist et auer saken dat des blodes wenich ist, so wert der mensche gesoint van aller siner cranckheit ... (TEMMEN 2006, p. 391).

The inclusion of non-lethal pathologies in the prognostic treatise is not exclusive of the *Abdinghofer Arzneibuch*, since two of them could also be found in Albrecht von Borgunnien's *Arzneibuch*, as we have seen above. What is peculiar in the *Abdinghofer Arzneibuch* is rather the attitude its author shows towards these cases: instead of simply hinting at the possibility of healing certain pathologies, the text goes a step further and prescribes the most adequate therapy to actually cure them. To heal completely the patient with the fever and the pustule under the tongue (but with reddish lips) will have to take baths with a series of herbs, which are listed in the text.<sup>6</sup>

This list of medical herbs constitutes another significant addition to the original nucleus of the pseudo-Hippocratic prognostics. Among these herbs, particular importance is given to one *dat heitet bese, to sinen ander namen heitet Godes gensel*, whose healing power is ascribed to its phenotypical similarity to the scourge used to flog Christ (see also TEMMEN 2006, p. 248). According to Keil & col. (2004, p. 313), this reference to the passion of Christ could indicate the religious origin of the text.

Another peculiarity of this Low German version of the *Capsula eburnea* is the presence of a series of general prognostic considerations. These considerations are not based on the appearance of pustules or cutaneous eruptions and they remind us of those contained in medical lunaria (see also WEISSER 1982, p. 21 and following):

Ist auer eyn mensche dat vt eyner crenckheyt in eyn ander vellet, deme menschen sal men wedergeuen arcedie vnd is et sach, dat er der arcedie nicht en mach, steruet he, men sal et dri male vorsucken, ys et sach, dat he et des derden male ouer geuet, so steruet de seken sunder twiuel (TEMMEN 2006, p. 391 and following).

All these features contribute to the originality of the prognostic treatise included in the *Adbinghofer Arzneibuch*, which – as pointed out by Temmen (2006, p. 248)– "bildet eine Mischform aus Todesprognostik und der Vorhersage eines Krankheitsverlaufes" and "geht deutlich über den ausschließlich thanatognostischen Rahmen der nach dem Vorbild der jüngeren lateinischen Version entstandenen 'Capsula eburnea' hinaus". As a possible explanation for the singularity of this version of the Hippocratic prognostics, its position within the *Arzneibuch* has been adduced: while, in fact, this text is usually inserted in the context of other prognostic works, here it follows a series of short monographs on single drugs, thus remaining isolated from the other prognostic and diagnostic passages of the handbook. However, the actual reason why this location should have influenced the text's content in this way has not been given. For this reason, it is impossible to exclude that the two circumstances are completely unconnected (TEMMEN 2006, p. 248).

## 3. Conclusion

<sup>&</sup>lt;sup>6</sup> TEMMEN 2006, p. 391: ...vnd der mensche sal to hant na der suke baden vnd in vil goden cruden als ick hir na nomen wille: als wegebreide vnd nacht schaden vnd biboet vnd lilien blomen vnd stocke vnd popelin vnd saet eynes crudes, dat heitet bese, to sinen ander namen heitet Godes gensel, want so laten als de swicke, der vnse Here mede gesmicket wart als Meyster Ypocras vnd Archim spreken in erer kunst, dat de smicken, dar Got mede gegen selde worde das geliken desen besen, dar vmme hat en Got dese groten macht geuen bouen den ander cruden als dir wol leistet in arcedie boecken, dar de bese in gescreuen steit, dar vmme sulle alle meyster de besen leyff hebben, want se to vele dingen goet sint vnd mer dan de meyster weten, dat de meyster sprecken, dat de dogede der besen hvndert halff better ist dan golt vnd ander steyne et cetera.

The short prognostic treatise commonly ascribed to Hippocrates and known as *Capsula eburnea* proved to be extremely popular in the German language area during the Middle Ages. Translations and adaptations of the text are, in fact, witnessed in both High and Low German over a timespan ranging from the 11<sup>th</sup> to the 15<sup>th</sup> century.

The first propulsive centre for this tradition, between the 11<sup>th</sup> and the 12<sup>th</sup> century, was the Alemannic area. This first High German translation of the *Capsula eburnea*, which is preserved only fragmentarily in the *Bamberger Arzneibuch* and in the Basel fragment, was characterized by a fictional prologue narrating the retrieval of Hippocrates' works inside his grave.

This narrative introduction is omitted in the other branch of the High German tradition of the *Capsula eburnea*, the section included in Ortolf von Baierland's *Arzneibuch*. In this version of the text, great emphasis is placed on black pustules (*swarczen platter*), which allows the assumption that the prognostic signs mainly referred to the carbuncle infection. Thanks to the great popularity enjoyed by Ortolf's medical compendium, Hippocrates' prognostic treatise spread throughout the High German language area. Within this large tradition, some manuscripts witness a peculiar evolution of the text, whose prognostic signs appear to refer to specific diseases, such as leprosy (Munich, Cgm. 398) or bubonic plague (Salzburg, M III 3).

In the 14<sup>th</sup> century the popularity of the pseudo-Hippocratic prognostics also reached the Northern part of Germany and in particular the North Low Saxon area, where it was translated into Low German. This North Low Saxon translation is preserved in two versions: a shorter one in Albrecht von Borgunnien's *Arzneibuch* and a more complete one in the *Düdesche Arstedie*. In Albrecht von Borgunnien's medical compendium we find no introduction or attribution to Hippocrates, while in the *Düdesche Arstedie* the prognostic signs are preceded by an abbreviated form of the introductory anecdote about Hippocrates' wish to be buried together with his works. In this respect, the modality of the text's retrieval represents a significant innovation with regard to the tradition: its finding, in fact, is not ascribed to the greed of a sovereign hoping to discover a huge treasure, but rather to the knowledge greed of the physician's disciple, who decided to dig up one of the books and study it.

