

Lucia Raggetti

‘Īsā ibn ‘Alī’s Book on the Useful Properties of Animal Parts

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‘Īsā ibn ‘Alī’s Book on the Useful Properties of Animal Parts

Edition, translation and study of a fluid tradition

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Preface

This book is based on my PhD dissertation, defended in April 2012. Two lines of thought led me to select this topic: a desire to keep working on Arabo-Islamic animal literature—an important section of readings in my curriculum of study—and curiosity about working with manuscripts. Curiosity is fundamental for the scholar and, luckily, it is not fatal to all animals. The literature on properties and especially the textual criticism on fluid traditions in Arabic is mostly uncharted territory. I tried to develop linear and empirical ways to handle this large and complex tradition, and make it available in a reliable edition with an English translation. The publication has been designed as a research tool, not just for arabists, but also scholars of the history of ancient medicine and science in different cultural and linguistic traditions. Once it has been tamed, such an unruly tradition—in which ‘everything is similar but nothing is the same’—opens large horizons and new perspectives on the ‘science of properties’, its transmission and its contents. Looking at any opening of the edition with its mirror translation, one is immediately struck by a *horror vacui* inspired by the blank space at the bottom of the odd pages. The annotation of the text, with the *loci similes* in Arabic literature as well as in other traditions, would have occupied several other volumes and years. It remains, however, a *desideratum* for the continuation of my research.

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Introduction

I. Authorship and Genre

I.1 'Īsā ibn 'Alī and his fate

Arabic sources unanimously present 'Īsā ibn 'Alī as both one of Ḥunayn Ibn Ishāq's most brilliant students and the author of a book on the properties of animals. 'Īsā ibn 'Alī served as court physician to the Abbasid Caliph al-Mu'tamid (256–279 H/870–892 AD), during an era noteworthy in Islamic culture for its extraordinary vitality and creativity. This portrait of 'Īsā ibn 'Alī emerges from a review of several bio-bibliographical sources. The first mention of him is in the *Fihrist*.¹

'Īsā ibn 'Alī

He was one of the pupils of Ḥunayn [Ibn Ishāq] and an excellent man. Among his books there was *The Book of Useful Properties obtained from the parts of animals*.

In the later tradition, however, the fact that his name so closely resembles that of another physician has partially hidden the historical tracks left by our author. Indeed, he was soon mistaken for the famous oculist 'Alī ibn 'Īsā, even though the latter lived a century and half after 'Īsā ibn 'Alī.² 'Īsā ibn 'Alī appears in both the well-known reference works of medieval Islamic medicine, viz. in Ibn Abī 'Uṣaybi'a's *'Uyūn al-anbā' fī-ṭabaqāt al-aṭibbā'* ('The Sources of information about the Generations of Physicians') and Ibn al-Qiftī's *Ta'rīḥ al-ḥukamā'* ('Chronology of the Learned Men').

Ibn Abī 'Uṣaybi'a mentions both physicians in two different entries. 'Īsā ibn 'Alī can be found in the eighth chapter, alongside several members of the Buḥtišū's family, where they are referred to as 'Syriac physicians who lived in the early times of the Abbasid rule'.³

He was a noteworthy physician who was also prominent in the field of philosophy and wrote various works on this subject. He studied the practice of medicine under the guidance of Ḥunayn ibn Ishāq and was considered one of his more brilliant disciples. He served Aḥmad ibn al-Mutawakkil, that is al-Mu'tamid bi-Allāh. He was his personal physician for a long time and when [Aḥmad] obtained the dignity of the Caliphate, he favoured and honoured 'Īsā ibn 'Alī and lavishly bestowed precious gifts on him. Several books are ascribed to 'Īsā ibn 'Alī: *The Book of Useful Properties obtained from the Parts of Animals*, and a *Book of Poisons* [in two chapters].

The almost homonymous 'Alī ibn 'Īsā (d. 400 H/1010 AD) is mentioned in the tenth chapter as an outstanding ophthalmologist, who composed the famous *Taḍkirat al-Kaḥḥālīn* ('The Reference Work for the Ophthalmologist') in three books.⁴ So in Ibn Abī 'Uṣaybi'a's work at least the distinction between the two figures is clear. In Ibn al-Qiftī's *Ta'rīḥ al-ḥukamā'*, however, the two physicians are conflated and their entries merged.⁵

'Īsā ibn 'Alī, one of the disciples of Ḥunayn [ibn Ishāq], an author famous for his book *Reference work for Oculists (Taḍkirat al-Kaḥḥālīn)*, on which the doctors in this field subsequently based their work—*The Book of Useful Properties obtained from the Parts of Animals*.

¹ See Ibn al-Nadīm 1970, II 699; for the Arabic text, see Ibn al-Nadīm 1872, I 297.

² See Mittwoch, E., "Alī b. 'Īsā", in: *Encyclopaedia of Islam*, Second Edition, Edited by: P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs. Consulted online on 13 February 2018 http://dx.doi.org/10.1163/1573-3912_islam_SIM_0513.

³ See Ibn Abī 'Uṣaybi'a 1884, 123 and 203.

⁴ Ibid., 247.

⁵ Ibn al-Qiftī 1903, 237. This problematic passage misled Ibn al-Qiftī's editor, who added a cross-reference to the passage on 'Īsā ibn 'Alī in Ibn Abī 'Uṣaybi'a, see Ibn al-Qiftī 1903, 247. Wüstenfeld and Leclerc instead followed Ibn al-Nadīm, so the two physicians remain entirely distinct. They blame the misunderstanding on the problematic manuscript tradition of the eighth chapter of Ibn Abī 'Uṣaybi'a's work, see Wüstenfeld 1840, 39, and Leclerc 1876, I 303–304). Both Ullmann and Eisenstein mention 'Īsā ibn 'Alī as a prominent figure in the earliest phase of medico-zoographical literature, see Ullmann 1972, 21–22 and Eisenstein 1991, 96).

The figure that emerges from the sources is that of a prestigious author who lived at a very early and golden moment of Arabo-Islamic civilization. However, as a result of the aforementioned confusion over his identity, 'Īsā ibn 'Alī partly disappeared from the biographical tradition. Inevitably, this biographical state of affairs affected the transmission of 'Īsā ibn 'Alī's text. On the one hand, an ancient and prestigious authorship prevented this collection of recipes from getting lost among the anonymous mass of similar compositions; on the other hand, the long time span of the transmission, and the uncertainty about the authorship created the conditions for a fluid transmission of the text.

This unfortunate homonymic case is not enough, however, to explain the oblivion into which 'Īsā ibn 'Alī sank. The extraordinary development of Arabic medicine probably played a role as well. There is no reason to doubt that, during his lifetime, and probably for at least a century after, 'Īsā ibn 'Alī enjoyed a reputation as a brilliant and important physician. His appointment at the court is a tangible sign of his professional prestige. However, if one compares the collection of recipes edited here with the medical encyclopedias and treatises composed shortly thereafter—al-Tabārī's (3rd cent. H/9th cent. AD) *Firdaws al-ḥikma* ('The Paradise of Wisdom'),⁶ al-Rāzī's (250–313 or 323 H/834–925 or 935 AD) *Kitāb al-ḥāwī* ('Liber Continens'), Ibn Sīnā's (370–428 H/980–1037 AD) *Qānūn fī-l-ṭibb* ('Canon of Medicine'), to name a few examples—the book by 'Īsā ibn 'Alī seems to correspond to a more archaic phase that preceded the unfolding of the golden age of Arabic medicine. The titles mentioned became reference works in the field of medicine, casting their shadow over other 'minor' works. It would be inappropriate, however, to see 'Īsā ibn 'Alī's *Manāfī* as the petty result of a primitive age, in which Arabic medicine was clumsily taking its first steps. This was rather a moment when contacts and interactions with a large number of non-Arabic sources were particularly intense, no doubt thanks to the multicultural background of the author: his native language was probably Syriac, he wrote in Arabic, and it is highly likely that he came into contact with the Greco-Arabic translation movement.

One may wonder, then, how, in spite of all these disadvantages, the text managed to survive. It is likely that, even as medical interest in this text was waning, a new kind of interest in its contents arose. The recipes started to be read as a collection of curious and wondrous tricks. This delineates two different readerships: one interested in medical knowledge, the other attracted by the more curious aspects of the recipes. However, it would be unwise to trace any kind of sharp division in terms of periods and readership, for the use of animal substances for healing purposes clearly survived alongside new models of medicine and pharmacology. Even after Arabic medicine had moved on, the text survived as a collection of curious and amusing tales, in Arabic *'aḡā'ib wa-ḡarā'ib*, which maintained a literary interest in the materials.⁷ In other words, the textual tradition did not die, but rather shifted in the direction of a 'Book of Secrets'.⁸ This change also made the text prone to including all kinds of heterogeneous materials.

According to this scenario, the name of 'Īsā ibn 'Alī as the author of a collection of recipes based on animal ingredients remained an important element, conferring authority and reliability upon the text. He was either identified as the most outstanding ophthalmologist, or as a nebulous character, who nevertheless lived during the great and highly idealized phase of early Abbasid rule, an authorial presence that, in any case, would have strengthened the importance of the text.

I.2 Title and introduction

Even if Arabic sources did not always attribute the work to the correct physician, they are in agreement about the title of the work: *Kitāb al-manāfī 'allatī tustafādu min a'ḡā' al-ḥayawān* ('The Book of Useful Properties That

⁶ The *Firdaws al-ḥikma* is the first medical encyclopedia in Arabic: for this and its early composition date, it is particularly relevant to compare it with 'Īsā ibn 'Alī's work, see Ṭabarī 1928; see also Ullmann 1978, 108..

⁷ Clues to this shift can be found in the manuscript tradition, where one often finds comments in the margins of the recipes. These marginalia often consist of a single word, either *'aḡīb* (wondrous) or *ḡarīb* (strange). Moreover, the more technical and positive *muḡarrab* ('tried out') can also be found among the marginal comments, see Raggetti 2015.

⁸ See Eamon's description of this tradition in Mediaeval and Early Modern Europe (Eamon 1994).

Can Be Obtained From Parts of Animals'). The manuscript tradition reveals a number of different titles, but does not include the one recorded by Ibn al-Nadīm and the other sources.⁹

The passage in the text highlighting the authorship is the introduction to the book. It is not possible to ascertain whether this passage really does originate from the pen of the author;¹⁰ nonetheless, there are some clear indications about the composition of the work, the use of the sources, the organization and the purpose of the book. These key elements of the composition cut across the whole manuscript tradition, in spite the general fluidity of its wording. The adherence of later compilers and copyists to the guidelines announced in the introduction should not be taken for granted.

The first point in the introduction describes the author's efforts to collect materials. The composition of the book began with the collection of relevant passages from a variety of ancient sources. The names of a number of authorities in the field of medicine and *physiologika* are mentioned here, whereas in the rest of the text the sources remain unattributed. All the manuscript witnesses mention Hermes Trismegistos and Democritus as sources, and they were almost certainly responsible for the transmission of large amounts of materials on the sympathetic properties of natural objects in the Greek tradition.¹¹ Other authorities are mentioned as well, for instance Euclides and Hippocrates. Such names, however, appear to have been added in order to give authority to the text of a specific copy, rather than as reference to actual sources. The actual number of sources may well have been much higher, but all of them remain implicit. In the branch (b) of the tradition, there is a further remark on the selection of materials. The author sieved through his sources, discarding any materials that were not relevant for his book, in particular any spells and charms that implied an opposition to the useful properties.¹² This awareness of the problematic relationship between these two entities is evidenced by the author's decision to select recipes on a qualitative base.

The originality of the book emerges on a formal level. While the materials were known and drawn from authoritative ancient sources—so well known or so easily recognized that they could remain implicit—the structure is presented as entirely innovative: the materials are organized in chapters and divided by animal.¹³

All these efforts to reorganize the materials, creating a new arrangement, were carried out for the benefit of the prospective reader: the author aims to facilitate the search for particular pieces of information within the book.¹⁴

The general impression is that the author is inscribing himself in a long tradition that goes back to antiquity and Hellenism. While the Greek component in the sources is predominant, it does not muffle the echo of other texts. The nature of 'Īsā ibn 'Alī's innovation was chiefly formal, and consisted of a radically new organization of the materials.

⁹ For the titles attested to in the manuscript tradition, see the description of the manuscript witnesses, ch. IV.

¹⁰ In theory, it may well be a fictional literary construction.

¹¹ Only fragments of his works survive, transmitted in the form of short passages arranged on a thematic base with, as a consequence, a particularly fluid transmission. Still, there are enough fragments to state that the analogy between their works and the *manāfi'/hawāṣṣ* literature is real, see Wellmann 1928, 10 and Laurenti 1985, 91.

¹² Nevertheless, a number of recipes mention magic, describing practices and suggesting how to protect oneself from it, see 'Thematic Index'.

¹³ If we are to believe what the introduction says about the ancient sources, properties and sympathies had to be listed simply without any particular criterion for their order. If the perception in the 9th century was such, then the organization in chapters by animal already represents a huge innovation. This lack of internal organization is mirrored more widely by the section on pharmacological preparations based on animal ingredients in the *Naturalis Historia* (XXVIII–XXXII), which ultimately results in an overwhelming entanglement: if we take the introduction at face value, we might have expected arbitrary lists of properties and sympathies. This is just an example, illustrating that, in the perception of the 9th-century audience, the organization of this material in chapters—with each chapter dedicated to ingredients deriving from a particular animal—might genuinely have been perceived as a huge innovation.

¹⁴ The introduction in (b) even mentions numbers assigned to the chapters.

1.3 *Manāfiʿ* vs. *ḥawāṣṣ*

In connection with ʿĪsā ibn ʿAlī, the Arabic sources only speak of *manāfiʿ* (useful properties), and not about *ḥawāṣṣ* (occult properties). In most of the texts dealing with the ‘science of properties’,¹⁵ the two terms go side by side, and are used to label a diverse accumulation of recipes and a huge amount of animal lore. In the wider manuscript tradition, the expressions *manāfiʿ* (useful properties) and *ḥawāṣṣ* (occult properties) are used interchangeably.

The apparently inextricable entanglement can be overcome by focusing on the common traits shared by all the recipes and prescriptions: they are all based on the properties of natural objects and circulated under the aforementioned labels of *manāfiʿ*, and *ḥawāṣṣ*. The lexicographical significance of these two categories has turned out to be quite a productive approach to defining their distinct characteristics.

Manāfiʿ (sing. *manfaʿa*): a cause, or means of advantage, profit, utility; or benefit: and simply, advantage; profit or profitability; utility, use, usefulness; or benefit. Contrary of *maḍarra*.¹⁶

Ḥawāṣṣ (sing. *ḥāṣṣa*): A property of a thing not found, or not existing, either wholly or partly in another thing.

Ḥawāṣṣ (sing. *ḥāṣṣiyya*): a property, or particular or peculiar virtue which is an unknown cause of a known effect; as that by which a medicine operates: the former differs from the latter in being conventionally applied to an effect, or effective property, whether the cause of its existence be known or not. And *ḥawāṣṣ* is a quasi-plural noun, not a plural.¹⁷

The difference between *manāfiʿ* and *ḥawāṣṣ* seems to be in the transparency of the underlying causal correlations. When the relation between cause and effect is clear and, indeed, can be deduced and known, then it can be classified as *manāfiʿ*; by contrast, in respect of *ḥawāṣṣ*, only the effect is known, while the causal process remains unintelligible.

