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1. Introduction

1.1 Preface

My first encounter with the topic of medicinal cannibalism was while writing a seminar about the first contact between Europeans and native Americans in Brazil. A main character in that seminar was Jean de Léry (1536–1613), a protestant traveler that accompanied a French attempt to establish a French foothold in what would be Rio de Janeiro. Upon arriving at the French colony, which he thought to be a Huguenot safe haven, he was quickly disillusioned by the harsh leadership of Nicolas Durand de Villegagnon (1510 – 1571) and the conditions in the colony, and ran off with some companions to join the native Tupinamba tribe. This tribe, friends and allies to the French, practiced cannibalism. Léry, who witnessed this practice first hand, took to a nonchalant view of it, in what could only be described as cultural relativism. In one passage, he equates the brutal ritual of cannibalism to French money lenders.¹ One scholar, in a footnote I cannot recall, trying to explain this attitude, raised the fact that Europeans practiced *medicinal cannibalism* extensively at that time. I was intrigued.

My curiosity led me to a rich corpus of medical writings from Europe from the 16th to the 18th century which implement various parts and excrements of the human body as medicine. I was hooked. As a MA student of European history it was the first time I have heard of this term - *medicinal cannibalism*. Initially doubts came to my mind. How common was medicinal cannibalism? Was it practiced in reality or just advocated in professional literature? If it was only a literary construct, what enabled it to be so openly advocated by respectable physicians, apothecaries and surgeons? If it was practiced, what was the economic mechanism that allowed it? Where did the bodies come from? Where were they processed? What was the legal

¹ Léry, History of a Voyage to the Land of Brazil. p. 132: "...if you consider in all candor what our big usurers do, sucking blood and marrow, and eating everyone alive - widows, orphans, and other poor people... you will say that they are even more cruel than the savages I speak of."

status of this practice? I quickly realized that this is an understudied topic, with very few contemporary scholars studying this subject specifically. The authority, the one who “wrote the book” on medicinal cannibalism (although he prefers the term *corpse medicine*) is Richard Sugg. His book *Mummies, Cannibals and Vampires*² is a broad examination of corpse medicine and related behaviors in Europe and beyond. In it, he describes a wide array of medicinal uses of the human body. As the title suggests, one of his focal points is mummies.

My initial thought when beginning the process of writing this thesis, was to follow his lead and bring a wide survey of the different uses for the human body in medicine. But on the advice of my thesis supervisor, Prof. Juliane Schiel, I decided instead to do a deep dive into this specific materia medica. Among the human products used in medicine, mumia is unique in several aspects. Unlike blood, human fat or human skull, this product is somewhat vague in its meaning. My initial assumption, that mumia is what we call mummy today (i.e. embalmed corpses from ancient Egypt) was wrong. The historical semantics of mumia will be explored later on, but the question of - what mumia really is, was debated in early modern medicine, though most scholars believed it to be of human origin. Unlike blood, bones or hair, the production of mumia, according to most sides of the debate, required intricate preparation. The mysterious origins, the lively debate, the sophisticated processing, and the questionable supply chain that it necessitated, makes mumia a topic worthy of its own thesis.

A word on terminology. The word mummy is the english version of mumia. In this paper I will use the word mummy for embalmed bodies, as we use it today. I will use the word mumia to discuss the materia medica, a substance. Mumia, as a substance, is an uncountable noun, traded by weight. Another clarification is due for medicinal cannibalism. I do not know who coined the term. The earliest scientific use of the term in modern scholarship that I could find is in Karen Gordon-Grube’s 1988 article *Anthropophagy in Post-Renaissance Europe: The*

² Sugg, *Mummies, Cannibals, and Vampires*.

Tradition of Medicinal Cannibalism.³ But this term is somewhat misleading, it suggests consumption of human parts. Many uses of *mumia* for example were exterior, e.g. as a plaster for wounds. As mentioned, Sugg prefers the term corpse medicine, but this also does not reflect the wide use of human derived substances applied in early modern medicine, like blood, hair and urine. A better but somewhat awkward term would be material of human origin. I will leave this debate aside for the moment and use them more or less interchangeably.

A note on translations. This paper makes use of sources from a variety of languages, not in all of them I am fluent. Hebrew and English posed no difficulty, and my knowledge of German is sufficient to use it with confidence. I have a basic understanding of Latin. I used translating apps to make sure I am not mistaking my interpretations. ChatGPT's translation of Latin is usually highly accurate. To avoid so-called hallucinations, I compared it with Google Translate. Key words, words that were essential for the correct reading and the arguments I was trying to make, I double checked with Latin dictionaries. For text in French, I used DeepL which is a more reliable translator. While I have no concrete knowledge of French, it is not a completely foreign language when one has knowledge of English and Latin. They share an alphabet and a lot of vocabulary and some other basic features. I wouldn't have acted the same way with Georgian for example. The case with Judeo-Arabic is a bit different. I do have basic knowledge in Arabic and Arabic shares a lot of grammatical features with Hebrew. All but one sentence in Judeo-Arabic were interpretations by the experts working on the Cairo Geniza. For the remaining sentence I gave a detailed explanation on my suggested translation. With that said, this paper is built as a mosaic of evidence rather than on levels of argumentations that are built one on top of the other (see below), meaning that even if a sentence is inaccurate, the main narrative still stands. Regarding the use of translation apps and AI, to ignore the possibilities they allow us will be to restrict ourselves and eventually harm our research. ChatGPT (and the likes) is a valuable research assistance, especially for students with limited

³ *Gordon-Grube*, *Anthropophagy in Post-Renaissance Europe*, pp. 405-409.

time and resources. It should be used as a guide to sources and not as a source of course, and this is the way I used it. For the sake of total transparency, I did use it for minor linguistic editing with a sentence here and there, probably less than 1% of the text.

1.2 Structure

This thesis will center around the substance called *mumia* and the question of how what might be called a translation mistake, or a misunderstanding, developed into the cannibalistic behavior that we will see. In order to do that, I will trace the origin of the mistake and the steps it made to enter the European theater. This in itself will not suffice to establish the reality and spread of cannibalistic behavior. This work aims at its fundament to show that *mumia* was used extensively and that it was, or at least thought to be, of human origins. While this would be enough to create sensationalism, my intention is to understand this behavior from the eyes of contemporaries. As this behavior, by most, was not considered sensational, it needs to be explained as a not-out of the ordinary behavior. What made it acceptable, into which existing associations and beliefs in early modern Europe it played, and how contemporaries explained it. Beyond the social and theoretical role *mumia* played, I will attempt to track the economy of *mumia*. As will be discussed, *mumia* in early modern Europe was never one thing. It was a traded good and a local produce. As a traded good, I will try to identify the origins and trade routes. As a European local product, I will ask who were the victims of this tradition, who were the suppliers, and in both cases who were the users. Throughout this paper I will examine the interplay between theory and practice and between folk and learned medicine. The lines between these worlds were often blurry.

After a brief literature review I will discuss the sources I used in writing this paper, the methodological challenges they present, and the options future research might enjoy. I will then

deal with the origins of mumia as materia medica and the confusion it arose. How it traveled from physicians in the Muslim world to the European world. A key figure in this paper will be Paracelsus, the 16th century Swiss physician and theorist who was the first to establish an elaborated concept of what mumia is, how it should be harvested and how it should be used. But before Paracelsus, at the beginning of the 16th century, mumia, as materia medica from human origin, was already used in Europe. This will be the topic of the third chapter.

Paracelsus stands out as an unusually original thinker. His concept of mumia seems to pop up like Athena from the head of Zeus, fully formed and heavily armored. In the chapter dedicated to Paracelsus I will track what possible influences on his theory and thought in general, and of mumia in particular, and in what intellectual environment they germinated. The next chapter will examine the acceptance of Paracelsian theories in the German speaking world. While there is vast research about this topic, the concept of mumia is almost absent from this discussion. I will ask how influential was his theory of mumia and was it a point of conflict between his supporters and opponents. I will then move to the French speaking world where both Paracelsian medicine and mumia were hotly debated. Mumia in France was, according to some sources, more common than anywhere else⁴ and many French writers, above others, associated Jews with the trade and production of mumia. I will explore this connection, its validity, and to what extent it was driven by antisemitic views. The paper will then continue to England and the English speaking world, where Paracelsus was a minor figure on the one hand, but on the other hand many of his ideas took hold with relative ease. In the English case, I found evidence of an actual supply and distribution chain of mumia (in this case, mummies). I will explore the markets of mumia, and mumia as a consumer product. Before closing with conclusion I will explore the fall of mumia out of use.

⁴ Although admittedly a dubious source (see below): *Pettigrew*, History Of Egyptian Mummies, p. 9.

1.3 Main Hypotheses

In this paper I will present four main working hypotheses:

1.3.1 In the Early Modern Period Mumia Was a Sought-After Commodity.

Mumia was a sought-after commodity, not only in Christian Europe, but also in the Arab and Muslim world. There was a demand for a product named mumia that was produced from human beings. This demand created diverse markets. In Egypt, where mummies were a source of income not only as mumia but also before the rise of popularity of mumia, a trade in mummies and in “fake mummies” developed. In Europe this demand fueled an industry of local mumia production both as a criminal activity and as a respectable pharmaceutical production.

1.3.2 In European Tradition the Work by Paracelsus Represented a Milestone in the Use and Trade of Mumia.

When Paracelsus developed his mumia theory, mumia was already a common product in European markets. His theory of mumia was a milestone in the use and production of mumia. It gave a scientific backing to the practice and brought it out of the shadows.

1.3.3 There Existed a Transregional Market for the Trade in Mumia, Sometimes Incorrectly Linked to Jewish Merchants and/or Physicians.

There was a transregional market for the trade of mumia, sometimes associated with Jewish merchants and physicians. While evidence shows that Jews did partake in this trade, this

association had antisemitic undertones that got intensified by mumia opposers and with the rise of antisemitism.

1.3.4 Mumia Transgressed the Borders of Folk Medicine and Learned Medicine.

Mumia trickled between the world of folk medicine and learned medicine back and forth. While originating in scholarly medicine, it was practiced in an independent way in folk medicine and traversed the boundaries of medicine and magic, superstition and science. This fluidity can teach us that knowledge was not exclusively transmitted through the written word.

1.4 Literature Review

The history of medicinal cannibalism, or corpse medicine, is a niche topic. It is very much understudied and remains surprisingly obscure. Not a lot of historical research touches on the subject. This study is therefore primary sources driven. The scarcity of secondary literature has its advantages though. Especially when discussing mumia and its history as *materia medica*, there is a clear pioneer and a founding text. Karl H. Dannenfeldt's *Egyptian Mumia: The Sixteenth Century Experience and Debate*⁵ is an overview of the term mumia/mummy in European history. The scope of this relatively short article is truly impressive, it led me to many of the primary sources used in this paper. It is not a coincidence that Dannenfeldt was the first to articulate the history of mumia in modern research. As will come apparent through this paper, two of the main sources for the history of mumia are medicine and scientific books on the one hand, and travelogs on the other. Dannenfeldt published works on renaissance science, botany and medicine, and a book about the travels of Leonhard Rauwolf, a 16th century physician who

⁵ Dannenfeldt, *Egyptian Mumia*, pp. 163–180.

traveled extensively through the Levant and the Middle East, the birthplace of mumia (Karl H. *Dannenfeldt*, Leonhard Rauwolf: Sixteenth-Century Physician, Botanist, and Traveler (Cambridge : Harvard University Press, 1968)). He published articles about specific materials in early modern medicine like terra silesiaca, (Karl H. *Dannenfeldt*, The Introduction of a New Sixteenth-Century Drug: Terra Silesiaca. In: Medical History 28, no. 2 (1984), pp. 174–88), and ambergris (Karl H. *Dannenfeldt*, Ambergris: The Search for Its Origin. In: Isis 73, no. 3 (1982), pp. 382–97).⁶ In the Venn diagram of his study interests, mumia fits naturally.

Dannenfeldt's 1985 article laid the foundation for the research of mumia and medicinal cannibalism, but it didn't seem to echo through the academic world. This topic was mentioned briefly by Gordon Grube in 1988.⁷ It was picked up by Louise Christine Noble in her 2002 dissertation *Corpus Salubre: Medicinal Cannibalism in Early Modern English Culture*.⁸ As the title suggests, she mainly focused on literary expressions of medicinal cannibalism. A deep dive into mumia and medicinal cannibalism came only in 2011 with Richard Sugg's *Mummies Cannibals and Vampires* (Richard P. Sugg, Mummies, Cannibals, and Vampires: The History of Corpse Medicine from the Renaissance to the Victorians. London: Routledge, 2011).⁹ This research field has a founding father, and an ur-text, and a scholar who literally wrote the book on the subject. Sugg's book on the use of human body parts is a wide spectrum investigation of corpse medicine (Sugg prefers this term over medicinal cannibalism). Interestingly Sugg is not a "typical" historian. He has a background in literary studies. His books are not intended for a strictly academic audience, but to the wide public. Like mumia itself transgressed the boundaries of learned and folk knowledge, so does scholarship around mumia transgresses the

⁶ As I did not use these works by Dannenfeldt in the body of my work, I brought them in the body of the text and not as references with bibliographical entries.

⁷ *Gordon-Grube*, Anthropophagy in Post-Renaissance Europe.

⁸ *Noble*, Corpus Salubre.

⁹ In this paper I used the second edition: Richard Sugg, Mummies, Cannibals, and Vampires : The History of Corpse Medicine from the Renaissance to the Victorians. 2015 edition. (London, New York: Routledge, 2016).

boundaries between academic and popular literature.¹⁰ Two of his main motivations for writing on the subject are the gap between how widespread this phenomenon was, and how little it is known, even in academic circles, and the sensationalism of this topic. Both are valid and important in my opinion. His book gained popularity and was published in a second edition, and a third and revised digital edition in 2020. Sugg laments this missed opportunity by academia to pick up on the subject.¹¹ I cannot say that his study made an impact on academic history. There is a reason for that, and it is not malicious or conspiratory. In his analysis of corpse medicine Sugg tries to understand the cultural mindset that allowed this behavior. His hypotheses will be discussed in this paper. But I would still classify his study as a “first generation” study. Meaning, like Dannenfeldt’s article, it is a broad exposé that brings to light the scope of the phenomena, in many short narrative threads. Yet academic history, to continue the metaphor, needs something to pull on. This is what I intend to do in this paper, to connect the threads of anecdotal evidence (see below), into a continuous string. To create a “second generation” study.

A good example of this dynamic between first generation and second generation studies is Valentin Groebner’s *Fleisch und Blut, Haut und Haar*,¹² and *Menschenfleisch: Der menschliche Körper als Arzneimittel*,¹³ a PhD dissertation written under his supervision by Janine Kopp. His article is a survey of different uses of human body parts in medicine and art throughout the ages. He focused on the phenomenon of the commodification of human body parts. It should be noted that his article precedes in time the book by Sugg. This is a fundamental work that allowed the elaboration of Kopp in her dissertation. Her work is a deep dive into specific aspects of the topic. It contains discussions on the writings of Johan Schröder and Johann Joachim Becher, a study of Luzern’s city authorities dealing with healers in the end of the 16th century, a survey of the use of different human body parts, and comparison to the use of animal parts.

¹⁰ I thank Prof. Schiel for this insight.

¹¹ Sugg, *Mummies, Cannibals, and Vampires*, pp. 380-381.

¹² Groebner, *Fleisch und Blut, Haut und Haar*, pp. 58-73.

¹³ Kopp, *Menschenfleisch: Der menschliche Körper als Arzneimittel*.

There is room in historical research for many projects like this, looking at medicinal cannibalism through a local perspective, using local archives. The materials are there.

Medicine production, medicinal cannibalism, and mumia, cross paths with many other fields of study. The two things that mumia is, are: medicine and a corpse. A useful monograph is *The Corpse in the Middle Ages : Embalming, Cremating, and the Cultural Construction of the Dead Body*, by Romedio Schmitz-Esser, Carolin Radtke, and Albrecht Classen.¹⁴ They survey the different uses and attitudes towards the dead body and the practice of how bodies were handled. They dedicate a chapter to *The Corpse as Medicine and Miracle Cure*,¹⁵ where they naturally discuss topics related to this research. To complete my Venn diagram of mumia as medicine and as a corpse, I consulted the second volume of *Geschichte der Pharmazie*, by Christoph Friedrich and Wolf-Dieter Müller-Jahncke.¹⁶ It is the most extensive inquiry into the history of the pharmacy I could find. They touch on subjects like mumia and medicinal cannibalism, they discuss Paracelsus and Paracelsianism in detail, and offer a detailed account for many of the relatively obscure historical figures my research deals with. During the writing of this paper their book served me as a compendium and as a sort of an encyclopedia.

1.5 The Sources

This paper is centered around pharmacy and pharmaceutical production. A few words need to be said in favor of the study of historical pharmacy. In my time studying history in several universities, I did not encounter this topic, even in a course discussing the history of medicine. And unjustly so. The pharmacy is a meeting place of several diverse worlds. It is a hub of trade of exotic materials from around the world. It is the place where these materials are studied and

¹⁴ Schmitz-Esser, Radtke, Classen, *The Corpse in the Middle Ages*.

¹⁵ Schmitz-Esser, Radtke, Classen, *The Corpse in the Middle Ages*. pp. 613-633.

¹⁶ Friedrich, Müller-Jahncke, Schmitz. *Geschichte der Pharmazie*.

interpreted. It is a hub of knowledge creation and dissemination surrounding those materials. In early modern Europe pharmacists were a leading force in (al)chemistry, the research of materials like metals, how they behave and react. They perfected techniques like distillation. It is a place where knowledge about the human body was created and discussed. The historical pharmacy is a hub of applied sciences.

Mumia is a useful key word in searches. In early modern medicine books it is quite common. Beside following leads from Dannenfeldt and other modern scholars, I expanded my search to the Oxford Text Archive. The OTA is a digital-text repository, and it is home to the *Early English Books Online* project by ProQuest that aims “to encode one copy (usually the first edition) of every monographic English-language title published between 1473 and 1700 available in EEBO.”¹⁷ Many of the pharmaceutical sources I used, I have found there. In history we are often compelled to search under the street light, to use a metaphor. There is no other comparable project that offers a corpus of such high quality digitized early modern writings. Therefore this paper has an English leaning bias. With that said, the OTA consists of many works of early modern translation into English from other languages such as German, French and Latin, oftentimes with additional commentary by the translator.¹⁸ But while medicine books deal with theory, to learn about practice and realities of mumia use, I searched travelogues, especially in the publications of the Hakluyt Society, established in 1846, this society publishes “scholarly editions of primary records of voyages and travels.”¹⁹ Some remarks made in these travelogues are especially revealing for understanding popular or common perceptions about mumia. Many of their publications are available online through the *Internet Archive* which is a free to use source for many books that are difficult to acquire otherwise. I would like at this point to acknowledge the work done by all those who scanned and uploaded these sources, those

¹⁷ From the OTA website: <https://ota.bodleian.ox.ac.uk/repository/xmlui/handle/20.500.12024/5>.

¹⁸ Such is the case of Croll's *Basilica Chymica*. See: Oswald Croll, *a lover of chymistry* (trans.), *Basilica chymica*, (1670).

¹⁹ From the Hakluyt society webpage: <https://www.hakluyt.com>.

who ran them through OCR apps, and those who maintain these repositories. This work wouldn't have been possible without their labor.

But to really go deep into the realities of mumia, archival material is needed. And here lies a problem, not many archives are online and searchable. A complete view and understanding of mumia lies there. Many archives are currently undergoing scanning operations, and intend to make their sources open to public access. Other archives do not. Some from lack of funds, and some because they do not wish their archives will be open to the public. The spirit of knowledge sharing is not universal. One archive that is open to scholars and the public is that of the Cairo Geniza,²⁰ which is an important and interesting source for sections of this work. The digitization and publication of more archival materials will enable future researchers to look for evidence of mumia use, that left a relatively minor paper trail, across several archives and across time and space, without physically being present in all those archives, an expensive and time consuming activity.

1.6 Methodological Challenges

This research presents a methodological challenge. Aside from several treaties discussing the topic of mumia directly, most evidence of mumia is scattered across time and space, uncontextualized and often unclarified. I will attempt to bring this scattered evidence together with more organized scholarly treaties about mumia and combine these two elements to create a fuller picture. I chose to focus my research around centers of discussion. The first center will be the translating project of Arabic texts into Latin. These texts introduced the mumia to Europe and influenced the European medical world for centuries. They had different ideas about mumia. Another center will be Paracelsus and his writings. I will try to understand his concept of mumia

²⁰ The Geniza documents are physically scattered in multiple archives around the world but accessible online.

in the background of his intellectual world, who influenced him, and what place mumia had in his overall world view, medical or otherwise. In the following centers of discussions I will focus on different regions.

The German speaking world, not surprisingly, was the first to start a debate about the paracelsian theory in general, and mumia in particular. Many of Paracelsus's early supporters and opposers had a second hand acquaintance of him. They knew each other personally for most, and were aware of each other's works. The more interesting question in this early stage of Paracelsianism is which texts by Paracelsus they knew. In these early days most of his writings were unpublished, many circled as manuscripts. I tried to understand what knowledge every writer had in each period, and how it is related to Paracelsian mumia theory.

In France, Paracelsian theory encountered an early and fierce opposition. I traced two separate debates. **A theoretical one:** about Paracelsian theory and what it meant for the French scholars in view of the texts available to them, and on what ground did they oppose or support Paracelsus. The debate in France centered around chemical medicine more than any other aspects of Paracelsian theory. I will ask whether it was related to mumia in any way. **The second debate** focused on mumia as materia medica, and as a consumer product. The debate centered around the origin of mumia and its efficacy as medicine, and on the true origin of the mumia and how it is traded into Europe.

The English world was more open to chemical medicine. It was also open to the use of mumia. Are these two things related? In England I will trace evidence of mumia in scholarly medical literature, trade routes of mummies from Egypt into London, and what English physicians thought of Paracelsian theory and mumia theory. These concrete discussions, although built at times from mosaic elements and not from sources specifically referencing each other, will enable a more contextualized and complete view of mumia, its uses, and its theory.

2. The Origin of Mumia

2.1 What Mumia Really Is

The common accepted understanding in research concerning the origins of mumia is that it is a bituminous substance, or some kind of natural asphalt found in specific mountainous regions in Persia.²¹ Hence the name *mumia*, from the persian word *mum* for beeswax.²² I always felt uncomfortable with this origin story, which is repeated time and time again in literature.²³ This origin story is usually accompanied by the fact that bituminous materials were used in European medicine since antiquity. Dannenfeldt brings the example of *bitumen ludaicum*, bitumen from the dead sea, that was considered by Dioscorides as the best for medicine.²⁴ But if European medicine had the same tradition of using bitumen, why would they embrace the foreign name *mumia* for a substance they are already using?

I was watching the Israeli version of the British reality TV show *Come Dine With Me* when one of the contestants, who owns a chain of convenience stores, pulled out a small container with a substance named *Shilajit* that he personally imports to Israel. This substance reportedly has miraculous healing powers. The consistency and appearance, the claimed medicinal properties and the place of origin (the mountain ranges of the Himalayas) sounded all too familiar. According to researchers Shilajit is:

“...a pale-brown to blackish-brown exudation, of variable consistency, exuding from layers of rocks in many mountain ranges of the world, especially the Himalayas and Hindukush ranges of the Indian subcontinent. It has been found to consist of a complex

²¹ Dannenfeldt, *Egyptian Mumia*, pp.163f.

²² See Avicenna on mum: Avicenna, *Plempio* (ed.), Canon Medicinæ, p. 195.

²³ See for example: Dannenfeldt, *Egyptian Mumia*, pp.163f. Schmitz-Esser, Radtke, and Classen. *The Corpse in the Middle Ages*, p. 620. Kopp, *Menschenfleisch*, pp. 54-55.

²⁴ Dannenfeldt, *Egyptian Mumia*, p. 164.

mixture of organic humic substances and plant and microbial metabolites occurring in the rock rhizospheres of its natural habitat.”²⁵

Not quite bitumen, not purely mineral, with organic components. The origin of this substance, interestingly enough, is still debated in contemporary science. According to the same research the composition of Shilajit differs according to its origin, but the major organic component is humus, organic decomposing plants and animals. This substance is known by several names and variations like *Salajit*, *Shilajatu* or *Mummiyo*.²⁶

The names mummiyo, compared to Shilajit and their variations, point to two different medical traditions. I see no reason to doubt the etymology of mumia as a derivative of the Persian mum. In the *Sushruta samhita*, an Ayurvedic text written during the last centuries BCE, Shilajit, or Śilājatu is described as follows:

“A kind of gelatinous substance is secreted from the sides of the mountains when they have become heated by the rays of the sun in the months of Jyaishta and Āshādha.”²⁷

This substance is known as Śilājatu and it cures all distempers of the body.”²⁸

The Śilājatu has six different kinds associated with different metal ores like tin, lead and iron, with efficiency rising according to the quality of the metal. All kinds are laxative and heat making, the best Śilājatu “...looks black and glossy, is heavy and devoid of sandy particles, as well as what smells like urine of a cow...”²⁹. It is recommended for the treatment of diabetes, but is described as a wonder cure for epilepsy, insanity, elephantiasis, poison, hemorrhoids, jaundice and more. Moreover “Each Tula measure of this medicine, taken successively, adds a century to the duration of human life.”³⁰

²⁵ Agarwal, Khanna, Karmarkar, Anwer, Khar, Shilajit: A Review. p. 401.

²⁶ Agarwal et al., Shilajit, p. 401.

²⁷ May to July (A.S.).

²⁸ Bhishagratna (trans.), An English Translation of the Sushruta Samhita, p. 386.

²⁹ Bhishagratna, Sushruta Samhita, pp. 386-7.

³⁰ Bhishagratna, Sushruta Samhita. p. 387.

The *Charaka-samhita*, another Ayurvedic text, written around the 1st century CE, speaks of four kinds of Silajatu with slightly different properties according to the metal ore they originated from (gold, silver, copper or iron, which according to the *Charaka-samhita* is the best for medicine). The *Charaka samhita* is in agreement with the *Sushruta samhita* that all Silajatu smell like cow urine and that “there is no disease in the world which is not overcome by Silajatu.”³¹ But *mumia*, the linguistic evidence shows, was not introduced to Persian medicine through India. It was a local version of *Shilajit*.

The confusion between bitumen and *mumia* accompanied the history of *mumia* from its beginning, and as seen from modern historical research, until today. The English MD John Fryer speaks to this common understanding of *mumia*. He surveyed East India and Persia between 1672 and 1681. Traveling south from Shiraz he encounters the precious material named mummy: “On the right hand of the King's Highway, between Siras and Gerom, at Derab, on the side of a Mountain, issues the pissasphaltum of Dioscorides, or Natural Mummy...”³² According to Fryer, this mummy is the property of the king, and stealing it was punishable by death. How should we know then that it is not bitumen? Fryer continues to say it is sometimes found randomly by “shepherds following their flocks on these mountains.”³³ This fits the description of *Shilajit*-style material more than bitumen. This area of the world (that is - Iraq and Iran of today) produces both bitumen and *mumia*. It is possible that locals confused them as well, as attested by Claudius James Rich in 1811. When traveling in the area of Heet (likely Hit, about 100 Km west of Baghdad), he describes where bitumen is coming from:

“The principal bitumen-pit has two sources, and is divided by a wall in the centre, on one side of which the bitumen bubbles up, and on the other, oil of naphtha ; for these two productions are always found in the same situation. That kind of petroleum, called by the

³¹ *Sharma*, *Charaka Samhita Text With English Translation*, pp. 25-26.