Another independent, Low German adaptation of the *Capsula eburnea* can be found in the *Abdinghofer Arzneibuch*, a medical-pharmacognostic handbook composed in the Benedictine Abbey of Adbinghof. Here the prognostic treatise is introduced by a passage about the basilisk from Pliny's *Naturalis Historia*. The mythological snake is compared to a pustule called *vr fana*, since those who see it must die. This version of the *Capsula eburnea* is characterized not only by a significant expansion of the original prognostic material, which is integrated with both passages from authorities such as the above-mentioned Pliny or the compiler's personal experience, but also by a new approach to the theme. Far from dealing exclusively with thanatognosis this Low German adaptation of Hippocrates' work also describes the course of non-lethal diseases and, in some cases, even prescribes a therapy which will lead to the patient's complete recovery.

## **Bibliography**

WARDALE, W. L. (ed.). Albrecht von Borgunnien's Treatise on Medicine, Sloane ms. 3002, British Museum. London, 1936

Das Arzneibuch Ortolfs von Baierland nach der ältesten Handschrift (14. Jh.) (Stadtarchiv Köln W 4° 24\*). Hrsg. von J. Follan. 1963. Stuttgart.

Das Gothaer mittelniederdeutsche Arzneibuch und seine Sippe. Hrsg. von S. Norrbom. 1921. Hamburg.

DI CLEMENTE, Valeria. Vicende della letteratura medico-prognostica pseudoippocratea nell'Europa medievale: la cosiddetta *Capsula eburnea (Analogium Hippocratis, Liber veritatis Hippocratis, Secreta Hippocratis, Secreta Democriti)* e la sua ricezione in area alto-tedesca (XI/XII-XV sec.). In: Itinerari. Quaderni di studi di etica e politica 2. Pp. 49-74. 2011.

FREDERIKSEN, Jan. Düdesche Arstedie. In: Die deutsche Literatur des Mittelalters. Verfasserlexikon II. Hrsg. von K. Ruh & al. Berlin - New York. Coll. 238-239.

Grant, Edward. 1974: A Sourcebook in Medieval Science, Cambridge (Massachusetts), 1980.

KEIL, Gundolf. Albrecht von Borgunnien. In: Die deutsche Literatur des Mittelalters. Verfasserlexikon I. Hrsg. von K. Ruh & al. Berlin - New York. Coll. 179-180. 1978.

KEIL, Gundolf. Capsula eburnea. In: Die deutsche Literatur des Mittelalters. Verfasserlexikon XI. Hrsg. von K. Ruh & al. Berlin - New York. Coll. 310-314.

Keil, Gundolf, Temmen, Mareike. 2004. Abdinghofer Arzneibuch. In: Die deutsche Literatur des Mittelalters. Verfasserlexikon XI. Hrsg. von K. Ruh & al. Berlin - New York. Coll. 1-2. 2004.

MEYER, Gustav; BURCKHARDT, Max. Die mittelalterlichen Handschriften der Universitätsbibliothek Basel. Beschreibendes Verzeichnis. Abteilung B: Theologische Pergamenthandschriften. 2. Bd.: Signaturen B VIII 11 – B XI 26. Basel. Pp. 882-913. 1966.

PLINIUS. Naturalis Historiae. Bd. 2. Hrsg von. K. Mayhoff. 1875. Leipzig.

PRIEBSCH, Robert. 1901: Deutsche Handschriften in England II, Erlangen.

PRIEBSCH, Robert. 1915: Deutsche Prosafragmente des XII. Jahrhunderts. I. Bruckstücke des sog. Züricher Arzneibuchs vermischt mit anderen medicinischen Traktaten. In: The Modern Language Review 10/2. Pp. 203-221.

RIHA. Ortrun. 1993: Funktionswandel durch den Kontext: Ortolf-Anteile als Pesttraktat. In: G. Keil & al. (hrsg. von). "ein teusch puech machen". Untersuchungen zur landessprachlichen Vermittlung medizinischen Wissens, Wiesbaden. Pp. 62-69.

SCHNEIDER, Karin. 1973: Die deutschen Handschriften der Bayerischen Staatsbibliothek München: Cgm. 351-600, Wiesbaden. Pp. 149-156.

SUDHOFF, Karl. 1914/1915: Die kurze "Vita" und das Verzeichnis der Arbeiten Gerhards von Cremona, von seinen Schülern und Studiengenossen kurz nach dem Tode

des Meisters (1187) zu Toledo verfasst. In: Archiv für die Geschichte der Medizin 8. Pp. 73-82.

SUDHOFF, Karl. 1915/1916: Die pseudohippokratische Krankheitsprognostik nach dem Auftreten von Hautausschlägen, "Secreta Hippocratis" oder "Capsula eburnea" benannt. In: Archiv für die Geschichte der Medizin 9. Pp. 79-116.

TEMMEN, Mareike. 2006: Das 'Abdinghofer Arzneibuch'. Edition und Untersuchung einer Handschrift mittelniederdeutscher Fachprosa. Köln – Weimar – Wien.

WEISSER, Christoph. 1982: Studien zum mittelalterlichen Krankheitslunar. Ein Beitrag zur Geschichte laienastrologischer Fachprosa, Hannover.

WILHELM, Friedrich. 1914: Medizinisches aus dem Basler cod. B XI 8. In: Münchner Museum für Philologie des Mittelalters und der Renaissance 2. Pp. 365-366.