The hidden causal process of the *ḥawāṣṣ* is presented as their signature, also in the theoretical statements formulated by al-Ṭabarī and al-Rāzī shortly after the composition of ʿĪsā ibn ʿAlī’s book. The *Firdaws al-ḥikma* can be considered as the first medical encyclopedia in Arabic and, as well as having the features of a genre pioneer, it preserves a number of archaizing traits,¹⁸ among them a long section on the useful properties of animals. At a different place in the work, al-Ṭabarī defines the *ḥawāṣṣ* in contrast to the *quwwa* (‘faculty’, often used to translate the Greek term *dynamis*, especially in the context of the Galenic translations).¹⁹ Al-Ṭabarī wrote that the senses can grasp the *quwwa*, whereas hidden properties can be comprehended only through experience.²⁰

Occult properties of things

With the help of God, I have already written what I wanted to write about the faculty (*quwwa*) of the bodies, the diseases and their own peculiar moments, and also other things about the tests, the urine, and other similar issues that the physician should not neglect. Now I will mention the faculty of the natural objects (litt. *aṣṣiyāʾ*, things), the signs of this faculty in the colours, in the flavours, and in the senses, with the permission and the help of God. Each natural object, in fact, has a faculty that can be perceived with the senses, but it has also an occult property (*ḥāṣṣa*) that is unknown, whose depth cannot be grasped but by trying it out several times (*taḡārib*, lit. ‘experiences’), because the occult properties are a mystery hidden in the natural objects. Like the occult property of the magnet that attracts iron and the particles of chaff. Among the natural objects whose occult property is to make the bladder stones crumble, when they reach the bladder, there are things like burnt scorpions and wild celery seeds.

¹⁵ I borrowed this expression from Paul Kraus, who used it for a particular section of the *Corpus Gabirianum* dealing with the properties of natural objects. See Kraus 1942, 61–70, and Raggetti 2015.

¹⁶ Lane 1863, VIII 3036.

¹⁷ Ibid., II 747.

¹⁸ I discuss the commission of innovative and archaic elements in the *Firdaws al-ḥikma* in a forthcoming article ‘The Paradise of Wisdom: Streams of Tradition in the First Medical Encyclopaedia in Arabic’, in *Cultural Systems of Classification: Sickness, Health and Local Epistemologies*, in the Routledge Series ‘Body and Medicine in Antiquity’

¹⁹ Ullmann 2002, 208–209.

²⁰ See al-Ṭabarī 1928, 355.

Al-Rāzī composed a short essay on occult properties, the *Kitāb al-ḥawāṣṣ*, collecting quotations from Classical Greek authors and a few contemporary colleagues, the materials here are arranged alphabetically. Its sharply polemic introduction opposes those who refuse to take advantage of such properties because their underlying *ratio* is not transparent.²¹

Kitāb al-Ḥawāṣṣ — Introduction

Muḥammad ibn Zakariyya al-Rāzī said: ‘I do know that there are people whose occupation is the accusation, the opposition, and the hastiness for the derogation of what they ignore, they are quick in censuring us while [in this way they are] declaring themselves stupid. We have observed in the composition of this book that there is no need for us to omit the things—in which we believe there is some usefulness—for the sake of people who are ignorant, and therefore against it. This could have been avoided if only those had been people of reason, careful examination, and waiting before rushing into the refusal of something they have no proof against.

[...]

And then how is it that in every moment they see things that go against them, which change in front of them, like the condition of the things that they reject, in spite of the fact that these things that are found evident in front of them, and what situation they see with their own eyes but do not realize it. In fact, they constantly see that the magnet attracts iron, but if someone claims the existence of a stone that attracts copper, or a stone that attracts gold or glass they hastily deny it, and dismiss it as a silly construct’.

Considering the statements of the two physicians, it seems that a clear distinction between *manāfiʿ* and *ḥawāṣṣ* existed at an early phase of the use of these labels, but they soon became inextricably linked. A concrete example is given by the titles transmitted by the manuscript tradition of ʿĪsā ibn ʿAlī, in which the words *manāfiʿ* and *ḥawāṣṣ* are either interchangeable or used side by side.

Al-Ṭabarī’s definition introduces a third lexical element to the discussion—the role of experience—already mentioned among the lexicographical remarks. The passive participle *muḡarrab*, ‘tried out’, can be found—isolated or in some periphrastic expression—not only in the margins, but also at the end of many recipes in the body of the text. The *Muḡarrabāt*, intended as a medical literary genre, comprises records of physicians’ case histories, treatments, medical experiences and remedies presented as real cases.²² Manfred Ullmann argues that these texts are recipes that have proven to be effective through the actual treatment of a patient, making them more *empirica* rather than *experimenta*.²³ Again, lexicography may help our understanding of some of the implications of this expression. The Arabic ‘intensive’, a verbal stem known to imply a notion of plurality, can be seen as an indication of a particular kind of successfully repeated operation or procedure. The *Muḡarrabāt* seem to depend upon the human experience of a certain recipe or procedure. Based on the curious mixtures and procedures described in these recipes, the addition of the expression ‘tried out’ readily gives the impression of an ‘experimental’ phase in its prehistory, thus bestowing its contents with a greater reliability. Any emphasis on the existence of a modern empirical procedure (a test or an experiment), however, would almost certainly turn out to be anachronistic.

The expression *muḡarrab* was also used in manuscripts outside its eponymous and rather limited textual genre: the word was simply added at the end of some recipes, as a comment on their alleged efficacy. In this way, it was possible for the expression to find its way into many different textual traditions: the personal point of view and comment of a single copyist or a particularly active reader—who, for some reason, felt confident enough to ‘certify’ a recipe’s potency—could, potentially, be included anywhere in the text and at any moment of the transmission. Whether the *Manāfiʿ* and *Ḥawāṣṣ* absorbed this expression, extrapolating it from its genre

²¹ See al-Rāzī, *Kitāb al-ḥawāṣṣ*, MS Cairo DAK Ṭibb Taymūr 264, p. 2; see also Ullmann 1978, 109. The existence of a whole range of magnets capable of attracting a large assortment of substances (hair, cotton, wool, nails, gold, silver, etc.) is attested to in the tradition of the Ps. Aristotle *Book of Stones*, see Ruska 1912, 108–111 and 154–160. The same example was discussed by Ibn al-Ḡazzār in the introduction to his *Kitāb al-ḥawāṣṣ*, see Käs 2012, 31.

²² See Álvarez Millán 2010, 195–197 and Álvarez Millán 1994.

²³ See Ullmann 1970, 311–13 and Ullmann 1978, 110.

context, or whether the *Muğarrabāt* genre originated from further reflection on the importance of medical observation, or even from some kind of need in the professional readership, remains an open question.²⁴

Combining the lexicographical perspective with the different genres in which these properties appear might give the impression that the riddle is not as obscure as it seemed. The actual state of the texts, however, is much more complex and characterized by many inconsistencies in employing the words *manāfiʿ* and *ḥawāṣṣ*. Each textual tradition has its own peculiarities and a huge number of unedited texts still require study in order to test the validity of these categories.²⁵

II. The Structure of ʿĪsā ibn ʿAlī's *Manāfiʿ*

A thorny and ambitious question looms over this and other similar texts. How and where should the line between magic and medicine be drawn?²⁶ If an ordinary liver complaint, for instance, is cured by a series of knots made on a thread of camel wool, should one focus on the healing properties of this item or on the procedure designed to restore health, which could easily be classified as a kind of ritual or a magical manipulation? Without wishing to deny the intrinsic value of these categories, one is forced to admit that this approach often results in a stalemate. Since the dichotomy and opposition between medicine and magic cannot not be applied consistently to the analysis of the considerable amount of materials transmitted under the name of ʿĪsā ibn ʿAlī, I suggest, here, the combination of a formal approach for the structure of the text with a thematic analysis of its contents.

²⁴ Cristina Álvarez-Millán underlines a singular point: the word *muğarrab* never occurs in a proper collection of medical experiences, but only at the end of other kinds of recipes, see Álvarez-Millán 2010, 198. Moreover, the three main books identified as *Kutub al-Muğarrabāt* ('Book of the Tried Out Remedies', by al-Rāzī, al-Hāšimī, and Abū al-ʿAlā ibn Zuhr) were posthumous compilations of medical cases dealt with by a physician, usually collected by one of the pupils. On the whole, this does not support the hypothesis that the word *muğarrab* migrated from a formal, medical genre to a decontextualized use in popular medicine and magic. On later *Muğarrabāt* and their relationship with magic, see Dorpmüller 2005.

²⁵ The *Nuʿūt* and *Ṭabāʿi*—the 'characteristics' and the 'natures'—of animals are other categories that can be related to *manāfiʿ* and *ḥawāṣṣ*, not least because some of them entered collection of different properties. They deal with the habits and behaviours of animals in a more descriptive way. Although all these words are mixed up in titles, their contents are rather distinct. In the Ps. Aristotelian *Nuʿūt al-Ḥayawān*, the chapters include distinct paragraphs devoted either to useful properties or to the habits of an animal (see MS Tunis 16385, for which I would thank Prof. Remke Kruk, who let me work with her copy of this manuscript), whereas in Ibn Buḥtišū, this information about the innate habits of animals is concentrated in a specific section that opens the chapter (see MS Dublin Chester Beatty 5006, MS Istanbul Aya Sofya 2916, and MS Istanbul Aya Sofya 2943). These materials have their origin in the book on animals composed by Timotheus of Gaza, see Ullmann 1972, 15, and Kruk 2001. Ullmann maintains that the difference between the *ṭabāʿi* and *manāfiʿ* / *ḥawāṣṣ* lies in their main sources, which, for the latter, are to be found in the pseudo-Democritean and Hermetic writings, in Xenocrates of Aphrodisia, and Anassilaos of Larissa (Ullmann 1972, 10). An example of *Ṭabāʿi* in the work of ʿĪsā ibn ʿAlī can be found at the end of the chapter on the lion (2.33 and 2.34). Since *nuʿūt* and *ṭabāʿi* are invariably found at the beginning or at the end of a chapter, there is a concrete basis for the hypothesis that they are a later addition. Another difference can be observed in the textual form: *manāfiʿ* and *ḥawāṣṣ* are structured as prescriptive texts (recipes), whereas *nuʿūt* and *ṭabāʿi* are, on the whole, descriptive ones or narratives. However, the fact that ʿĪsā ibn ʿAlī was counted among the sources of Ibn Buḥtišū, at least for the contents related to *manāfiʿ*, is attested to in the manuscript MS Escorial 893 (f. 140r), see Ruiz Bravo-Villasante 1980, 125.

²⁶ The scientific literature on this distinction is vast. An attempt to apply a modern, Western distinction to shed some light on complex textual and human phenomena has been a distinctive feature of almost every attempt to write about the history of science. It would be far too ambitious to attempt an acceptable bibliography on the topic here. I will therefore limit the list to those readings that, in different ways, have provided me with a general background for my research questions, namely Frazer 1906–15, Thorndike 1923, Lloyd 1979 and Lloyd 1983, Ullmann 1972.

II.1 Macro level: the chapters and their organization

The work of 'Īsā ibn 'Alī is organized in chapters, whose number varies greatly from one manuscript witness to another. Each chapter deals with a single animal and contains a number of recipes.²⁷ Although the order of the entries is not uniform in the manuscript tradition, it is still possible to detect some trends in the arrangement of the contents. The list begins with man, as the most elevated living being at the peak of the creation. A small group of large carnivorous animals follows (lion, wolf, hyena, bear, chapters 2–5). The chapters 6 to 14 (jerboa, pig, dog, gazelle, mountain goat, deer, fox, and crocodile), present a quite heterogeneous ensemble, and its *ratio* is less clear. The next group includes cattle and beasts of burden, both domestic and wild (chapters 15–24). Chapters 25–44 mainly deal with small animals, such as cat, lynx, badger, weasel, jackal, monkey, etc. The presence among them of the exotic and huge rhinoceros, or the most famous of all lizards—the salamander—is peculiar. The groups of birds (chapters 45–78), creeping animals (chapters 79–100), and water creatures (chapters 101–110) delineate themselves with much less uncertainty. In this picture, one can recognize the different organizational criteria from ancient systems of classification, which were inherited by the Arabo-Islamic tradition: food and diet (carnivorous, herbivorous, omnivorous), relations with men (domestic and wild), method of locomotion (creep, fly, swim) and preferred environment (air, water).²⁸

In 'Īsā ibn 'Alī's table of contents, all these different criteria are weighted equally and groups are defined on the basis of different overlapping and coexisting principles. The boundaries dividing the groups, however, are quite elastic. This makes the inclusion of additional chapters plausible and could explain some of the odd inclusions and configurations of the groups in the classification. In cases when the addition of an entire chapter entered the tradition and was somehow misplaced in the list, one can imagine that either there was no place considered appropriate for the animal, or that the author of the interpolation exercised his own ingenuity.

The manuscript tradition bears signs of this interest in classification, and the branch (b) is the most conspicuous in this regard. Here, there are additional headings marking the classification and labelling large groups of chapters. In this same branch of the tradition, the MSS T and W include a list of the chapters prior to the beginning of the text. In terms of the sub-groups within some chapters, four groups were singled out in the manuscript tradition: *insān* (human being),²⁹ *bahā'im* (animals, possibly with four legs), *ṭuyūr* (birds) and, finally, *ḥiṣāṣ al-arḍ* (insects of the earth). Notably, there is no specific classification of water creatures.³⁰ In the MS Istanbul Saray Ahmet III, 2083, in particular, the headings are rubricated, and the final number of one hundred chapters is also given.³¹ In the list of chapters that opens MS Wien 1481/2, there are three different labels: *sibā'* (beasts of prey), *ṭuyūr* (birds), and *ḥaṣarāt* (creeping animals).³² The text is incomplete, so it is impossible to check whether the classification labels were consistently applied in the text. Although the interpretation of these clues of classification remains open, there is a clear intention to define clusters of animals in a consistent way, and to organize the table of contents as a multi-oriented classification system.

²⁷ Focusing on a single animal is more a tendency for the chapters than a rule. Also, those chapters with a single protagonist tend to call the animal by different names when referring to the male or female specimen, to the young, etc. In the chapter dedicated to sheep for example, five different names are used: *ḍa'n* and *ṣā'* as collective nouns, with the addition of the more general *ḡanam* for small cattle, *ḥarūf* for the young, *na'ḡa* for the female and *kabṣ* for the ram. The chapter about the dog, in an associative way, includes a recipe based on the shark, literally called 'sea dog' (*kalb al-baḥr*). A similar approach is taken with the horse (*faras*) and the hippopotamus (*faras al-nahr*). By association, I suppose, the chapter devoted to the pearl oyster includes a mineral, meerschaum, as distinctive ingredient (106.15). In the case of chickens, there are two distinct chapters, one for the hen and one for the rooster. There appears to be some confusion, at least at the semantic level, for less common animals. The chameleon (*ḥirbā'*), for instance, is mentioned in three different chapters (83, 89 and 94).

²⁸ For a summary of the different classifications in Arabic scientific literature, see Ullmann 1972, 50–54. See also Ibn Qutayba 1949.