³² *Fryer*, *A New Account of East-India and Persia*, p. 318.

³³ *Fryer*, *A New Account of East-India and Persia*, p. 318.

Orientalis Mumia, is also found here, but of a quality greatly inferior to that brought from Persia.”³⁴

Later during the 19th century, while establishing a telegraph line from India to England, the British Colonel Sir Frederic John Goldsmid (1818 - 1908) reported about the “superstitious notions” of the Khan of Karman (Kerman, Iran): “Another (superstition, A.S.) was in the infallibility of 'mūmia,' a kind of resin exuding from rock, to serve as a cure and prophylactic in physical emergencies.”³⁵ In another place, a local doctor tells him that: “...the mumia I possessed was greatly prized, and only procurable from a hill or rock at or near Babahan, between Shuster and Shiraz, in the south west of Persia.”³⁶ This fits the description of Shilajit.

2.2 How Mumia Arrived in Europe

Mumia was introduced to European medicine through this Persian tradition. According to Dannenfeldt the first to use the term mumia (at least in writing that is) to describe bituminous material is Rhazes (ca. 854 - 925/935).³⁷ A Persian Muslim alchemist, physician and philosopher.³⁸ His major work on medicine, *Kitāb al-Manṣūrī*, was translated to Latin by Gerard of Cremona (ca. 1114 - 1187) and was known as *Liber ad Almansorem*. In tractatus tertius, cap. 40 he writes:

“Mumia emoptoycis bona exñs;rupturā vel fracturaz velociter reftaurat. Dolorem p̄terea gutturis ac diffolutionis: 7 Oculfionis: 7 plaga□ sedat. Illi aūt □ dixerunt qp □fecte

³⁴ Rich, Narrative of a journey to the site of Babylon in 1811, p. 101.

³⁵ Goldsmid, Telegraph and Travel, p. 589.

³⁶ Goldsmid, Telegraph and Travel, p. 597.

³⁷ Abū Bakr Muḥammad ibn Zakariyyā al-Rāzī. See: Dannenfeldt, Egyptian Mumia, p. 164.

³⁸ More on Rhazes, or Al Razi, see: Encyclopaedia Britannica, s.v. "Al-Razi," accessed August 7, 2025, Encyclopaedia Britannica. <https://www.britannica.com/biography/al-Razi>

emendat: mētiti sunt. Dolori ifu□ ex friditate naribus cum oleo lambacino ifufflata auxiliat.”³⁹

No explicit connection to bitumen or tar like substance in this quote. What there is here is a reference to the belief that *mumia* is a wonder cure, which fits the aforementioned later description of Colonel Goldsmid. In this early modern print edition from 1497, under a section *Synonima Rasis*, comes the following description of *mumia*: “*Mumia res est que inuenitur in terris vbi mortuorum corpora aloē condiuntur, a quibus hūor mortui cū aloē mixtiz resoluī et similaī pici marīe.*”⁴⁰ This section is not by Rhazes himself and was probably added by his translator Gerard of Cremona or even a later interpreter. Whether it be Gerard of Carmona or a later writer, this description of *mumia* as being found in the tombs of Egyptian dead has already spread into Latin Europe. Dannenfeldt gives Constantinus Africanus the precedent for creating this connection. Here, I am not sure what Dannenfeldt's intentions are, but this definition appears in the writings of Isaac Israeli, (832/855 - 932/955) a Jewish physician (and philosopher of course) born in Egypt, and a contemporary of Rhazes.⁴¹ His writings were translated by Constantinus Africanus. In his *Liber Secundus Practice*, Israeli writes: “*Mumia quidam dicunt esse aspaltum: quaedam tamen species est quae invenitur in sepulcris mortuorum.*”⁴² I used a later print edition of Israeli's writings. But this does not seem to be a commentary and it seems to be of genuine authorship of Israeli. This is supported by the 17th century physician Johann

³⁹ Rhazes, *Gerard of Cremona* (trans.), *Liber ad Almansorem*: “*Mumia, being beneficial for those with haemoptysis, quickly restores ruptures or fractures. Moreover, it soothes the pain of the throat and of dissolution, as well as of concussion and wounds. However, those who said that it perfectly cures are lying. In addition, when insufflated into the nostrils with jasmine oil, it helps with pain arising from coldness.*” (trans. chatGPT). Unpaginated, (Cap. XL, pdf scan: p. 41).

⁴⁰ Rhazes, *Liber ad Almansorem*: “*Mumia is a substance that is found in regions where the corpses of the dead are embalmed with aloes, from which the fluid of the corpse, mixed with the aloes, is released and becomes similar to marine pitch.*” (trans. ChatGPT). p. i06 (pdf scan: p. 220).

⁴¹ More on Isaac ben Solomon Israeli, see: Encyclopaedia Britannica. “Isaac ben Solomon Israeli.” Accessed August 7, 2025. <https://www.britannica.com/biography/Isaac-ben-Solomon-Israeli>.

⁴² Israeli, *Constantinus Africanus* (trans.), *Trot* (ed.), *Omnia opera Ysaac*: “*Some say that mumia is asphalt, but it is actually a certain kind of substance that is found in the tombs of the dead.*” (trans. ChatGPT). folio LXXXIIIJ: (pdf scan: p. 621).

Daniel Horst⁴³ who also writes that the first to use mumia was Israeli: “Mumia Rhasi & Avicennae vox Arabica est, Pissaphaltum indicans. Isaac Persicam esse dicit, quæe liquamen quoddam in in sepulturis inventum notat, in quibus hominum cadauera aromatis condita multos annos seruata fuere.”⁴⁴ I would be careful to state beyond any doubt that it was Israeli that made this connection between mumia and Egyptian dead, but it looks like a plausible option. In later parts of this essay we will encounter again the idea that Jews brought the medicine known as mumia to the Christian and Muslim worlds. The identification of mumia and the Jews, and particularly Jewish merchants, in later periods, was not without an obvious layer of antisemitism, and was articulated by opponents of the use of mumia. Speaking of the middle ages, there is no evidence of criticism of mumia, and it seems that the medicine did not take hold of European pharmacies yet. The connection between mumia and the dead was also not accepted by all.

Arguably the most influential muslim physician and author in the middle ages was Avicenna (980 - 1037). He also, like Rhazes, was a Muslim physician from Persia.⁴⁵ In his *Canon Medicinæ* (lib. 2 tract. 2) where he lists materia medica, he includes an entry to “Moumija: Quid sit. Vires naturamque habet picis & bituminis sibi invicem commistorum; sed enim praececellens ipse est, atque utilitas ejus latè se diffundit.”⁴⁶ The translator (though not explicitly stated, this edition probably uses the translation of Gerard of Cremona) chose the term *Pissasphaltus* that points to a mineral origin of mumia and to Greek medical tradition. If it is Gerard of Cremona that is responsible for both translations (in Rhazes *Synonyma* mumia is from the dead, and in Avicenna is mineral) we are left with a puzzle, what is the origin of mumia according to him? For the interpreter of the canon, Vopisco Fotvato Plempio, who wrote his

⁴³ On Horst see: *Friedrich, Müller-Jahncke, and Schmitz, Geschichte der Pharmazie*, pp. 339-340.

⁴⁴ *Horstius, Pharmacopoeia Galeno-chemica*: “Mumia, according to Rhazes and Avicenna, is an Arabic term indicating pissasphaltum. Isaac says it is a Persian word, which refers to a certain liquid found in tombs where human corpses, preserved for many years with aromatics, have been stored.” (trans. ChatGPT). p. 232.

⁴⁵ For more on Avicenna see: *Encyclopaedia Britannica*. “Avicenna.” Accessed August 7, 2025. <https://www.britannica.com/biography/Avicenna>.

⁴⁶ See: *Avicenna, Canon Medicinæ*: “**Mumia: What it is.** It has the powers and nature of pitch and bitumen mixed together; yet it surpasses them, and its usefulness extends widely.” (trans. ChatGPT). p. 197 (pdf scan: 476).

commentary in 1658, the origin of mumia were several, according to traditions that were developed during the early modern period:

“**Moumija**) Elkharsjius commentator scribit hoc medicamentum de triplici corporum genere dici. Primò de re, quae pici similis est, fluens de quibusdam montibus admixtâ aquâ: (isti montes sunt montes Ceraunij) dumque concrevit, picem refert, odorem expirans picis bitumini mixtae. Secundò de lapide levi nigroque, in quo liquor niger continetur, qui, dum frangitur lapis, vel bullit in oleo, exit universus. Multa hujus est copia tempore, quo multùm pluit. Tertiò de capitibus reliquoque hominum corpore, quae mutantur in naturam quasi picis bitumini mixtae. Ejus mutationis seu conversionis causa est corporum conditura. Haec mumia plurima colligitur in Aegypto ex cadaveribus vetustis: & vocatur mumia sepulchralis.”⁴⁷

The first speaks to mineral origin, presumably from the Ceraunian Mountains.⁴⁸ The third points to Egyptian tombs as the origin. The second is interesting and somewhat unclear, but it does resemble the concept of the shilajit. It is seasonal like the shilajit (*Multa hujus est copia tempore, quo multùm pluit*). In the Himalayas the months of *Jyaishtha* and *Āshādha* are associated with intense heat and summer monsoons. The fragmentary evidence makes it difficult to know if there is a line connecting these two descriptions. Is this mumia shilajit? I will leave it as a plausible option. To support the claim that mumia is shilajit and not bitumen or asphalt I would point to the fact that Avicenna is devoting a separate entry to it. Other similar materials also

⁴⁷ *Avicenna*, Canon Medicinae: “**Mumia** – Elkharsjius, the commentator, writes that this medicine is spoken of in relation to three types of bodily substances. **First**, it refers to a substance similar to pitch, flowing from certain mountains mixed with water (these mountains are the Ceraunian Mountains); and when it hardens, it resembles pitch, giving off the odor of pitch mixed with bitumen. **Second**, it refers to a light and black stone, within which a black liquid is contained that, when the stone is broken or boiled in oil, comes out entirely. There is much of this substance during times of heavy rain. **Third**, it refers to human heads and other body parts which have been transformed into a material resembling pitch mixed with bitumen. The cause of this transformation or conversion is the embalming (or preservation) of the bodies. This kind of mumia is collected in great quantity in Egypt from ancient corpses and is called **sepulchral mumia**.” (trans. ChatGPT, my emphasis). p. 197 (pdf scan 476).

⁴⁸ As Dannenfeldt shows, ancient Greek writers already spoke of bituminous substances in medicine. See above.

appear in his *materia medica*. On page 208 he has an entry for *Niftth* - Naphtha, and on page 122 there is an entry for *Zift* - Pix.⁴⁹

All the evidence taken together strengthens the case for shilajit being *mumia*. The uncertain origin, the fact that it is confused with bitumen and tar but it is apparently not either, the rumors about its miraculous healing powers hinted at by Rhazes, the later idea that it is seasonal and dependent on rains and heat, all support this identification. With that said, the word shilajit, while it refers to the same substance as *mumia* (so I argue), never made it to Europe and was never used in the European medical tradition. When speaking of material culture, in the case of *mumia* at least, the name and the literature traveled more easily than the substance it seems. *Mumia* was known as a black tar like material, and with that ambiguity it arrived at the European theater. Pre-modern notions of materials were descriptive, they did not have modern tools of molecular analysis. Concerning the transmission of the meaning of the word *mumia*, I have to be a bit speculative here. It was originally designated to a shilajit like material, but this material was rare and little known outside of Persia. The properties of this substance, like consistency and colour, reminded users of tar like or bituminous materials. These materials came to be known as *ersatz* materials for *mumia*. These materials were used, or at least thought to have been used, in Egyptian embalming. The notion that these materials preserved the dead from decay, was extrapolated to include the preservation of the living body. This might have been collaborated by the idea that *mumia* (the original *mumia* as described in Persian tradition) was a wonder-cure. This led to the harvesting of this material from the embalmed bodies, and to the notion that those bodies contain the miracle drug. Some thought *mumia* to be the bodies themselves, which is, as modern terminology shows, the semantic turn that stuck to our time. But entering the 16th century in Europe, *mumia* carried these uncertainties, as manifested in the commentary by Plempio, some thought it to be bitumen, some thought it to come from embalmed bodies, which Plempio coined *mumia sepulchralis*, and

⁴⁹ *Avicenna*, *Canon Medicinae*, p. 122-3, pp. 208-9.

some thought it to be the bodies themselves. It is interesting here that between the three medieval sources we encountered, it was Rhazes and Avicenna, both from Persia, that did not connect *mumia* to the tombs of Egyptian dead. It is probable that they knew what real *mumia* is. Israeli, who was himself from Egypt, did make this connection. It might have been a connection that Israeli did himself, but it could have been a translation of an existing Egyptian tradition (i.e. using embalmed bodies as medicine) to terms from the wider medical Islamic world. This question will remain open for now. The next chapter will explore this plurality of meanings in the years before Paracelsus.

3. Mumia before Paracelsus

3.1 Putting Paracelsus in Context

Before we deal with Paracelsus, a main character in this paper, this chapter aims to establish three things: Before Paracelsus, *mumia* was a substance (*materia medica*) in debate, *mumia* from human origin was sold as a medical commodity in Europe, and it featured in medicinal and theoretical works. We begin with the highly influential work⁵⁰ most commonly known as *Gart Der Gesundheit*, first printed in Mainz in 1485. This book of early print, was written and compiled by the physician Johann Wonnecke von Kaub (also known as Johannes de Cuba, ca. 1430 - 1503) and contained 378 wood cuts by the Mainz artist *Erhard Reuwich* (ca. 1450 - 1505).⁵¹ This work contains an entry about *mumia*. The writer has no doubts about the human origins of the medicine, it is created when the dead are *mit palsam uñ mirra besteckt*.⁵² Von Kaub explains

⁵⁰ It was reprinted almost yearly between 1485 (1st.) and 1500.

⁵¹ *Rudolph, Reuwich*, Im Garten der Gesundheit, pp. 13-14.

⁵² Here I chose a 1496 edition. Johannes von Cuba, *Gart der Gesundheit*, (Augsburg : Gedruckt ... durch Hannsen Schönsperger, 1496), pp. 150r-151r, (cap. CCLXIX, pdf scan: pp. 305-306).

that this *palsamieren* is still practiced *in dem heidnischen land bey babylonia*. He is clearly talking about the mumia as a product of embalmed corpses, though he seems to confuse Egypt and Babilonia, which is admittedly closer to the place where, according to my analysis, the original mumia comes from. He describes the best mumia: *Diß ist der beste mummia der schwartz ist vñ clar vñ ein starcken gerauch hat*.⁵³ In this entry, Von Kaub gives an intriguing explanation for the formation of mumia: *Vnd von(de) krafft vnd hitz deß palsams so zeuchte er an sich das geplüt in das hirn. Vñ darin wirt es gekocht. vnd darnach trucknet es vñ verdorret. vñ wirt verwandelt in ein herte materj. vnd das heist dañ mummia*.⁵⁴ The mumia is a hardened material. We see here a reversal in properties of the mumia. If we accept that the confusion between bitumen and mumia (i.e. shilajit) is due to the rarity of mumia (shilajit) and the similar physical properties of both materials, where did this hard mumia come from?

Here we are introduced to another kind of mumia. In a letter written in 1516 by the Portuguese Tomé Pires (ca. 1468 - ca. 1524/1540), an apothecary and traveler to king Manuel, we can get a glimpse into what contemporaries thought of mumia. In his report he is describing medicinal substances in the east and their origins:

“Mummy is not human flesh, as is believed in our parts, nor, it seems to me, does such flesh dried or toasted on the sands possess the [properties] we believe it to have; for the true [mummy] is an exudation from corpses, obtained in this fashion: when the man dies they remove his intestines, lungs, etc., and throw in myrrh and aloes; then they sew up the corpse and put it in a sepulchre with holes. This mixture with the moisture of the body drips out and is collected. This liquor is called mummy. They do not use it here. That which goes to our parts comes from the Arabian deserts, via Alexandria; sometimes

⁵³ *Cuba*, Gart der Gesundheit, p.151r (cap. CCLXIX, pdf scan: p. 306).

⁵⁴ *Cuba*, Gart der Gesundheit, p.151r (cap. CCLXIX, pdf scan: p. 306).

they pass off toasted camel flesh for human flesh. I do not believe that one is more useful than the other."⁵⁵

Some of the best sources on mumia are mumia sceptics. Pires exposes us to an interesting kind of mumia product. This is the *sand mumia*. Sand mumia are the remains of unlucky travelers in the deserts of Arabia and north Africa, who died in sand storms, their bodies covered and cooked by the heat, creating a dried shrunken corpse resembling a mummy.⁵⁶ Notice that Pires complains of trickery, a fraud, merchants who "pass off toasted camel flesh for human flesh". Meaning, in European markets, customers expected to receive human flesh when purchasing the product named mumia(!). How did mumia come to mean a dried corpse? I could not find any written evidence, but here we might indulge in some more light speculations. The association was first made between the mumia and a liquid substance within the dead mummies, from there, the corpse itself took on the meaning of mumia. The rarity of authentic mummies created a need for an alternative substitution, this came in the form of the sand mummy that resembled the embalmed body in its form.

Pires continues to complain about fraudsters and raises an interesting question: "In the same way (that the Venetians sell fake ivory, A.S.) they sell the flesh of beasts for human flesh; neither of them is mummy. I do not know how they use it, in view of the great difference there is between the liquid mixture and dried flesh."⁵⁷ So we have the intellectual tradition of mumia as a liquid substance exuded from embalmed corpses, and apparently there is a commodity in European markets named mumia, which is hard and dry. Could this be the reason von Kaub describes mumia as hardened material? This evidence supports the idea that the practice of mumia was not theory driven, but market driven. Meaning, that what this substance was, where

⁵⁵ *Cortesão*, A Suma Oriental De Tomé Pires, p. 515.

⁵⁶ On sand mummies, or Arabian mummies see: *Sugg*, Mummies, pp. 111ff.

⁵⁷ *Cortesão*, A Suma Oriental De Tomé Pires, pp. 515-516.

it came from, and what were its properties, were secondary in its proliferation to market demand for a substance named mumia.

At the turn of the 16th century mumia was thought of as a *materia medica* from human origins. There was a market for this product, where customers expected human flesh. In the last leg of this chapter we will see an example of how mumia was used in a pharmaceutical recipe. This medical use is found in Marsilio Ficino's (1433-99) *Three Books on Life* (published 1489). Ficino was one of the most important thinkers of his time, a (or better yet: *the*) neoplatonic philosopher, translator of Plato, the *Corpus Hermeticum* and many more, and of course a physician.⁵⁸ This mention of mumia, a single mention in *Three Books on Life*, is revealing as it is mundane. The *Three Books on Life* is a unique piece of medical literature, it is a book dedicated to the health of elderly intellectuals (who tend to be saturnian and melancholic). In a chapter titled *What Means of Fomenting All the Parts of the Body the Elderly May Receive from the Planets*, Ficino casually recommends to soften mummy and roasted goose with goose fat and cook them with honey and other ingredients. He gives zero clarifications concerning mummy.⁵⁹ What is this mummy⁶⁰ according to Ficino? We cannot know based on this recipe alone. This is a good example of the lack of context many mentions of mumia suffer from. But what can we tell from this isolated, unexplained reference? One option is that mumia needed no explanation, what it is was common knowledge. Another option, not mutually exclusive, is that mumia was a sort of a trope, a reference to a magical cure. Conclusive evidence in the case of Ficino's mumia, I do not have. But as the 16th century progressed, more and more evidence shows that mumia became common knowledge and received the reputation of a wonder cure.

⁵⁸ On Ficino and his works see: *Allen, Rees, Davies*, Marsilio Ficino : His Theology, His Philosophy, His Legacy, introduction pp. xiii - xxii.

⁵⁹ *Ficinus, Kaske*, *Three Books on Life*, pp. 200-203.

⁶⁰ In the original Latin: mumia. *Ficinus*, *Three Books on Life*, p. 202.

3.2 Mumia as an Anthropological Problem

To understand how mumia was so easily accepted as *materia medica*, it must be considered in a wider framework of reference than that of medical literature alone. The following is an attempt to place mumia in a wider context of European society and culture. As mumia is a kind of cannibalism, I will start by examining the terminology used by anthropologists when discussing the subject. Mumia presents a challenge to modern anthropological classifications. Commonly two main categories of cannibalism exist according to scientific literature. The first is famine cannibalism, which is pretty self explanatory, and clearly does not fit the use of mumia. The second is ritualistic cannibalism that is further divided into two categories, endo-cannibalism, consumption of the flesh of members from inside the community, and exo-cannibalism, consumption of the flesh of people from outside the community.⁶¹ Where should we position mumia in this dichotomy? In his review of medicinal cannibalism in Europe between 1300 and 1700, P. Kenneth Himmelmann argues that “cannibalism is never just about the consumption of the human body, but neither is it ever merely symbolic.”⁶² When eating the heart of their enemies (exo-cannibalism), the Aztecs symbolically performed the ultimate victory over their enemy, but their belief and intent went beyond, they expected to harness the brevity of their victim. The Bimin-Kuskuskin, when consuming the genitals of deceased loved ones (endo-cannibalism) expected to maintain their virility and potency within the community.⁶³ But mumia breaks the mold. It is, I would argue, *not* ritualistic, at least on the level of consumption, nor does it seem to have any symbolic meaning. It has beneficial properties for the health of practitioners, and as we have seen, the materiality of it mattered for users (i.e. what is the origins of the mumia and how was it processed), but the individual human element, the source

⁶¹ *Byard*, *Cannibalism—Overview and Medicolegal Issues*, pp. 281–87. Byard does discuss another kind of cannibalism, pathological, which is unrelated to our topic.

⁶² *Himmelmann*, *THE MEDICINAL BODY*, p. 184.

⁶³ *Himmelmann*, *THE MEDICINAL BODY*, pp. 183-188.

of the mumia, had no importance whatsoever.⁶⁴ How can we understand the practice of mumia as a social phenomena, seemingly so unlike any other cases of cannibalistic societies?

Mumia, in its cannibalistic form, was not limited to christian European society. It was practiced in the Muslim world as well.⁶⁵ With that said, there are some elements of Christian belief that made the practice of medicinal cannibalism in European society more palatable, so to speak. I would argue that there are some unique myths and traditions, or more broadly speaking symbolic structures, in Christianity that created the niche into which mumia could integrate. The first is the ethos of healing - Jesus was a religious teacher, but also a miracle worker and a healer. This concept of miraculous healing accompanied the christian religion from its inception. Healing was an imperative to the successors of Jesus and continued to be an essential theme in early modern Christianity (or Christianities). The miraculous healing served as a proof of divine favor.⁶⁶ Many saints were known for their healing powers, for some, these powers continued after death, in the form of relics. It is a theme picked up by many scholars who touch on the subject. It is hard not to make the connection between mumia, as dry flesh, and the shriveled remains of saints stored in churches and cathedrals across Europe. Many of these relics, as mentioned, were believed to have healing power.⁶⁷ Christianity has another unique form of cannibalism, a symbolic one - the Eucharist.⁶⁸ During this ritual the community of believers consume, symbolically or otherwise, the flesh and blood of the Messiah, to gain physical or spiritual wellbeing. The idea of cannibalism and the healing power of the dead body existed in Christianity. But I would raise more of our modern biases. We live in a sterile world.

⁶⁴ At least not in the same way other cannibalistic societies saw it. In some cases the material properties of the victim were of importance (see below), but the identity of the victim of mumia production was not.

⁶⁵ Medicinal cannibalism had an even wider spread. For China see: *Sugg*, *Mummies*, pp. 182ff. For various cases of medicinal cannibalism, or rumors of it, in South America, and China see: *Groebe*, *Fleisch und Blut*, pp. 58-73.

⁶⁶ See Paracelsus's take on that theme in: *De Mumiae Arcanis*. In: *Paracelsus*, *Sudhoff* (ed.), *Sämtliche Werke*, Vol. 14, p. 306.

⁶⁷ See: *Himmelman*, *THE MEDICINAL BODY*, pp.191-193.

⁶⁸ Or not symbolic, without getting into the transubstantiation debate.

We live in a world where the presence of the dead is practically non-existent. We do not see public executions, we do not see piles of dead bodies on the streets of our cities during pandemics, and for most, we don't nurse our dying loved ones at our homes. We just don't see the dead. Another element of the sterility of our society is the distancing of the fleshiness of the living. It is safe to assume that premodern people (and for that matter in many modern and contemporary societies) witnessed animal slaughter on a regular basis. This awareness of the process that turns an animal, e.g. a pig, into meat is spared from modern western consumers. For us, even the experience of consuming meat is usually done on sterile terms. Pre-packed flesh of animals at the supermarket, or on demand cuts of meat from the butcher. A butcher that ordinarily does the dirty work in a back room, sparing his customers the harsh reality of dismembering an animal. This awareness of the fleshiness of the living was not restricted to animals. Premoderns might witness public torture and mutilation. Executed people were left on the gallows as a public spectacle. They were quite aware, for example, that the anatomy of the pig is very similar to that of a person.⁶⁹ However, anthropological arguments are a pitfall for historical research. If we are interested in maintaining scientific standards, it is not enough that a symbolic association makes sense to the researcher, we must show that this association was present in the minds of contemporaries. In our case, Paracelsus, with his stream-of-consciousness writing style, which at times seems to reveal a shared European undercurrent of suppressed thought, does exactly that.

⁶⁹ See for example: *Ficinus*, and *Kaske*, *Three Books on Life*, pp. 180, 181 (book 2, chap.6).

4. Paracelsus and His Mumia Theory

4.1 Paracelsus and His Philosophy

Paracelsus, born *Philippus Aureolus Theophrastus Bombastus von Hohenheim* (1493 - 1541), is one of the more enigmatic characters in the early modern history of medicine and science, and the age of reformation. He was born to a Swiss physician who practiced medicine and alchemy in southern Germany and the Swiss cantons. He left his home at the age of 14, studied in several universities and practiced as a surgeon in mercenary armies. In 1527 he received a position as the city physician in Basel, where he, beside practicing medicine, also lectured in the university as part of his office. In his lectures he promoted his new reformist ideas of medicine and antagonised the local authorities by teaching in German instead of Latin and famously by burning the Canon of Avicenna.⁷⁰ He did not hold this position for long. Paracelsus was by all accounts, an uneasy type with confrontational tendencies, he spent most of his life roaming from town to town in search of work and recognition, often finding himself a persona non grata shortly after arriving. He was a revolutionary thinker with deep disdain for authority and accepted knowledge. The recognition he so much sought after came only posthumously. He published very few works during his life, and not from the lack of trying. After his death, a small group of followers started collecting his works and publishing them.⁷¹ By the last quarter of the 16th century his name loomed large over the European medicine world. The avid supporters of his theories created a new kind of medicine, at odds with traditional medicine not only in theory but also on account of using inorganic materials like metals in their medicine and controversial substances like arsenic.