²⁹ This sections includes three distinct chapters for man, woman and child.

³⁰ See MS Istanbul Saray Ahmet III 2055 (T), ff. 1v–3r and MS Wien 1482/2.

³¹ See *Ibid.*, ff. 5v–7v. These quotations deal with: animals with a bony or non-bony penis, animals with a large tongue, fish bones, fish eggs, etc.

³² MS Wien 1481/2 (W), ff. 134r–134v.

II.2 Fortunes and misfortunes of the structure

If the case of homonymity can be seen as an unlucky and unpredictable setback, the problematic aspects of the structure affected its fortune more predictably. The text, as ʿĪsā ibn ʿAlī arranged it, can be searched only by animal, and the search is possible only at a chapter level. Within chapters, there is no systematic order to the recipes (*a capite ad calcem*, for instance, or, alternatively, distinctive ingredients presented in alphabetical order). If, however, the reader wants to search for a remedy for a specific disease, the whole book must be leafed through, or indeed, the contents learned by heart.

It is not surprising, then, that this structure was soon abandoned in favour of something more practical.³³ Nevertheless, in the first medical encyclopedia ever composed in Arabic, the *Firdaws al-ḥikma* by ʿAlī ibn Rabbān al-Ṭabarī,³⁴ the fourth *maqāla* deals with the useful properties of animals. Forty-two animals are listed, each of them in a dedicated chapter.³⁵ A single chapter in the *Firdaws* usually contains less recipes than in ʿĪsā ibn ʿAlī, but the recipes are basically given in the same order. The classification implied in the list of animals in al-Ṭabarī strenghtens the hypothesis about ʿĪsā ibn ʿAlī's composition. The main difference between the two texts lies in the position of the predatory and the domestic animals: in ʿĪsā ibn ʿAlī, man is followed first by predators and then by domestic animals, whereas al-Ṭabarī inverts their positions, placing domestic animals immediately after the chapter on man. The fact that portions of text could be moved within a larger textual frame confirms the presence of coherent blocks of chapters defined by an implicit classification.

This formal analogy between the structures of the two works, together with the cultural features shared by the two authors, offers another clue to the fact that we are dealing with a very early stage of this textual genre. In this early phase, the authors were still familiar with the ancient sources, also thanks to the multilingual dimension of their personal and professional lives. They experimented with new textual forms, new structures—not all of them meeting with the same success—to reshape materials inherited from the past.

While later authors radically changed the formal paradigm and adopted a completely different arrangement of the materials, the readership, too, had to cope with the problems posed by ʿĪsā ibn ʿAlī's text. Traces of different attempts to limit the discomfort caused by the textual structure are clear in the manuscript tradition. For instance, the copyist or another hand added marginal glosses, with the aim of indexing the text; another solution was that this text circulated together with others containing similar recipes arranged by illness, from head to toe.³⁶

II.3 Micro level: the recipes

If the chapters and their arrangement represent the macro-level of this work, the micro-level is represented by its smallest structural component, i.e. the recipe. Recipes often coincide with a syntactic unit. Thus, the recipes' role is mirrored by some codicological features of the manuscript witnesses, where the coherence of the recipe as a unit of text is explicitly marked by various dividers. The composition of the basic textual unit (the recipe) can also be approached in a formal way. This allows recipes to be compared and helps us understand whether we are dealing with the same one, in spite of the huge number of variants. Each recipe has three constitutional elements: the animal ingredient, processing of the ingredient(s), and the purpose or aim of the recipe.³⁷

³³ For the strategies and tools devised in the Arabo-Islamic Middle Age by scholars, see Rosenthal 1947.

³⁴ ʿAlī ibn Rabbān al-Ṭabarī was born near Marw at the beginning of the 9th century, to a Christian Persian family. He worked on the *Firdaws al-ḥikma* for more than twenty years, completing it at the beginning of al-Mutawakkil's reign (850 ca.). See Meyerhof 1931 and Thomas, D., 'al-Ṭabarī', in: *Encyclopaedia of Islam*, Second Edition, Edited by: P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs. Consulted online on 13 February 2018 <http://dx.doi.org/10.1163/1573-3912_islam_SIM_7248>.

³⁵ Ṭabarī 1928, 420–444.

³⁶ For a description of the manuscript witnesses, see ch. IV. For a specific description of their material features to be interpreted as clues of evolution and clues of transmission, see Raggetti 2015.

³⁷ Anna Contadini has suggested the existence of a treatment syntagm composed by five elements (condition, choice of body part, manner of preparation, specification of dosage, result). She seems, however, quite pessimistic about the possibility of identifying

II.3.1 The distinctive animal ingredient

The distinctive element of every recipe in this collection is an ingredient of animal origin and this determines its inclusion within a specific chapter. These ingredients include organs (liver, testicle, brain, etc.), tissues (skin, horn, hoof, etc), fluids and secretions (blood, urine, sweat, etc.), and body parts (leg, wing, paw, etc). The origins of some ingredients, however, are more opaque. One recipe, for instance, is based on a worm that can be found inside the head of wild cattle: the presence of such a worm makes the animal restless; therefore, if this worm is placed on a man, he will not be able to sleep (29.1).³⁸ Bezoar stones are another peculiar ingredient. They are not actual stones or minerals, but rather conglomerates of hair and other materials, usually found in the digestive tracts of animals. 'Īsā ibn 'Alī's work features a number of animals from which these 'stones' can be obtained: cow (15.58), rooster (61.10), goose (64.6), swallow (50.14), and chameleon (84.X). In the chapter on the dog (8.28), a pseudo-bezoar is mentioned. This is a stone that has been swallowed and which is subsequently regurgitated by the animal. Moreover, this text refers to a greater diversity of useful properties of bezoar stones than the purpose for which they became famous, that is as a powerful and universal antidote.

The inherent beneficial power of the animal ingredient—its 'vis' or faculty—can be more or less transparent. In many recipes, the effect depends on a sympathetic or antipathetic interaction. For instance, the ingredients provided by the mule—a notoriously sterile crossbreed—are meant either to act against sterility, or to provoke it. Similarly, the sparrow, believed to hold a record among animals for the frequency of its sexual intercourse, serves as a key source for ingredients that affect desire and sexual potency.³⁹ Sympathy is stated and interpreted in many different ways. An immediate association occurs when a particular organ cures the corresponding body part in a human patient. In many cases, however, the connection between the intrinsic power of a certain ingredient and its effect is less clear, and none of the solutions suggested until now is valid. By applying the lexicographical observations on the possible difference between *manāfi'* and *hawāṣṣ* to this collection of recipes, the properties that can somehow be reconnected to a sympathetic relationship—or that, generally, have a transparent causality—can be considered *manāfi'*; whereas those whose causal relation remains obscure are *hawāṣṣ*. Nevertheless, the issue of the difference between *manāfi'* and *hawāṣṣ* is so complex that this criterion is only the first tentative step, rather than a definitive solution. What cannot be excluded, however, is that a cause that today remains unintelligible, may well have been self-evident in the context of the composition and circulation of this work.

The fact that some effects are governed by sympathies suggests that the ingredients are literally meant as animal organs and substances; that is, they are the actual vehicle for the *vis animalium*.⁴⁰ The power preserved

common materials through formal analysis. See Contadini 2008, 146. Medical recipes, in different fields of study, have recently been the object of scholarly attention. See, for instance Totelin 2009 and Lehmhaus-Martelli 2017.

38 This parasite is mentioned in connection with two different animals, the wild cow in branch (b), and the buffalo in branch (a) and branch (c).

39 See al-Ġāḥiẓ 1965, II 330.

40 Robert Muth suggested the name *Träger des Lebenskraft* for some of these substances, and offers a collection of examples from Greek and Latin on the use of saliva, urine, and excrement. He reiterates, however, a dichotomy between magic and medicine in the two groups of materials in his analysis: *Zaubermedizin* and *Volksmedizin und Heilungswunder*, see Muth 1954. Pliny vehemently attacked the use of disgusting animal ingredients in Greek medicine, and, from the sources mentioned, it seems that this use was imported from the East: 'To examine human entrails is deemed an act of impiety; what then must it be to devour them? Say, Osthane, who was it that first devised these practices; for it is thee that I accuse, thou uprooter of all human laws, thou inventor of these monstrosities; devised, no doubt, with the view that mankind might not forget thy name! Who was it that first thought of devouring each member of the human body? By what conjectural motives was he induced? What can possibly have been the origin of such a system of medicine as this? Who was it that thus made the very poisons less baneful than the antidotes prescribed for them? Granted that barbarous and outlandish tribes first devised such practices, must the men of Greece, too, adopt these as arts of their own? We read, for instance, in the memoirs of Democritus, still extant, that for some diseases, the skull of a malefactor is most efficacious, while for the treatment of others, that of one who has been a friend or guest is required. Apollonius, again, informs us in his writings, that the most effectual remedy for tooth-ache is to scarify the gums with the tooth of a man who has died a violent death; and, according to Miletus, human gall is a cure for cataract. For epilepsy, Artemon has prescribed water drawn from a spring in the night, and drunk from the skull of a man who has been slain, and whose body remains unburnt. From the skull, too, of a man who had been hanged, Antæus made pills that were to be an antidote to the bite of mad dog. Even more than this, man has resorted to similar remedies for the cure of four-footed beasts even—for tympanitis in oxen, for instance, the horns have been perforated, and

in the animal body parts is activated by the processing, and then transferred to the patient. However, the phenomenon of zoological *Decknamen* to encode the names of mineral and vegetal ingredients is attested to in other Arabic sources, and in Ancient technical literature more generally.⁴¹ A number of recipes raise the suspicion that the animal ingredient may, in fact, be a code name for other substances, for instance, the recipe stating that crows' eggs are able to negate the effects of lime (59.12), while bat droppings congeal it (52.25), swallow droppings are used to slake chalk (50.16), and horse hooves can be used to harden glass and make gold and silver look like copper (16.13). A recipe based on the abdomen of a black cat equates its effect to that of tar (30.2), and given the resemblance in colour this could be a clue to a *Deckname*. In general, however, the trend in the 'Īsā ibn 'Alī tradition seems to be towards a literal interpretation. Some recipes are based on a single animal ingredient, but it is common to find a longer list of ingredients that includes plants, oils, and mineral substances.

Any kind of ingredient needs to be quantified in order for a procedure to be repeated and to obtain a specific result. If an ingredient is quantifiable in units, then a precise number is given, for instance, seven lice taken from a dog (8.23). If, instead, the weight or the volume of the ingredients has to be quantified as a whole, there are three distinct approaches. The first adopts a precise unit of measurement (*raṭl*, *dirham*, *qīrāṭ*, *dāniq*, *miṭqāl*, etc.), the second uses empirical units of measurement, determined by common sense and daily life experience (a handful the quantity equivalent to a chickpea, etc.), while the third adopts a relative measurement based on the part against which the other ingredients can be proportionally measured. In the pre-modern world—and Arabo-Islamic society was no exception—the units of measure could vary not only from place to place, but also from one individual to the other.⁴² This implies that, in the transmission of a text, relative measures represent a more reliable approach to preserving the intended proportion of ingredients in a recipe.

II.3.2 Processing the ingredients

The second structural element in the recipes can be considered from several perspectives. It may deal with the application or administration of the animal substance (salves, pills, compresses, fumigations, eyedrops, mixed with food or beverages, etc.), or with the preparation of an intermediary object to convey the effect of the animal ingredient (talismans, lanterns, phylacteria, etc.). Different operations may coexist in the formal space of the 'main ingredient's processing', and this component of the recipes can easily be enlarged by selecting and combining different procedures. Moreover, additional indications are easily introduced into this part of a recipe. They also consist of supplementary therapeutic indications: whether the medicament must be applied to the right or the left part of the body, taken in the bath or on an empty stomach, additional handling of the main ingredient (to be pulverized, ground, burnt, filed, liquefied, etc.), and the indication of different media for the administration of the medicament.

human bones inserted; and when swine have been found to be diseased, fine wheat has been given them which has lain for a night in the spot where a human being has been slain or burnt' (*Nat. Hist.* XXVIII.2). For the nature of his work, Pliny has been chosen here as an example of a wide collection of many different traditions circulating in antiquity. Despite the many centuries and cultures in between, there still is a resemblance between the recipes mentioned by Pliny and 'Īsā ibn 'Alī. See Pliny 1963, 5–9.

⁴¹ In a manuscript witness to the astro-mineralogical work attributed to 'Uṭārid ibn Muḥammad, dealing with the stones associated with the seven planets and their engraved seals (MS Paris BnF Ar. 2775, f. 108v), there is one clear example of a *Deckname*. In the chapter describing the preparation of the seal of Mars, there is an explicit identification of a vegetal ingredient alongside a second name referring to a plant: 'the tongue of the black bird, which is a mollusc which lives in the ponds, and a medicinal plant called scorpion'. In the copy preserved in MS Istanbul Aya Sofya 3610, f. 156v, the indication of an equivalent name in Greek is missing. On the use of *Decknamen* in alchemy, see Siggel 1951.

⁴² For this complex technical topic, see the second edition of the *Encyclopaedia of Islam* s.v. *Makāyil*, (Ashtor, E. and Burton-Page, J., 'Makāyil (a.)', in: *Encyclopaedia of Islam, Second Edition*, Edited by: P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs. Consulted online on 13 February 2018 <http://dx.doi.org/10.1163/1573-3912_islam_COM_0635>); see also Sauvage 1884a, 1884b, and 1885. Armin Schopenh borrows the values given by Oliver Kahl, see Schopenh 2006, 236 and Kahl 2002, 225–228; see also Bos 2009. Sara Fani has formulated an admirable synthesis of the question in her PhD dissertation, summarizing in the glossary what is stated in primary sources, as well as the discussion in the secondary literature, see Fani 2013.

There are two distinct approaches to the processing of the main ingredient. The first points at those mechanical and technical processes that belong to the ordinary activities of an apothecary. The second, by contrast, refers to all those magical and ritual actions involved in the preparation.

The first group includes many different procedures aimed at reducing the main ingredient to the most suitable consistency, in order to mix it with other components. Hard materials are ground up and pulverized, while fluid or soft ones are diluted with decoctions of plants and oils. The different kinds of meats have to be cooked until they dissolve in a broth, alternatively they are baked in a clay oven or roasted. Different kinds of oven are mentioned, used in connection with specific activities: the kiln for lime (79.6), the oven in which the seller of sheep heads prepares his goodies (21.8), and an already warm oven used to bake bread (50.12). Some alchemical instruments are mentioned as well, like the alembic and the 'cucurbit' (16.13).

Some recipes prescribe that one or more ingredients are to be left to putrefy for a certain number of days, sometimes in a vessel buried in the ground or in manure. The creatures generated during the process of fermentation can be used as a source for medical ingredients. Fermentation and generation of peculiar creatures from the decayed matter are also used in other works as a metaphor for the description of alchemical operations.⁴³

Some of the preparations are not meant for immediate use, but rather are to be preserved in small bottles or containers, so that they are at hand in moments of need.