⁷⁰ On the life of Paracelsus see: ADebus, *The English Paracelsians*, pp. 14-18. Friedrich, Müller-Jahncke, Schmitz, *Geschichte der Pharmazie*, pp. 267 ff.

⁷¹ On the dissemination of Paracelsian theory after his death see: Friedrich, Müller-Jahncke, Schmitz. *Geschichte der Pharmazie*, pp. 285 ff.

His intellectual environment was diverse. When reading his texts and theories, it is very clear that Paracelsus is a Christian writer. Elements and themes from Christian theology and lore feature extensively in his writings and in his theories. Paracelsus was also trained in alchemy from a young age by his father. This art of manipulating nature and perfecting it, is essential for the understanding of his theories and his practice of medicine in general, and the preparation of pharmaceuticals in particular. Paracelsus also studied in universities. He knew the accepted medical theories, and more importantly, he was up to date with contemporary intellectual thought. He is often associated with neoplatonic thought and Ficino is mentioned as an influence on him. Two fundamentals of Ficino's medicine and neoplatonic thought are clearly evident in the writings of Paracelsus. The use of astronomy (or what we would call astrology) and the concept of macro-cosmos and micro-cosmos which reflect each other. The first is the world and the firmaments, i.e. stars and constellations, the second the inner human body. From learning how to read the sky, the physician can learn how to read the patient. As a student in universities in Italy when Ficino popularity was at its height, it is unlikely that Paracelsus did not know his work.⁷² But within the neoplatonic tradition, Florian Ebeling, a professor in the Egyptology department in the university of Heidelberg, argues that it was not the bulk of the Corpus Hermeticum that influenced the German alchemists, but a smaller corpus of alchemical neoplatonic writings and above all, the *Emerald Tablet*.⁷³

Before examining the Paracelsian theory of mumia, a quick survey of his general theory of medicine is needed. A few words are in place when tackling Paracelsus in general. The concept of *understanding* Paracelsian theory should not be viewed as our modern scientific concept of *understanding* a theory. His writing style is extremely associative, meandering at times, and more often than not, his essays read like a continuous rant. His language is obscure, and many of his theories are as well. On top of that he is a very prolific writer. According to

⁷² Žemla, A balsamic mummy, p. 79.

⁷³ Ebeling, The Secret History of Hermes Trismegistus, p. 60.

some estimates, his collected work will amount to about 8,000 pages.⁷⁴ It is not uncommon to find inconsistencies in his theory.⁷⁵ His active career was short. Some of his early writings are dated to the mid decade of the 1520s, but most of his work was written in Basel and after. His death in 1541 brought to an end a writing career that spanned roughly fifteen years. He held fast to his theories, presumably not the type to admit mistakes, which allows us to see his overall world view as a monolith. That is, there is little discernible difference between early and late Paracelsus, which does not mean there was no development in his theories, but rather that the main principles remained. One of his main arguments is the superiority of experience, and experiment, over the study of the medical authorities.⁷⁶ But we shouldn't confuse his contempt for Avicenna and humoral theory as anchored in proto-scientific theory. Modern scientific theory would be crudely defined here as observation of nature and results of controlled experiments, and building theories on the base of these observations alone, and the acknowledgement that these theories are valid just as long as other experiments or observations did not contradict them. To be sure, his ideas have a base in his observation and experience, but they are also strongly anchored in abstract theories.⁷⁷

Paracelsus's four pillars of medicine, as described in his *Das Buch Paragranum*, are philosophy, astronomy, alchemy and virtue. This book was in the making in his Basel years and it is a good window to his medicine and terminology. Philosophy, for Paracelsus, is the understanding of the hidden forces that act on nature. Philosophy describes what it sees.⁷⁸ Its concern is the two earthly elements, water and earth. Nature is where medicine is, the physician needs to know how to harness its powers to heal the patient. A philosopher learns the causality

⁷⁴ *Gantenbein*, The two lights of Paracelsus, pp. 198-199.

⁷⁵ See for example Week's note no. 3: *Weeks*, Paracelsus: Essential Theoretical Writings, p. 861 n3.

⁷⁶ *Weeks*, Paracelsus: Essential Theoretical Writings, p. 4. *Žemla*, A balsamic mummy, p. 77.

⁷⁷ As Weeks puts it: "Science for Paracelsus is virtually the opposite of systematic observation. Immanent in nature, scientia reveals itself to inspired intuition." *Weeks*, Paracelsus: Essential Theoretical Writings, p. 26.

⁷⁸ This is an element in Paracelsus's attack on humoral theory: "Dann welcher hatt je Choleram in der Natur gesehen? Welcher hat je Melancholiam in der Philosophia funden? Welcher hat je Phlegma für ein Element erkennt? Wo ist je Sanguis dem Lufft gleichmässig geworden?" *Paracelsus*, *Weeks* (trans.), Paracelsus: Essential Theoretical Writings, p. 118.

of nature (what turns things black) the physician can learn from nature (outside: macro-cosmos) on the human (inside: micro-cosmos). The power of creation works from the macro to the micro, from the parent to the child.⁷⁹ The astronomer reads the signs in the sky, in which the elements of air and fire reside. Here, according to Weeks, Paracelsus set a trap for himself when describing philosophy as *hidden* nature.⁸⁰ His rejection of humoral theory on the basis of not seeing humors, might be countered with a more abstract view of humors.⁸¹ In his discussion, the firmaments are invisible forces, the *astra*. The astra is an *arcana*, a hidden force that interacts with the *elements*. The heavens, the astra, are the father, and sometimes referred to as male, while the elements, the material, sometimes referred to as feminine, are the child. Here is the source of disease, for the parent is the one who births the child and not the other way around. When the earth and the water get corrupted, it is because of the actions of the air and the heavens.⁸² When one learns how to read the sky, he becomes an astronomer. If he knows how to read the sky in the human, he becomes a physician.⁸³ To understand a disease in a specific patient, the physician can't examine the interiority of a person (i.e. the humors), but rather he needs to study his outer body (i.e. his celestial map, his horoscope).⁸⁴ To understand Paracelsus's analytical method, here is an example of his line of thought: he claims that man is made from the same elements as the world, water - this is why he drinks, earth - this is why he eats, air - this is why he breathes, and fire - this is why he needs heat.⁸⁵ Here he invokes the concept of *like heals like*. It shouldn't be taken at face value. Certain materia medica are associated with different forces in the world. Disease comes from the heavens and is associated

⁷⁹ Paracelsus, Weeks (trans.), Paracelsus: Essential Theoretical Writings, pp. 11-12, 166, 167.

⁸⁰ Weeks, Paracelsus: Essential Theoretical Writings, pp. 11-12.

⁸¹ Here Paracelsus says that the humors are elements, but not like the Galenists think. Paracelsus, Paracelsus: Essential Theoretical Writings, p. 172, 173.

⁸² Paracelsus, Paracelsus: Essential Theoretical Writings, p. 168, 169.

⁸³ Paracelsus, Paracelsus: Essential Theoretical Writings, p. 174, 175.

⁸⁴ Paracelsus, Paracelsus: Essential Theoretical Writings, p. 184, 185.

⁸⁵ Paracelsus, Paracelsus: Essential Theoretical Writings, p. 186, 187.

with heavenly bodies. For example, if a disease is from Mars, then the cure must come from Mars as well.⁸⁶ But to create this cure a physician must know alchemy.

Alchemy is the art (Kunst) of perfecting nature. Nature does not create perfect things. When discussing alchemy, Paracelsus uses an even more obscure language, which is not uncommon in alchemical writings. Here he has a debate with humoral theory, a cure is from Saturn, Mars, etc., not phlegm or black bile.⁸⁷ A medicine should be guided by the air (the most important element, because humans need to breathe before anything else), therefore it must be separated from the body, the *astra* (force) from the *corpora* (the elements), this way the *arcanum* can be harnessed. But the *arcanum* is also *chaos*. It should be guided by the *astra*. The physician must know: which *astrum* is in which *arcanum*.⁸⁸ This act of separation is named by Paracelsus (in other writings) *Spagyria*⁸⁹ - to separate and recombine, and it is essential for the understanding of his alchemy, which in turn is essential to the understanding of his mumia theory. The fourth pillar is virtue or *Proprietas*, the character of the physician. This polemic is not very useful for our discussion. Paracelsus, as a reformer (not a follower of Luther or strictly of any other), seems to echo the debate about the validity of sacraments given by corrupt clergymen. In this debate the church (the Catholic church that is) doubled down on the validity of the sacraments from an ordained priest. The power of the sacrament works through the priest and through the church directly from God in kind of a mechanical way. Without getting too deep into the discussion, the transfer of the grace of God here, is not reliant on the virtue of the priest but rather on schematic actions that flow from the ordination of the priest to the ceremony he performs. For Paracelsus this could not work, a physician must be a man with faith and true character. That he must be, not directly to be able to heal, but to have access to medicine,

⁸⁶ Paracelsus, Paracelsus: Essential Theoretical Writings, p. 174, 175.

⁸⁷ Paracelsus, Paracelsus: Essential Theoretical Writings, pp. 213-219.

⁸⁸ Paracelsus, Paracelsus: Essential Theoretical Writings, pp. 218-221.

⁸⁹ More on the concept of spagyria see: *Principe*, The Secrets of Alchemy, pp. 127-131.

because it is God who gives invention and medicine, not man. A physician needs the belief of his patient in his medicine as well.⁹⁰

When reading Paracelsus the place of God in his writings is at many occasions, I would argue, pretty awkward. Between nature and the astra, the arcanum and mumia (see below), satan, and the knowledge of the physician, the function of God is unclear. This is especially true in texts where he seems to get entangled in his complex line of thought. There are two discernible major forces in the works of Paracelsus. The light of nature and the light of the holy spirit.⁹¹ A spiritual force and a material one. This manifests in the concept of astra and elements, and also in the discourse of mumia as will be discussed below. And yet the place of God is unclear in this equation. It is of course not my intention to offend anyone, but the concept of monotheism is, let's say, *problematic*. This is evident from Paracelsus's writings and the debates of his time. Monotheism is a philosophic problem. It goes back to ancient times and is best articulated in the so-called *problem of evil*. Three assumptions that form an inconsistent triad, in which only two can be true at the same time; God is omnipotent, God is benevolent, man is righteous.⁹² In the specific context of medicine, how do we explain disease that hits indiscriminately in the face of an omnipotent and benevolent God? One solution Paracelsus offers is that man cannot know what God finds good or evil.⁹³ This ultimately leads to a teleological argumentation, but on the other hand it can absolve a physician from wrong doing. If a patient dies, and God is benevolent and omnipotent, then he must have been evil. But this idea of two forces will inevitably strip God of his omnipotence. Research into nature was dangerous for early modern religion. With any investigation into the working of nature, the monotheistic God tends to shrink, until finally there is no place for Him in the physical world

⁹⁰ *Paracelsus*, Paracelsus: Essential Theoretical Writings, p. 266, 267.

⁹¹ *Gantenbein*, The two lights of Paracelsus, pp. 201 ff.

⁹² It is an ancient problem in monotheism. This is the basic dilemma of the book of Job. While the easiest assumption to discard the righteousness of man, that sometimes manifests as free will, in the book of Job it is asserted that Job is righteous. The author of the book of Job chose a different path. Something along the lines of: I am God, so be silent.

⁹³ *Paracelsus*, Paracelsus: Essential Theoretical Writings, p. 874, 875.

anymore. And in the time of Paracelsus, it could have been a precarious path to walk. After all, monotheism is only one step away from atheism, among the worst accusations a thinker could face in his time.⁹⁴ After establishing some of the basic principles of Paracelsus's theory, it is time to discuss his mumia theory.

4.2 The Mumia by Paracelsus

Mumia is a central theme for Paracelsus. Yet surprisingly it features very little in modern research of Paracelsus. The mumia of Paracelsus has many faces. He broadened the meaning of the term. For Paracelsus mumia is not only a material but also a force. While dating the works of Paracelsus is difficult and some of the texts that follow are not dated, one of his chronologically first discussion of mumia is in *Das erste buch der wundarzney*, dated to 1528, that ,conveniently for this research, opens with the title *vom mumia*, first chapter: *Was mumia sei, das ist die arzney*.⁹⁵ But, reader of Paracelsus beware: to him who seeks straight answers, disappointment comes swiftly. "anfenglich ist mumia die, die alle wunden heilet, das ist der süß mercurius. dan hie scheidet sich der süß und der saur von einander."⁹⁶ Mumia in this essay is an inner force that heals the wounds. But it also has physical properties: "mumia ist ein liquor, durch den ganzen leib gespreit, in allen glidern gewaltig, wie er sein sol, teilet sich mit solchem underscheid: im fleisch nach art des fleisches, im gebein nach art des gebeins, im mark, adern oder haut etc, wie ir notturft erfordert."⁹⁷ Mumia of the leg needs to heal wounds of the leg etc. The main job of the physician is to let nature, i.e. mumia, do its work. The formation of pus is a sign of the destruction of the body's mumia. A wound must be kept closed to let the mumia heal it. The following section of this essay discusses what wounds are. It closes with several recipes

⁹⁴ See for example Erastus claim that Paracelsus is a "magician, atheist, and pig." Quoted in: *Gunnøe*, Thomas Erastus and the Palatinate, p. 322.

⁹⁵ *Paracelsus*, Sämtliche Werke, Vol. 6, p. 62.

⁹⁶ *Paracelsus*, Sämtliche Werke, Vol. 6, p. 62.

⁹⁷ *Paracelsus*, Sämtliche Werke, Vol. 6, p. 62.

to heal wounds, and of course some bragging about the quality of his *wundarznei* compared to that of other physicians. Not all of his recipes contain mumia, those that do, have no further information about the origin or character of this product. It is likely that Paracelsus, in this early essay, refers to the common mumia products available in Europe at the time. He just adds his own elaborations on the subject.

In later texts, mumia becomes more of a *Wunderarznei*, if I may. In *De mumiae Arcanis*, collected in the Sudhoff edition in volume 14,⁹⁸ a volume of later works, the association of mumia and the Eucharist, and mumia and relics is central.⁹⁹ In this work, Paracelsus calls on the reader to differentiate between two sources of medicine, the faith (the light of the holy spirit), and nature (as it manifests in mumia, that is - nature). When people are healed by a saint, a relic, it might be because of the works of God who gives them health, or it could be because of the powers of the mumia. If the body of the saint was properly *constellirt*, it receives healing powers of mumia.¹⁰⁰ In the case of the Eucharist, Paracelsus denounces the power of the earthly material, the bread and wine, to heal.¹⁰¹ According to Hartmut Rudolph, the ideas of Paracelsus are in line with some Swiss reformists, but it seems to me that he somehow denounces the sacrament altogether.¹⁰² If *De mumiae Arcanis* is indeed a later work, it is not the first time Paracelsus picks up on the subject of relics and saint veneration. Very similar themes appear in his fourth book of *De Causis Morborum Invisibilium (On the Invisible Diseases)* dated

⁹⁸ Sudhof himself found the manuscripts of this work. It was not known to the earlier publisher of Paracelsus. Although found only in the 20th century, Sudhof supports its authenticity. *Sudhoff*, *Sämtliche Werke*, Vol. 6, p. 62, Vol. 14. Intro, p. VI.

⁹⁹ though probably not the earliest time Paracelsus writes about this connection. See below

¹⁰⁰ Paracelsus in this essay discusses magnetic powers. A mumia has attractive power, but like a magnet it attracts only the things that are meant to be attracted to it, like only iron is attracted to a magnet and not copper. This work of a magnet is expanded by Paracelsus to include what we would call charisma and reputation. A leader in battle that people follow is a magnet for them, a doctor that patients flock to, is a magnet and so forth. *Paracelsus*, *Sämtliche Werke*, vol. 14 p. 305 - 308.

¹⁰¹ *Paracelsus*, *Sämtliche Werke*: "So secht, das die priester der kirchen des bluts und fleisch machen etlich haufen, lassents liegen, und das die schaben fressen und dergleichen die milben...", Vol. 14, p. 307.

¹⁰² See: *De Mumiae Arcanis*, *Paracelsus*, *Sämtliche Werke*: "Got hat sein leib und blut geben seinen jungern, und das dessen ist worden, das ist es sein, das ander nit." Vol. 14 p. 307. Hartmut Rudolph reads, God gave his body exclusively to his disciples. See: *Rudolph*, *Hohenheim's Anthropology*, p. 190.

to around 1530.¹⁰³ The saint works through faith and does not need the material mitigation of his body.¹⁰⁴ Confusing the two powers leads to blasphemy. In this extremely hard to follow text, Paracelsus tries to understand the powers that stay in the body as a magnet. He suggests that if powers reside within a specific human body, and they do not come from God but from nature, they existed there from its creation. In *De mumiae arcanis* Paracelsus is somewhat clearer. He denounces any natural powers of the saint, only divine power. But mumia resides somewhere in between the two lights of Paracelsus. It belongs indeed to the natural world. In an interesting comment in this essay, Paracelsus declares the obvious: if a person with special natural powers dies, these powers return to the world of natural forces.¹⁰⁵

A discussion on the physicality of mumia is found in another undated work by Paracelsus. It does seem that there is a sort of progression in his thought of mumia (that is if we follow the attempt of Sudhoff to order the writings of Paracelsus chronologically). In the essay *Von dem fleisch und mumia*, part of a work named *Philosophiae tractatus quinque*, that is included in volume 13 of Sudhoff's collection,¹⁰⁶ Paracelsus gives instructions on the proper origins of mumia. This essay stands in straight dialogue with the conceptions of mumia we encountered so far. He begins with counting the different kinds of meat.¹⁰⁷ Water - animals that live in water, air - birds that live in the air, earth - tame animals, domesticated animals, and fire - venison and game animals that need a lot of heat to cook their meat. The flesh of the air, like the element itself, is the most preferable. Flesh of water is weak, flesh of earth is medium, and flesh of fire is too strong. The same goes to mumia. Four kinds exist: air, earth, water and fire. The mumia of earth is discussed in detail. It is the mumia of a man who lost his life on the earth, usually from weakness or disease. This mumia is the one that: "...uns ungesund und geben vil

¹⁰³ Weeks collected works that were written in the early 1530s. *Weeks, Paracelsus: Essential Theoretical Writings*, p. 6.

¹⁰⁴ See: *Paracelsus, Paracelsus: Essential Theoretical Writings*: "Ein mal ist der Körper in der Erden/ vnd der Heilig im Himmel. Darumb/ was in der Erden ligt/ was es würckt/ das ist natürlich: Also was im Himmel ist/ was es würckt/ das ist vbernatürlich." p. 859.

¹⁰⁵ *De Mumiae Arcanis, Paracelsus, Sämtliche Werke*, Vol.14, p. 308.

¹⁰⁶ *De Mumiae Arcanis, Paracelsus, Sämtliche Werke*, Vol. 13, pp. 343-349.

¹⁰⁷ Here is a reminder about the importance of food in premodern medicine.

und mancherlei krankheiten. Dan es ist ein faul as, unkreftig und untüchtig.”¹⁰⁸ Just like we don’t consume sick or dead animals, we should not consume the flesh of the sick human: “geschicht nun das mit krankem vich, so wir die schlahen und essen, wie vil mer mit toten; das ist, wan wir die selbs sterben lassen, darnach erst essen.”¹⁰⁹ To come back to what I described as the *fleshiness* of the human being, Paracelsus discusses human flesh as he discusses food, blatant cannibalistic discussion I would argue. The first obvious conclusion is the rejection of sand mumia, and mumia from embalmed corpses: “so seind die balsamirten menschen körper auch nit die rechte mumia.”¹¹⁰ An earth mumia is depleted from powers. It is not the right mumia for medicine. To harness the power of the best mumia, one should turn to the air mumia. Just as the flesh of the air is the best kind, so is the mumia of the air:

“aber von den andern dreien zu reden, solt ir also vernemen, das der aller fürnembste mumia, der am höchsten zu loben ist, das ist der mumia des lufts. das ist, der leib der an dem luft oder im luft zu einem mumia ist worden. der mensch der erhenkt, gespießet, oder geradbrecht ist worden; dan er stirbt am luft und im luft ist sein grab und verwesung, und dis seind die constellirten mumia, darin das ober gestirn gewaltiglich imprimirt und influirt, und so bald es sonn und mon uberscheinet, ist er in seiner höchsten exaltation, und in kreften und tugenden gar wunderbarlich, und wan die arzt und sonst menniglich wußte, was mit disem mumia fürzunemen oder wozu er nützet, würde kein ubelteter über drei tag am galgen oder auf dem rad ligen bleiben, sonder hinweg genomen...”¹¹¹

This quote is the base for later instructions on mumia production to be discussed below. Paracelsus goes on to speak about water and fire mumia that are created when a man loses his life in water or fire respectively. That is, mumia is created when a life, the spirit, leaves the body.

¹⁰⁸ Von dem Fleisch und Mumia, *Paracelsus*, Sämtliche Werke, Vol. 13, p. 344.

¹⁰⁹ *Paracelsus*, Sämtliche Werke, Vol. 13, p. 344.

¹¹⁰ *Paracelsus*, Sämtliche Werke, Vol. 13, p. 344.

¹¹¹ *Paracelsus*, Sämtliche Werke, Vol. 13, p. 345.

Here Paracelsus discarded the previous idea that a *mumia* is present only in people with special powers. The people who have direct excess to this *mumia* are the executionaires and hangmen, but also criminals and murderers who regularly enjoy the power it contains. To be clear of his intention, Paracelsus calls already in the *Paragranum* to use local *mumia* and not to seek it overseas.¹¹²

Where does this power come from? What is released with death, and why? Consider this discussion from the *Paramirum*, another work dated around 1530. Paracelsus describes the process a rose must go through before it can be used as medicine: “Die Roß ist groß im ersten leben/ vnnd wol gezierdt mit jhrem geschmack: Dieweil sie den hat vnnd behalt/ dieweil ist sie kein artzney nicht: Sie muß faulen/ vnd im selbigen sterben/ vnd New geboren werden: Als dann so redt von den krefftten der artzney/ [dann] so administrirt.”¹¹³ The rose must die to allow its medicinal properties to be used. Paracelsus postulates three lives of an organism. The first must pass to reveal the power of the *arcana*. The second life is dissection, and the third is the new life, where the *prima materia*¹¹⁴ becomes visible. He explains this theory as three anatomies, *localis*, when the person is dissected, and *materialis* when “the New Life is introduced into the human being following the prior Middle Life, by entering into the transmutation...”¹¹⁵ In another place, in book 4 of the invisible disease Paracelsus employs the metaphor of plants dying and revealing their power again. He then applies the same logic to human beings: “Vnnd aber das ist Mumia, so der Mensch das leben nimmer hatt/ so gehendt

¹¹² This is another element in the theory of Paracelsus that was not discussed here. Paracelsus is a loud advocate of using local *materia medica* instead of looking for the *materia medica* described in ancient writings. This is another contrast between Paracelsus and many neoplatonists who claimed the superiority of ancient knowledge. “Also nicht allein mit dem Alaun/ sondern auch in Mumia/ wo suchen jhrs? jenetz Meers von Heyden? O jhr einfeltigen / vnd ligt vor ewern Heussern/ vnnd in den Rinckmauren.” *Paracelsus*, Paracelsus: Essential Theoretical Writings, p. 228. Compare with calls for local herbs and other materials: *Paracelsus*, Paracelsus: Essential Theoretical Writings, pp. 198-201.

¹¹³ *Paracelsus*, Paracelsus: Essential Theoretical Writings, p. 370.

¹¹⁴ The *prima materia*, or *tria materia* are sulphur, mercury and salt, which are part of the complex theory of materials and alchemy of Paracelsus. It is not a main theme in this paper, but for a short discussion see below.

¹¹⁵ *Paracelsus*, Paracelsus: Essential Theoretical Writings: “Das da ein New leben eingeführt werd im Menschen/ nach dem ersten Mittel leben/ in die Transmutation...” pp. 372-373.

sein blüst an/ in den natürlichen krefftten vnd Arcanen.”¹¹⁶ The mumia is released in material death. This idea echoes Ficino's concept of spiritus. For Ficino the spirit is what connects the body and the soul, in the world, and in humans. The mumia of Paracelsus functions like the spirit of Ficino.¹¹⁷ This process should also be viewed as an (al)chemical process. The aforementioned tria prima are the basic understanding of the products of distillations. As Debus explains, the alchemists saw the spirituous liqueurs (mercury), inflammable oils (sulfur) and residue (salt).¹¹⁸ I suggest that the mumia should be seen as a similar process. In death, a human is also broken down into these elemental parts: mercury - the spirit, goes to heaven, salt - the residue, the bodily material, to nature, and the sulfur - oils, the mumia, become medicine. The distillation of material makes the medicine more potent, in a similar way, the mumia is the *fifth essence (quintessence)* of the body.¹¹⁹

When Paracelsus wrote his theory of mumia, mumia was already a widely used materia medica. It was known to be of human origin, it was traded from Egypt and the Levant to Europe. The various theories of the proper mumia circulated in Europe and Paracelsus was aware of them. In *Das erste buch der wundartznei* Paracelsus broadens the term to fit his theory of medicine. It is a liquor, a force, that exists in the human body and heals it. The good physician just aids this natural force to work its powers. The medicine of Paracelsus is deeply influenced by his theology. In his later works, *De mumiae arcanis* and *vom fleisch und mumia*, he directly connects to the medical and theological discussions of his time. The use or consumption of human flesh in the form of mumia is discussed in the background of his analysis of the Eucharist. As an experimental proto scientist his mumia theory is part of his study of nature. The works of the mumia are likened to the mysterious and selective attractive powers of the magnet.

¹¹⁶ Paracelsus, Paracelsus: Essential Theoretical Writings, p. 850.

¹¹⁷ For a discussion on Ficino's spiritus see: Žemla, A balsamic mummy, pp. 78 ff.

¹¹⁸ Debus, The French Paracelsians, p. 11.

¹¹⁹ Paracelsus describes the process of distilling medicine in the last parts of the fourth book on the invisible disease: “Darumb das fünfft wesen erfunden ist/ auß zwentzig Pfunden ein Loht zumachen/ vnnd das Loht vbertrifft die xx. pfund. Darumb je weniger Leibs/ je höher die Artzney in Tugenden ist.” Paracelsus, Paracelsus: Essential Theoretical Writings, p. 880 f.

The release of the force in death is understood as an alchemical process where substances are separated into their components. The cannibalistic nature of mumia is addressed directly, especially in *Vom Fleisch und mumia*, where he suggests that the best mumia is to be harnessed from executed criminals that died in the air. It is possible that Paracelsus was picking up on a phenomenon (creating mumia from executed people) that exists and was well known, and he, (like in *Das erste buch der wundarzney*) just articulated the theory behind the practice. Future research can dive into this question, was there an industry of preparing mumia from executed persons?

Although this is what Paracelsus suggests, he does not go into the details and practice of mumia preparation. This would be done by his followers. The next chapters of this paper will deal with the acceptance of, and resistance to, paracelsian theory in Germany (German speaking world that is), France and England. After surveying the debates surrounding Paracelsian theory, I will turn to the case of mumia in particular, asking whether it served as a key point of contention between Paracelsian physicians and their opponents. When discussing Germany I will trace the different versions of a recipe for mumia by Oswald Croll. This recipe, or instructions, are clearly based on the mumia from *Vom Flesich und mumia*. The recipe went through several expansions and versions under the hands of different writers. In France, a very centralized polity, the debate around paracelsian theory was formal. There was a live discussion about the origin of mumia and how it comes to Europe. I will ask if these discussions overlapped. In England, where unlike in France, chemical medicine was easily adopted, the discussion was different. Paracelsus was not necessarily the carrier of the new medicine for the English physicians. Their view of him and his theory was mitigated through anti-Paracelsus polemics. In the English case, I also traced evidence of actual trading routes of mumia that will also be discussed.

5. Paracelsian Theory in the German Speaking World

5.1 Early Paracelsians and Their Mumia

Paracelsus was a minor figure in the medicine world during his life. As a writer he did not find success and published very little. After his death some followers of him started collecting his manuscripts and bringing them to print. Among them Adam von Bodenstein (1528 - 1577) a son of the theologian Andreas Bodenstein (1486 - 1541) from Karlstadt am Main. He studied medicine in several German universities and in Ferrara. He showed interest in the occult philosophy of Agrippa and in astral medicine. With encouragement from prince-electors Ottheinrich, starting in the 1560s, Bodenstein began to collect the writings of Paracelsus. He translated, commented and brought them to print. Another influential early Paracelsian was the Tirolian Michael Toxites (1514 - 1581). Toxites had a more modest education than Bodenstein. He was employed as *famulus* of Otto Truchseß von Waldburg, with whom he moved to Italy. From there he moved to Wittenberg and made the acquaintance of Philipp Melanchthon. He settled in Straßburg in 1542 where he worked as a teacher. His journey did not stop there and after the death of his first wife he continued his travels. He had ties to many important figures like Conrad Gessner (see below) and Johan Winter von Andernach (1505 - 1574), and powerful rulers like the Kaiser Karl the V. and the prince-electors Ottheinrich. He met Bodenstein in 1562 or 1563 in Basel. He was introduced by Bodenstein to Paracelsus and his writings, and experienced a "Paracelsian turn". In 1564 Toxites, who up until then published philological and pedagogical works, started collecting and publishing Paracelsus's writings. He became part of

an early Paracelsian circle along with figures like Gerhard Dorn (1530/40 - 1584), Alexander von Suchten (1520 - 1576/90) and Leonhard Thurneisser (1531 - 1596) among others.¹²⁰

This profile of the Paracelsians as wanderers and travelers is an important part of their collective identity, like Paracelsus himself who rarely stayed in one place more than a couple of years. This profile of a dynamic group with a social and intellectual networks, was more than mere coincidence. It soon became part of the ideology of the new physicians, ready to learn from experience and the simple people and not exclusively from books. It became a symbol of their revolutionary character. This ideology was articulated by Peter Severinus, one of the most influential early Paracelsians and physician to the King of Denmark. He wrote to his readers in 1571:

“Sell your lands, your houses, your clothes and your jewelry; burn up your books. On the other hand, buy yourselves stout shoes, travel to the mountains, search the valleys, the deserts, the shores of the sea, and the deepest depressions of earth; note with care the distinction between animals, the differences of plants, the various kinds of minerals, the properties and mode of origin of everything that exists. Be not ashamed to study diligently the astronomy and terrestrial philosophy of the peasantry. Lastly, purchase coal, build furnaces, watch and operate with the fire without wearying. In this way and no other, you will arrive at a knowledge of things and their properties.”¹²¹

This paragraph sums up the ideological self perception of Paracelsianism and the image of Paracelsus himself. This is the model the Paracelsians aspired to. There are remarkable similarities to apostolic life in service of the new medicine, spreading the word of Paracelsus in what might be coined *Imitatio Theoprasti*. And like the early Jesus movement, they did not lack in opponents and enemies (see below).

¹²⁰ Friedrich, Müller-Jahncke, Schmitz. Geschichte der Pharmazie, pp. 285-290.

¹²¹ Quoted in: Debus, The English Paracelsians, p. 20.

One of Toxites main projects was his *Onomastica II*, Published in 1574. It was a multilingual compendium of Paracelsian medical terms. Mumia features in it quite often:

“Mumia quidquid occisum est & quidquid sanandi vim habet Item caro Balsamita. was getödt ist vnd was heilsam ist. Item die Balsanmierten Körper besich Theophrast on Wunde im ersten Buch. Gall Chair Baulsmee...

Mumia elementorum idest Balsamus elementorum externorum.

Mumia medullæ, est ipsa medulla. Das mark / Gall. La moelle...”¹²²

“Balsamus de mumis, id est Carne, Fleische balsam /Mumieebalsam/ Gall. Baulsme du chair mumie.

Balsamus externus elemétorum, est liquor Mercurialis, id est, elementorum mumia, vnum ex tribus rerum principiis. Der Element kuffer balsam / ist ains aus dé dreien Ersten anfängé aller ding / der Mercurialisch saft der element. Gall...”¹²³

“Mumie Heidenisch fleisch im Lybischen sand verwåret.”¹²⁴

This mix of Paracelsian ideas and common mainstream ideas can reveal a lot about the Paracelsian movement. Obscure ideas like *Mercurialishes saft*, mumia that is what is dead and what cures and *balsamus elementorum*, mixed together with more common materia medica like *Das Mark*. Notice the terminology for the sand mumia, *Mumie Heidenisch* from the Libyan desert. If we use the aforementioned anthropological terminology, this alienation of the subject of the mumia frames this specific mumia as a case of exo-cannibalism. It is likely that Toxites did not read *von dem Fleisch und Mumia*, where Paracelsus rather explicitly denies the efficacy of sand mumia. But this goes to show that the Paracelsian movement was in a way, *not about Paracelsus*. It was about expanding the boundaries of medicine and human knowledge. They incorporated ideas they believed to be of Paracelsus without too much scrutiny, many of the

¹²² Toxites, *Onomastica II*, p. 465.

¹²³ Toxites, *Onomastica II*, p. 407.

¹²⁴ Toxites, *Onomastica II*, p. 74.

Paracelsians added their own thoughts and ideas. The elements Severinus counts: contempt to authority, learning from experience and not from books, learn from the simple folks, study astronomy and experiment with alchemical preparations, all put them in direct opposition to conservative thought. They opened the gates for new science, and this, I would argue, was one of the main contributions of Paracelsus, or at least the image of him, to modern science. But as with every threat to orthodoxy, Paracelsians had their share of enemies.

5.2 Conrad Gessner an Anti-Paracelsus Pioneer

One of the first to reject Paracelsus was the Swiss physician Conrad Gessner (1516 - 1565). Gessner was an acclaimed polymath that studied medicine, biology, botany and more. Gessner, about 20 years younger than Paracelsus, and city physician in Zürich, witnessed the early revival of paracelsian theory. He was aware of Paracelsus and his theory, and of the legend of Paracelsus. He probably knew some of Paracelsus's acquaintances as well. The phrasing I used here - *to reject Paracelsus*, is important. According to Gunnoe, Gessner laid the foundation of later paracelsian opposition.¹²⁵ The objections of the opponents of Paracelsus were, for most, not directed at his medicine, but at his religious ideas, his alleged use of magic and involvement with the devil,¹²⁶ or plainly ad hominem attacks on his personality or drinking habits. In an early remark on Paracelsus's work, he dismissed it for its "obscure, barbaric, self-important and ridiculous statements and sayings."¹²⁷ Gessner saw Paracelsus as a heretic and as an arrogant person, lacking collegial manners. He distanced himself from astrology and stuck to Galenic theory. In an interesting encounter with John Dee (1527–1608), another polymath and intellectual, and an influential figure in the court of Elizabeth the I of England,

¹²⁵ Gunnoe, *Daniel*, Anti-Paracelsianism from Conrad Gessner to Robert Boyle, p. 107.

¹²⁶ A rumor that was spread by some of his early students and supporters. See the case of Georg Vetter: Gunnoe, Thomas Erastus and the Palatinate, pp. 298-300.

¹²⁷ Leu, *Ray*, Conrad Gessner, p. 316.

Gessner was deeply impressed by his knowledge, and perplexed by his admiration of Paracelsus. He especially opposed his belief in *healing in absentia*.¹²⁸

Distant healing is probably a reference to infamous *weapon salve*, a controversial technique that circled in paracelsian cliques. According to this method, a wound inflicted by a weapon can be healed by anointing the weapon itself with a special salve. It is not Paracelsus who invented this. It first appeared in what is widely considered a pseudo-Paracelsus composition called *Archidoxis Magicae*.¹²⁹ In this composition an explanation on the works of sympathetic powers can be found. Under the title *An admirable Oyntment for wounds*, the anonymous author states that “Simpathy, or Compassion, hath a very great power to operate in humane things.”¹³⁰ The recipe calls for skull moss (*usnea*), Man’s grease, Mummy, Man’s blood, Linseed oil, Oil of Roses and Bole-Armoniack. The skull or bone that is needed for this ointment should be taken from “a dead body that hath lain in the Air,”¹³¹ echoing the air mumia recommended by Paracelsus. This medicine has quite an interesting application: after preparing the ointment, it is laid aside until it is required. When an injury occurs, a stick of wood is dipped into the wound until it is bloody, when it is dried, it is “thrust” into the ointment. The wound is then bandaged with *Linen Rowler*, and washed every day with the patient’s urine. With this ointment you can heal a wounded person “though he be ten miles distant from you, if you have but his blood.”¹³² It can be used for teeth pain and wounded horses, all you need is the ointment and the blood of the patient. A version of this ointment can treat weapon wounds. If you add honey and ox fat to the ointment and anoint the weapon, the wound shall heal. “But because the Weapons cannot alwayes be had, the Wood aforesaid is better.”¹³³

¹²⁸ Leu, Ray, Conrad Gessner, p. 319.

¹²⁹ Friedrich, Müller-Jahncke, Schmitz. *Geschichte der Pharmazie*, p. 304.

¹³⁰ Here I used a later English version: *Pseudo-Paracelsus*, Paracelsus of the Supreme Mysteries of Nature, trans. R. Turner, (London : N. Brook and J Harison, 1656), p. 117.

¹³¹ *Ps. Paracelsus*, Paracelsus of the Supreme Mysteries, p. 117.

¹³² *Ps. Paracelsus*, Paracelsus of the Supreme Mysteries, p. 117.

¹³³ *Ps. Paracelsus*, Paracelsus of the Supreme Mysteries, p. 118.

This medicine is repeated by several authors who added to it, and elaborated on it. Oswald Croll, a highly respected professor of medicine at the university of Marburg,¹³⁴ (see below) explains that this cure is “performed... by the magnetick attractive virtue of this Medicament, caused by the Stars, which the Aire mediating, is brought to and conjoyned with the Wound; and as a spiritual operation the effect is produced.”¹³⁵ It is possible to see some elements from Paracelsus, like the mediation of medicine through the air. Robert Fludd (1574 - 1637), an English physician and an advocate for all things magic (see below), discusses the weapon salve extensively. He explains the practicality of its operation:

“If after the wound is made, a portion of the wound's externall blood, with his inward spirits, or of his internall spirits onely, that have penetrated into the weapon...be conveyed from the wound, at any reasonable, but unlimited or unknown distance, unto an Ointment, whose composition is Balsamick... the oyntment so animated by those spirits will become forthwith magneticall... being directed thereunto by those spirituall bloody spirits in the weapon, or other thing, which hath received or included them.”¹³⁶

Fludd gives an almost mechanical description of the weapon salve. It is quite different from Croll's explanation. While Croll summons the astral powers to convey and direct the medicine, Fludd relies on the magnetic powers of the ointment to connect the blood on the weapon and the blood on the wounded. This process is typical to the Paracelsian movement. A kernel of an idea found in a work by Paracelsus (or pseudo-Paracelsus in this case) is broadened and combined with a theory that is loosely grounded in paracelsian elements to explain its operation. The weapon salve was one of the most contested elements of Paracelsus's theory, it is therefore rather ironic that it comes from pseudo-Paracelsus authorship. Ironical twice: once because of the attack on a theory which was not an original Paracelsus, and second because

¹³⁴ More on Croll see: *Friedrich, Müller-Jahncke, Schmitz*. *Geschichte der Pharmazie*, pp. 308-311.

¹³⁵ *Croll, lover of chymistry* (trans.), *Bazilica chymica*, (1670), p. 173.

¹³⁶ *Fludd*, *Mosaicall philosophy*, p. 262.

Paracelsus's avid supporters doubled down on the works of the ointment. Especially for Fludd it seems to be the hill he chose to die on.

The weapon salve was associated by Gessner with astral medicine and magic. In defense of Paracelsus and his astral medicine (He is probably not the author of the weapon salve, but distant forces or magnetic forces do feature often in his work), I would argue that assuming that invisible forces have influence on nature and human beings is not unsensible. We already discussed the power of the magnet. What about the sun, it brings light, and heat. The full moon causes greater tides. Is it that far-fetched to think Venus or Mars have some influence as well? Ficino does this association explicitly: the effects of the moon on the tide, also affects the sick person. It is therefore not wise to perform operations on a member of the body while the moon is in its corresponding house (e.g. Cancer: the breast, Leo: the heart, Gemini: the forearms and shoulders, etc.).¹³⁷ Today *we know* we are surrounded by invisible forces: sun rays, cosmic background radiation, radio, neutrinos. Not to mention dark matter and dark energy. The same can be said about the concept of magic. If a person who does magic is someone who tries to understand and harness these hidden powers, what makes him different from what we call a scientist? It is not my intention to articulate a postmodern stance, on the contrary. Our conception of magic stands as opposed to science. In a world without a scientific method, this distinction has no meaning.¹³⁸ When Gessner, who is by many accounts a proto scientist, rejects Paracelsian theory, it is because he holds a competing world view on the works of nature, and not because Paracelsian theory has no empiric proof.

But interestingly, Gessner held Paracelsus with respect. He saw his new medicine, based on alchemical processes like distillation, as a powerful new tool. Apart from rejecting

¹³⁷ *Ficino*, Three Books on Life, p. 286, 287, (book 3, chap. X).

¹³⁸ See the remarks of the Jesuit Hernando Castrillo who wrote in 1643, quoted in: *Debus*, Paracelsianism and the diffusion of the Chemical Philosophy: "Magical Art is an absolute science." p. 240. Or Levinus Battus's claim that: "...Paracelsus's methods—the Kabbalah, chiromancy, physiognomy, the theory of signatures, and the art of the furnace—were not demonic but were derived from the light of nature." In: *Gunnoe*, Thomas Erastus and the Palatinate, p. 306.

some of Paracelsus's substances, like Laudanum (an opium based medicine), he was an advocate of applying these new methods in pharmaceutical production. He even actively searched for works by Paracelsus. In his medical compendium, *Thesaurus Euonymi Philatri de remediis secretis*, originally published under a pseudonym in 1552, he embraces the use of metals and of antimony.¹³⁹ In a strict Galenist theory, metals are indigestible and are therefore not medicine (see below). Just like he did not reject paracelsian use of metals in medicine, he did not reject mumia. Gessner counts mumia as materia medica in his recipes.¹⁴⁰ What did Gessner understand by mumia? Did he mean bitumen or materia medica from human beings? Gessner does not go into details. But in another place he brings instructions for a medicine distilled from "mans bloud,"¹⁴¹ but he does not support using it, because it goes against the religion.¹⁴² If I had to guess, I would say Gessner would have rejected the paracelsian mumia. In any case, the use of humans in medicine was not the source of conflict.

5.3 Thomas Erastus and His Anti Paracelsus Manifest

The person who wrote *the* anti-paracelsian manifesto was Thomas Erastus (1524–1583), another Swiss physician and natural philosopher, who was on friendly terms with Gessner. Starting around 1570 he dedicated his life to counter the spread of paracelsian theory and practice. He published an extensive disputation in four volumes between 1571 and 1573 titled *Disputationum de medicina nova Philippi Paracelsi*. In this four volume collection, written as a dialogue between the author and a Paracelsus/ian like character, he set out to reject every aspect of Paracelsian medicine. The first volume of the work was aimed against Paracelsus's

¹³⁹ Here is an English translation: Conrad Gessner, Peter Morvvyng (trans.), *The treasure of Euonymus*, pp. 122-124.

¹⁴⁰ Admittedly sparsely. See: Gessner, *The treasure of Euonymus*, pp. 269, 273.

¹⁴¹ Gessner, *The treasure of Euonymus*, p. 177.

¹⁴² Gessner, *The treasure of Euonymus*, p. 118.

astrology and magic, and his theology. According to Gunnoe, the theological rejection was based on the assumed theology as understood by Erastus from the published writings of Paracelsus at that time, and not based on his strictly theologian writings that were not yet published and were unknown to him.¹⁴³ The second volume was directed at the natural philosophy of Paracelsus. The third volume, against his medical theory and against the paracelsian theory of the origin of disease. The fourth volume discussed therapy of disease. A major part of his attack was ad hominem, mostly third hand stories and rumors he collected from various sources, about the character and behavior of Paracelsus. According to Gunnoe, this work by Erastus was widely read, and very influential, but it did nothing to hinder the spread of paracelsian ideas. At times it also backfired, especially the exaggerated focus on the character of Paracelsus, which for some, was interpreted as avoiding the core issue of his philosophy.¹⁴⁴

According to Gunnoe, Erastus's insistence on collecting stories about Paracelsus as part of his attack on his philosophy and practice, had seven discernible goals. He wanted to show that:

- “(1) Paracelsus and his followers were dangerous heretics;
- (2) Paracelsus dabbled in demonic magic;
- (3) Paracelsus was unlearned and wrote in a most obscure style;
- (4) As a physician, Paracelsus was at best ineffective and at worst lethal;
- (5) Paracelsus was a drunkard;
- (6) Paracelsus was personally unreliable and prone to flight in difficult circumstances;
- (7) Though Paracelsus was a successful chemist, he was not as innovative or perhaps as independent as conventionally thought.”¹⁴⁵

¹⁴³ Gunnoe, Thomas Erastus and the Palatinate, pp. 309-310.

¹⁴⁴ Gunnoe, Thomas Erastus and the Palatinate, pp. 304-305. Gunnoe and Daniel, Anti-Paracelsianism, pp. 111-113.

¹⁴⁵ Erastus claimed that he found many of Paracelsus's recipes in medieval manuscripts. Gunnoe, Thomas Erastus and the Palatinate, p. 303.

Gunnoe judges the information collected by Erastus as reliable. Even the accusation of dabbling in demonic magic came not only from his opponent, but from (at least one of) his close companions.¹⁴⁶ For some scholars, magic was, as mentioned, an inquiry into hidden forces of nature and therefore not demonic, but natural.¹⁴⁷ Unlike most anti-paracelsians, who were to some degree open to the new techniques and *materia medica* (i.e. distillation, and the use of metals and antimony), Erastus rejected the efficacy of inorganic materials. He did it on the basis of Galenist theory that saw medicine as digested by the heat of the body. Metals are simple materials, humans are complex materials, metals could not be digested, they cannot build the complex human body, and therefore did not act as medicine.¹⁴⁸ Under his influence, metals and antimony were banned as *materia medica* in Heidelberg.¹⁴⁹ Ironically, Erastus also criticized Paracelsus for inventing a theory that is not based on observation of nature, the same accusation Paracelsus aimed at the medical establishment.

What did Erastus think about *mumia*? Erastus discusses *mumia* and *mumia* theory in several places in his four volume work. In volume 2, Erastus discusses *mumia* as part of the Paracelsian natural philosophy. His main arguments are aimed at the confusion of what *mumia* is. He criticizes the multiple terms used by Paracelsus to describe a hidden life force: “*principium hoc vitæ, Radicem, Balsamum, Mumiam, Elementum...*” etc.¹⁵⁰ He addresses the double function of *mumia* as material, used for plasters for example, and a force. As a force it doesn't fit into the idea of *tria prima* and cannot be separated into them.¹⁵¹ Another point of criticism is the concept of universal cure, on which FVR (the short hand for the paracelsian like figure) and Erastus debate. According to Erastus, natural philosophy and Aristotelian physics don't allow a universal cure. A more interesting reference to *mumia* comes in the 4th volume. In

¹⁴⁶ Like Georg Vetter who served as his *famulus* for two years. See: Gunnoe, Thomas Erastus and the Palatinate, pp. 298-300.

¹⁴⁷ Gunnoe, Thomas Erastus and the Palatinate, p. 306.

¹⁴⁸ Gunnoe, Thomas Erastus and the Palatinate, p. 325.

¹⁴⁹ Gunnoe, Thomas Erastus and the Palatinate, p. 333.

¹⁵⁰ Erastus, *Disputationum... Pars Altera*, p. 113.

¹⁵¹ Erastus, *Disputationum... Pars Altera*, pp. 86, 155.

it, when discussing the origin of disease and magical treatment for them, Erastus brings up the topic of embalmed Egyptian corpses that are sold publicly in apothecaries almost for the price of gold. These corpses are sold against bleeding, internal and external. He continues to discuss the source of this medicine and blames it on a mistake from the writings of the Arabs. He does not blame Paracelsus for this *mumia*, but he does blame him for encouraging the use of *materia medica* from human origins. He goes on to discuss the use of human skulls in medicine, again, not accusing Paracelsus for inventing it, but rather for promoting it and inserting a level of dishonesty and deceit.¹⁵² This is in line with the hypothesis we laid before. It seems that medicinal cannibalism and *mumia* were practiced before Paracelsus and independently from his theory. It seems that the criticism of Erastus in volume two stems from the description of *mumia* in the more medical oriented writings of Paracelsus, like his books on *wundarznei*. I assume that Erastus was not aware of the more cannibalistic aspects of the *mumia* by Paracelsus. While *De mumiae arcanis* was probably never published before Sudhoff, the overt cannibalistic treaty *Vom Fleisch und Mumia* was published in Basel as an appendix *ohne Gewähr eines Herausgebers* in 1572.¹⁵³ As the fourth volume of *Disputationum de medicina nova* was published in 1573, I would suggest that Erastus missed it as well. He clearly opposes medicinal cannibalism and an essay like *Vom Fleisch und Mumia* would, presumably, have been of great use for him in his disputation. The issues that Erastus takes with *mumia* are based on the natural philosophy of Paracelsus and the obscure place it has in his ontology. The rejection of *mumia* as *materia medica* is not exclusively aimed at Paracelsus and the Paracelsians, but they are accused of promoting it.

¹⁵² Erastus, *Disputationum... Pars Quarta*, pp. 134-135.

¹⁵³ Sudhoff, *Sämtliche Werke*, Vol. 13, intro p. X.

5.4 Andreas Libavius - a Rational Opposer to Paracelsianism

Paracelsian theory was attacked from a different angle by the German physician, (al)chemist, and indeed a graphomaniac to rival Paracelsus himself, *Andreas Libavius* (ca.1550 - 1616). Libavius was a leading figure in the institutionalization and standardization of alchemy in academia. He wrote one of the earliest of what might be called text books on alchemy (published in 1597).¹⁵⁴ His polemic was not with Paracelsus per se, but with the Paracelsian movement as a whole. The main pillar of his criticism was based on Aristotelian physics and philosophy. As an experimental (proto)scientist, Libavius searched for systematic knowledge creation and categorization. In his writing a notable systematic inquiry of nature is evident, in a way that justifies the modern term scientist. He called for theories based on natural physical observations, without incorporating unobservable supernatural forces. He wrote against the Paracelsian notion of knowledge as revelation.¹⁵⁵ He took special offense from the idea of the weapon salve. For Libavius experimental observation meant to separate cause and effect. When examining the efficacy of ointments for the cure of wounds he asks: "...quaeso examina compositiones vnguenti, modum etiam vtendi, & confer ista cum effectis, contemplatus, sic ne necessitas affectionis inter talem causam, & talem effectum..."¹⁵⁶ If an ointment is used, what ingredient is causing what reaction? In the case of the weapon salve, he notes that apart from anointing the weapon, the paracelsian cure calls to clean the wound itself. He saw this as a

¹⁵⁴ For more on Libavius and his work see: *Jalobeanu*, Dana, Charles T *Wolfe*, Delphine *Bellis*, Zvi *Biener*, Justin E. H *Smith*, Angus *Gowland*, Ruth *Hagengruber*, Hiro *Hirai*, Martin *Lenz*, and Gideon *Manning*. *Encyclopedia of Early Modern Philosophy and the Sciences*. 1st ed. 2018. Cham: Springer International Publishing AG, 2022. <https://doi.org/10.1007/978-3-319-31069-5>. pp. 1086-1087

¹⁵⁵ *Moran*, *Defining the Meanings of Magic*, pp. 382 ff.

¹⁵⁶ See: *Libavius*, *Tractatus duo physici*: "I ask you, examine the compositions of the ointment, also the manner of its use, and compare these with the effects; having considered this, is there truly a necessary connection of affection between such a cause and such an effect...?" (trans. ChatGPT). p. 48.

great methodological fallacy, if cause and effect are to be observed, start by cleaning the wound and leaving the weapon alone.¹⁵⁷

And what does he say about *mumia*? When discussing wound treatments and the system of knowledge creation, he touches on the subject. If a treatment by Paracelsus calls for the use of *mumia*, *vsnea vranei*, *bolus* and *therebinthina*, what is the purpose of these materials? He does not categorically reject the practice of corpse medicine. It sounds like he does question the use of *mumia*. When using *materia medica* from human origin, he wants to understand *why* it has to come from humans? “*Adeps humanus lenit, vt & ol. Lini*” (human fat soothes, so does linseed oil).¹⁵⁸ Do these materials act because they are from a man, or because they have material properties against wounds? If it is because it is from man, there is nothing left of the human once the *ratio* has gone, only material, and if it is material, then why does it have to be from human origin? This idea is an Aristotelian idea: without the ratio, the human is like any other animal, why not use an animal then? Libavius's objections to *mumia* and corpse medicine are anchored in logic and experiment. As mentioned, his dispute is directed not solely against Paracelsus, but at his followers as well. His opposition to Paracelsianism was shaped not only by scientific concerns but also by a strong religious Lutheran foundation. In his time, paracelsianism had a more mild branch, that looked for new ideas and techniques in medicine, and a distinctly mystical offshoot, that looked for ways to harness the occult powers of nature through amulets and incantations.¹⁵⁹ This branch of mystical magicians, was represented, in the eyes of Libavius, by the mysterious *Rosicrucian* manifestos, that he wrote extensively against.¹⁶⁰ Another prominent figure of the mystical branch of paracelsianism was Oswald Croll (1560-1608) a brother in faith and contemporary of Libavius. In his masterpiece

¹⁵⁷ *Libavius*, *Tractatus duo physici*, pp. 48-51.

¹⁵⁸ *Libavius*, *Tractatus duo physici*, p. 48.

¹⁵⁹ To be clear, Libavius opposed both. See: Lyke de Vries, *Protecting Academia and Religion*, pp. 34 ff.

¹⁶⁰ *Vries*, *Protecting Academia and Religion*, pp. 34 ff.

Basilica Chymica (first published postmortem in 1609) an extensive instruction on the preparation of mumia first appears.