As for the 'magical' and ritual processing, the most common procedure suggested by the recipes is the preparation of a phylactery, usually consisting of a part of an animal that is carried around in a small purse made of skin, either from the same or from a different animal. Significant attention is paid to the correspondence between left and right. In the case of paired limbs and organs, it is not uncommon to find a precise indication about the side from which the part has to be taken, or to which the medicament must be applied. There are less indications about colours, but they are still significant. They deal with the specific nuance of a thread or a piece of cloth to be used in the preparation of a protective talisman (15.58, 16.13 and 56.10). Other traces of magical procedure can be seen in a recipe to bind someone's tongue (where the mouth of a frog has to be sewn shut with a silk thread, 108.9), in the dismembered parts of a large rat arranged in a particular configuration in order to chase pests away from the fields (43.10), and with the cat, whose blood is used for a love potion (30.9). Only in one case, an animal, namely the turtle, is presented as a medical scapegoat, to be burnt once the disease has been transferred to it (104.15). Among the few examples of written amulets, there is a little scroll against fever (1.29)—the recipes suggest modifying the text in accordance with the kind of fever to be cured—and a tanned piece of weasel skin inscribed against epilepsy (33.5).

As for the administration of medicaments, some recipes contain more detailed indications: the dosage may be different for adults and children (1.35), some preparations have to be taken in the bath on an empty stomach or at certain intervals. The administration of remedies against epilepsy can be related to the phases of the moon, with the beginning of a new lunar cycle as the most propitious moment. The awareness of the patient—or, more often, the lack of it—is a significant detail, especially in the case of love potions. Fumigations are a common

⁴³ See, for instance, the chapter on wondrous fermentations (*al-ta'fināt al-'ağība*) in the *Kitāb Iṣrāsīm*, (MS Paris Ar. 2634 ff. 27v–35v and MS Paris Ar. 2635, pp. 83–90). 'Chapter on the fermentation that has a huge effect and on the extraordinary secret. The Egyptians said: if Indian peas flour is taken, kneaded with bull blood, stuffed in a vessel filled with bull urine, buried as mentioned for one day, then a beast will be generated from it. This has the head of flowers [?], the body of a bird, and its colour tends to red. When it is like this, give it ram blood to drink for four days, one *raṭl* every day. When you hear a rustling noise, seal the lid of the vessel with clay and close it, drill a small hole through it, fill the receptacle with old wine and *Is* [?] water, and then bury it in the manure for fourteen days. Then open it, purify the wine and the water that comes out of it, and you will obtain a yellow water. Then add water for a second time, when it is needed, and close the hole. Then put it in a moderately hot oven for a whole night, let it cool, and put it back in the manure for three days. Then open it—but only after you have rubbed your hands with lily and violet oil—and you will find a red worm in it. Then purify the water and pour some of it on the worm. Then grind it with water and let it precipitate from the 'cucurbit' (*qar'a*) and from the alembic. Then store it, and this will make people blind. No wonder that when three hundred dirhams of melted lead are diluted with one ounce of it—after it has been melted for three times—turn into red gold of the highest quality. If some of it is given to a man to eat with his food in a suitable quantity, then he will die. If leprosy is rubbed with it for three days, then this will cure it. If a man struck by a paralysis enters a hot bath, and rubs himself with this, then he will immediately be healed' (see MS Paris Ar. 2635, pp. 85–87). For the *Kitāb Iṣrāsīm*, see Ullmann 1972, 382 and Coulon 2017. For a study of the processes of fermentation in magical literature, see Saif 2016; for the phenomenon of spontaneous generation in general, see Kruk 1990.

application and in the case of gynaecological applications the woman has to stand over the source of smoke, so that it can penetrate her womb (21.13). Sometimes, the medicament is administered via a specific medium: it is quite common to dilute it in wine, but there also are more peculiar ways like inserting it into an egg (8.25).

The chapter about the dog describes a procedure that may have been intended as an empirical diagnostic test. In order to understand whether a man is going to survive the bite of a rabid dog, one has to check his reflection in a mirror: if the mirror reflects the image of a dog, it means that the patient is doomed (8.17). Other examples are a pregnancy test based on the observation of lice in milk (95.2), the use of a feather to sort out which one of the two owl eggs has the faculty to remove unwanted hair (60.1), and the effect of kite gall on snakes tested in the basket of the snake charmer (58.5).

II.3.3 The purpose of the recipe

Every recipe aims to obtain some effect, and this text contains a wide range of them. These can vary a lot, from relieving a patient from an illness to the preparation of wondrous and probably amusing tricks. If a recipe mentions more than a single outcome, then these are usually related in some way. When a recipe is meant to cure a specific skin problem, such as freckles, it is likely that it may be used for treating other skin conditions (leprosy, pigmentation spots, impetigo, etc.)

To summarize, the recipe can be seen as the minimum structural component of the text, the smallest textual block conveying a coherent and enclosed segment of procedural knowledge. This unit works thanks to the interaction of three different components (ingredient, processing, and purpose), whose extension determines the length of the recipe itself. Recipes can reach a considerable length and complexity, as a consequence of the addition and multiplication of elements to any of its components. The formal approach to recipes adopted here helps us to explain how blocks were constructed up and transformed over time;⁴⁴ but the complexity of individual recipes cannot be used as evidence of any clear-cut chronological distinction between specific recipes. In other words, formal complexity alone does not demonstrate that the simplest recipes represent the oldest layer of the text.

III. The world of recipes: a thematic approach

The description of the formal structure of recipes, however, does not by any means fully exhaust their significance. Recipes do not simply convey a structured procedure; they also offer a vivid image of the readership's interests and tastes, and of many aspects of daily life and widely held beliefs. The purpose of the recipes describes the needs and wishes of those who read, copied and carried them out. This aspect can be especially appreciated in the purpose of the recipe. A relatively limited number of issues are dealt, if compared with that of the recipes. Below is a detailed description of the recipes' themes, whose distribution is recorded in the 'Thematic Index'.⁴⁵

Absent from the *Manāfi* of 'Īsā ibn 'Alī is a physiology that might explain the origin of the diseases and the properties of drugs. The traces of humoral physiology in the compendium are so scant that their presence could be merely accidental (52.25 with the pigeon excrement containing much hotness). Another element missing is any explicit reference to Islamic practices and beliefs. Although many recipes conclude with a pious invocation to the will of God, as *conditio sine qua non* for a successful result, this remains a superficial veneer. This also gives the impression that a light Islamic touch was enough for these materials to be fully accepted, although they might not always concur with Islamic precepts, for instance those concerning ritual purity. Only one manuscript mentions a Qur'anic verse, used as an invocation to calm a beast, and this too is easy to consider as a

⁴⁴ For the notion of 'erratic block', see Ullmann 1978, 24.

⁴⁵ When translating the recipes, I have tried to avoid anachronisms and retrospective projections of modern medical knowledge. The identification of ingredients is made on a lexicographical basis, and aims to give the reader an idea of the substance in question. For the most significant elements in the text, the choices of translation are recorded in the 'Glossary'.

material that entered the text in the course of its transmission, not least because it differs from the main stream of the *Manāfi*' recipes (20.17).

III.1 Diseases of the body, body parts and organs

Some diseases receive particular attention, as evidenced by their frequent appearance: illnesses of the internal organs (liver complaints, bladder stones, kidney complaints, heart palpitations, palsy, colic, etc.), skin diseases, eye diseases, swellings and tumours, haemorrhoids. It is known that skin and eyes are affected by a number of endemic diseases, still widespread in the Middle East, and also in the *Manāfi*' ophtalmological problems. Different manifestations of leprosy receive particular attention as well.⁴⁶ Various fevers are treated and classified on the basis of the frequency of their occurrence (tertian, quartan, etc.). Epilepsy has a special position along with insanity, etymologically connected to a devilish possession.

III.2 Sex and love

The topics of sex and love receive prominent attention, and the number of related recipes is considerable. Many of them deal with sexual potency, aiming to give men amazing power during coitus. They are somehow related to preparations that bind a woman to her lover in an exclusive way. Another possibility offered to would-be lovers is a potion that makes them visible only to the beloved one. In this field, prescriptions and purposes take on a somewhat different nuance with respect to gender. If a recipe is designed for both men and women, then there might be a difference in the outcome, which may also depend on their social class (1.25 and 1.26). The fear of being cheated on often goes hand in hand with sensual love and so, by placing the appropriate animal part under a woman's head while she is asleep, a man can obtain a full disclosure of everything she has done (9.23).

III.3 Reproduction and birth

The issue of human reproduction follows as a logical implication of the previous subject. Several recipes meant for sexual potency also offer help in conceiving. Both fertility and sterility can be induced. In most cases, it seems to be a unilateral male decision, since the awareness and the will of the woman are never mentioned. Moreover, if a woman gets pregnant, several pharmacological interventions are possible to interrupt the pregnancy and abort the child. On the other hand, in case of a difficult pregnancy, an unwanted miscarriage can be avoided and the foetus protected. The delivery can be eased or induced under difficult circumstances; as can the expulsion of a dead foetus from the womb.

III.4 Sleep and insomnia

Sleep can be either induced or prevented with the use of various preparations. There are cases in which the text suggests that prolonged wakefulness is meant to be imposed as an unpleasant condition. In this collection of recipes, several solutions are offered to cope with troubled and agitated sleep, especially when it afflicts children. Only one recipe mentions a procedure to induce nightmares (35.2).

⁴⁶ In a number of cases, it seems that leprosy is equated with those skin diseases that provoke a similar decay of the epidermis, for instance vitiligo or black spots.

III.5 Cosmetic

Treatments for beauty and aesthetic improvement are another relevant topic and, mainly, relate to the skin and hair. Several recipes describe the preparation of ointments that removes freckles and unsightly spots from the face or the whole body. The hair can be made shinier and more beautiful, and its colour can be changed. The possible colours are limited to black and white: white hair can be turned black, and vice versa. More than a dyeing process, one is left with the the impression that the change is of a different nature, i.e. that it is an expression of spite or animosity, or a trick. Depilatory concoctions can be prepared to remove superfluous hair from the body in general, or in particular from the area of the eye. Moreover, hair growth can also be induced in the hairless spots left by alopecia. A few recipes deal with the female figure, in particular with the breasts, offering a solution to prevent their excessive growth and for preserving their youthful shape (1.45).

III.6 Nature, husbandry, agriculture and hunting

Domestic animals are not only a source for ingredients, they also are counted among the beneficiaries of the recipes, and the protection of domestic animals is one of the main purposes of such preparations, for example, to ensure the safe return of cattle and beasts of burden to their stable, to calm them when they are afraid, and to heal them when afflicted by a number of diseases (1.39 and 38.16). As for the birds that live in close contact with humans, pigeons and their lofts have to be kept safe from predatory animals so that the birds can multiply; while the hunting hawk has to be kept healthy and well fed, so that its plumage may shine. A few recipes mention fishing, suggesting ways to attract water animals to the surface so as to catch them more easily (18.4). Much less numerous are the beneficial effects for plants and other agricultural activities. Among the rare cases, there is a recipe that explains how to protect vines from a particular parasite (5.18), and another one explaining how to induce a fig tree to bear fruit outside its season (21.10). Dealing with nature and animals also means knowing the hidden tensions and attractions that affect living beings. Though these might better pertain to other kinds of properties, the *Manāfi* of 'Īsā ibn 'Alī contain a number of remarks on antipathies. Antipathies affect both domestic and wild animals, they may run between two animals (scarab and gazelle, 10.7 and 10.8), between an animal and a substance (cat and rose oil 30.6, and cat and rue water 30.7), or between an animal and a plant (lion and oak, 2.34).

III.7 Vermin and obnoxious animals

Other animals pester the daily existence of humans, in particular insects and rodents. Primarily fumigations, but also other actions, are carried out in order to drive away scorpions, bugs, lice, snakes, rats and all the other animals that are troublesome to mankind or domestic animals. Some recipes target a particular kind of vermin, for instance in the case of the prescription suggesting the placing of a lion skin among other textiles in order to protect them from moths (2.27).

III.8 Crafts

Only a few examples of craftsmanship can be found among the great number of 'Īsā ibn 'Alī's recipes. For instance, a long procedure for obtaining splinterproof glass (16.13). There are also recipes to treat different materials, from wool (100.2 and 110.10) to precious stones (22.19 and 22.31), and for the preparation of an invisible

ink (104.13).⁴⁷ Recipes like these could have been addressing a particular professional category, but some of them could also be intended as targeted tricks.⁴⁸

III.9 Tricks

A significant number of the recipes describe different kinds of tricks and pranks. They remind us of the *Paignia*, those tricks of *magie amusante* well attested to in Anassilaos of Larissa, in the pseudo-Democritean tradition, and in other Greek authors.⁴⁹ Several magic lanterns, whose wick has been soaked in a particular substance or mixture, create different illusions: people with the head of a dog or headless, women undressing and dancing around, a room entirely made of silver, even endless farting. Other tricks are meant to make fun of a particular professional category. For instance, those fumigations capable of shattering all the items in a glass shop (103.4), or those for splitting the membranes of drums and tambourines (3.7 and 3.8). Professional guilds may also avail themselves of these tricks, with mischievous and deceitful intentions: thieves carry with them a dog's tongue so that dogs will not bark at them (8.20), while street tricksters used to prepare an ointment to bring about an allegedly supernatural resistance to fire (108.2).⁵⁰ There are also commercial tricks, like the one to lower the price of an animal at the moment of the purchase by making appear the animal sick (93.9). If we are to believe the accompanying comments to the recipe, turning black hair white was also considered an amusing trick (50.2).

III.10 At court

The most detailed descriptions of antidotes and ways of detecting poisons always appear in connection with a courtly environment. This is explicit in the remarks about how kings and sovereigns used to carefully store these precious substances and objects in their treasures (42.3). Another issue strictly related to a courtly environment is the use of expedients or tricks to enter the court, and to ensure the king has a benevolent disposition. These practices also produce as a side effect a generalized love and admiration for the user, including the love of all women. The other side of this coin is represented by enmity, legal quarrels, verbal disputes, and the way to triumph over an adversary in such situations.⁵¹

III.11 Evil eye and black magic

The evil eye and the hideous effects of black magic are very concrete issues in the scenario offered by the recipes of 'Īsā ibn 'Alī. A man can protect himself from these supernatural attacks using a number of phylacteria and ointments. Some of them offer a form of protection against evil spirits and demons. A related therapeutical topic is the use of a prescription to darken blue eyes, in the inauspicious case that a baby is born with them, since blue eyes were—and still are—considered a powerful source of the evil eye. Some recipes, however, offer

⁴⁷ See Raggetti 2016, 324.

⁴⁸ See the following paragraph.

⁴⁹ See Hershbell 1987, 7–8, and Martelli 2011, 99–114.

⁵⁰ In a variant reading, this practice is associated with devils.

⁵¹ These materials are probably textual relics from the past, perhaps even an echo of the Babylonian *Egalkura* incantation, as I discuss in the forthcoming article 'Tricks to enter the court. Amulets, Rulers, and Social Distress', proceedings of the BabMed Workshop *Patients and Patrons* (Eisenbrauns). As for the connection with the ancient tradition, for instance in the case of the fat between the eyes of the lion (2.2), we can find in Pliny the Elder a remark on the Oriental origin of this unreliable remedy: 'The frivolous lies of the magicians assert that persons who are anointed with lion's fat, will more readily win favour with kings and peoples; more particularly when the fat has been used that lies between the eyebrows of the animal—a place, in fact, where there is no fat to be found!' (*Nat. Hist.* XXVIII.25). See Pliny 1963, 63–64.

more active interaction with the supernatural world. For instance, by applying a particular ointment on the eyes, it becomes possible to see the world of *ġinns* and to interact with them (30.3).