5.5 The Crollian Mumia

Oswald Croll was a professor of medicine at the university of Marburg. He incorporated alchemical teaching in his medicine. He was heavily influenced by Severinus¹⁶¹ and Duchesne. One of his main themes was the concept of *semina* - seeds. His opus magnum *Basilica chymica* was a highly influential work of medicine, alchemy and philosophy. It was reprinted in many editions throughout the 17th century and was translated to several different languages from the original Latin.¹⁶² While his book contains probably the most widely known instructions of *how to make* mumia, it does not discuss the theory of mumia, or the source of its powers. The following is the full how-to of mumia preparations. This is taken from a 1670 edition translated to English and published by “a lover of chymistry.” I chose this edition not for its convenient access alone, but also because it shows, as a late print of the book, a transmission of knowledge that I find interesting. This translation was not made on the basis of the original book, but rather based on Johann Hartmann’s (1568 - 1631)¹⁶³ commentary. Hartmann is also responsible for the remark that appears in the marganelia of the first page of the book: “There is one common Mummy of all men, viz. the spirit of life. The Medicine therefore may also be one. For the Disease in mans Body is nothing else but an Affect whereby the Mummy, or operation of the Spirit of life in man is hindered.”¹⁶⁴ This note does not appear in the original and is a later addition of Hartmann.¹⁶⁵ For Hartmann mumia is the essence of life. It is one in all men, and therefore a cure for the mumia is

¹⁶¹ Petrus Severinus (1540/42 - 1602), the renowned Danish physician and paracelsian, that will (as mentioned) not be discussed in this paper.

¹⁶² On Croll see: *Friedrich, Müller-Jahncke, Schmitz*. *Geschichte der Pharmazie*, pp. 307-311. *Jalobeanu and Wolfe*, *Encyclopedia of early Modern Philosophy and Science*, pp. 399-400.

¹⁶³ On Hartmann see: *Friedrich, Müller-Jahncke, Schmitz*. *Geschichte der Pharmazie*, pp. 311-315.

¹⁶⁴ *Croll, Hartmann, lover of chymistry* (trans.), *Basilica chymica* (1670), p. 1.

¹⁶⁵ Compare original: *Croll*, *Osualdi Crollii Veterani Hassi Basilica chymica* (1609), p. 2. This note appears in a 1643 from Venice: *Croll and Hartmann*, *Basilica chymica* (1643), p. A2.

a universal cure. The search for a universal cure, so typical for paracelsians, can be understood in this background. In humoral theory, where disease is a specific imbalance of the humors, a disease must be counter with restoring this balance, the uniqueness of every disease makes the cure unique as well. This is the source of controversy surrounding universal cure (see above).

In the following, letters in (parentheses) are the notes of Johann Hartmann. The English version in the OTA, is based on a poor quality scan from the Early English Books Online projects, where I thought it is beneficial, I brought the original latin from the 1643 Venice edition in {braces}:

“Venenate.

I. Treacle of Mumy.

OF Mumy (a) only is made the most excellent Remedy against all kinds of Venomes.

First, A Tincture of Mumy is prepared in this manner.

Chuse the Carcase of a red Man (b), whole (c) clear without blemish, of the age of twenty four years (d), that hath been Hanged, Broke upon a Wheel, or Thrust-through, having been for one day and night exposed to the open Air, in a serene time.

This Mumy (e), from the two Luminaries (f), once illuminate and constellate (g), cut into small peices or slices, and sprinkle on them Powder of Myrrh,¹⁶⁶ and of Aloes, but a very little, (otherwise it will be too bitter) afterward by Macerating, Imbibe them for certain days in Spirit of Wine, hang them up a little (h), and again Imbibe them (i), then hang them up to dry in the Air; this so dried will be like Flesh hardned in Smoak, and be without stink. Afterward with Spirit of Wine, or Spirit of Elderflowers, according to art extract a most red Tincture (k).

Also Oyle Olives may (l) a part with the dried Mumy (for the moisture (m) in digestion causeth an intollerable Stinke) be Macerated for a Month, and so be Tinged therewith; this Tinged Oyle Olive, may afterward at pleasure be added to the Tincture of Mumy, before it be mixed with the Treacle.

R Therefore of the Tincture or Extract of Mumy made with Spirit of Wine, from which the Spirit is afterward abstracted, half a pound.

- Treacle Andromach ʒiiij.

¹⁶⁶ Interestingly the German version translates myrrh to mumia: “...in Stücke zerschneiden mit pulverisierter Mumia und ein wenig Aloe...” See: *Croll*, Osvaldi Crollii Vett: Basilica Chymica (1629), p. 226.

- Oyle Olives mumiat ʒij.
- Salt of Pearls and Corals, of each ʒij.
- Terra sigillata ʒij.
- Musk ʒj.
- Mix and digest these by Circulating for a Month.

Virtues, Use, and Dose.

By this Treacle of Mumy very many Diseases are perfectly cured.

1. In the Pest, so great is its virtue, that if administred before Infection, there is thence forward no danger of venome, and who so useth ʒ j. hereof in the morning, will not be Infected that day.

[...] taken (n) in Treacle or in Water of Carduus [...]. {infectus utatur drachma semis vel drachma una, in aqua Cadui benedicti, vel cum theriaca}

[...], Blanes, and the Pleurisie (o) ʒj. is administred. Then [...] is [...]ed, and who so attams that hour, as to take [...] be certain of recovery.

[...] of [...]. Dose from ʒss. to ʒj. or ʒij. in urgent necessity. [...] drunk poison, the said Dose in ʒj. or ʒij. of Oyle (p) of Almonds, that [...] V [...]mit, the Operation of the Medicine must be expected in Bed.

By this means all venomes of Beasts, or Minerals, may be expell'd.

(a) [...] in this place our Author means not that Liquid matter which is found in [...], {per mumiam hoc loco intelligit autor non illud liquorem in sepulchris Aegyptiorum inuentum} in which Humane Bo [...]es, embalmed with Aromaticks, have been [...] But according to Paracelsus it is the flesh of a Man, that perishes by [...] for some time in the Air; its Extraction, but mystically, Para [...] [...] lib. 3. [...] Long Life, chap. 10. It is otherwise by him called Mumia pa [...].{patibuli}

[...] Al [...]pharmacons, which are here placed by our Author, are such as [...] had, and therefore are worthy of all commendation. If there be other [...] published, yet varying here from, are not worthy to be compared with them.

{caeterum quae autor hic, specifica & alexipharmaca enchiremata posuit, sunt talia, qualia alias non habentur : ideoque merito magnificienda. sique alias vulgaria circumferuntur, illa nullo modo cum his comparanda sunt.}

(b) Because in them the blood is more sincere, and gentle, and therefore more excellent. Note. Red [...] {homines} are all Mercurial, and tend either to good or evil.

(c) Not ma [...]ed, {non mutilati}

- (d) Or there about.
- (e) That is, Musculous flesh, of the Thighs, Breasts, Armes, and other parts.
- (f) Sun and Moon.
- (g) Viz. From the impression of the Luminaries.
- (h) For six or ten days in the Sun.
- (i) With the same Spirit of Wine, which is made of Elder-stowers, first [...]ermented, asterward in the m [...]nner of other Spirits Distill'd.
- (k) By digesting.
- (l) Some prepare Mummy, cut in pieces, but not very small, with Myrrh, and Epatick Aloes a part, not altogether, but piece by piece, without Spirit of Wine, or with Sublimed Flowers of Sulphur, with Saffron, Myrrh, and Aloes, and so leave it for a Month in some commodious place, that it may be dried very leisurely; then with fresh Oyle Olive, for another Month they putrefie it, Express it, and from the Oyle with Spirit of Wine, or of Elder, Extract a Tincture, which by Distilling off the adjected Spirit, they reduce to a Consistency.
- (m) For so hath it been done by some, who putrefie fresh Mummy, not dried, with Oyle Olive in a place moderately hot, but with so great a stink, as greater cannot be. This a [...]seth from the [...] of that humidity freshly mixed with the Oyle; yet this by drying is removed, although [...]t be afterward putrefied in Oyle, yet no evil savour is excited, being Circulated in the Winter in Balneo, in the Summer in the Sun.
- (n) O, with Treacle-water, or Water of Meadowsweet.
- (o) Malignant.
- (p) Or, if the Patient abhor it, it may be given in other appropriate Water."¹⁶⁷

This extensive quote is necessary to understand the details of the recipe, which are not typical for this kind of writing. This quote, I would argue, makes a strong case for the study of apothecaries. It is a prime example of how many worlds of knowledge reside together in the pharmacy. The astrological knowledge needed to *illuminate and constellate* the mumia, the different materials in use, the knowledge of anatomy and butchery, preservation skills that come

¹⁶⁷ Croll, Hartmann, *lover of chymistry* (trans.), *Bazilica chymica* (1670), pp. 155-156.

from cookery and the technical savvy for the distillation. Here mumia takes on a role unmentioned in this paper before as an antidote for all kinds of venom, but not only venom, because “By this Treacle of Mumy very many Diseases are perfectly cured.” This recipe is an amalgamation of several writings by Paracelsus. The idea of mumia as an antidote for all poisons is taken from *De Mumia Libelus*.¹⁶⁸ Here mumia is marinated in olive oil and mixed with musk. In a different essay Paracelsus recommends imbibing the mumia in wine and distilling it.¹⁶⁹

The first note (a) by Hartmann addresses the common mistake of thinking mumia (or mummy here) is the embalmed bodies of Egyptians. The true origin of mumia is that of a man killed in the prime of his life. The man should lose his life violently in the air. This concept of air mumia is taken from *Vom Fleisch und Mumia* of course. According to the theory of mumia that is presented in that essay, mumia from embalmed bodies is of no use for it is earth mumia. The earth mumia is a mumia of those who lost their life on or in the ground,¹⁷⁰ usually from sickness or weakness, and therefore their mumia is depleted from powers. In Paracelsian theory the process of embalming is less important than the circumstances in which the mumia was created, i.e. *where* life was lost.¹⁷¹ This should be common knowledge for any devout Paracelsian, or any reader of this paper who paid attention thus far. But surprisingly Croll advocates in his book the use of Egyptian mummy.¹⁷² In one case, in a recipe that makes use of mumia and is attributed by Croll to Paracelsus, Hartmann clears in a side note that the mumia is “Of the common, viz. Egyptian, not Mumia Patibuli of Paracelsus.”¹⁷³ Another kind of mumia that is mentioned in the book is the *foreign mummy* (or *Forraign Mumy*).¹⁷⁴ While the term is not

¹⁶⁸ Paracelsus, *Sämtliche Werke*, Vol. 3, p. 375.

¹⁶⁹ Paracelsus, *Sämtliche Werke*, Vol. 3, p. 278.

¹⁷⁰ As most people do. Or in other words, if you are *not* an earth mumia when you die, something went horribly wrong.

¹⁷¹ Von dem Fleisch und Mumia: Paracelsus, *Sämtliche Werke*, Vol. 13, pp. 343-349.

¹⁷² Croll, Hartmann, *lover of chymistry* (trans.), *Bazilica chymica* (1670), pp. 90, 17.

¹⁷³ Croll, Hartmann, *lover of chymistry* (trans.), *Bazilica chymica* (1670), p.175.

¹⁷⁴ Croll, Hartmann, *lover of chymistry* (trans.), *Bazilica chymica* (1670), pp. 87, 103, 161, 164.

explained, I would suggest that this is none other than the sand mummy, which became known at that period as a product of human *other*, usually Arabian or Muslim.

Now to the curious victimization, or choice of the perfect mumia candidate. The conditions for the perfect mumia are very strict. We discussed the method of execution, in the air. Which makes it an air mumia, the *gouldy lock* mumia: not too weak (water) and not too strong (fire).¹⁷⁵ The illumination and constellation is meant of course to imprint the celestial powers on the mumia.¹⁷⁶ We are left with some traits that seem random: age of 24, not mutilated, clear without blemishes, and red hair. Some speculations are needed here, I will try to anchor them in the epistemic world of Croll and Hartmann. The age of 24, at first glance, seems to mean a young man in his prime. This seems to be the way Hartmann understands it: “of the age of twenty four years (d - Or there about).” I would argue that Hartmann is wrong here. It should be a man in his 24th year. According to Ficino, a 7 year cycle governs human life. While in the womb, the baby’s growth is decided by the celestial body in a monthly cycle, from furthest (Saturn) to the closest (Moon).¹⁷⁷ Ficino suggests that a cycle begins with the child’s birth. But this time yearly, and in reverse, starting with the Moon and ending with Saturn. This is why every seventh year is significant, because of the great leap from Saturn back to the Moon.¹⁷⁸ Following this logic a person entering his 24th year will be governed by the Sun. The Sun is considered a beneficial planet (it was seen as a planet) and was associated with Gold. I believe this is the reason for the specific age.

¹⁷⁵ Not to mention the earth mumia that can down right hurt you. *Paracelsus*, *Sämtliche Werke*, Vol. 13, pp. 343-349.

¹⁷⁶ Here Croll is somewhat lenient. See for example the instruction on *Sympathetick Oyntment, or Stellate of Paracelsus*. This preparation calls for the use of usnea (I added the note by Hartmann in its proper place): “Then take of Usnea (g - They are better, from such as are Hanged), shaved off the Cranium of one that hath perished by violent Death, the Moon encreasing, and being in a good House, if it can be at the time, when she is in the House of Venus, not of Mars or Saturn...This Oyntment must be prepared when Sol is in Libra.” Again death in the air is preferred. *Croll, Hartmann, lover of chymistry* (trans.), *Basilica chymica* (1670), p. 173.

¹⁷⁷ Which curiously amounts to a 7 month pregnancy. The order of celestial bodies according to common renaissance astrology (from nearest to furthest): Moon, Mercury, Venus, Sun, Mars, Jupiter, Saturn.

¹⁷⁸ *Ficinus*, *Three Books on Life*, pp. 230-233.

The person should be not mutilated, presumably to avoid depleting the powers of the mumia, or otherwise it is connected to the mumia candidate being “clear without blemish.” This description of the mumia candidate suspiciously echoes the description of the witch in early modern Europe. It is kind of a mirror image of the typical profile of the witch. The witch is a woman, the mumia is made of men. The witch is old, past her child bearing age, the mumia is a man in his prime. On the body of the witch, the witch’s mark is to be seen, the mumia must be “clear without blemish.” The witch is burned and eliminated from society, the mumia is processed and reintroduced into society as medicine. There is a logic of social recycling here, at least in a symbolic way. The witch, as an old woman, not participating in the work force, is a burdon on societies resources,¹⁷⁹ the mumia was a vital part of the work force and his death is a net loss to society.

The first element to be mentioned is the red hair (a red man). This is not the only time Paracelsus, or Paracelsians take issue with red heads. In an obscure comment Paracelsus declares that a surgeon should not have a red beard.¹⁸⁰ This unexplained remark left Christie guessing. The suggestion raised by him, is that the red colour is associated with Mars, and therefore with war-like astrum. This aggressive nature is not fitting for a physician.¹⁸¹ I do not claim to have the answer for the red bearded surgeon, but we do have some clues in regards to the mumia. When discussing this recipe, which appears in a book by Johannes Schröder as well, Kopp suggests that the answer lies in humoral theory. Red hair is associated with the excess of blood, blood is associated with the element of air, which is cold and dry, therefore red hair, like the mumia of air, is most beneficial.¹⁸² But Hartmann gives us another hint here. Red headed people “are all Mercurial, and tend either to good or evil.” Are they like Mercury, the

¹⁷⁹ It must be stressed that I am NOT bringing my opinion on the matter, but rather looking at the subject from the eyes of a patriarchal society that had different concepts on domestic work. It is probable that elderly women played crucial parts in early modern European society. Many of the women accused of witchcraft were employed in fields related to childbirth and the care of young children—feminine environments largely overlooked by masculine society.

¹⁸⁰ *Christie, The Paracelsian Body*, pp. 274-275.

¹⁸¹ *Christie, The Paracelsian Body*, pp. 274-275.

¹⁸² *Kopp, Menschenfleisch*, pp. 63-64.

metal that is (at least metaphorically) able to flow from evil to good, and take the shape of the vessel it is in? Let us remember one property of the mumia: it works like a magnet,¹⁸³ it is attracted to where it should go and attracts to itself what it should attract.¹⁸⁴ I suggest that the mercurial properties of the red man make him a better mumia for that reason, the fluidity. Another option is that Mercury alone from all the planets has a hermaphroditic nature.¹⁸⁵ As we have seen before, in Paracelsus's theory, astral forces are male, and the elements are female. The hermaphroditic nature of this mumia might be better in conducting the medicine that travels from the (male) astral cause of disease, to the (female) material.

This ambiguity and room for interpretation are very typical to the Paracelsus and to the Paracelsian movement. In a way it gave the option for supporters and opponents alike to see in Paracelsus what they wanted. The early Paracelsianists laid the foundation for Paracelsus to become an all European sensation. It is interesting that every country, or better yet, every region, had different approaches to the new medicine. Some adopted it with ease and some did not. The opponents of Paracelsian theory rejected it on several grounds. In Switzerland many of the attacks were on a personal basis, maybe not surprisingly from people who had some personal connection to Paracelsus himself. They also attacked his perceived religious ideas, which is also not surprising in the German speaking world so engulfed with religious reforms and theological debates. In France, where the Parisian medical establishment reigned supreme in the kingdom's most important city, the debates took different forms.

¹⁸³ In Paracelsian theory the concept of magnet is wider than what we call magnet. A magnet in Paracelsian theory is a force that attracts a specific thing, that is: every material has its own magnet. What we call a magnet is a magnet for iron.

¹⁸⁴ *De Mumiae Arcanis*, *Paracelsus*, *Sämtliche Werke*, Vol. 14, pp. 305-308.

¹⁸⁵ *Ficinus*, *Kaske*, *Three Books on Life*, p. 34.

6. France: the Chemical Debate and the Source of Mumia

6.1 Chemical Medicine is Banned in Paris

In this Chapter we will explore the medical world of France. In France there were formal debates about chemical medicine, and informal debates about mumia. The French world of medicine was no stranger to alchemy in medicine prior to Paracelsian theory. Here Debus reminds us that the Paracelsians could trace the heritage of alchemy in medicine to figures like Roger Bacon (ca. 1214 - ca. 1294), Arnald of Villanova (1235 - 1311) and John of Rupescissa (14th century). Jean Fernel (1497-1558), a professor of medicine in Paris, advocated the use of alchemy in medicine before any Paracelsian gained any significant circulation in France (or indeed most of Europe).¹⁸⁶ Paracelsus was a minor figure in the discussion that started the debate around the use of chemicals and metals in France. The debate started with the use of antimony in medicine. Loys de Launay (d. 1557) learned about the use of antimony from the French translation of the commentaries on Dioscorides by the Italian Pietro Andrea Mattioli (1500 - 1577). In it, Mattioli credits Paracelsus for being the first to use antimony as a laxative (while others used it primarily as purgative). De Launay praised the use of antimony. In his 1564 work *De la faculté & virtue admirable de l'Antimoine* he credits mainly Mattioli and not Paracelsus. He was answered by Jacques Grévin (1500 - 1570), a Parisian physician and dramatist, who wrote a disputation against the use of antimony. His work led the Parisian Faculty of Medicine to decree in August 1566 that antimony was poisonous and dangerous.¹⁸⁷ Their back and forth debate spent four tracts, in the later tracts, that were published in 1567, Paracelsus is more

¹⁸⁶ Debus, *The French Paracelsians*, pp. 13-14.

¹⁸⁷ Debus, *The French Paracelsians*, p. 25.

prominent. According to Debus, this altercation not only sparked the chemical debate in France but also introduced Paracelsus to the French medical establishment.

Beside these tracts, In 1567 two other works of Paracelsus were published in France. One was the *La grande, vraye et practice chirurgie* translated by Pierre Hassard, a physician and surgeon from Amentières. Hassard did not focus on chemistry in this book, he did however, promote the myth of Paracelsus as “a tireless scholar who had written hundreds of volumes on philosophy, medicine, astrology, theology, political justice, natural magic, and other subjects.”¹⁸⁸ Another work of paracelsian philosophy was published by Jacques Gohory (1520 - 1576), a diplomat with an affinity to the occult arts. His work focused on “the occult interpretation of the Paracelsian description of the cosmos,”¹⁸⁹ and less on practical medicine. Paracelsus was introduced to France as a reformer and mystical figure. In early years, many physicians in France were drawn to the new chemical medicine. Not necessarily following Paracelsus, but earlier traditions of chemical medicine. Physicians who embraced paracelsian theory were not themselves strictly paracelsians, applying some of his ideas, and at times incorporating them into Galenist theory.¹⁹⁰

The medical establishment in Paris was highly suspicious of the new medicine. If only because of the reformist undertone of the *nova medicina*. Paracelsians were often associated with religious reform. but Gunnoe and Daniel show that much of the early opposition to Paracelsus came from reform circles as well. The catholic church was late to respond to the new medicine. When theological works by Paracelsus were later published, a surprising alignment with catholic theology was apparent in them. Paracelsus also went under the radar of catholic censorship, while many of his opponents, ironically, featured extensively in lists of banned books by the Catholic church.¹⁹¹ With that said, it was true that the new medicine was

¹⁸⁸ Debus, *The French Paracelsians*, p. 26.

¹⁸⁹ Debus, *The French Paracelsians*, p. 27.

¹⁹⁰ See: Debus, *The French Paracelsians*, pp. 21-30.

¹⁹¹ Gunnoe, *Daniel*, *Anti-Paracelsianism*, pp. 117-118, 128-130.

carried by reform-minded travelling physicians and scholars, and this was especially true in the case of France.¹⁹² The deeply Catholic Medical Faculty of Paris, who stuck to conservative Galenist theory, was quick to take action against the new wave of medical reformers. One of their first moves was taken against Roch le Baillif (1540 - 1598), a pro Paracelsian physician from Normandy who was summoned to Paris to serve Henry the III. The Parisian Medical Faculty quickly invoked its privilege and banned him from lecturing or practicing medicine. He refused and was summoned to appear before the parliament. The trial was an attack by the Faculty on Paracelsian medicine as a whole, widening the debate beyond the use of antimony. Le Baillif was ordered to leave Paris.¹⁹³ The details of the debate that spent a century are beyond the scope of this essay. The new medicine had ups and downs. With the ascendant to the throne of Henry of Navarre, a supporter of chemical medicine, the almost exclusively Huguenots practitioners of chemical medicine saw a short lived relief. In 1615 chemical preparation of medicine was banned. In 1625, the discussion, that up till then was focused on medicine and pharmacology, expanded into new areas of paracelsian theology and philosophy. The faculty waged an uphill battle against the spread of chemical medicine. In 1648 a center for chemical studies was operating in Paris, and yet, chemical medicine was not included in the curriculum faculty for medicine. But was mumia part of the discussion?¹⁹⁴

6.2 What Mumia Was for the French Paracelsians

In Gohory's *Compendium*, published under the name of Leone Suavio, in a section where the author comments on *de Vita Longa*, there is a curious discussion on mumia. It seems that the author is mixing the term for mumia and balsam. He describes the various kinds of balsam: "...pervulgatum scilicet vel Iudaicum naturalem vel artificialem à quibusdam inscienter

¹⁹² Gunnoe, *Daniel*, Anti-Paracelsianism, p. 128.

¹⁹³ Debus, *The French Paracelsians*, pp. 38-44.

¹⁹⁴ Debus, *The French Paracelsians*, pp. 65, 99-100.

confectum.”¹⁹⁵ This is part of the discussion on preservation of the body. He goes on to use the word *mumia* as a verb, and dispute its origins: (a new balsam must be found that remove corruption) ”... & corpus morbo affectum muniat seu mumiat (ut lego à *mumia* uocabulo ficto (de qua lib. 2.).”¹⁹⁶ Here Gohory sees the *mumia* as a material and mixes the term balsam with *mumia*. What kind of balsams are there? A natural Jewish one, and an artificial one (as I read it, made by people without the necessary skill and knowledge). Is this a reference to *bitumen ludaicum*, the dead sea asphalt? If so, what is the *balsamus artificialis*? Could it be a reference to local production of *mumia* from humans in France? It is hard to say for certain, but there is evidence to support this hypothesis (see below).

One of the most prominent figures in the early Paracelsian movement in France was Joseph Duchesne, or Quercetanus (ca. 1544 - 1609). A Calvinist that spent the tumultuous times of religious war in exile. He studied medicine in Basel before settling in Geneva. He returned to France in 1593 when Henry of Navarre took Paris.¹⁹⁷ He was never a strict paracelsian and combined the new medicine with the old authorities. In his book *A breefe aunswere...*,¹⁹⁸ he discusses *mumia* quite extensively. In a section concerning medicine from animals he first explains, using what looks like Aristotelian reasoning, that animals have more force, because they “doo obtaine the second degree of perfection, and among the animals man by right obtaineth the first place.”¹⁹⁹ Therefore a *mumia* from man is the strongest one. According to Duchesne, three kinds of *mumia* exist: liquid, fresh and drie, or transmarina. All are good sources for medicine. *Mumia Transmarina* is none other than “mans body, laid in the tombe inbalmed with Frankensence, Myrra, and Aloes.”²⁰⁰ This is the only kind that was known to the ancients. They used it inwardly and outwardly, to stop bleeding and cure diseases of the

¹⁹⁵ Gohory, Paracelsus: Theophrasti Paracelsi Philosophiae Et Medicinae: “...namely a common one, either Jewish, natural or artificial, ignorantly prepared by certain people.” (trans. ChatGPT). p. 213.

¹⁹⁶ Gohory, Paracelsus, p. 213.

¹⁹⁷ Debus, The French Paracelsians, p. 33.

¹⁹⁸ Here an English translation from 1591 of the original French of 1575 (*Ad Iacobi Avberti Vindonis...*): Duchesne, John Hester (trans.), *A breefe aunswere*.

¹⁹⁹ Duchesne, *A breefe aunswere*, p. 33.

²⁰⁰ Duchesne, *A breefe aunswere*, p. 33.

stomach and to strengthen the heart. Today this mumia is rare and apothecaries “vse the dried flesh and that without any preparation.”²⁰¹ This sounds like a reference to sand mumia. What follows is a recipe for liquidation of the dry mumia, made by chemical processes.²⁰²

This descriptive account of mumia, centered around the reality and existing use of mumia, is the more common one. More common, that is, than a discussion into the theory of mumia. Duchesne is engaged in a dialogue with the *praxis* of mumia. Not unlike Paracelsus that rationalized the existing use of mumia himself. The shallow theoretical discussion and the wide use of mumia, point to a tradition that had an inertia of its own. Apothecaries in Europe used mumia as part of their tool kit, not because of the Paracelsian theory. They were not particular about the kinds in use. From Duchesne and from other sources it seems like the common mumia was what we described as sand mumia. This situation is largely persistent since Tomé Pires sent his report to king Manuel in 1516. The scholarly debate between Paracelsians and Galenists in France largely ignored the topic of mumia. But there was a lively debate in France concerning mummies.

6.3 The French Go to the Source of Mumia

The French debate of mumia went to the source, so to speak. Carried by travelers and physicians that visited Egypt and saw the mummies first hand. 16th century Europeans were fascinated by Egypt (a claim that is arguably true to almost every century Europeans). Judging from the accounts they left behind, mummies were of particular interest to them. The famed 16th century French cosmograph André Thevet (1516 – 1590) wrote two accounts on the Levant. The first, *Cosmographie de Levant*, was published in 1554 and contained a short description of the Pyramids and the practice of embalming. As was the custom of many 16th century writers,

²⁰¹ *Duchesne*, A breefe aunswere, pp. 33-34.