IV. The edition

IV.1 Introduction to the edition

The description of the structure of ‘Īsā ibn ‘Alī’s *Manāfi*’ highlights a number of features that deeply affect the critical work on the text.⁵² A text like this—with the recipe as minimal textual unit, arranged in chapters devoted to a single animal, and whose chapters follow an order that sketches a classification—is prone to being transmitted by a fluid tradition.⁵³ The fluidity manifests itself at different levels, and clearly emerges from the collation of the manuscript witnesses: a different number of chapters, a different number of recipes in the chapter, different formulations of the same recipe, an abundance of variant readings in the various manuscript witnesses.

The huge number of variants and the fluid development of the tradition, together with the early date of composition and the considerable time gap between this and the manuscript tradition, are all elements that make it impossible to reconstruct a form of the text that is close to the author’s version.

In spite of this discouraging premise, the critical work on the text remains necessary. In this scenario, the edition becomes the occasion to display the development of the tradition, trying to explain the mechanisms that influenced it, rather than an attempt to reconstruct a version close to the unattainable original.⁵⁴

The physical limits of a paper edition—instead of a digital one—and the necessity to cope with the limited space of the page, have also influenced the definition of the editorial approach.

In a fluid textual tradition like the *Manāfi*’ of ‘Īsā ibn ‘Alī, it is not easy to find ‘errors’. In order to sort out and group the manuscript witnesses, contextually relevant variants and structural features are often the only clues. Shared traits in the structure (the addition of a specific chapter or a shared lacuna, for instance) represent the strongest clue. In a fluid tradition, the variants are not alternatives in the reconstruction of an original, rather they are complementary in the development of the tradition and in its philological reconstruction. A great number of these variants are carriers of meaning, relevant information and peculiar interpretations of the text. These meaningful variants deserve to be considered differently than other variants that only produce ‘background noise’, without really surrendering any important information. These variants, moreover, are valuable in the context of the whole textual tradition, rather than in isolation.⁵⁵

As an easy solution to this problem, one could choose one manuscript witness, a so-called best manuscript. This decision results from the assumption that one manuscript is better than the other ones. Basing this choice on more or less reasonable criteria (date of the manuscript, length and therefore alleged completeness of the text, even readability) would not save us from a huge loss of material and information.⁵⁶

On the other hand, it must be said that this rich variety easily strays into a chaotic and entangled mass, in which it is easy to get lost and lose courage. To spare first the editor and then the reader from such a predica-

⁵² The problematic aspects, in other words, are not simply due to the circumstances of the transmission, but to the nature of the work. These reasons are intrinsic, rather than accidental. See Varvaro 1999.

⁵³ See Trovato 2014, 155–160.

⁵⁴ Jan Just Witkam constructively warned against the fanatical search for an archetype in many Arabic textual traditions, see Witkam 1986 and Witkam 2013. On the other hand, in terms of scholarly practice he has shown that it is of fundamental importance to examine all the manuscript witnesses available, and to look at them with the eye of a historian.

⁵⁵ The words of Alberto Varvaro are illuminating apropos the value of variability and its manifestation: ‘The awareness of the very fertile variability of medieval and modern texts does not by any means imply unbridled enthusiasm for variability as such. To begin with, Medieval variability (variance) is never the simultaneous presence of variants, but rather of the instability of a text in different locations, environments, and times. There has never existed a simultaneous competition of variants except in the margins of the *editiones variorum*. Moreover, neither variability nor its absence constitute value; they are only to be considered circumstances. As textual critics, we look instead for meanings and values’. See Varvaro 1999, 57.

⁵⁶ On the importance of a complete *recensio*, see Bausi et al. 2015, 336.

ment, the variants must be looked at from a different perspective, in which the idea of an original text remains marginal. The primary sources agree on the fact that, in the 9th century, there lived a physician named ‘Īsā ibn ‘Alī and, among other things, he wrote a book on the useful properties of animal parts. Although some details remain unknown, and the information given by the sources might be not completely genuine, there is no reason to doubt the author’s existence or his prestigious position in his time. That version of the text is, however, to be considered beyond our reach.

The image of the broken vase that has to be reconstructed from its fragments can be used to describe the state of this textual tradition, and the difficulties that the critical work on it encounters. In the 9th century, ‘Īsā ibn ‘Alī shaped a collection of useful properties, the original vase whose form we can guess in some detail. The fragments that have been handed down to us come from vases whose fashion was inspired by the original, but that were also freely reshaped in the course of centuries, with the introduction of additional elements or simplification of the form. The uncritical glueing of these fragments would only create a wildly eclectic hybrid. The aim of this edition is to collect and display all of them in an ordered and rational way, stressing their formal connection, so that the history of the textual tradition can be told and its contents made available.

So, after a complete collation of these large and varied materials, I opted for a division of the manuscript witnesses into three families, whose ties must be looked for in the order of chapters and recipes, their style, and in some *loci critici* where particularly meaningful structural variants can be found. Consequently, the edition is constructed in three different columns, representing the three branches (a), (b), and (c). In this way, visible parallels and gaps in the textual tradition are immediately detectable. One manuscript has been chosen to represent the textual tradition of each branch.⁵⁷ The choice fell upon the more inclusive in terms of contents—in other words, the longest text—and it was oriented by the pragmatic approach to this fluid tradition. The manuscripts chosen to carry the banner of each branch are not the best ones, but rather the most suitable and practical witnesses to the fluid tradition in all its richness.

The variants from the other manuscripts are given in the positive apparatus, whose structure mirrors the three branches of the tradition. In many instances, it was necessary to note in the apparatus the whole recipe, as attested to by another witness, either because the formulation is completely different, or because its syntactical arrangement did not allow for a more syntetic display of the variants.

IV.1.1 Order of the chapters

As for the order of the chapters, the choice has been strongly oriented by the implicit classification of animals that can be detected in all the manuscript witnesses. However, the order of the chapters in the edition is not exactly mirrored by any extant manuscript; rather, it is the result of an inclusive edition. The reason for the anomalous position of a chapter in a particular manuscript or branch is not always clear. The impression is that it may depend more on the innovation of a specific witness, rather than on the general fluidity of the order of the chapters in the textual tradition. To varying degrees, all the manuscript witnesses show oddities in terms of chapter order. In the making of the edition, I have decided to give some of the chapters a different position to the one they have in the manuscript. All these interventions are clearly marked in the ‘Appendix’, where the chapter order of the edition is matched with that of the manuscripts, by means of a synoptic table. The replacement of the chapters is, of course, a hypothesis based on the general idea of a formal structure of the work impressed by the implicit classification of the animals. The chapters are progressively numbered, and the edition of the *Manāfi* counts one hundred and ten of them. The chapter numbers are an addition to the edition.

The degree of variance that may affect the level of the chapter finds an example in ch. 34, which is devoted to a curious pair of animals, the jackal and the chamois. Here, paleography is responsible for the co-presence of the jackal (*ibn āwā*) and the chamois (*arwī*). The implicit classification suggests that probably the ‘right’ animal here is the jackal. In the manuscript tradition of the text, however, this paleographically problematic reading generated different results. Branch (c) has two distinct headings followed by two clusters of recipes, respective-

⁵⁷ Here I use the expressions branch, family and group of manuscripts practically as synonyms. The preference for branch is determined by the fact that it better conceptualizes, in concrete, the tripartite structure of the edited text.

ly associated with the jackal and the chamois (in other words, the more inclusive version); branch (b) has only the section on the chamois, whereas branch (a) has the chapter heading *ibn āwā* ('jackal') and is followed by the recipes that, in (b) and (c), are associated with the chamois. In the edition, this case is represented by a single chapter with the two inextricably related entries.

The case of the jerboa and the pig (chs 6 and 7) could be handled differently, because the the two different clusters of recipes remained distinct, and only one witness of branch (b) had put them together in the same chapter.

IV.1.2 Order of the recipes

In the edition, the recipes of each chapter are numbered progressively. In the critical apparatus, it is possible to see whether a recipe is omitted by other manuscripts of the same branch. The apparatus also informs the reader of cases when the manuscript chosen to represent a certain branch lacks the recipe. In this case, two possibilities are given. If the recipe is attested to in at least one of the other two branches, then it enters the text, and the apparatus tells the reader that the text of that particular recipe is taken from another manuscript of the same branch. If, instead, the recipe is attested to only as a singular feature of one manuscript, which has not been chosen to represent the branch, then the text of the recipe is given in the apparatus as an addition by a particular witness, together with a summary of its contents.⁵⁸

The order of the recipes in the edition has been established by a comparison of the relative position they have in the different manuscript witnesses. This is basically an internal and empirical criterion, but it relies on the fact that the order of the recipes in the manuscripts is quite stable. If a recipe, or a cluster of them, has a peculiar position in one of the manuscripts that diverges from the general trend, then this is indicated in the apparatus, by giving its position in relation to the other recipes in the edition.

IV.1.3 Parallel recipes: variants and positional value

This formal approach, adopted to determine the sequence of the recipes in the edition, raises a more general question about the possibility of comparing materials in a fluid tradition. As said, from the collation it emerges that these recipes were transmitted in a fairly stable order. It is not easy to guess why, in some instances, a recipe, or a cluster of them, appears in a different position. This change in the order, however, cannot simply be described as the result of a whim: almost any change in a formal frame requires a will and a plan behind it, though this may remain unknown to its modern readers.

In the case of added recipes, they usually share either the distinctive ingredient or a purpose with the one with they are are juxtaposed.

Then, when the focus moves to the recipes displayed in parallel, on the same line—and therefore considered not just as comparable materials, but relatively free variants of the same text—the issue of the degree of congruence emerges. To what extent can two or more recipes be considered as equivalent, i.e. a variant of the same procedural text, rather than different preparations? Since variants may emerge in each of the three components that construct a recipe (distinctive ingredient, processing of the ingredients, and aim), and in more than one simultaneously, the result is a bewildering number of possible combinations. Nevertheless, their position in the text is a strong clue to their analogy, which allows us to compare materials that, usually, are tricky objects of comparison, if one is only looking for an exact correspondence in the wording. The inclusive criterion applied here, next to their positional value, considers that one common element in one of the three parts of the recipe is already enough to consider them akin. In other words, when it comes to establishing a parallelism between two or more recipes, the specific contents and the position weigh more than the wording.

The wealth of variants is the result of the fluid tradion, in which the re-writing of a textual unit is a normal practice. Moreover, there is no end to the addition or omission of elements and this phenomenon was also possibly influenced by the readability of a particular *Vorlage*, the degree of creativity and literacy of single copyists,

⁵⁸ This formal difference in the presentation and annotation of the text is an editorial choice that allowed for the sifting of singular additions of the particular manuscripts.

his expertise, the availability and the familiarity with supplementary ingredients, etc. Many other hypothesis can be formulated about the generation of variants, but what can be surely inferred from the textual tradition is that, in the fluidity of the process of copy and transmission, both trivial and relevant variants accumulated and interwove, becoming complementary rather than alternative. A further step in the direction of the definition of a more complex system of textual affiliations can be taken only after a similar formal comparison with other related works is carried out, not only on short textual samples, but on a larger scale that includes entire compendia.

To recapitulate, the methodological approach devised for this edition allows two or more recipes to be considered as variants of the same procedural text, insofar as their position in the text and at least one of their three structural components remain the same.

The edition is as inclusive as possible, aiming to display the rich variety of this textual tradition.⁵⁹ All the interventions on the composition of the text are recorded, with a view to leaving as little room as possible for eclecticism: at any moment, the reader can easily check the position of a particular chapter or recipe in the general picture of the textual tradition. The thematic analysis offers the possibility to evaluate the single recipes, and peculiar connections between distinctive ingredients and purposes (see ‘Thematic Index’).

The position of a chapter or of a particular cluster of recipes is also important for grouping the manuscript witnesses. The chapters on the sheep (ch. 21) and the goat (ch. 22), for instance, see a small cluster of four recipes in different positions. The manuscripts of branches (a) and (b) record them as recipes based on sheep ingredients, whereas the witnesses to branch (c) include them in the subsequent chapter on the goat. Such fluctuations are also present in the lexical ambiguities generated by animal names that can be generically applied to small cattle. Nevertheless, it provides a significant clue to structural relationships between manuscripts. The phenomenon of recipes that fluctuate from one chapter to another is attested to more than once, favoured by the affinity between the animals dealt with, like the wild cow and the buffalo (23.3 and 29.1), the mantis and the bedbug (89.4 and 92.3), or the sandgrouse and the vulture (45.8 and 46.1).

IV.2 Variants and linguistic features

An edition is a compromise between fidelity (to the author, to the manuscript witnesses and the text they transmit, to an alleged archetype) and legibility of the edited text, a compromise that the editor makes with the prospective readership of the edition in mind.⁶⁰ I have opted for an edition form that offers a tendentially normalized Arabic in order to reach a larger readership. At the same time, I have paid attention to preserving—in the apparatus or, in particular cases, in the edition—those linguistic features that might be relevant for a deeper linguistic study of this text, and of technical literature more generally.

In the context of an open recension like the *Manāfi*, the copyist may decide to give the text a different formulation, which he finds more appealing, without affecting at all the meaning (e.g. second or third person singular, active or passive formulation of the sentence). The background noise of the orthographical variants and the different syntactic formulations of the recipes is loud. Some orthographic elements that produce this background noise have been normalized, since a different choice would have impaired the readability of the edited text, without preserving any other relevant linguistic information (orthography of the *hamza*, *tā’ marbūṭa* and *hā’*, *yā’* and *alif maqṣūra*). The alternance between emphatic and non-emphatic (ḏ — d, ṣ — s), interdental and non-interdental letters (ḏ — d, ṭ — t) in the spelling of the same word is normalized in the edition, but the record of relevant orthographic variants is recorded in the apparatus and in the glossaries.⁶¹

Together with the open recension, the linguistic peculiarities of middle and mixed Arabic gave the copyist a huge set of variants (orthographical, lexical, syntactical), and he was guided in their choice by many different

⁵⁹ See Trovato 2014, 155–160.

⁶⁰ See Varvaro 2012, 44–47.

⁶¹ See Varvaro 2012, 94 and Bausi et al. 2015, 345.

needs and reasons.⁶² In general, these deviations from the standard can be regarded either as a conscious intention to mix registers for the sake of style, or as the result of a lack of familiarity with the contents, or sometimes a simple slip of the pen. In any case, an unintentional deviation from the standard might also be a trace of the influence of spoken language on orthography. For this reason, it remains important to record these relevant features as linguistic documents of the witness that contains them.

IV.2.1 Typology of the variants

As anticipated, the large degree of variation produces a huge number of equally acceptable readings: these do not offer any genealogical information, but carry with them meaningful knowledge.

In the great wealth of variants, it is still possible to stress some trends in terms of their character and genesis. The distinctive ingredient can vary in an associative way: the brain (*dimāḡ*) can alternate with marrow (*muḥḥ*), which may be considered as a synonym for the anatomical notions about the nervous system. A similar shift of meaning may happen between the penis (*qaḍb*) and the tail (*ḍanab*), where the sexual organ of some animals is placed; or between the saliva (*lu'āb*) and the foam (*luḡām*) of a camel (20.10); or, like in the case of the deer (12.15), between the quite specific hooves (*aḡlāf*) and the more general extremities (*aṭrāf*). An interesting case (22.29) is one in which the variation features an organ on one side (*minfaḥa*), and an entire periphrasis on the other (*man aḥaḍa muḥḥ*).