²⁰² Like the paracelsian mumia, mostly marinated in liquid, and heated or distilled. *Duchesne*, A breefe aunswere, pp. 33-34.

his account is a mix of his own sightings, experience and inquiries of locals,²⁰³ and of ancient and contemporary writers who discussed these subjects. The office of the cosmograph is an interesting one. The cosmograph sets out to arrange the knowledge of the world for his country men. He is part geographer, part anthropologist, part historian, part botanist and zoologist, part natural philosopher (and occasionally a theologian). His authoritative claim for knowledge is anchored in his physical travel and unmediated contact with the subjects of his study. The second account of Egypt is part of his *La cosmographie vniuerselle*, published in 1575. This account is an expansion of the first publication, supplemented by contemporary discussion and knowledge.

In both accounts of Thevet, mummies (here the embalmed bodies) are a central topic and mentioned as medicine. He is interested in the technique of embalming and the history of it. He has great admiration for the Egyptians who, among all nations, are the most meticulous with honoring their dead. He discusses some ancient burial rituals of different nations shortly, and the embalming process and related funeral rites of the Egyptians in more detail. As far as I know, Egyptians in the 16th century did not practice embalming, at least not as their ancient compatriots, so this knowledge is based on his reading of other writers (Pliny is mentioned for example). He discusses some technical details of the embalming process and the substances that were used. This topic is not of great importance to our subject. Thevet describes three levels of embalming according to the deceased status, complex embalming with expensive materials and removing of the entrails for the elite, a more modest embalming with aromatic oils enema for the wealthy, and a simple embalming for the poor that were basically salted and dried.²⁰⁴

²⁰³ He reports for example that the Jews in Egypt told him that the Pyramids were granaries of the King. An idea that certainly comes from *Genesis*, where Joseph's claim to fame was interpreting Pharaoh's dream that years of drought would follow, and advising him to store grain. See: *Thevet*, *Cosmographie de Levant*, p. 151.

²⁰⁴ *Thevet*, *Cosmographie de Levant*, pp.149-156.

This account also appears in what is arguably the most detailed discourse on mumia in the 16th century: *Discours de la mumia*²⁰⁵ by Ambroise Paré (ca. 1510 – 1590). Paré was a renowned surgeon in the court of the kings of France. This work by him, published in 1582, is a great example of knowledge transmission and knowledge creation in the medical world in the second half of the 16th century in Europe. Paré, who did not travel to Egypt, got his information from friends and acquaintances who did visit Egypt. Their knowledge was supplemented with classical and contemporary writings, experience, and experimental observations. He traces the origins of embalming the dead to most ancient people, and above all the Egyptians. Interestingly he claims that embalming was practiced by Jews as well. This idea might have several bases. Paré quotes Strabo who says Jews applied bitumen to preserve their dead. The bitumen they used is the dead sea²⁰⁶ bitumen, sometimes called Jewish bitumen. The geographical origin of the bitumen combined with the idea that this substance is used in embalming might be the source of confusion. Embalming is not a Jewish tradition. While Jewish funeral rites varied through the ages, proper embalming was never practiced and it is antithetical to the basic principle of Jewish burial: *כִּי-עָפָר אַתָּה וְאֶל-עָפָר תָּשׁוּב*.²⁰⁷ Another source of confusion might be the bible. While rare, there are some cases of prominent figures that were embalmed. Namely Jacob, on the will of Josef, which Paré mentions explicitly, and Josef himself.²⁰⁸ Another exceptional example is king Asa, who seems to have been embalmed in a way: *וַיִּשְׁכַּב אָסָא עַם-אֲבֹתָיו וַיָּמָת בְּשָׁנָת אַרְבָּעִים וְאַחַת לְמָלְכוֹ: וַיִּקְבְּרֻהוּ בְּקִבְרֹתָיו אֲשֶׁר כָּרָה-לוֹ בְּעִיר דָּוִיד וַיִּשְׁכְּבֻהוּ בַּמִּשְׁכָּב אֲשֶׁר מִלֵּא בְּשָׂמִים וְזָנִים מְרֻקָּחִים בְּמִרְקָחַת מַעֲשֶׂה וְיִשְׂרָפוּ-לוֹ שִׁרְפָּה גְדוֹלָה עַד-לְמָאָד*.²⁰⁹ Paré mentions the Burial of Jesus as well. He was treated with myrrh and aloe and wrapped in a shroud. This might be

²⁰⁵ Paré, *Discours d'Ambroise Paré*, pp. 1-14.

²⁰⁶ Here Strabo/Paré is confusing the Dead Sea with the Red Sea: Paré, *Discours d'Ambroise Paré*, p. 2.

²⁰⁷ Genesis 3:19: "For dust you are, And to dust you shall return." Translation: The Contemporary Torah, Jewish Publication Society, 2006.

²⁰⁸ Genesis 50:2, 26, Paré mentions the embalming of Jacob, see: Paré, *Discours d'Ambroise Paré*, p. 5.

²⁰⁹ II Chronicles, 16:13,14: "Asa slept with his fathers. He died in the forty-first year of his reign. and was buried in the grave that he had made for himself in the City of David. He was laid in his resting-place, which was filled with spices of all kinds, expertly blended; a very great fire was made in his honor." (Tanakh: The Holy Scriptures, published by JPS).

another source of confusion, in Jewish tradition the body of the dead is wrapped in a shroud and not buried in a coffin. This tradition is practiced until today in religious Jewish communities. This is not the only way Jews were connected to mummies, more on that below.

Paré's interest in embalming was not only theoretical. The techniques of embalming were of great interest to him as an experimental and practicing surgeon. He understands the process of embalming as a form of preservation. He compares embalming with food preservation. Techniques of food preservation were highly important to a surgeon that his main concern was to prevent decay, pus and gangrene. Paré also experimented with embalming himself. He reports that he preserved a body for his study of anatomy, and as an instructive tool for surgery. The body was of an executed criminal and was given to him by one Lieutenant criminel nommé Segulier, Seigneur de la Verriere.²¹⁰

One of the most interesting aspects of Thevet's account is his description of an entire industry around mummies. Guides take him to ancient tombs and lead him into burial caves to show him where the mummies come from. He reports that he had witnessed many times tombs being opened, and the body taken away on the back of camels.²¹¹ He reports of an abundance of mummies in the land. But Thevet is at times a bit fanciful and should be taken with a grain of salt. Like his eyewitness account of a mummy that was 9 feet tall.²¹² This mumia market was not a recent development in the times of Thevet. Mummies were a source of income and a resource for Egyptians in the middle ages as well. The Baghdad born physician and philosopher Abd Allatif (1162 - 1231) who traveled in Egypt in the year 1203 reports a similar state of affairs. The land was humming with industrious scammers, swindlers and treasure hunters looking to make a fortune from ancient Egyptian cultural assets. Foreigners looking for grave goods, local guides who charged hefty prices to show them the best places and of course rubbers of any kind. In the

²¹⁰ *Paré*, Discours d'Ambroise Paré, p. 5.

²¹¹ *Thevet*, La cosmographie vniuerselle, p. 43v.

²¹² I do not know what counts as a foot for Thevet, but considering it is based on a body measure, and that 9 standard modern feet are 2.74 cm, there is a clear exaggeration here. *Thevet*, La cosmographie vniuerselle. Sn31 p. 43v.

tombs they sometimes found gold and jewelry, but the mummies themselves were a resource as well. The sheets of cloth are taken and sold to paper makers, and the bodies themselves are carried to the market.²¹³ What was done with these corpses in the market? “In the belly and skull of these corpses, is also found in great abundance, the substance called mummy. The inhabitants of the country transport it to the city, where it is sold for a trifle. For half a dirhem I purchased three heads filled with this substance.”²¹⁴ Abd Allatif designates the word mummy to the substance. In the following paragraphs he discusses the *materia medica mumia*. I do not have the original Arabic, but the 19th century translation did not use it for the embalmed bodies. The word mummy for embalmed corpses was well established in the 19th century, therefore it is safe to assume that the original indeed used this word only for the *materia medica*. It is unclear who was the target audience of this medicine, it is possible that there were trade routes to Europe. But it is certain that the local Egyptian market had a demand and use for this *materia medica* (see below).

Abd Allatif addresses the dual meaning of *mumia* in his travelogue. It is the substance of the dead, but also a substance nicknamed “menstrua of the mountains,”²¹⁵ the description of which is aligned with *shilajit* more than any other substances so far discussed. He is of the opinion that when in need, the *mumia* “found in the hollows of corpses in Egypt” is a fine substitute for the “menstrua of the mountains.” The French discourse as well was not limited to mummies, but was also about *mumia*. In his later text, *La cosmographie vniuerselle*, Thevet comes in strong with polemics against Mattioli (see above). In his *Commentary on Dioscorides* Mattioli supports the bitumen theory of *mumia*. He doesn’t refute the option that *mumia* might refer to the liquid in embalmed bodies, but these have to be embalmed with myrrh and other expensive substances that are used only in the case of elites, and are not the product that arrives in Europe. It is important to point out that he does not reject *mumia* on the basis of

²¹³ *Pinkerton*, A General Collection..., pp. 813-818.

²¹⁴ *Pinkerton*, A General Collection..., p. 816.

²¹⁵ *Pinkerton*, A General Collection..., pp. 816-817.

cannibalism, as he approves from experience the use of powdered human skull against epilepsy.²¹⁶ Thevet takes offence with Mattioli's opinion on mumia, which might come from a different work of his rather than the commentary on Dioscorides, because he describes an argument between him and Belon, a dear friend of Thevet. For Thevet, mumia comes from an Arabic word for any aromatic liquid mixed with the human body. Not like he was previously made to think that the word comes from cinnamon, as he, to his much regret, wrote in his first published account of the Levant.²¹⁷ According to Thevet the real mumia is as described, embalmed with myrrh and aloe. But in Thevet's time, the dual meaning of mumia that Abd Allatif had to explain, expanded to new territories, namely the sand mummy.

It is a curious case, the case of the sand mummy. It seems to be rejected as "true mumia" by most people who write on the subject, and yet it was apparently widely spread. Of course Paré who disapproved of the concept completely (see below), Pires, who thought it as a fraud, although admittedly he also rejected the efficacy of "true mumia", and Paracelsus who considered it an earth mumia. Mattioli also thinks of it as a fraud: apothecaries that grind simple human flesh and sell it as mumia.²¹⁸ Thevet goes one step further and claims the spontaneous creation of sand mummies, i.e. people buried under hot sand and dry completely, is impossible. He claims that in his two crossing of the desert he didn't hear of the phenomena, and there is no air so dry as to prevent putrefaction. What's more, wild beasts and other creatures will surely devour such corpses. And if it is so, how come animals like camels and horses are not found in the sands?²¹⁹ It is a good place to point out that many accounts of embalmed animals are

²¹⁶ *Mattioli, medici senensis Commentarii*, pp. 79-80. Mattioli also recommends mumia sepulcrorum in another place. See: *Ibid.*, p. 679.

²¹⁷ It takes a big man to admit your mistakes. Compare: *Thevet, La cosmographie vniuerselle*, p. 42, and *Thevet, Cosmographie de Levant*, p. 149.

²¹⁸ *Mattioli, medici senensis Commentarii*, p. 80.

²¹⁹ Thevet was apparently unaware of Pires report to Manuel (see above). *Thevet, La cosmographie vniuerselle*, p. 42ff. Compare: *Cortêsão, A Suma Oriental De Tomé Pires*, p. 515.

given,²²⁰ not one source that I encountered contemplated whether they will make good medicine.

6.4 The Jewish Mumia Trade

To this trio of mumiae (bitumen, sand mumia, and Egyptian mumia) joins another mumia, the *fake mumia*. The term *fake* for mumia is a flexible one to say the least. It depends on one's expectations for what mumia is. If mumia is human flesh, sand mumia will suffice. If it must be made according to practice used on ancient Egyptian kings, then a simple mummy embalmed with bitumen is fake. If the mumia must harness the power of the celestial body and die in the air, all mummies from Egypt are basically fake. In the following discussion, fake mumia will refer to mummies deceitfully made to supply a demand in the market. The most influential account of fake mummies comes from Paré, or to be precise, brought by him. In his *Discours de la Mumia* Paré brings a conversation he had with Guy de la Fontaine, the physician of the King of Navarre. An obscure figure that I couldn't find a lot of (or indeed, any) information about. According to the story told on his behalf by Paré, he visited Alexandria in Egypt in 1564. There he met a Jewish merchant who traded in mummies. When he was asked about the source of these mummies, the merchant gladly professed that he makes them himself from every corpse he can get. He showed de la Fontaine his storage room with tens of mummies, most of them not four years old. He shared his techniques and ironically marvelled at the European hunger for human flesh.²²¹ The trade in fake mummies is corroborated by Thevet. Thevet, that for most lacks the slightly antisemitic tone of other writers discussed here, reports that in Cairo, Rosetta, Damietta, Alexandria and other places in Egypt, apothecaries will, on request, take you to a back room where they store many mummies. He claims this trade is common with all nations

²²⁰ See: *Thevet*, La cosmographie vniuerselle, p. 43. *Pinkerton*, A General Collection..., p. 817. *Thevet*, Cosmographie de Levant, pp. 154-155.

²²¹ *Paré*, Discours d'Ambroise Paré, pp. 7-8.

but especially among the Jews: “les Juifs sur tous : combien qu’ils soient falsificateurs de cela, aussi bien que de toute autre drogue.”²²²

Jews were not only accused of trading in fake mummies, they were accused of doing the association of mummies (embalmed bodies), and mumia (materia medica). The musician and medievalist Jean-Baptiste-Bonaventure de Roquefort-Flaméricourt (1777-1834) wrote in his essay *des Funérailles des rois* that: “et toute cette imposture, si l'on s'en rapporte à un ouvrage publié en 1625, était une spéculation de Juifs.”²²³ The work in question, that this statement is based on, is *diverses leçons de L. Guyon*, that I couldn't find. In it he tells the myth of Elmagar, a Jewish physician that during the crusades started prescribing the medicine to Christians and Muslims. In the words of Guyon, it was done with mal intent, a typical antisemitic trope. But Guyon is not the source of this myth. This name appears in Thevet's 1575 book. There, when discussing the origin of this cure, Thevet reports that he heard from Arab physicians that it was an Alexandrian physician named Elmagar. Thevet's Elmagar is not explicitly Jewish.²²⁴ In his travel to Egypt in 1203, Abd Alattif does not make this connection, although he is describing a mummy market where mumia is sold as materia medica. He does not speak of fake mummies.²²⁵ As mentioned above, it is likely that it was Isaac Israeli who first mentioned mummy as mumia. Though I would argue that he too just put into writing an existing practice. The name Elmagar according to Thevet is “nom d'un estourneau en langue Africaine.”²²⁶ But could it be related to Isaac Israeli or to a Jewish name of some sort? The only option I can think of is if it is some Arabized form of the Latin *Major* with an Arab article *Al*. It might be related to the common Jewish Sepharadic family name Almagor (אלמגור) which I believe has a different

²²² Thevet, *La cosmographie vniuerselle*: “...the Jews above all: however much they may falsify this, as well as any other drug.” (trans. DeepL). p. 44.

²²³ Roquefort-Flaméricourt, *Des sépultures nationales*: “And all this deception, according to a work published in 1625, was a Jewish conspiracy.” (trans. DeepL). p. 125. The quoted work is *diverses leçons de L. Guyon*, see: Dannenfeldt, *Egyptian Mumia*, p. 170.

²²⁴ In other places Thevet does mention the Jewishness of characters. Thevet, *La cosmographie vniuerselle*, p. 42v, 45.

²²⁵ Pinkerton, *A General Collection...*, pp. 813-818.

²²⁶ Thevet, *La cosmographie vniuerselle*: “A starling in an African language.” (trans. DeepL). p. 45.

etymology. Either way, I couldn't find any basis for this story. These two stories, of Elmagar and Guy de la Fontaine, were enough for later writers, like Roquefort, to deem it a Jewish conspiracy. In 1834 Thomas Joseph Pettigrew (1791 - 1865), a doctor of philosophy of the university of Gottingen, who became one of the leading experts on mummies, took this unfounded story from Guyon, and the second hand account from Paré, to describe the trade of mummies as a Jewish conspiracy to feed Christians with the flesh of the dead.²²⁷ I doubt whether he had better sources than I do. But the question remains, did Jews trade in mummies?

The simple answer is yes. But before we continue, a caveat regarding this delicate subject. Many antisemitic tropes, like the *Hofjuden* that handle the money of the king, or the Jewish banker with world wide business entrepreneurships, have a kernel of truth. Hofjuden, as economic advisors to kings and nobles did exist. Rich Jewish bankers still do exist. But as any antisemitic trope it is vital to remember that *it was never only Jews and it was never all the Jews*. With that said, evidence of Jewish activity regarding mumia can be found in the *Cairo Geniza*. The Cairo Geniza is one of the treasures of modern historical research. A Geniza is a collection of written documents, usually holy scriptures that are overly used and cannot be read anymore. According to Jewish tradition these documents must be buried like a person, and are kept in a storage in the synagogue until the time is right. In a synagogue in Cairo, the Jewish community expanded this collection of documents to almost every kind of document imaginable, probably to avoid discarding by mistake any holy scripture. From the 19th century onward documents were starting to be taken out of the Geniza, they contained letters from, and to, community members, including Maimonides, some writings by him, business accounts, ancient Torahs and more. The earliest are dated to the 10th century and the latest to modern time. The Geniza, on its hundreds of thousands of documents, is stored in several repositories of different universities and is available almost entirely online. The language of most documents is

²²⁷ Pettigrew, *History Of Egyptian Mummies*, pp.7-9. The lively discussion around mummies in France also brought him to the conclusion that: "The demand for mummy was greater in France than in any other country." *ibid.* p. 9.

Judeo-Arabic, that is Arabic written in Hebrew letters. The database is searchable, and I found several mentions of *mumia*.

I faced two major problems with using this database. The first is that I do not speak Judeo-Arabic. Luckily this posed a challenge only in one document. The second is that most letters are undated. This makes them noncontextualized and anecdotal. Curiously, the documents in the Geniza carry dates between 1002-1266, and again from the second quarter of the 16th century. This makes a plausible periodization of the undated documents to between 1266 and 1525.²²⁸ The first evidence is an unmistakable reference to *mumia* as *materia medica*. It appears in a document as part of a list of *materia medica*, like pepper and saffron (to name some I could recognize), that were ordered in small amounts: "...Quarter of a carat *mumia*..."²²⁹ The document is not dated. Carat probably means here a money amount and not a weight measure.²³⁰ What was the *mumia* ordered here? Bitumen, sand *mumia*, Egyptian *mumia*, "fake" *mumia*? It is probably impossible to know, but I would suggest it wasn't mineral *mumia* (see below). *Mumia* appears in another business document which is quite obscure.²³¹ A more detailed account is a document in which one Yefet b. Menashshe writes to his brothers to inform him that he sold *mumia* for 6 dinars and 45 dirhams.²³² The last mention of *mumia* I could find in the Cairo Geniza is an interesting one. The document is described as follows: "Letter sent by

²²⁸ *Goitein*, *A Mediterranean Society*, pp. 18-19.

²²⁹ Cambridge University Library, Taylor-Schechter, T-S 8J25.21. Available online through the Princeton Geniza Project at <https://geniza.princeton.edu/documents/3725/>, accessed July 29, 2025.

The letter is written in Judeo-Arabic:

"רבע קיראט מומיה"

This is a simple phrase. The word RB'A is a very ancient word, used in Modern Arabic dialects and in Hebrew. Transcription: RB'A QYRAT MUMYH.

²³⁰ *Goitein*, *A Mediterranean Society*, p. 359.

²³¹ Cambridge University Library, Taylor-Schechter, T-S K25.120. Available online through the Princeton Geniza Project at <https://geniza.princeton.edu/documents/38323/>, accessed August 1, 2025. See description of document in the Princeton Geniza project. The image of the document exists in the site of the Cambridge Cairo Geniza. I couldn't identify the word mummy in the document, but I do trust the experts on that.

²³² See description in Princeton Geniza. No full transcription is available there: Cambridge University Library, Taylor-Schechter, T-S NS J61 + Cambridge University Library, Taylor-Schechter, T-S AS 152.77 + Cambridge University Library, Taylor-Schechter, T-S AS 145.44 + Cambridge University Library, Taylor-Schechter, T-S AS 151.231. Available online through the Princeton Geniza Project at <https://geniza.princeton.edu/documents/8714/>, accessed August 1, 2025.

Mubarak b. Hanina to Abu Yusuf Ya'akov b. Musa, giving details about persons who perished or survived an earthquake, most probably in Ramla." In the margins of the document:

"וסער אלמומיה | אל.אלל. | ה. תעמל | דהב באנהא | ענדנא כתירה | ומא להא טלב | ולעל אן אוגה מנהא."²³³

This document is not translated, which left me no choice but to try and figure out its content. It translates to something like this: "And the price of the mumia | (...corrupted...) will make/makes | gold, for it is | we have much of it | and it has no demand | and perhaps I will dispose of some of it."²³⁴ Mumia was traded by the Jews of Egypt. But if the trade of mumia was widespread in that community, one would expect to see more traces of it. We can raise several hypotheses here. It might have been a fringe occupation, practiced by very few merchants. Another option is that traders in this questionable merchandise (if it is of human origin), were careful not to leave a paper trail. A third option is that they used a different name for it, a phenomenon not uncommon in the Cairo Geniza.²³⁵ It could have been a code name to avoid scrutiny by

²³³ Cambridge University Library, Taylor-Schechter, T-S 13J19.30. Available online through the Princeton Geniza Project at <https://geniza.princeton.edu/documents/3300/>, accessed August 1, 2025.

²³⁴ I compared what ChatGPT offered me with modern Arabic in other translation apps, and consulted with my Arabic teacher, Daniel Ziss, who takes no responsibility whatsoever for the translation, as he is not an expert on Judeo-Arabic or has any background in the language.

וסער אלמומיה - *sa'a'r al mumia*

WaSa'a'r: *Wa* is *and*. *Sa'a'r* is *price*, used in modern Arabic in the same meaning. Has a parallel in Hebrew that is used in a similar way. *Al-mumia*, the Arabic article + *mumia*: *And the price of mumia*.

Here come some corrupted lines, ending with:

תעמל - *ta'ml*

Ta'mal: This is a very basic root in Arabic (a'.m.l), it is used to describe actions, like doing, making. Here it is conjugated in future tense (or present simple) for feminine singular, i.e. the mumia. *She will do*.

דהב באנהא - *dhb banha*

Dahab: *gold*. *Be-anha*: *be-* a prefixed preposition for *in* or *with*. *Anha*: *An* might be *because*. The *ha* is conjugation for 3rd person feminine singular. Translate to something like: *she is like gold*.

ענדנא כתירה - *l'ndna ktyrh*

This is simple: *we have a lot* (of her)

ומא להא טלב - *wma lha tlb*

Wama: *wa* - *and*, *ma* - *no*, a negative phrase, common until today in Palestinian Arabic (from Ramala?). *Leha* - *to her*. *taleb* - a very interesting root (*t.l.b*), that is similar to the Hebrew (*d.r.sh*), it is about learning (like the Taliban - literally students) but also *demand*. Which I found out is used in this sense in modern Arabic as well. So: *there is no demand for her*.

ולעל אן אוגה מנהא - *wla'l an augh mnha*

Wal'al: *wa* - *and*, *l'al* - ChatGPT suggests *maybe*. *An* - *that*, or something of this nature. *Augh* - read *waja*, or *awja*. Here the root *w.j.h* sometimes means to turn, maybe to circulate, in the first person singular future, maybe as *I will send/dispose*. *Minha*: like *Leha* but *from her*. So: *and maybe I will send/dispose from her*.

²³⁵ Goitein, A Mediterranean Society, p. 210.

authorities, or they could have had just a different term for it. Could it be that *mumia* was a term used for a specific kind of *mumia*, say “fake” mummy, and a different name was given to the sand mummy?

If this evidence is somewhat sparse and without context, another source can corroborate the use and trade in *mumia* in the Jewish community in Egypt and the Muslim world, rabbinical responsa literature. Responsa, or in Hebrew *שאלות ותשובות* (literally *questions and answers*) are basically a collection of questions, normally concerning day to day life, sent to a Rabbi as a religious authority and an interpreter of *Halacha* (Jewish law). The Rabbi discusses the question in writing, referring to holy scripture and previous rabbinical rulings on the subject, and gives his own verdict, usually permitted or forbidden. A discussion of *mumia* can be found in the Responsa of David ben Solomon ibn Zimra (1479–1573, דוד בן שלמה אבן זמרא, זמרא), known also by his initials Radbaz. Radbaz was born in Spain and was forced to leave with his family during the expulsion of the Jews in 1492. He moved through north Africa and the Levant, settling in Egypt where he held public offices and led the community as a religious authority. Beside his political and spiritual leadership, he was also a trader. It is unclear when exactly did he compose this responsa, probably it was a work in progress and not a work that was written as one coherent composition. But to judge from his biography and to give a generous margin of error, it was written between 1515 and his death in 1573. As responsa requires an authoritative knowledge and at least some degree of fame, I would guess that it wasn't composed while he was a young scholar or a new head of community. Be that as it may, the years are relevant to our periodization.

Question number 548 (תקמח) in the third volume of his *Responsa* does not leave any room for speculations regarding what is *mumia* and what people do with it:

"ממני אדיעך דיעתי על מה סמכו העולם להתרפאו' בבשר המת הנקר' מומי"א ושלא במקום סכנה ובדרך הנאתו ולא עוד שלא שמסתחרין בו ונושאים ונותנים בו והוא מאיסורי הנאה דקיי"ל דבשר המת אסור בהנאה..."²³⁶

This question is specifically about the use of *mumia*, as the flesh of the dead, for medicine (while not in mortal danger. If a life is in danger, basically all halakhic rules are nulled, even keeping the Sabbath) and for trade. In his not very long answer, Radbaz is first making clear that we are talking about the bodies of the embalmed (חנוטין) that are wrapped in cloth and treated with drugs/medicine (סמים). His main argument is that the body has changed its form and it is no longer but dust and ashes. All that is left are the drugs, and this is the benefit, not the flesh. He strengthens his claim by the fact that the flesh of other dead is not used as medicine and has no medicinal benefits. Therefore it is allowed for use as medicine even without mortal danger and it is allowed for trade. This responsa reveals what *mumia* was for the Jewish trader of Egypt. It does not mean that other kinds of *mumia*, like what we deemed fake, or sand mummies were not traded.

I cannot say that *mumia* was widely discussed in Jewish literature. But the sporadic mentions are revealing. The opinion of Radbaz was backed by his student Yaakov de Castro (1525–1610 יעקב קאשטרו). He was also a prominent figure in the Jewish community of Egypt. His discussion is only a couple of lines long and it is basically a reference to the verdict of Radbaz on the subject.²³⁷ The next comment I could trace of this discussion was a couple of generations later. This comment is from Avraham ben Mordechai Halevi (ca. 1650 - 1712, אברהם בן מרדכי הלוי), another important figure in the history of Egyptian Jewry. In a lengthy discussion (that for the sake of fairness and out of respect to Radbaz also includes his entire discussion) he dismantles all the arguments Radbaz makes in favour of the use and trade of

²³⁶ *Zimra*, Responsa III: "I will inform you my opinion on what based the (people of) the world to heal (themselves) with the flesh of the dead called *mumia* and (even) not in the case of (mortal) danger but for benefit. And not only that, but trade and buying and selling in it and it is forbidden from benefit (or enjoyment) as there is a law that the flesh of the dead is forbidden for benefit." (my translation A.S.). pp. 87-88.

²³⁷ *Castro*, *Erekh Lehem*, p. 53 (mark 349).

mumia. He bases his argument on the principle of the *impurity of the dead* and seemed to be amazed by the endorsement given to mumia trade and use by Radbaz.²³⁸ According to Halevi, even if there is no flesh in the mumia any more, and only the drugs and shrouds are left, they are still to be regarded under the theoretical framework of impurity of the dead, as does every object that came into touch with the dead.

Jewish law is an interesting being. It was a law with limited powers of enforcement. Jewish communities historically lived under non-Jewish authorities, on many occasions under duress. Halakhic rulings are not meant only to restrict and maintain the borders of the community, but also at times to expand it and to give halakhic solutions to the needs of the community. This is true also today, with more reform minded Rabbis trying to align gay marriage with halakhic law for example. The reasoning of Radbaz is admittedly a bit weak. I doubt if one out of a hundred Rabbis would take his side in the debate today. Mumia *is* human flesh, or at least came in contact with human flesh. I would argue that what he is trying to do is to build the halakhic framework to allow a behavior that existed. Even if he was to forbid the trade and use of mumia, he wouldn't have had the tools to enforce it. It could have built tensions within the community if merchants would have continued their trade despite the ruling of the head of the community. Would he then involve the authorities (if we assume that the trade was somewhat illegal, a claim that I can't back with solid evidence)? Radbaz chose here to keep the cohesion of the community, his student Castro chose the same. Halevi, who bans mumia, wrote probably in the last quarter of the 17th century or the beginning of the 18th century. It is a probable assumption that his prohibition of mumia for trade and medical use reflects the fall of popularity of the mumia as a traded good in Egypt. This is in line with my evaluation of the time line of mumia popularity (see below).

²³⁸ For a new edition see: *HaLevi*, Responsa Rose Garden, pp. 21-25.

(אברהם בן מרדכי הלוי, שאלות ותשובות גינת ורדים, (ירושלים: ישמח לב, בית וגן, תשס"ח), עמ. כא-כה.

All the discussions about mumia in the Jewish world come from Egypt. I did not encounter any writings of Ashkenazi Jews about mumia. The only mention of mumia I could find in European Jewish literature is a later discussion written by Sholom Mordechai Schwadron (1835 – 1911, שלום מרדכי בן משה הכהן שוודרן), but this discussion, interesting in its own right, is about a mummy on display in München. The local community asks if the display should be regarded as a grave with all that is ensue.²³⁹

The use of mumia was not limited to one religious group or another. It was practiced by both Christians and Jews, and as we have seen from Abd Allatif, it was practiced by Muslims as well.²⁴⁰ This French trio, of Thevet, Paré and Bellon, all acquaintances, or at least both knew Paré, are mumia sceptics, each for his own reasons. Thevet, who admits he is not a physician and therefore unqualified to discuss the efficacy of mumia, did try it. He reports that it was given to him by a Jewish physician as a treatment. This mumia was made from an embalmed child, a fact that did not give him much second thoughts.²⁴¹ He doubts if this treatment worked. It is sometimes hard to understand his position on the subjects, when reminiscing of his treatment he seems to dismiss it as ineffective, but in the opening of his account of Egypt he does discuss what is the true mumia, and insists that it is the one from ancient embalmed bodies. This discussion seems more etymological and semantic than medical. Bellon, who is quoted by Roqufort, sees the use of mumia as an utter folly. He also visited Egypt in 1553 and saw the mummies there. Interestingly he gives us a timeline for the rise in popularity of mumia. He claims that it was only a few years ago that this medicine gained popularity. Meaning the middle of the 16th century. He could find no ancient writer to recommend this materia medica and he wonders about this habit.²⁴² Paré is a staunch mumia denier, he speaks from the position of an

²³⁹ See in: *HaCohen*, Responsa Maharasham I, pp. 203-204.

שלום מרדכי הכהן, שאלות ותשובות מהרש"ם חלק ראשון, (ירושלים: מכון חתם סופר ירושלים, תשל"ד) עמ' 203-204.

²⁴⁰ As I have a background in European history, there is a European bias to this paper.

²⁴¹ He also purchased a mumia of a child that was lost when Arab raiders attacked his convoy. *Thevet*, *La cosmographie vniuerselle*, pp. 42v, 44.

²⁴² Although we have seen it existed as a trade good before, and was discussed as materia medica. At least by Mattioli and Ficino, the Italians, and by Pires, the Portuguese. It might be the case that mumia gained late popularity in France. *Roqufort-Flaméricourt*, *Des sépultures nationales*, pp. 136-137.

experienced surgeon who has seen the outright damage consumption of mumia can cause (stomach pain, vomiting, bad breath) and vows to never prescribe it. He recounts the different kinds of mumia products found in literature and in apothecaries: The mumia from embalmed Egyptian dead, embalmed “fake” mumia covered in tar, the sand mumia, mineral mumia, and lastly, to his appall, mumia made in France, from bodies of criminals stolen from the gallows at night. These bodies can be found in apothecaries if one dares to investigate.²⁴³ The essay of Paré was published in 1582. Paracelsian writing existed in this time, but I doubt if the robbers of the bodies were aware of the treatise *Vom Fleisch und Mumia*, that was by then already published in German. The Crollian instructions for mumia were not published until 1609. I would argue that evidence does not support Paracelsus as the source of this behavior. It supports the hypothesis that he gave a theory to a behavior he was aware of. But information travels in mysterious ways sometimes. Look at this quote from Guyon from 1625:

“Aucuns Juifs subjects au gain et qui ne se soucient de quel costé ils en ayent, prennent plaisir d'embaumer des corps morts, pour les vendre aux Chrestiens. Par quoy ils en prindrent des empalez, d'autres pendus à des gibets, soit aussi qu'ils fussent ladres, vérolez, rongneux, demi-pourris, pestez (morts de peste); tout leur estoit bon.”²⁴⁴

Setting aside the antisemitic tone, this quote shows a mix of several sources of information. The story about the Jews trading in counterfeit mumia probably had a wide circulation and is repeated by all the writers mentioned (and admittedly probably had a kernel of truth). This idea of syphilitic and all kinds of sick being prepared and sold as mumia comes from the account of Guy de la Fontaine. But there is another very interesting element here. I do not know how common was impalement in the early 17th century, as far as I know it was not a widespread

²⁴³ Paré, Discours d'Ambroise Paré, pp. 6-7.

²⁴⁴ Roquefort-Flaméricourt, Des sépultures nationales: “Some Jews, who are greedy for gain and care little where it comes from, take pleasure in embalming dead bodies to sell them to Christians. They took some that had been impaled, others that had been hanged on gallows, whether they were leprous, covered in sores, half-rotten, or plague victims (dead from the plague); everything was good for them.” (trans. DeepL). pp. 130-131.

method of execution and I doubt that it was practiced in Ottoman Egypt at that time. I would argue that this is a direct reincarnation of the Paracelsian air mumia, made from “Der mensch der erhenkt, gespietzet, oder geradbrecht ist worden.”²⁴⁵ It doesn’t seem like Guyon was aware of this theory of mumia. Although it did circulate by then in France, mostly through the immensely popular *Basilica Chymia* of Croll (that was also translated to French in 1622). If Guyon knew the source of this trope, I would have expected him to raise it. It shows that information traveled by word to mouth, not only in writings of learned physicians. This is a trap we as historians should be aware of.

7. Paracelsianism in England

7.1 The Introduction of Paracelsus into England

The situation in England was different. Paracelsian medicine per se was late to arrive on the Island. Like in France, the beginning of chemical medicine was associated with the medieval alchemical traditions of writers like Hieronymus Brunschwig and Arnold of Villanova. Unlike in France, where chemical medicine was quickly identified with Paracelsians, in England it came to be associated with different figures and was not seen as opposed to the Galenic system.²⁴⁶ The theories of Paracelsus were ironically introduced to England via the disputations of Erastus. Paracelsus therefore, was associated with reform in medicine, and magic. One of the most influential writers in English medicine in the second half of the 16th century was none other than Conrad Gessner. He was considered a contemporary medical authority. The translation of his *Thesaurus Euonymi...* was an introduction of the new medicine, the chemical medicine, to England. This new medicine would become associated with him in Elizabethan England. The first truly Paracelsian discussion was done by R. Bostocke, to whom Debus gives the title of the

²⁴⁵ *Paracelsus*, Sämtliche Werke, Vol. 13, p.345.

²⁴⁶ *Debus*, The English Paracelsians, pp. 51-53.

first Paracelsian in England. Bostocke attacks Galen and “that heathnish philosophie of Aristotle.”²⁴⁷ He defended the use of natural magic for good, if it does not apply “Ceremonies, Coniurations, Invocations, Consecrations, Blessing, and all maner superstition whereby it becometh ungodly.”²⁴⁸ He does not discuss the mumia theory of Paracelsus. According to Debus, his book doesn’t seem to have had any impact on medical discourse in England. An impactful 16th century Paracelsian in England was Thomas Moffet (1553 - 1604) who studied in Basel among other places.²⁴⁹ He was a highly respected doctor and a part of the Royal College of Physicians. In fact, in 1585, when the Royal College of Physicians decided to compose an official pharmacopoeia, he was a member of the committee in charge of composing the section on chemical medicine.²⁵⁰ The willingness of the Royal College to incorporate chemical medicine in their pharmacopoeia stands in stark contrast to the Parisian attitude towards it. Their moderation is surprising considering most members were trained, like their Parisian colleagues, on the ancient authorities. The situation in England in the 16th century was as follows: chemical medicine was readily accepted. It was not associated with Paracelsus. Paracelsian theory was known mainly through the essay of Erastus. Paracelsus, as a medical reformer, was treated with overall indifference. But was mumia used? And if so, what did the English physician think it was or how it works?

7.2 Mumia and Paracelsus Are Easily Accepted

As Gessner was a prominent figure in the English medical world in the second part of the 16th century, it is appropriate to start with him. His *Thesaurus Euonymi*, that was previously discussed, contained reference to mumia. In 1576 the second part of Gessner’s *Thesaurus Euonymi* was published by George Baker (1540-1600), master of the Company of

²⁴⁷ Debus, *The English Paracelsians*, p. 58.

²⁴⁸ Debus, *The English Paracelsians*, p. 63.

²⁴⁹ On Muffet see: Debus, *The English Paracelsians*, 71 ff.

²⁵⁰ Debus, *The English Paracelsians*, pp. 70-71.

Barber-Surgeon and publisher.²⁵¹ As is the case with the first part, in the second part there is no discussion of mumia, but it is mentioned in recipes as materia medica. The original work was published in Zürich after Gessner's death in 1569.²⁵² It seems that he warmed up to Paracelsus just enough to include his recipes in this work. In a recipe titled *A discription of Christes baulme borrowed out of the learned practises of Theophrastus Paracelsus*, four ounces "of the lycour of mumia" are distilled with other ingredients.²⁵³ Another one of Paracelsus's recipes calls to "take of the grease of Mumia."²⁵⁴ But mumia is not limited to Paracelsian recipes and appears in other places as well.²⁵⁵

The ease in which English physicians incorporated Paracelsus with traditional medicine is apparent in John Banister's *An antidotarie chyurgicall*²⁵⁶ from 1589. Banister (1533 - 1610) was a notable English surgeon, his Antidotarie is a collection of remedies. He diligently, and quite untypically for the period, records the sources of each recipe. He quotes Paracelsus and his disciples (Duchesne and Thurneisser) 35 times.²⁵⁷ His antidotarie is a collection of recipes to heal wounds. As mumia was considered highly effective in stopping blood, it is not a surprise to see many mentions of mumia in a book of a surgeon. It is mentioned in recipes that he wrote (p. 5, 6, 353), or by Quercetanus (Duchesne), (p. 9), Paracelsus (98, 297) or other people like Mesue (an 8th century Persian physician p. 13), Andernacus (p. 14 Johann Winter von Andernach 1505 – 1574, the translator of Galen into Latin)²⁵⁸ and others. It is interesting to see that in the English debate there was a considerable participation of surgeons. Surgeons at times were looked down upon, as craftsmen. Paracelsus himself was employed as a surgeon for several years. But it shouldn't come as a surprise that they were the ones most willing to incorporate new techniques and ideas. First, not all of them had the classic theoretical training

²⁵¹ *Debus*, The English Paracelsians, pp. 56 ff.

²⁵² *Debus*, The English Paracelsians, p. 57.

²⁵³ *Gessner*, *Baker* (trans.), The newe iewell of health, chirurgian, p. 137.

²⁵⁴ *Gessner*, The newe iewell of health, p. 145.

²⁵⁵ *Gessner*, The newe iewell of health, pp.44, 66, 228.

²⁵⁶ John *Banister*, An antidotarie chyurgicall. See pages in body of work.

²⁵⁷ *Debus*, The English Paracelsians, p. 69.

²⁵⁸ On Winter see: *Friedrich, Müller-Jahncke, Schmitz*, Geschichte der Pharmazie, pp. 294-295.

of physicians which made them less loyal to the ancient authorities. Second, unlike internal medicine, where cause and effect are very hard to determine, in surgery, it is easier to observe what helps healing and what causes infections. A good example of this attitude can be found in a paragraph by another surgeon named William Clowes, quoted in Debus. In this quote, Clowes admits that he does not have the wit to understand the Paracelsian doctrine but he did try his medicines and found them useful. He also addresses the Galenists and Paracelsianists debate and declares that he uses everything that is for the benefit of his patients and improves his skills and knowledge, regardless of its origin.²⁵⁹

A discussion about mumia can be found in William Clever's *Flower of Physicke*. This work is a collection of quotes from different medical authors with his commentary.²⁶⁰ He writes about the substitution of materia medica when materials are not available. He is not a big supporter of mumia as it seems: "...and many very [...]sophistically doo frame the filth of men long dead to serue herein."²⁶¹ He continues to list the two kinds of mumia, "the best sort proceedeth of the rich Ba[ls]amum, Catabalsamum... and many other sweete odours, imbalmed within the dead▪ coorses (probably corpses, A.S) of most noble personages which doo cendensate into substance with the flesh by long continuance, as is afterwarde taken vp for perfect Mumy."²⁶² The second kind is the sand mumia that "the Arabian writers do much command..."²⁶³

7.3 Fludd and the Magnetic Mumia

Paracelsian thought and theory gained popularity in England in the first half of the 17th century. There was a strain of English Paracelsianists who were drawn to the alchemical side of

²⁵⁹ Debus, The English Paracelsians, p. 70.

²⁶⁰ On Clever and his book see: Debus, The English Paracelsians, p. 77.

²⁶¹ Clever, The flower of phisicke, p. 120.

²⁶² Clever, The flower of phisicke, p. 120.

²⁶³ Clever, The flower of phisicke, p. 120.

Paracelsian theory. Some of them, following the example of John Dee, took affinity to the occult and mystical elements of Paracelsian theory. A prime example for this branch of English Paracelsians is Robert Fludd (1574 - 1637). He was a highly successful physician and could maintain an apothecary in his estate.²⁶⁴ He constructed his own world view and philosophy that were largely influenced by Paracelsus. Like Paracelsus took inspiration from the two revelations of God: his written word, and creation (i.e. nature)²⁶⁵ so did Fludd. In his book *Mosaicall Philosophy*²⁶⁶ he elaborates on mumia extensively. Fludd discusses a very specific kind of mumia. A mumia that can be taken from a person without harming his health and can be used to heal or create attraction. This mumia is created by first creating a magnet that attracts it. Any person immersed in the study of Paracelsian mumia will recognize this idea immediately. Like Croll, who took the murky guidelines of true mumia from Paracelsus,²⁶⁷ elaborated on them and created a more detailed account, so did Fludd here, and from the same essay of Paracelsus.

In one of the more bizarre paragraph in *Von dem Fleisch und Mumia*,²⁶⁸ Paracelsus describes a mumia taken from one body and *transmutirt* to attract another body, one lover to another lover (and it is not menstrual blood!). Its effect is so strong it can be used by farmers to make sure their flock will always return, by hunters to attract game or tame beasts, it can even make the worst enemies, *ein affen und ein schlangen*, into dear friends. For Fludd, this magnetic attraction is paralleled with the weapon salve, it creates effect from a distance. It seems that Fludd was aware of the appearance of the idea, right at the beginning he states: "And yet I hope that my Story shall no way sound unto Wisemens eares, as Cacomagicall, but onely naturally Magicall, and therefore ordained by God..."²⁶⁹ Fludd must have anticipated the reactions this mumia might bring, either from past experience, as an advocate of the weapon

²⁶⁴ On Fludd see: *Debus*, The English Paracelsians, pp. 105ff.

²⁶⁵ *Debus*, The English Paracelsians, p. 107.

²⁶⁶ Here I will use the English translation, published in 1657, quite some time after his death. The original Latin version was published in 1638, a year after his death.

²⁶⁷ *Von dem Fleisch und Mumia: Paracelsus*, Sämtliche Werke, Vol. 13, pp. 343-349.

²⁶⁸ *Paracelsus*, Sämtliche Werke, Vol. 13, pp. 346-347.

²⁶⁹ *Fludd*, *Mosaicall philosophy*, p. 289.

salve, or it might be his self-awareness of the outlandishness of this mumia. He also, in a move that looks like it is taken from the playbook of the swindler tailors from Hans Christian Andersen's *The Emperor's New Clothes* (and forgive my anachronism here), declares that only men of wisdom can truly see into the occult powers in play. This harnessing of occult power is a thin line to walk. Paracelsus and his followers were often accused of dealing with dark magic and demonic powers. Fludd therefore makes sure to stress that this is an act for good ordained by God.

Unlike the Crollian mumia, the mumia by Fludd lacks clear explanation in some vital steps. The premise of this process is that a "Microcosmical magnet" will be extracted from a man, without any harm, and it will attract the desired mumia according to the process. This Microcosmical magnet has an active parent, the father, which has a "Sulphurous Martial spirit", and a passive parent, the mother, is a "Mercuriall matter." It is extracted from the mine that is man. By design Fludd omits the practical steps here. The lore of this medicine is its esoteric nature, and those who did not understand this explanation could not proceed. The next step is to attract the correct mumia for the desired medicine: "if you would make a generall Medicine, which should respect the animal, vitall, and naturall parts, all at once."²⁷⁰ The animal is sucked from where the body evacuates the animal spirit, the vitall from "that place, which nature hath ordained to purge the vitall region."²⁷¹ And the spiritual natural mummy from which nature tends "to send forth the spirituall fumes, or sweaty evacuations from that member, namely from the Liver."²⁷² The mummy now extracted should be introduced into a vegetative nature. "We ought therefore to mingle a proportion of this imbibed Magnet, with a certain proportion of his mother-earth."²⁷³ Despite the metaphor-sounding instruction, here Fludd means literally to mix it with earth and plant the correct seed (again actual seed) for the disease. For Dropsy, Pimpnel or

²⁷⁰ Fludd, *Mosaicall philosophy*, p. 290.

²⁷¹ Fludd, *Mosaicall philosophy*, p. 290.

²⁷² Fludd, *Mosaicall philosophy*, p. 290.

²⁷³ Fludd, *Mosaicall philosophy*, p. 290.

wormwood, in the bruising or contusion of parts, Hypericon or Plantain etc. As the seed grows (in the open air) “it will sympathetically and Magnetically extract the imbibed Mummiall spirits out of the Magnet.”²⁷⁴ How one should use this magnet, depends on the type of the disease. “If the disease be dry and of a combust nature, as is the yellow Jaunders, the Ptisick...” throw the plant that grew into running water. If it's moist, you ought to burn it. It can also be planted in a tree, the type of tree varies depending on the desired results, but most of the time an oak tree is best. This magnet will attract the disease from the sick body and heal the person. It can be used to harm, for the mumia of the disease can be transferred to a healthy person and he will get sick instead of the original patient.²⁷⁵ This kind of healing by ceremonial magic takes the concept of occult forces one step further it seems, than what Paracelsus ever did. For most, the Paracelsian mumia is described as a material *and* a force, his theory of mumia is somewhat obscure, but when mumia appears in his recipes, its usage is quite standard for medicinal recipes of his period. Is this process described by Fludd similar to what Paracelsus had in mind when discussing attractive mumia? It is hard to tell, I didn't come across anything resembling this process described here. But when discussing Paracelsus's theories there is always a chance that somewhere in his vast body of work, maybe in a text not included in Sudhoff's collection, or in a pseudo-paracelsian text, or even in an unpublished manuscript, the process of creating an attractive mumia from the living body is outlined in more detail.

It seems like the theory and practice of mumia existed in two parallel spheres. It is true in the writings of Paracelsus, and even more so when considering these elaborate Paracelsian theories vis a vis the realities of mumia trade and use in more mainstream medicine. Fludd was a big supporter of medicinal use of human body parts.²⁷⁶ Did he prepare the Crollian mumia? He

²⁷⁴ *Fludd*, *Mosaicall philosophy*, p. 290.

²⁷⁵ *Fludd*, *Mosaicall philosophy*, p. 293.

²⁷⁶ See for example his apology in defence of the weapon salve: “...there is but one common vehicle, which carryeth this spirit in the Etheriall substance of the blood. And lastly, that because the oyntment is made of mans blood, mans fat, mans flesh, or mummy, and the fumous excrescence of mans bones, called vzie or the mosse that groweth on the skull, according vnto my receit, and for that the nature of the Catholike spirit thus specified, is in the oyntment, though not working, and is stirred vp to operate by

must have had the right connections to acquire a body, like Paré did. Did he use this technique of creating attractive *mumia* on his patients? These are interesting questions that are beyond the scope of this paper. But there is evidence of mummies traded between Egypt and England in the late 16th century.

7.4 The Mumia as a Trade Good

The English traveler and merchant John Sanderson (1560–c.1627) who was employed by the short lived Turkey Company, that received a trade charter to the Levant between 1581 and 1588 (the charter was not renewed),²⁷⁷ describes his sojourn in Egypt. On the 28th of April 1586 he went to see the Pyramids and many tombs in *Momia* (used as a toponym, probably the mummy pits of Saqqara). In *Momia*, he and his companions were led to the ancient burial site, where they “were lett doune by ropes” into a dark cave. The cave was so full with embalmed bodies that they literally had to walk on them. There were “great and samule bodies and some imbalmed in little earthen potts.”²⁷⁸ Sanderson “broke of parts off[f] all parts of the bodies to see howe the flesh was turned to drugge.”²⁷⁹ He then purchased 600 lb of mummies to send to England. It is unclear if the purpose of the trip to *Momia* was to acquire mummies for shipment, but he was clearly aware of their value as *materia medica*. The trade of mummies outside Egypt was, by his report, banned. I couldn’t find records of an explicit law forbidding mummy trade under Ottoman rule in Egypt, but grave robbing is presumably not something Islamic law (or most religious laws for that matter) sees favorably. A fellow of the company, one William Shales, who was fluent in “the language of the Moors,” orchestrated the proper bribery. The Cargo was loaded on a ship named *Hercules*, no jewish intermediaries needed. The *Hercules* was a 300

the vnion which it hath now from the beames of the li [...]ely and operating spirit of the wounded.” In: *Fludd*, Doctor Fludds answer vnto M^r Foster, pp.102-103.

²⁷⁷ *Epstein*, The English Levant Company, pp. 16-19.

²⁷⁸ *Sanderson*, The Travels Of John Sanderson, pp. 44-45.

²⁷⁹ *Sanderson*, The Travels Of John Sanderson, p. 45.

tons burden ship with 70 crew members. It was operated by the Turkish company between 1583 and 1588. It is mentioned several times in the records of the Levant Company,²⁸⁰ On the 20th of May 1590 it is listed with 60 crew members, then in an undated list, and in a list from 1595, where it is listed as having 250 ton capacity, probably due to its age. It is mentioned for the last time on the 2nd of August 1627.²⁸¹ A life span so long for a ship is not typical, it might be a different ship carrying the same name. Upon arriving in London the ship received an offer of 70,000 for the cargo, but the offer was refused.²⁸² The mummies were taken to the warehouse of Sir Edward Osborne (1530 - 1591) in *Filpot Lane* (modern spelling: *Philpot Lane*) in London. From there it was sold to London apothecaries.²⁸³ Osborne was a prominent merchant and the founder of the Turkey Company by a charter from Queen Elizabeth the I. The company was founded to answer the Venetian dominance over Mediterranean trade. The growing wealth and influence of the London merchants pushed them to seek direct trade routes to the Mediterranean, which until then had been mediated by Venetian merchants who brought goods from the Levant to the ports of England and northern Europe.²⁸⁴

Was the trade of mumia a major source of income for the Turkey Company? To get a general sense of the trade, Epstein brings a letter in one of the notes, describing the route. To the east are sold "all sorts of cloth and kerseys, dyed and dressed to the best proof, tin, lead, black cony skins, etc. back to London are brought oils, indigo, raw silk, spices, drugs, currants, wines of Candia, cotton wool and yarn, grograms..." and more.²⁸⁵ The mummy fits here under drugs. But taking into account a capacity of 300 tons (here a measure of volume, standardized as 1 ton = 2,240 lb)²⁸⁶ the mumia was clearly not a main import of the Company to London. It

²⁸⁰ A new company that was established in 1592 after the Turkey Company was dismantled. See: *Epstein*, *The English Levant Company*, pp. 25ff.

²⁸¹ *Epstein*, *The English Levant Company*, pp. 219-229.

²⁸² *Sanderson*, *The Travels Of John Sanderson*, pp. XIII-XIV, 6.

²⁸³ *Sanderson*, *The Travels Of John Sanderson*, p. 45 n.1.

²⁸⁴ *Epstein*, *The English Levant Company*, pp. 20-24.

²⁸⁵ *Epstein*, *The English Levant Company*, p.18-19 n.5.

²⁸⁶ The Editors of Encyclopaedia Britannica. "ton." *Encyclopedia Britannica*, November 6, 2024. <https://www.britannica.com/science/ton>.

also doesn't feature in a list of goods under imposition (extra taxation) in 1605.²⁸⁷ Was mumia a pricy commodity? We can get a sense of its value during the 1580's from the *Tudor Book of Rates* of 1582.²⁸⁸ The book of rates is a list of *ad valorem* tax rates. This is a differential tax on goods that amounts to 5% of their worth.²⁸⁹ In the book of 1582 the rate is set on 4d (4 pence) the pound, which according to Dannenfeldt's calculations amounts to a commercial rate of 4 Shilling per pound of mummy, which doesn't sound correct.²⁹⁰ Whether my calculations are correct or Dannenfeld's, the book of rates does not reflect the exact market value. Books of rates were published irregularly and at many occasions just copied the tax rates of previous books. An examination of the *ad valorem* taxes through the years shows stability. The first book to feature mummia was the 1558 book of rates. In it, mumia is taxed similarly to 1582, at a rate of 4d.²⁹¹ In 1604 it doubled the rate to 8d.²⁹² But interestingly in *The rates of marchandizes* of 1608, the tax on mumia is broken down into 4d *subsidie*, and 4d *imposition*.²⁹³ The subsidie reflects the *ad valorem* tax, the imposition is a crown taxation on goods. The rate books of 1623 and 1635 show a consolidation of the two taxes into one subsidie of 8d and no imposition.²⁹⁴ This shows that the books of rates were not very dynamic. But for a comparative analysis let's look at another medicinal product, *manna* (sap of a type of tree). It also featured for the first time in the book of rates of 1558, with a tax rate of 20 Shilling (a pound sterling or 240d).²⁹⁵ This puts mumia prices as comparatively low. The tax rate on manna remained at 20s in 1582.²⁹⁶ But interestingly the tax rate dropped dramatically in the 1604 book to 5s.²⁹⁷ In the rate of

²⁸⁷ *Epstein*, The English Levant Company, pp. 232-238.