A complex list of supplementary ingredients rarely remains stable, and its elements vary from one manuscript witness to another, revealing omissions and additions (12.2). A variant concerning the name of a simple drug may consist of a quite lengthy explanation and collection of synonyms (20.9 and 26.1).

Sometimes, an apparently negligible variant (singular/plural, or the addition of a pronoun) can give a completely different flavour to the recipe. For instance, a procedure that aims to confer a man with a particular appeal, is very different to saying that his woman or all women will find him irresistible (76.2). In other cases, a variant offers a different perspective on the same object: a mound of earth can be described as an anthill, or as the sign of a molehill (10.11).

These variants acquire a particular meaning when they do more than create an equivalent and basically synonymic expression. That is, when a paleographical similarity leads to a semantic ambiguity in the specific field of medicine and pharmacology.

As already seen for ch. 34, a paleographical ambiguity may affect entire chapters. In the case of ch. 82, all the manuscripts show an irregular and uncertain dotting. The majority opts for the reading *ḡirdawn* (large rat), the others go for *ḥirdawn* (lizard), suggesting the former as a more familiar name. On the other hand, the position of the chapter rather suggests that it should be read as lizard, and the edition follows this positional line.

As for the distinctive animal ingredient, the brain (*dimāḡ*) and the blood (*damm*) are interchangeable. One of the names used for the herbivorous dung (*ḥaṭan*, and its different plurals) can alternate with *ḥašan*, 'bowels' or 'intestine' (15.17). Other ingredients show this kind of variation: (12.20) safflower (*qirṭim*) and alfalfa (*qurṭ*) with a third and more banal reading that may emerge on the side (*qirāṭ*); and (15.5) Indian hemp (*ṣahdānḡ*) and fumitory (*ṣāhtraḡ*). Pitch (*zift*) and oil (*zayt*) are not hard to confuse either (21.18), while honey (*'asal*) is just one dot away from being red like washing (*ḡusl*) (15.4). It is striking how one of the manuscripts from branch (b)—MS Istanbul Saray Ahmet 2083—always uses *zaybaq* (quicksilver) instead of *zanbaq* (lily).

Two verbs used frequently in the recipes—that is, *saḥaqa* (to grind) and *saqā* (to give to drink) frequently alternate (22.26). In respect of hair, the paleographical similarity concerns the verbs *nabata* (to grow) and *natafa* (to pluck out), which have entirely opposite meanings.

Much rarer are cases—often connected to unusual ingredient names—in which none of the readings preserve a plausibly correct form. Only in one case, that of gum ammoniac (13.15), has it been possible to reconstruct the ingredient, whereas a question mark remains over the names of remedies and electuaries that are impossible to identify (3.21 and 10.9).

⁶² See Lentin and Grand'Henry 2008; Zack and Schippers 2012.

Similar phenomena are attested to in connection to diseases. The characterization of a swelling (8.9) can vary from warm (*ḥarr*) to acute (*ḥadd*). Laboured breathing (*buhr*) and the skin disease called (*bahaq*) can generate a similar kind of variant too (24.2). The shift from hotness (*ḥarāra*) to impetigo (*ḥizāza*) represents another example.

The processing phase offers a case that occurs very often with the verbs that mean ‘to mix, dilute’. The frequency of this phenomenon is high, but the different forms are irregularly distributed in the manuscript tradition. The origin of the variants remain partially unclear, and it is possible to propose more than one reason for their genesis. The forms attested to in the tradition include the verb *ḍāba/yaḍūbu* and the verb *dāfa/yadūfu*.⁶³ Both generate a number of variants that may depend on both paleographical similarity and influence of the spoken language. The verb *ḍāba* is also attested to as *dāba*, which Wehr describes as a form derived from *ḍāba* seen mostly in modern Egyptian Arabic.⁶⁴ The verb *dāfa*—which specifically refers to the moistening of medicines or perfumes—also appears as *ḍāfa*, which Lane describes as a dialectal variant.⁶⁵ Another variant associated to this second verb is *ḍāfa/yaḍīfu*, which, in its fourth form, means the adding of something to something else. More rare, but still present, is the variant *ḍāba/yaḍību*. In sum, the origin of these variants can be connected with different and non-mutually exclusive causes: a paleographic similarity and the consequences of defective writing, the semantic closeness of the forms, influence of spoken language in the written realization. Considering the complex nature of these variants, largely attested to in technical texts, the edition preserves them as they appear in the manuscripts.

Sometimes, the genesis of the variant crosses the border of the recipe as textual unit, and the collation shows that, often, two recipes are merged into one (for instance, 8.20–21 and 15.21). Usually, two recipes are attracted to each other by a shared element, the distinctive ingredient or purpose (26.5), in a homoteleuton that also involves contents next to forms.

V. The manuscript witnesses and the branches of the tradition

The literature on *Manāfi*‘ and other properties is vast and largely unexplored. The materials, moreover, are quite repetitive in nature, creating the impression of being at the forefront of a tradition ‘where everything is similar but nothing is the same’.⁶⁶

In order to be included in the recension, a manuscript witness has to have the introduction (preferably mentioning the author’s name), the contents have to be arranged by animal, and it must deal with useful properties. Exploring the standard repertoires, I was able to collect seven manuscript witnesses.⁶⁷ I have omitted all the indirect tradition, or better, all the other texts in which a certain recipe appears. The exploration of these materials are the subject of my ongoing research interests and intentions.

Already in the collation phase, the great fluidity of the materials required the development of a specific approach, mainly based on practical and empirical instances. From the synoptic overview of the manuscripts emerged a need to present more than one text in the edition. It has not been possible to establish among the witnesses those relations that are usually shaped in a *stemma codicum*. Nevertheless, on the basis of the aforementioned common structural features, the manuscript witnesses have been divided into three different groups. They represent three different recensions of the text, or three different branches of the tradition, at least as they

⁶³ Lane 1863, I 933.

⁶⁴ Wehr 1979, 343.

⁶⁵ Lane 1863, I 988.

⁶⁶ Special thanks to Remke Kruk, who shared with me this aphoristic formulation that so precisely depicts the circulation of the ‘science of properties’.

⁶⁷ See Brockelmann 1943, 267 and Brockelmann 1937, 417; Sezgin 1970, 377; Ullmann 1972, 21–22. The autoptic examination of manuscripts and the research in different libraries have made an important contribution to the bibliographical research. The text attributed to ‘Ali ibn ‘Isā (the ophtalmologist) in the Chester Beatty catalogue, in fact turned out to be a copy of Ibn Buḥtīšū’s book on animal properties, see Arberry 1964, 3. On the other side, during a research period in Cairo at the National Library, I was struck by a title on animal properties attributed to Ibn Sīnā, which turned out to be a misattributed copy of ‘Isā ibn ‘Ali’s *Manāfi*‘.

are attested to by the extant manuscript witnesses. Manuscripts belong to the same branch when they share, firstly, formal features (disposition of chapters and recipes) and, secondly, similarities in terms of formulation.

V.1 Branch (a)

(S) MS Istanbul Şehid Ali Pasha 2096, 181 ff., 7 ll. per page.

Some blocks of folia are in disorder and some are missing, possibly as a result of a new binding given to the manuscript. This hypothesis, however, cannot be checked against quire numbers. The foliation was added after the misplacement. There are no catchwords, and the correct order of the folia had to be reconstructed on the basis of the text and the average order of its entries in the rest of the tradition. This manuscript is a particularly rich copy: it is written in *nash* script, largely vocalized, just a few lines per page and ample margins. The title page is written in gold letters outlined in black and vocalized in blue—the chapter headings are written in the same fashion—the text of the introduction is framed by a blue rule-border. The text on this first folio, however, is more of a descriptive subtitle. The title page is missing, but it is plausible to imagine it decorated with a squared panel containing a medallion. This manuscript was probably one of those copied in the Mamluk barracks as school exercises. This institutional training system seems to have counted the sciences of nature among its interests.⁶⁸

The subtitle page gives the following information about the work and the author: *Kitāb maǧmūʿ ḥawāṣṣ min aʿdāʾ al-ḥayawānāt taʿlīf al-ṣayḥ al-ḥalīm al-awḥad ʿAlī bin ʿĪsā al-mutaṭabbib bi-madīnat al-Andalus* ('Collection of the occult properties from the parts of animals, the author is the clement the unique ʿĪsā ibn ʿAlī the medical practitioner, in the city of al-Andalus'). The attribution Andalusian origins to the author is unique and can be explained as an attempt to place the author, whose name revealed little, in the most prestigious location for Mediaeval Islamic medicine.

(B) MS Berlin Pet. II 244 (Ahlwardt 6240), 91 ff., 10–11 ll. per page.⁶⁹

Written in a plain *nash* script by a book hand, the text is partially vocalized. The front page has a simple carpet decoration in black, dark blue and red. There is no title on the front page, only the name of the author (*ʿAlī bin ʿĪsā al-mutaṭabbib*). The text is framed by a black double line, chapter headings are inscribed in a rectangular cartouche. The beginning of the recipes is marked either by rubrics, or by a bolder script. From f. 40 onwards the decoration, the rubrics and the frame are incomplete.

V.2 Branch (b)

(T) MS Istanbul Saray Ahmet III 2055/1, 55 ff. (1r–54r), 15 ll. per page.

Written in an elegant *nash* script by a professional book hand, largely vocalized. A title is given in the recto of the first folio: *Kitāb mā fī al-ḥayawān wa-baʿḍ ḥikāyāt min al-ṭibb*. This one is probably a partial transcription of the longer title given in red at the beginning of the text (f. 1v): *Kitāb mā fī al-ḥayawān wa-baʿḍ ḥikāyāt min al-ṭibb min al-manāfiʾ mim mā yaǧmaʾuhū ʿĪsā ibn ʿAlī al-mutaṭabbib* ('Book about the Useful Properties of Animals and Some Stories of Medicine Collected by ʿĪsā ibn ʿAlī, the Medical Practitioner'). Then follows a list of the chapters,⁷⁰ more numerous than the actual chapters that are attested in the manuscript (See 'Appendix'). Chapter headings are either rubricated or marked by a red stroke over them: a small *hāʾ* (هـ) marks the end of the recipes. The text shows corrections and annotations that may be by the same hand. The first chapter, on man, is

⁶⁸ As I discuss in a forthcoming article 'Rolling Stones Do Gather: MS Istanbul Aya Sofya 3610 and Its Collection of Mineralogical Texts', the Proceedings of the workshop *The Emergence of Multiple-Text Manuscripts*, held in Hamburg in November 2016.

⁶⁹ See Ahlwardt 1893, 505–506.

⁷⁰ At the end of the list, the chapters are said to be one hundred and twenty three but, in fact, they are less numerous (see 'Appendix').

interpolated with a long Aristotelian passage on the description and classification of animals. The text has a number of lacunae that suggest that parts were already missing in the *Vorlage*.

(W) MS Wien 1481/2 (ff. 134v–145v), 15 ff., 21 ll. per page.⁷¹

Written in a clear *nash* book hand. The first line of f. 134v gives a rubricated title: *Kitāb manāfi‘ al-ḥayawānāt*. This is followed by a list of all the chapters that were supposed to be included in the text. However, there are only thirteen chapters (see ‘Appendix’), out of a much longer list given in the manuscript. Chapter headings and some incipits of recipes are rubricated. The text is incomplete, ff. 146–149 show a melange of incantations and magical prescriptions always related to animals that, however, do not belong to the work of ‘Īsā ibn ‘Alī. The codex is a multiple-text manuscript that also contains a hippiatric work of the 14th century.

(G) MS Gotha 67/2 (ff. 32v–61v), 30 ff., 15 ll. per page.⁷²

Written by a book hand in a plain *nash*, sporadically vocalized. The chapter headings are written in a bolder script. A dot inscribed in a circle is used to mark the end of a recipe and the beginning of the following one. The same hand indexed the text, by systematically adding the purpose of the corresponding recipe in the outer margins. This manuscript shows a consistent gap in the contents, i.e. chapters 38–63 do not appear (see ‘Appendix’). Among the witnesses of this branch of the tradition, G is the only one that does not have the initial list of chapters. Other formal aspects, however, resulted in its inclusion in this branch. The *Manāfi‘* represents the second of two units in a multiple text manuscript. The first contains a text on the use of animal substances in agriculture, with a small addition of various properties arranged by purpose.

V.3 Branch (c)

(L) MS Leipzig 770 (ff. 2r–45v), 45 ff., 15 ll. per page.⁷³

Written by a book hand in a plain and regular *nash*. The title page gives the following title and description for the book in a spear-shaped arrangement: *Kitāb durrat al-ḡawāṣṣ ‘alā al-manāfi‘ [wa] al-ḥawāṣṣ, min manāfi‘ al-waḥṣ wa-l-ṭayr wa mā ḍaḥarahū al-mulūk mimmā lā yuṭla‘u ‘alayhi* (‘Book of the Pearls of the Diver about the Useful and Occult Properties of Wild Animals, Birds, and the Highest Things that the Kings Recorded’). The codex is a multiple text manuscript. On the second line of f. 45v another text begins, in which other recipes are arranged by vegetal simple drugs. From f. 52r onwards the text is arranged by disease *a capite ad calcem*. The second text ends on f. 71r, with a spear-shaped colophon dating the copy to the year 1074 H. (1663–64 AD). This manuscript contains the longest version of the text.

(C) MS Cairo Dār al-Kutub, *Ṭibb Taymūr* 205, 31 ff., 23 ll. per page.

Written by a book hand in a cursive *nash*, sporadically vocalized. The title page gives the following title and description for the book, arranged in the form of a spear: *Kitāb durrat al-ḡawāṣṣ ‘alā al-manāfi‘ [wa] al-ḥawāṣṣ, min manāfi‘ al-waḥṣ wa-l-ṭayr wa mā ḍaḥarahū al-mulūk mimmā lā yuṭla‘u ‘alaihi al-ḡayra min asrār al-ḥikmat wa-fawā‘id al-ḡumla* (‘Book of the Pearls of the Diver about the Useful and Occult Properties of Wild Animals, Birds, and the Highest Secrets of Wisdoms and all the Advantages that the Kings Recorded’). The chapter headings have their own dedicated line and are written in a bolder script (from the black-and-white reproduction it is

⁷¹ See Flügel 1865, 550–551.

⁷² See Pertsch 1878, 121–122.

⁷³ See Vollers 1906, 249–250. This manuscript has been digitised by the Refaya Project and is available online: <https://www.refaiya.uni-leipzig.de/servlets/solr/select?fl=*%26sort=ihsinvent+asc%26q=%2BobjectType%3A%22islamhs%22+-ihsstatus%3A%22STAT0001%22+%2BballMeta%3A%22volumes%22&mask=search_form_islamhs_simple.xed%26XSL.lastPage.SESSION=%2Fsearch_form_islamhs_simple.xed%26version=4.5%26start=562%26fl=id%26returnId%26rows=1%26XSL.Style=browse%26origrows=25> (last accessed 11 February 2018).

not possible to see whether these were rubricated as well). In ff. 30v–50r there is a second text containing recipes arranged by illness and purpose, rather than by animal.⁷⁴

⁷⁴ It is significant to observe, in particular in branch (c), how the text of the *Manāfi* used to circulate in association with one or more text that offered a different perspective on the properties. L and C are also very close in terms of wording, though L includes a higher number of recipes and chapters.

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Manuscripts

- (S) MS Istanbul Şehid Ali Pasha 2096
 (B) MS Berlin Pet. II 244 (Ahlwardt 6240)
 (T) MS Istanbul Saray Ahmet III 2055
 (W) MS Wien 1481/2
 (G) MS Gotha 67/2
 (L) MS Leipzig 770
 (C) MS Cairo Dār al-Kutub, *Ṭibb Taymūr* 205

Conspectus siglorum

- [...] addidi
 add. addidit
 om. omisit

Edition and translation

a

b

c

- * بسم الله الرحمن الرحيم وبه نستعين الحمد لله الحكيم المنان الذي خلق الانسان وعلمه البيان وشرفه على سائر الحيوان والظهره بلطيف الامتنان على ما اودع من الحكمة فيما سيذكر من الحيوان والصلاة والسلام على اشرف آمل أنف من عبد مناف وبعث من ولد عدنان ونعت بدلائل الاعجاز القرآن وعلى اله واصحابه ما تعاقب الجديدان
- بسم الله الرحمن الرحيم وما توفيقى الا بالله كتاب ما في الحيوان من المنافع مما عنى يجمعه عيسى ابن علي المتطبيب
- بسم الله الرحمن الرحيم وبه نستعين الحمد لله الحكيم المنان الذي خلق الانسان وعلمه البيان وشرفه على سائر الحيوان والظهره بلطيف الامتنان على ما اودع من الحكمة فيما سيذكر من الحيوان والصلاة والسلام على اشرف آمل أنف من عبد مناف وبعث من ولد عدنان ونعت بدلائل الاعجاز القرآن وعلى اله واصحابه ما تعاقب الجديدان
- بعد فهذا الكتاب جمعه فيه الامام العلامة ابو الحسن علي بن عيسى المطيب فرائد القوائد وعقائد القلائب مما ادخره الحكماء وانه من تجربته به العلامة قيمته من المال انفس ويضاهي بحسنة الانفس وانتخبه ذامقراطيس وهرمس وغيرها ممن عنا هذا الشأن
- قال مؤلف هذا الكتاب اني لم اجد له نسخة وانما جمعته من كتب متفرقة للحكماء الاوائل مثل هرمس ودامقراطيس وغيرهما من الفلاسفة الذين عنوا بهذا الشأن
- قال شيخ الامام ندرة الزمان علي بن عسى المتطبيب رحمه الله تعالى هذا كتاب قد جمعته وجمعت فيه جميع اعضاء الحيوانات مما وجدته منفردا في كتب الفلاسفة المتقدمين والعلماء الاولين مثل هرمس واقليدس وبقرات وغيرهم من العلماء المتقدمين والذين عنوا بهذا الشأن والنظر فيه

كتاب مجموع الخواص من اعضاء الحيوانات تأليف الشيخ S has a subtitle, probably completing the missing title page: B | اجمعين | وسلم (a) *
 S الحليم الاوحد علي بن عسى المتطبيب بمدينة اندلس رحمه الله وغفر لكتابه وفاريه ولمن نظر فيه ولسائر المسلمين اجمعين امين يا رب العالمين
 بسم الله الرحمن الرحيم بالله استفتح وبه استنجد وعليه اتوكل وبه استعين وهو حسبي ونعم الوكيل ولا قوة الا بالله العلي |وما توفيقى... المتطبيب (b)
 W كتاب منافع الحيوانات G: العظيم. نبدا بعون الله تعالى بكتاب الحيوان وما فيها من المنفعة
 بسم الله الرحمن الرحيم واسياله الاعانة والتوفيق الحمد لله الحليم المنان الذي خلق والداء والدواء بلطيف الامتنان. اودع في |وبه... الجديدان (c)
 C كل شيء حكمته وخلق الانسان علمه البيان والصلاة والسلام على شرف الرسل سيد ولد عدنان وعلى اله واصحابه ما تعاقب الجديدان
 المتقدمين | B وغير | وغيرهم | B | وبقرات | وبقرات | B | وافلندس | واقليدس | B | هرير | هرمس | B | جمع | جميع | B | om. B | جمعته | om. B | رحمه الله تعالى (a) **
 om. B | والذين عنوا بهذا الشأن والنظر فيه | B | الاولين
 om. G | من الفلاسفة | om. W | الاوائل | W | كثير | G: كثيرة | متفرقة (b)
 انتخبه الائمة من علماء | وانتخبه | C | مما يضاهي | قيمته من المال انفس | يضاهي | C | واتقن مجربت | وانه من تجربته | C | add. C | الطيب الفهامة | العلامة (c)
 C اعتنى | عنى | C | كابقرات | ذامقراطيس | C | add. هذا الفن

Introduction

a

b

c

- * In the name of God the Merciful the Compassionate. Praise be to God, Lord of the worlds, His Prayer and Peace upon our Lord Muḥammad, his Family and His Companions.
- In the name of God the Merciful the Compassionate, I have no success but in God. Book of the useful properties found in animals, collected by ‘Īsā ibn ‘Alī the medical practitioner.
- In the name of God the Merciful the Compassionate. In Him we seek help, Praise be to God, the Perfectly Wise the Benefactor the Judge, who created the man, taught him eloquence, and honoured him over the rest of the animals, and with kindness showed him the gratitude, in conformity with the wisdom that is preserved in what we will mention about the animals. Prayer and Peace be upon the Noble that descended from ‘Abd Manāf, he came from the progeny of ‘Adnān and characterised the Qur’an with proofs of inimitability, [Prayer and Peace] on Him and his Companions, as long as the succession of days and nights will last.
- ** The master, unique man of the time, ‘Īsā ibn ‘Alī the medical practitioner—may God be pleased with him—said: ‘I composed this book and I have collected in it all the parts of animals that I found scattered in the books of the ancient philosophers, and of the first wise men, like Hermes, Euclid, Hippocrates, and other ancient learned men who dealt with this subject, and researched it.
- The author of this book said: ‘I did not find an original copy of this book, but I just composed it anew from different books of the first wise men, like Hermes, Democritus, and other philosophers who dealt with this subject.
- Now then, in this book were collected by the most erudite master, Abū al-Ḥasan ‘Alī ibn ‘Īsā the medical practitioner, the gems of the benefits and the doctrines of the hearts that the wise men preserved, that is what comes from the experience of the learned men—its value comes from the wealth of the spirits, and imitates the beauty of the spirits—Democritus, Hermes, and other authors who dealt with this issue and investigated this field of knowledge.

***	om.	ووجدت في بعض هذه الكتب من	om.
		المنافع التي قصدنا لجمعها اشياء خارجة عن هذا الغرض داخله في باب الرقاء والعزائم ولم نر ندخلها في هذا الكتاب لشناعتها	
****	وجعلت هذا الكتاب ابوابا على كل	وقد صنّفت هذا الكتاب ابوابا وجعلت	وترجم عنه بعد التجربة والبيان ومرتبة
	باب منه اسمه منفعته ومنفعته ثم نذكر	وعلى كل باب عددا ليسهل طلب ما	برتبها يسهل النظر فيه ويوضع معانيه
	كل حيوان منه ليكون ذلك اسهل وايين	يريد منه ولعله يكون قد خلط بالمنافع	والله الحق الاعانة على التهذيب وعليه
	لمن نظر فيه والله الموفق للصواب	التي فيه اشياء من جنس ما قلنا بدئا	توكلت واليه انيب
		فينبغي لك ايها الناظر في هذا الكتاب	
		ان تعرف الغرض الذي قصدنا في جمعنا	
		ما جمعنا فيه وتيسر بالعذر فيما يلحقك	
		منه مما مخالف الغرض ويعلم ما ينال	
		من قصد هذا الشأن من التعب والنصب	
		وذلك يسير في جنب ما يحاوله من	
		المنافع للناس	

لشناعتها | G W ولم ار ادخالها | ولم نر ندخلها | G العزائم والرقاء | G العزائم | G | om. G | لجمعها | W قصدت | G | om. G | قصدنا | G | om. G | من المنافع التي (b) ***
om. G; لاستعانتها W

om. B | ذلك | B | ولغته | ونعته (a) ****

ليسهل طلب ما يراود منه وجعلت له عدد المنافع التي وصفها على الحواشي ايسهل | وجعلت... منه | G | له | هذا الكتاب | W | وضعت | G | جعلت | صنّفت (b)
فيما | G | منه | بخالف | غرضك | | مما | مخالف | الغرض | om. W | ايها الناظر في هذا الكتاب | add. W | بدئا وذلك لا عن تعمدا | بدئا | om. G | ولعله... بدئا | G | ذلك
وذلك هين في كتب من يومئذ من منافع الذي | G | om. G | وذلك... للناس | om. W | والنصب | W | مثله | هذا الشأن | om. G | ويعلم... والنصب | W | خالف | غرضنا
W | يلحق الناس الذي سقى اظافير نفسه يصبح له تلك الوكيل او الغلام وازداد له حيا ويصاق الانسان من لدغ الهوي
C | من منافع انواع من الحيوان وبدا فيه يذكر منافع الانسان ورتبه على ابواب حسان | ومرتبة... انيف | C | بالبيان | C | والبيان | C | واخبروا | وترجم (c)

om.

In some of these books on the useful properties that we considered for the present collection; in the chapter on charms and spells, I found things outside its main purpose, but I did not want to include them in this book for their hideousness.

om.

I divided this book into chapters, every chapter has its name, its coherence and its usefulness; then I mentioned every single animal so that it will be easier and clearer for the one who looks in it, and God is the One who grants what is right.'

I compiled this book in different chapters, and I assigned numbers to every chapter in order to ease the search of what one may want from it. Perhaps, however, some of the things of the kind that we defined loathsome have already mixed with the useful properties. So you should know, oh you who search in this book, the purpose that we have tried to achieve in our composition, and the sincere apology for anything extraneous to this purpose that we have laid in front of you, and to know the inconvenience and the problematic aspects that may derive from the consideration of this topic. This is, however, a small thing if compared to the useful properties that are here given to the people.'

It was translated from this following the experience, the explanation, and the order of its arrangement, in order to ease the search inside it, and to explain its meanings. God is the Truth, the Help for the rectification, in Him we put our trust, and to Him we will return.

١. الانسان

a	b	c
ذكر منافع اعضاء ابن ادم	الانسان	باب منافع الانسان
1.1 يؤخذ ضررس انسان ميت يجعل على الضررس الوجع يسكن وجعه باذن الله تعالى	لوجع الضررس يؤخذ ضررس انسان ميت يعلق على من به وجع الضررس فيسكن باذن الله تعالى	اذا أخذ ضررس الانسان وعلق على من يشتكي وجع الضررس ابرأه
1.2 للناسور في الانف يؤخذ عظم الميت يحرق حتى يصير رمادا ثم تخلط معه صبر ويحشي الناسور فيبرأ باذن الله تعالى	لنناسور في الانف يؤخذ عظم الانسان الميت يحرق بالنار حتى يصير رمادا ثم يسحق ويخلط معه صبر يحشي به الناسور وينفخ منه في الانف يبرأ	واذا أخذ وسحق وخلط بصبر ونفخ في الانف الذي في الناسور ابرأ
1.3 للبياض في العين يؤخذ حيات بطن الانسان فتجفف وتُسحق سحقا ناعما ويكتحل بها من في عينه بياض فيذهب باذن الله تعالى	للبياض في العين يؤخذ حيات الجوف فتجفف وتذق ويكتحل بها من بياض العين يبرأ	اذا أخذ الحيات الذي تظهر من بطن الانسان وجففت وسحقت ناعما واكتحل بها من بعينه بياض ابرأه
1.4 الآكلة في جميع البدن يؤخذ سذاب يابس ويدر على الآكلة فتبرأ باذن الله تعالى	للآكلة يؤخذ رجيع الانسان يابس يخلط معه سذابا يابس ويدر على الآكلة يبرأ ان شاء الله تعالى	om.

1: T صفات منافع الانسان [انسان (b)]

In W the section on 'Man' is at the end of the chapter, هذا منافع ما في الانسان ان شاء الله تعالى

1.1: (a) B على صاحب الضررس [على الضررس (a)]

(b) ضررس الانسان الميت يعلق على من به وجع الضررس فيسكن... فيسكن (b)

C وجع اسنانه [وجع الضررس (c)]

1.2: (a) B ويجعل في الانف الذي فيه الناسور [ويجعل B] ثم تخلط | om. B [لنناسور في الانف (a)]

(b) W | om. G وعظم الانسان اذا حرق ثم سحق رماده وخلط معه صبر حشي به الناسور ونفخ منه في الانف الذي فيه الناسور... يبرأ (b)

C لحم بني ادم واذا حرق وسحق وخلط بصبر ونفخ منه في الانف الذي في الناسور ابرأه [واذا اخذ... ابرأ (c)]

1.3: (a) om. B

(b) W | om. G وحيات بطن الانسان يجفف وتذق ويكتحل بها البياض العين فيذهب [للبياض... يبرأ (b)]

(c) C بياض من الجدري ابرأه [بياض ابرأه C] الأدمي [الانسان (c)]

1.4: (a) om. B

(b) W | om. G رجيع الانسان يسحق ويخلط معه شراب يابس ويدر عليه الآكلة تبرأ [للآكلة... يبرأ (b)]

1. Man

a	b	c
Exposition of the useful properties of the parts of the man	The man	Chapter on the useful properties of the man
1.1 Molar tooth of a dead man: if it is taken and placed on the aching molar tooth, then its pain will subside, with the permission of God, may He be exalted.	Against the pain of the molar: if the molar of a dead man is taken and hung on the man suffering from an aching molar, then it will cease, with the permission of God, may He be exalted.	Molar of a dead men: if it is taken and hung on the man suffering from the pain of a molar, then this will cure him.
1.2 Against the fistula in the nose: if the bone of a dead man is taken, burnt until it becomes ash, then mixed with aloe and stuffed inside the fistula, then this will heal, with the permission of God, may He be exalted.	Against the fistula in the nose: if the bone of a dead man is taken, burnt on the fire until becomes ash, then ground, mixed with aloe, stuffed inside the fistula, and blown inside the nose, then this will be cured.	And if it is taken, ground, mixed with aloe and blown inside the nose affected by a fistula, then this will be cured.
1.3 Against the glaucoma of the eye: if the worms that come out from the abdomen of a dead man are taken, dried, finely ground and rubbed on the eye of the man affected by glaucoma, then this will go away, with the permission of God, may He be exalted.	Against the glaucoma in the eye: if the worms of the belly are taken, dried, ground, and rubbed on the eye affected by glaucoma, then this will cure it.	If the worms that come out from the abdomen of man are dried, finely ground, and rubbed on the eye affected by glaucoma, then this will cure it.
1.4 Against the gangrene that affects the entire body: if some dry rue is taken and put on the eruption, then this will heal, with the permission of God, may He be exalted.	Against gangrene: if human excrement is taken when it is dried, pounded and melted with dry rue and applied on the eruption, then this will heal.	<i>om.</i>