²⁸⁸ *Willan* (Ed.), A Tudor book of rates, p. 41.

²⁸⁹ On *ad valorem* tax see: *Willan*, A Tudor book of rates, pp. XVIII-XXVI.

²⁹⁰ Sounds to me like a wrong calculation, as it should be 6 Shilling and 8 pence. If: 4d x 20 (i.e. 5%) = 80d, which amounts to 6 shilling (6 x 12 = 72) and 8 pence. *Dannenfeldt*, Egyptian Mumia, p. 174.

²⁹¹ *Jenks* (ed.), Four Books of Rates, p. 60.

²⁹² *Jenks*, Four Books of Rates, p. 92.

²⁹³ *England Customs*, The rates of marchandizes... 1608. Pagination is not clear in the scan, it seems like it is page F4v. or 48 page in scan.

²⁹⁴ *England Customs*, The rates of marchandizes... 1623, p. D2v. *England Customs*, The rates of marchandizes... 1635, p. C4r.

²⁹⁵ *Jenks*, Four Books of Rates, p. 60.

²⁹⁶ *Willan*, A Tudor book of rates, p. 39.

²⁹⁷ *Jenks*, Four Books of Rates, p. 92.

merchandise of 1608 it is taxed at 10s, of them 5s subsidie and 5s imposition. In the 1623 and 1635 books the imposition is dropped, and manna is taxed at 5s.²⁹⁸ Still a lot higher than the mumia at 8d. In the case of the manna it seems to have been adjusted to its market value. Possibly by merchants who saw their revenue fall compared to the taxes they paid. In the case of mumia, I would be careful to suggest any adjustment to market value. The doubling in tax seems to be more of a policy issue between the parliament and the crown rather than price fluctuations. I would be careful to suggest market price changes from the tax rates, or market value. The books of rates seem to be pretty stagnant, it is possible that the original rate was calculated according to market prices in 1558 and it was copied from then on to future books. Mumia, although as we have seen, was a common commodity, on the larger scale of goods traded in England it was not significant and might have slipped the eye of the tax authorities. If this is the case, real prices of mumia could have been a lot higher, as merchants enjoyed the lack of attentiveness by the authorities and low taxation. When comparing the price of mumia and manna, it is hard to imagine that it was as expensive as gold.²⁹⁹ It is important to note, that trade, as we have seen, was not the only source of mumia in Europe, and the rates of taxation do not reflect the local mumia production industry. These tax rates were set during the height of the popularity of mumia. The next chapter will discuss the decline in popularity of mumia and the last incarnations of this tradition.

8. The End of Mumia

The end of mumia was not abrupt, it was a slow process. When Pettigrew's *History of Egyptian Mummies* was published in 1834 he had to explain to his audience of readers that mummies

²⁹⁸ *England Customs*, The rates of marchandizes 1623, p. D2v. *England Customs*, The rates of marchandizes 1635, p. C4r.

²⁹⁹ Compare with Erastus: *Erastus*, *Disputationum...* Pars Quarta, p. 113.

were used as a drug.³⁰⁰ It is the same in Roquefort's book from 1824, where he recounts this curious tradition.³⁰¹ The sources of both authors are similar, namely the treatises by Paré and *Leçons de Loys Guyon*. It is no wonder that they both repeat a similar story about the end of the mummy trade from Egypt to Europe. This story brings us back to the Jewish conspiracies so often associated with the trade of mummies. According to this story, a Jew from Damietta who was in the business of contraband mummy production had a Christian slave. The Jew pressured the slave to convert to Judaism and submit to circumcision. The slave refused and his master treated him harshly. The slave, as a payback, went to the Pacha and reported the fraudulent operation of his master. The Jew was thrown in prison, only to be redeemed for a hefty ransom of 300 Gold coins. The word of this easy fix for government treasury soon spread, and Jews practicing this art across Egypt were ransomed to a point they did not dare to practice it anymore.³⁰² I wouldn't dismiss this story as a total fiction, it might be based on some real events. As I have no other sources to corroborate it though, I cannot judge this story as other than myth. Both authors consider this as the turning point of mumia. As the trade with Egypt stopped so did the use of mumia in medicine stopped, so they claim. As the book by Guyon was published in 1625, we know that this is not the case. They both fail to explain how this affected the European mumia production, of which they were presumably aware, both quoting Paré. It is a possibility that trade declined at the beginning of the 17th century, as evidence suggests from the Jewish sources discussed. But mumia was still considered a legitimate and sought-after medicine.

Corpse medicine and mumia endured into the 18th century, despite a growing number of sceptics. Mumia, usnea and human fat continued to appear in pharmacopoeia and in popular culture.³⁰³ The association with Jews did not disappear as well. As Sugg notes from the entry for

³⁰⁰ Pettigrew, *History Of Egyptian Mummies*, p.7.

³⁰¹ Roquefort-Flaméricourt, *Des sépultures nationales*, pp.127-129.

³⁰² Pettigrew, *History Of Egyptian Mummies*, p. 11. Roquefort-Flaméricourt, *Des sépultures nationales*, pp. 143-145.

³⁰³ Sugg, *Mummies*, pp. 340 ff.

mummy in Samuel Johnson's dictionary (1755), where he claims that the sale of mummies should be condemned as in fact "what our druggists are supplied with is the flesh of executed criminals, or any other bodies the Jews can get."³⁰⁴ Evidence shows that mumia lost its popularity around the middle of the 18th century. The English traveler Richard Pococke wrote of his journey in Egypt in 1743: "I saw also many skulls here (where the mummies were, A.S.)... many of which probably had been rifled of the bitumen or balsam that was in them, when that sort of medicine was formerly much more in use than it is at present."³⁰⁵

Mumia continued to be featured in official pharmacopoeia and medical treatises as a legitimate medicine. Sugg shows that it was also sold in pharmacies in the 18th century, and it was widely known in popular culture.³⁰⁶ There is no one reason that mumia and corpse medicine faded away. Sugg counts the following reasons, none of which can be considered more important than the others: "the rise of Enlightenment attitudes to science, superstition, and the general backwardness of the past; a desire to create a newly respectable 'medical profession'; a changing attitude toward hygiene, the body and disgust; and the radically changed nature of the human body itself."³⁰⁷

But mumia didn't die in the 19th century. According to a source quoted by Sugg: "Writing around 1929, C.J.S. Thompson could state that 'mummy is still sold in the drug-bazaars as a remedial agent in the Near East'."³⁰⁸ This late use of mumia was witnessed by Abraham Moses Luncz (1854 - 1918) a Jewish scholar and researcher of the holy land. In his book, titled *Jerusalem* (ירושלים) and published in Vienna in 1881, he describes the traditions and customs of the land of Israel. When discussing superstitions (that are only present amongst the women and

³⁰⁴ A quote from physician and botanist John Hill: *Sugg, Mummies*, p. 365.

³⁰⁵ It seems like he designates the word mummy to the embalmed bodies, as do we in modern times, while the materia medica is named balsam. Marking the final change of semantics the word mumia went through, from natural material that is confused with embalmed bodies to exclusively meaning the embalmed bodies, without association with the materia medica. *Pinkerton, A General Collection...*, p. 209.

³⁰⁶ *Sugg, Mummies*, pp. 340 ff.

³⁰⁷ *Sugg, Mummies*, p. 392.

³⁰⁸ *Sugg, Mummies*, p. 394.

the unlearned), he mentions מומיא (mumia).³⁰⁹ The mumia is what the Arabs call: "חתיכת עצם".³¹⁰ In a side note he clarifies that this mumia is taken from travelers and pilgrims in the sea of desert on their way to Mecca or other places. They died from the heat and were buried under the sand. Their bones hardened, blackened and shrunk. They are sold in the pharmacies of the Arabs, every dram (דראה) costs 5 piastre (פיאסטער).³¹¹ This is of course the sand mummy, which surprisingly became the most enduring mumia of all. As materia medica at least. This description is almost exactly the description we encountered in the early 16th century. It is not clear where Luncz took his information from, but it seems to have been gathered from the local population. Again we see knowledge transmission outside the scholarly debate. The knowledge of local Arab pharmacists of mumia is probably not taken from Paracelsus or Fludd. It is likely that their sources were very similar to, or maybe even translations of European works. But I would argue that this knowledge was not necessarily transmitted through literature but rather through traditional professional apprenticeship. Not unlike the European pharmaceutical world before its institutionalization. What is clear is that we witness here a shared culture of medicine between the Levant and Europe, A culture that developed jointly and shaped by reciprocal influences.

While the origin of the medicine is familiar, the application of the medicine is a different story. The mumia is grinded and placed in a cup. This cup is left overnight to catch the morning dew. The patient will drink from it for nine days. On the fifth and ninth day, the patient will be washed and wrapped with white dresses (like an Egyptian mummy?) and a person will be left to guard him, for these are the most dangerous days. The patient will eat only bread and butter and will avoid strong smells like garlic, onion and fish. Menstruating women are not allowed in the house, and visitors should be avoided. Luncz says that the neighbours who believe in the

³⁰⁹ Luncz, Jerusalem, p. 21.

אברהם משה לונץ, ירושלים (שנה ראשונה), (וייען : געארג בראג, תרמ"ב.

³¹⁰ Luncz, Jerusalem: "A piece of bone dark as night in appearance, it can heal every ailment and disease." (my translation, A.S), p. 21.

³¹¹ Luncz, Jerusalem, p. 21.

power of mumia will leave their house out of fear of its powers, or at least draw a *mamlogma hand* (יד ממלוגמא).³¹² The mumia here lives in two worlds, the world of official medicine and the world of folklore magic.³¹³ It is purchased in a pharmacy that traces its knowledge to the intellectual world of early modern Europe and the Levant. It is applied by what seems to be an idiosyncratic amalgamation of traditions borrowed from folk belief, religion and mysticism.

This is not the latest evidence of the use of mumia. Another evidence of mumia assimilation into folk medicine comes from Melvin Firestone. In his research into *Spharadic Folklore in Seattle* in the 1960s he mentions mumia as a cure *Por Espantu*, a fright. The fright is believed to be caused by demons. One way to cure a person from the fright is to feed him mumia without his knowledge. This mumia is powdered human flesh or foreskin removed during circumcisions or, according to one of his sources, from the body of the dead before the funeral service.³¹⁴ Folk medicine in Seattle in the 1960s is a long way from our main discussion. According to Raphael Patai, this confusion of mumia and foreskin and mumia and the flesh of the dead “reflect a relatively recent folk-belief which developed among the Seattle Sephardim or their parents, after the actual origin of mumia had been forgotten.”³¹⁵ I would argue that there is a continuity, not in the ceremonial aspect of the ritual, but with the identification of the mumia. While Patai goes on to recount the origin of mumia as wax (he states natural bitumen), he misses some cannibalistic elements which became a central part of mumia. To begin with, the identification of mumia with human flesh, and the expectations that it *will be* human flesh is evident already in the letter of Pires in 1516 (the idea that foreskin can be used as mumia is admittedly new to my research). Another surprising element is the insistence on the flesh of a

³¹² As Hebrew uses vowel letters very sparsely, I am not sure what is the correct transcription. I do not know this term, but its function and the description as hand resembles the *Hamsa*, a well known amulet against the evil eye that fits this description and I believe this is what the author meant. *Luncz*, Jerusalem, pp. 20-21.

³¹³ Here I will allow myself to use the term magic as it is used commonly today. As the 19th century saw a separation between systematic scientific inquiry and magic.

³¹⁴ *Firestone*, *Spharadic Folk-Curing in Seattle*, p. 306.

³¹⁵ *Patai*, *Indulco and Mumia*, pp. 7 ff.

person before any funeral rites were performed. This element exists in the *mumia* by Croll,³¹⁶ and it is also an essential element in *usnea*, the moss grown on the skull of an unburied person.³¹⁷ These elements of the 20th century folk *mumia* are a result of a transmission of knowledge. I assume that it is traditional oral folk knowledge, and not the writings of Paracelsus, Croll, and Fludd, that gave this idea to the Sepharadic community in Seattle in the 1960s. It seems to be a similar process like the case of the *mumia* ceremony reported by Luncz in Jerusalem (it is also possible that some of the members of the Seattle community might have had some roots in Jerusalem). The substance *mumia* migrated from official *materia medica* into folk mystical medicine. It was coupled with ceremonies from a different origin. But as a material, a product, it maintained many, if not all, of its attributes. The tradition of *mumia* in the Jewish world was carried by the Sepharadic community. It was practiced by Egyptian Jews in the 16th and 17th century, many of them fled Spain (i.e. Sepharadim). It was practiced by them in different variations in the Levant, where the Arabs also practiced the use of *mumia*, as we have seen, into the 20th century. It was brought across the ocean to America. I could not find any evidence of *mumia* among Ashkenazi Jews. It will be left for future research to discover if *mumia* even made it to eastern Europe, where most Ashkenazi Jews lived. As a rule of thumb, it is important to remember that Jewish communities usually adopt the behaviors of their surroundings.

Discussing the end of *mumia* is somewhat misleading. For once, *mumia*, the original *shilajit*, is making a comeback as I write. The mummies of Egypt are still a source of fascination. While it is true that they are not ingested as medicine any more (I do hope), the ideas that made this behavior possible are ever present. As Sugg notes, one of the reasons for the decline of corpse medicine was the rise of the age of reason and rationality. But history, more than it is written by the victorious, it is written by the *class of writers*. And for most, they don't share the

³¹⁶ See above, or: *Croll, Hartmann, lover of chymistry* (trans.), *Bazilica chymica* (1670), p. 155.

³¹⁷ See for example: *Ps. Paracelsus, of the Supreme Mysteries of Nature*, p. 117. Or specifically on man's skull see Hartmann note: *roll, Hartmann, lover of chymistry* (trans.), *Bazilica chymica* (1670), pp. 99-100.

world view of the majority. Or as Sugg puts it: “for most people, for most of history, there was nothing but magic.”³¹⁸ As we have seen, many thinkers in the early modern period were totally fine with seeing magic as a legitimate investigation of nature. They saw no contrast between studying the circulation of blood, and preparing a weapon salve. If we accept Sugg’s observation, and I see no reason not to, that the rise of rationality within the *writers’ class* caused magical thinking to disappear from the historical record (though not from the minds of the majority), then it is hardly surprising that with the rise of social media, which has given a voice to the *non-writers’ class*, magical thinking is now resurfacing in the public sphere. Will mumia too rise from the dead to stage a triumphant comeback in alternative medicine? I wouldn’t be surprised.

9. Conclusions

The conclusion will revisit the hypotheses outlined at the beginning of this paper:

In the early modern period, mumia was a sought-after commodity: One of my humble contributions to the scientific research of mumia and its history is identifying the original substances mumia was. This materia medica, known today under the product name shilajit was used in Persian medicine probably since antiquity. It arrived in Europe through the translation projects of Arabic and Muslim texts during the middle ages. The association between Egyptian dead and mumia was made by Isaac Israeli. At least in writing and for the Europeans that is. It is highly likely that medicine from embalmed corpses was used before him, and he just connected the name of an unknown materia medica to an already existing practice. Entering the 16th century, Europeans spoke about mumia as a pharmaceutical product of human origin. There was a debate around the true mumia: is it the liquid in embalmed corpses, the corpses

³¹⁸ Sugg, *Mummies*, p. 393.

themselves, a mineral substance, or bodies buried under the sands of the deserts. But it seems that these discussions were not the driving force in the mumia market. The mumia market developed in response to market demand for a substance named mumia. According to historical evidence, the popularity of mumia peaked between the second half of the 16th century and the beginning of the 18th century. It was widely used and presumably had diverse origins. Mumia was used in the Muslim world as well as the Christian world. To understand the acceptance of mumia as legitimate *materia medica*, it is crucial to let go of some of our own biases. Premodern societies were not as sterile as our own, death and filth were common, and the fleshiness of the human body was widely evident. On top of that, Christian tradition and belief have some theological niches that mumia could fit right into: the ethos of healing, the belief in the healing power of the saint - dead or alive, relic cults, and the Eucharist. This research focused on the European theater, I am sure further research into the Islamic world of medicine in early modern times by scholars with the proper skills will yield interesting results as well.

In European tradition, the work by Paracelsus represented a milestone in the use and trade of mumia: Paracelsus constructed an elaborate theory of mumia as a force within the body, with materiality, that can be harnessed in several ways. His theories were influenced by ideas that existed in his intellectual environment, like alchemy and astral-medicine. Mumia was a central theme in his world view. Paracelsus was a highly influential figure after his death, but not in a straightforward way. While themes of his mumia theory appeared in the writings of his followers like Croll and Fludd, the concept of mumia he suggested was not embraced by them in its entirety. This is typical to the overall dynamics between Paracelsus and Paracelsianism. This movement that carries his name, at least in modern research, was less about his theories per se, and more about his image and his motivation to reform medicine. His obscure style and the slow publication of his writings, allowed him to become a head figure for revolutionary ideas. His image as a learned wanderer and experimental physician, shaped a rebellious movement. This

enabled the break from traditional medicine, which was admittedly highly conservative and stagnant. Paracelsus and the Paracelsianists were attacked on several grounds, but never as the source for corpse medicine or cannibalistic mumia. In the German speaking world, so occupied with theological debates, his theories were attacked on that basis. Many of Paracelsus's critics and followers had a personal second hand acquaintance with him. His personality was another point of attack. In the divided world of German polities, Paracelsianism found a foothold, in a way similar to that of religious reformers. The situation was different in Paris, where the centralized power of the medical authorities waged an uphill battle against the new medicine. They took issue with the use of chemical medicine more than any other aspect of Paracelsian theory. In England Paracelsus was a relatively minor figure. The carrier of the gospel of the new chemical medicine was, ironically enough, Conrad Gessner, who opposed Paracelsus. In England Paracelsian theory found a foothold for its esoteric and magical ideas, as expressed in Robert Fludd's theories. These mystical theories, while they might have had a root in the writings of Paracelsus, developed mostly independently from his actual theories, in a manner very typical to this movement we call Paracelsianism. This movement, and the name of Paracelsus, were what might be defined as a roof organisation for every new idea and every person who supported pushing the boundaries of what is accepted in medicine and other fields of knowledge. What Paracelsus actually thought was secondary. So it was with the mumia theory of paracelsus. While it might have been developed by his followers, it wasn't influential on mumia practice and theory as a whole, laying to rest my initial hypothesis. Mumia was practiced before and after Paracelsus in a similar way. It is probable that even his description of creating a mumia from an executed person was a rationalization on his side for a phenomenon he witnessed: pharmacists used the bodies of criminals to create mumia in Europe, as later reported by Paré.

There existed a transregional market for the trade in mumia, sometimes incorrectly linked to Jewish merchants and/or physicians: As for other claims raised by Paré, namely that Jews in Egypt were falsifying mummies, it shouldn't be dismissed as fiction. The story of Guy de la Fontaine might be genuine. If we cross this account with Thevet's report that apothecaries in Egypt regularly maintained a supply of presumably "fake" mummies (i.e. bodies recently prepared to look like ancient Egyptian mummies), it is likely that Jewish merchants joined this line of work as well. What is certain regarding Jews and mummies, is that Jewish merchants did trade them, as attested by the documents from the Cairo Geniza and Responsa literature. What it was certainly not, is a monopoly held by Jews. The sale of mummies as medicine, as mumia, was already practiced in the times of Abd Allatif, in the beginning of the 13th century. In his report these are the local Muslim who trade it. In another concrete account regarding mummies trade, John Sanderson describes a process that did not involve one single Jew. What is also certain is that this accusation became an antisemitic trope in later centuries. All evidence taken into account, it doesn't seem like mummy trade was a main occupation of the Jewish community, as the sparse evidence shows. Regarding fake mummies, there is not sufficient evidence to date to make a judgment. But Jews, as I claimed before, usually do what the society around them does. If production of fake mummies was practiced in Egypt, it is likely that Jews did it as well.

Mummies were probably not a main import into Europe, to judge from the cargo of the Hercules. But this trade route described by Sanderson is a worthy thread to pull on for future research. He gives the date and names of persons who participated, the name of the ship that carried the cargo, and the place where it was unloaded and stored. To build a full picture of the mummy trade, future research will have to go to the archives. The evidence is there. In England, imported mummies were not a high-end product as the books of rates show. It conflicts with other evidence that claims it was an expensive commodity. But the books of rates are not a perfect indicator for market prices, and there is always the possibility that different markets had

different prices. It could be the case that in England mumia was cheap and in France expensive. But there is no evidence to suggest that and it seems unlikely. There is however evidence that mumia was commonly used and sought-after. The dynamics between prices, and supply and demand will be a topic for future research.

Mumia transgressed the borders of folk medicine and learned medicine: One of the most important conclusions I came out with from this project is that historical reality is not written reality. As historians we study the written word, and in the case of the mumia it is very clear that the practice and use of mumia, and the written documents about mumia, exist in separate worlds that collide and intermingle at times. When Israeli writes about the mumia from the graves, was it his idea to suggest it as a local *ersatz* for the Persian mumia? Did he put into writing a professional convention, or was it a folk tradition that he rationalized? Did mumia start being traded into Europe after his translation, or did it spread to Europe by word to mouth by Italian merchants? These remain open questions. Did Paracelsus know of a phenomenon of producing mumia from executed people, or did it spread because of him? If we take the evidence of Paré about France, it is unlikely that it was Paracelsus who influenced it because of the timing of the translations. But could this theory by Paracelsus travel orally to France before his writings ever did? It is not unimaginable considering that elements of the Paracelsian mummy appear not only in the writing of his followers, like Croll, but also in the report of Guyon that claimed fake mummies are made from the hanged and the impaled.

Mumia traveled orally and in written form, it also traveled between folk medicine and professional medicine. It is possible that it began as folk remedy, but by the 16th century it was well entrenched in learned medicine. In the European medicine world mumia began to lose favor in the 18th century, but it lingered on in apothecaries in the Levant. It reincarnated into folk medicine practiced by Sephardic Jews, in Jerusalem in the end of the 19th century, where the sand mummy was merged with a mystical rituals, and in Seattle in the 1960s where the material

maintained some of its 16th century attributes, like being of human origin - from an unburied person. In a similar way, mumia did a semantic turn. From an organic secretion in the mountain of Persia, to a material inside of Egyptian mummies, to the Egyptian mummies themselves, and maybe today, back to semantically signifying the original substance. This sums up a thousand years of mumia from human origin being practiced in Europe and the Mediterranean. One might say that like the embalmed bodies of the Egyptian, mumia stood the test of time.

I really do hope that the next life of mumia will emerge through historical research. This phenomenon in particular, and medicinal cannibalism in general, were common and central to early modern European societies and deserve more research. Beyond the curiosity of the subject, it can give us insights into past societies, their conception of the body, of life, of health and sickness. There are open questions regarding the transmission of knowledge and the spread of traditions and ideas. Above all, there are many things to discover about the practicality of mumia. Who traded mummies, to where were they shipped, what was the Egyptian (Ottoman) authorities' attitudes towards it, who were the intermediaries along the way and how did it get to apothecaries? How widespread was the production of mumia, was it practiced in Egypt and in Europe, who practiced it, criminals or pharmacists? How was the trade in cadavers conducted, who was mummified, was it done according to the Crollian instructions, or like Paré describes? I cannot say that all the answers will be found, but I am certain that many will be. As more and more archives will become digitized and searchable, the possibilities to complete this mosaic of mumia will grow. It is my hope that my research, though I have described it as a second generation of work on the topic, will, in the long run, be counted as part of the beginnings of this field, for it has by no means exhausted the subject.

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Abstract

English:

“The Paracelsian Mumia: Practice and Theory” examines the history of the medicinal substance *mumia*, focusing on its uses and interpretations in early modern Europe. In Persian medicine, *mumia* referred not to bitumen or asphalt, as modern research suggests, but to a microbial secretion containing organic compounds. The thesis traces the evolution of the term in Egypt, where it came to denote a substance derived from ancient embalmed bodies, and its transmission into European medicine, where it acquired diverse meanings, many involving human remains. The demand for human-derived *mumia* fueled both a transregional trade in corpses and a European industry of locally produced substitutes. Paracelsus, the sixteenth-century Swiss physician, was the first to develop a theoretical framework to explain *mumia*, and the thesis explores the spread of his ideas through his disciples across Europe. However, the Paracelsian theory had little impact on the *mumia* market, which was driven primarily by demand rather than theory. The trade was associated with Jewish merchants and physicians in the Levant, but it was practiced more broadly across the region, particularly in Egypt. While the use of *mumia* declined in Europe during the eighteenth century, it persisted in the Levant well into the twentieth, where it blurred the boundaries between folk and professional medicine. This study highlights the complex interplay of theory, practice, and commerce in the history of *mumia*.

German:

„Die paracelsische Mumia: Praxis und Theorie“ untersucht die Geschichte der Heils substanz *Mumia*, mit einem Schwerpunkt auf ihre Nutzung und Deutung im frühneuzeitlichen Europa. In der persischen Medizin bezeichnete *Mumia* nicht Bitumen oder Asphalt, wie es die moderne Forschung annimmt, sondern eine mikrobielle Absonderung mit organischen Stoffen. Die Arbeit verfolgt die Entwicklung des Begriffs in Ägypten, wo er eine Substanz aus alten einbalsamierten Körpern meinte, und seine Übernahme in die europäische Medizin, wo er verschiedene Bedeutungen erhielt, viele davon mit menschlichen Überresten verbunden. Die Nachfrage nach *Mumia* aus menschlichem Ursprung führte sowohl zu einem transregionalen Handel mit Leichnamen als auch zu einer europäischen Produktion von Ersatzstoffen. Paracelsus, der Arzt aus der Schweiz im 16. Jahrhundert, war der Erste, der eine Theorie zur Wirkung von *Mumia* entwickelte. Die Arbeit beschreibt diese Theorie und ihre Verbreitung durch seine Anhänger in Europa. Doch die paracelsische Theorie hatte wenig Einfluss auf den Markt, der vor allem durch Nachfrage bestimmt war. Der Handel wurde mit jüdischen Händlern und Ärzten im Levantegebiet verbunden, war aber auch allgemein verbreitet, besonders in Ägypten. Während die Nutzung von *Mumia* in Europa im 18. Jahrhundert zurückging, blieb sie im Levantegebiet bis ins 20. Jahrhundert bestehen. Dort überschritt sie die Grenzen zwischen Volksmedizin und professioneller Medizin. Diese Studie zeigt das Zusammenspiel von Theorie, Praxis und Handel in der Geschichte der *Mumia*.