- | | | | |
|-----|---|--|--|
| 1.5 | Human excrement: if it is taken when it is dried, ground, mixed with wine vinegar and honey, rubbed on the throat affected by gangrene or suffocation, then these will cease, with the permission of God, may He be exalted. | Dry human excrement: if it is taken, ground, melted, kneaded with honey, rubbed on the throat, this will cure the suffocation; and likewise, if it is blown dry inside the throat. | Human excrement: if it is dried, ground and kneaded with vinegar and honey, rubbed on the throat affected by gangrene or a feeling of breathlessness, then these will be cured. |
| 1.6 | If the molar of a dead man and the bone from a hoopoe's wing are taken, placed under the head of a sleeping man, then he will keep sleeping as long as they remain under his head. | If the molar of a man and the bone from the right wing of a hoopoe are placed under the head of a man, then he will keep sleeping until this is removed from underneath his head. | If the molar tooth of a man and the bone of the right wing from a hoopoe are taken and placed under the head of a sleeping man, then he will not wake up as long as they remain under him. |
| 1.7 | Hair of a man: if it is hung on the man suffering from migraine in his brain, then this will subside. | Hair of a man: if it is hung on the man suffering from migraine, then the pain will subside. | Hair of a man: if it is hung on the man suffering from migraine, then he will heal. |
| 1.8 | Hair of a man: if it is moistened with wine vinegar and applied on the bite of a rabid dog, then this will be useful against it, with the permission of God, may He be exalted. | The hair, again: if it is moistened with vinegar and applied on the bite of a dog, will this be instantly useful against this; the urine of a man is effective too, if poured on the bite of a dog. | If the hair is moistened with vinegar and applied to the bite of a dog, then this will cure it. |
| 1.9 | Man blood: if it is taken and put in a pottery vessel, then its opening is covered with clay and buried somewhere for forty days; then take out the vessel with the blood inside, which in the meanwhile has turned into the effigy of a man, take this effigy and put it in the flour for seven days, take it out and slaughter it, then the blood will run from it. Take this blood, mix it with some pure wine vinegar and give it | For love: if the blood from cupping or from a nosebleed is taken, put in a vessel, and left there for forty days, then the figurine of a man can be found inside it; put this figurine in some wheat flour for seven days, then take it out, slaughter it, and take the blood that runs from it, mix it with wine, and give it to drink to | If the blood from cupping or blood-letting or the blood from a nosebleed is left in water inside a pottery vessel for forty days, then the effigy of a man can be found inside it; put this effigy in some wheat flour for seven days, take it out, slaughter it and then the blood will run from it. If this blood is mixed with a bit of old wine, given to someone—man or |

- وتسقيه لاحد من ذكر او انثى فعل في المحبة ما لا يكاد يغير عنه
- ما يسيل من دمه فاخلطه بخمر اسقه من شئت ذكر كان او انثى فانه يحبك
- واسقيه لبن شيت ذكرا او انثى فانه يحبك حبا شديدا
- وان خلط من ذلك الدم بشيء من دهن ورد خالص عتيق ودهن به انسان وجهه كان مقبولا عند السلاطين والامر او عظماء الناس وفعله عجيب جدا
- وان طرح ذلك الدم الذي يخرج من التمثال في دهن ومسحت به وجهك كان نافعا للسلطان ولكل حاجة فانها تقضي
- وان أخذ دم انسان اذا احتجم يعجن به دقيق حلبة وماء سذاب والعسل وطلّي على كل قرحة تكون في الجسم وخاصة الساقين والقروح التي يسيل منها الماء نافع ان شاء الله تعالى
- دم بن ادم اذا عجن بدقيق الحلبة وماء السذاب والعسل وطلّيت به قرحة تكون في البدن خصوصا التي بالساقين والرطوبة المائية التي تسيل الدم تبرأ باذن الله تعالى
- 1.10 وان أخذت من ذلك الدم وخلطت معه دهن زنبق ودهنت وجعل كنت مقبولا عند الملوك والسلاطين وجميع بني ادم
- 1.11 دم الانسان يؤخذ ويعجن بدقيق الحلبة ويرطب بماء السذاب عسل النحل ويطلّي كل قرحة [...]]

— المرأة والصبيان —

- اذا أخذ دم الحيض من امرأة جارية بكر وخلط بخمر عتيق واكتحل به في عينه يبيض ابراه
- يؤخذ دم حيض المرأة لم يلمسها رجل يخلط معه المنى ويحتكل به لليباض الذي في العين فانه يبرأ
- يؤخذ دم حيضة المرأة البكر فيخلط معه خمر ويحتكل به من في عينه يبيض فانه يبرأ باذن الله تعالى
- خرقة دم الخيض اذا علقت على مؤخر سفينة لا يدخلها ريح ولا زوبعة
- خرقة الحيضة تعلّق في مؤخر السفينة لا يقربها ريح ولا زوبعة
- يؤخذ خرقة دم الحيضة فيعلق على مؤخر السفينة فلا يدخلها الريح عاصف ولا زوبعة

1.10: (a) This recipe is attested only in B

(b) om. G W

(c) وله [وفعله] C | الاكابر [والامر او عظماء الناس] C | عند السلطان [عند السلاطين] add. C | مقبولا عند كل احد [مقبولا] C | بشيء بدهن [بشيء من دهن] C فعل

1.11: (a) om. B

(b) دم الانسان من حجامه اذا عجن به دقيق حلبة ورطب بماء الشراب الطري وشيء من عسل وطلّي على كل قرحة تكون في الجسد [وان أخذ... نافع] (b) جاصة في الساقين حلبة ورطبه وبرا ذلك W; دم حجامه الانسان او دم رعاف اذا عجن به دقيق حلبة ورطب بماء السذاب الرطب مع العسل وطلّي به G القروح التي تكون في الجسد جميعه الرطب واليايس نفع نفعا جيدا

(c) دم بن ادم اذا عجن بدقيق الحلبة وماء الفنجل وهو السذاب والعسل وطلّيت به القروح التي تكون في البدن خصوصا الذي تكون [دم بن ادم... تبرأ] (c) بالساق ابراه وكذلك تذهب الرطوبة المائية C

1.12: (a) om. B

(b) om. W G | الذي في العين W; اليباض [اللباض] G | لم يمسها [لم يلمسها] W; لم يكونوا مسهل [لم يلمسها] W | حيضها [حيض المرأة] om. W G; [يؤخذ] (b) W G فيبرأ [فانه يبرأ]

(c) C بعينه [في عينه] C | اذا خلط [وخلط] om. C | امرأة [om. C] | اذا أخذ (c)

1.13: (a) om. B

(b) W G اذا علقت [تعلق] (b)

to drink to whomever you desire—either man or woman—then this person will love you passionately.

whomever you desire, either man or woman, and this person will love you.

woman—to drink, then this will do for love what cannot be achieved by any other mean.

1.10 If you take this blood, mix it with lily oil and rub it on the body, then you will be welcome in the presence of kings, sultans and of all the people.

If you add the blood that comes out of this figurine to some oil and rub your face with it, then this will be useful for an audience with the sultan and for any other need, in fact the need will be satisfied.

If this blood is mixed with some pure rose oil and a man rubs it on his face, then he will be welcome in the presence of sultans, princes, and the mighty people, and its effect is really amazing.

1.11 Man blood: if it is taken, kneaded with fenugreek flour, moistened with rue water and rubbed on every kind of ulcer [...]

Human blood from cupping: if it is taken, kneaded with fenugreek flour, rue water, and honey, then rubbed on any kind of ulcer that affects the body, especially the legs, then this will be useful, God willing.

Blood of a man: if it is kneaded with fenugreek flour, rue water and honey, rubbed on the ulcers that affect the body, especially the ones on the legs and the moist ulcers from which the blood flows, then these will heal, with the permission of God, may He be exalted.

—

Woman and Children

—

1.12 Menstrual blood of a virgin: if it is taken, mixed with wine and rubbed on the eyes of a man affected by glaucoma, then this will heal, with the permission of God, may He be exalted.

Menstrual blood of a woman, who has not yet been touched by a man: if it is mixed with some sperm and rubbed on the eyes against the glaucoma, then this will heal.

Menstrual blood of a virgin maiden: if it is taken, mixed with old wine and rubbed on the glaucoma of the eyes, then this will cure it.

1.13 If a piece of cloth soaked in menstrual blood is taken, hung on the stern of a ship, then neither a violent wind nor a storm will damage it.

If a piece of cloth from the menstruation is hung on the stern of a ship, then neither the wind nor a storm will damage it.

If a piece of cloth soaked in menstrual blood is hung on the stern of a ship, then neither the wind nor a storm will damage it.

- 1.14 *om.* *om.* زبل الانسان نافع من جميع السموم
القاتلة شربا ومن نهش الافاعي القاتلة
- 1.15 *om.* *om.* شعر الانسان اذا بخرت به اذا تحت
امرأة منعها من انتفاخ الرحم
- 1.16 *om.* *om.* دهنه اذا أخذ وهو حار حين يخرج من
الزق وطلّي به السرطان ابرأه
- 1.17 واذا اصاب المرأة وجع السرة عند النفاس
يؤخذ خرقة خرقه الخيضة فتحرقها
حتى تصير رمادا ويؤخذ من رمادها جزء
ومن الاكشوث العراقي جزء ويداف
الجيع بماء فاتر ويطلّي به مكان الوجع
باذن الله تعالى
- المراة اذا اصابها وجع السرة عند النفاس
يؤخذ خرقة حيضها فتحرق ويؤخذ منها
ومن دمها جزء ومن الكشوث اليابس
جزء ويذاب بماء فاتر ويطلّي به المكان
فيسكن الوجع باذن الله
- اذا صاب المرأة وجع السرة تأخذ خرقة
الحيض وتحرقها حتى تصير رمادا ثم
تأخذ من ذلك الرماد جزء ومن الكشوث
جزء ويذاب بماء فاتر ويطلّي به حول
السرة تبرأ وان اصابها ذلك عند النفاس
سكن ذلك
- 1.18 يؤخذ لبن امرأة فيخلط معه العسل
والخمر العتيق ويسقي لمن به الحصاة
ولبول الرمل
- لبن النساء اذا شرب مع الشراب والعسل
فتت الحصاة
- لبن الجارية البكر اذا شربه انسان مع
عسل فتت الحصاة وادر البول

الصبي

- 1.19 اذا ولد الصغير اشهلا ازرقا فيسقي لبن
حبشية سبعة ايام فيذهب من عينه
الزرقه باذن الله تعالى
- اذا ولد الصبي ازرق العين فارضعته
حبشية سبعة ايام صار اشهل وزهبت
الزرقه من عينيه
- اذا ولد الطفل ازرقا رضعه لبن حبشية
فانها تذهب تلك الزرقه

1.14: (c) *om.* C1.15: (c) *om.* C1.16: (c) *om.* C1.17: (a) *add.* B الوجع فيذهب عنه | الوجع | B وتطلق | ويداف | B الكشوث | الاكشوث | B وخذ | ويؤخذ | B الظهر | السرة | S الصر | السرة (b)

(b) يؤخذ خرقة حيض المرأة التي اصابها وجع في سرتها عند النفاس فيحرق الخرقة ويؤخذ من رمادها | فيسكن الوجع... | فيسكن الوجع | T الضرس | السرة (b) المرأة اذا اصابها وجع الضرس عند النفاس يؤخذ خرقة حيضها | W; جزء ومن الكشوب اليابس جزء ويضاف بماء فاتر ويطلّي به مكان الوجع فيسكن G فتحرق ويؤخذ منها ومن دمها جزء ومن الكشوث اليابس جزء ويذاب بماء فاتر ويطلّي به المكان فيسكن الوجع باذن الله C فيسكنه | سكن ذلك | C فانها تبرأ | تبرأ | C ويطلّي بها السرة | ويطلّي به حول السرة | C الى ان | حتى | C فتأخذ | تأخذ (c)

1.18: (a) *add.* B وبول الرمل فيذهب عنه | ولبول الرمل | B تخلط | فيخلط (b)

G حصاة المثانة | W الحصاة من المثانة | الحصاة | G السذاب او الشراب | الشراب والعسل (b)

(c) In C another recipe is added, لبن الجارية لبن الجارية اذا شربه من به الحصاة مع شي من عسل فتت الحصاة وادر البول | لبن الجارية... | وادر البول (c) with woman milk to dissolve the stones in the bladder: المثانة من الحصاة من المثانة

1.19: (a) B الزرقه من عينيه | من عينه الزرقه | B ازرقا اشهلا | أشهلا ازرقا (b)

(b) W G اسهل | اشهل | *om.* W G | وزهبت الزرقه من عينيه (c)

(c) In C this recipe is after 1.20 | ولد... الزرقه | اذا ولد... الزرقه (c)

- | | | | |
|------|--|---|---|
| 1.14 | <i>om.</i> | <i>om.</i> | Human excrement is useful against all the deathly poisons and the bite of a deadly viper. |
| 1.15 | <i>om.</i> | <i>om.</i> | Hair of a man: if it is fumigated under a woman, then this will prevent the swelling of the womb. |
| 1.16 | <i>om.</i> | <i>om.</i> | His grease: if it is taken warm, as it comes out from the skin, and rubbed on a cancer, then this will cure it. |
| 1.17 | If a woman happens to have umbilical pain at the moment of the delivery, take a piece of cloth soaked with menstrual blood, burn it until it becomes ash, take one part of its ash and one part of Iraqi clover dodder, mix everything with lukewarm water and rub it on the aching part, with the permission of God, may He be exalted. | If a woman happens to have umbilical pain when she breathes, take a piece of cloth soaked with menstrual blood, burn it, take one part of it and one of her blood, one part of dry clover dodder, mix it with warm water and rub it on the part, then the pain will cease with the permission of God. | If a woman happens to have umbilical pain, take a piece of cloth soaked with menstrual blood, burn it until it becomes ash, take one part of its ash, one part of clover dodder, liquefy it with lukewarm water and rub it around the umbilicus; and if it happens at the moment of the labour, then this will calm the pain. |
| 1.18 | Woman milk: if it is taken, mixed with honey and old wine, and then given to drink to a man suffering from [bladder] stones and sand in his urine, then this will be useful. | Woman milk: if it is drunk with wine and honey, then this will dissolve the bladder stones. | If a man drinks the milk of a virgin maiden with honey, then this will dissolve the [bladder] stones and will make his urine flow more easily. |

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Child

—

- | | | | |
|------|---|--|--|
| 1.19 | If a baby has deep-blue eyes, he has to be given the milk of an Abyssinian woman for seven days to drink, then the blue will leave his eyes, with the permission of God, may He be exalted. | If a child is born with blue eyes, then an Abyssinian woman should nurse him at her breast for seven days, then the blue will turn to black. | If a child is born with blue eyes, he should be breast-fed with the milk of an Abyssinian woman, then this blue colour will go away. |
|------|---|--|--|

- 1.20 رجيع الطفل عند الولادة يجفف ويسحق ويكتحل من بعينه بياض يبرأ رجيع الصبي حين يولد اذا جفف وكحل البياض في العين نفع منها وينفع من الغشاوة في العين ايضا يؤخذ رجيع المولود ساعة يولد فيجفف ويسحق ويكحل به صاحب البياض والغشاوة على العين فيبرأ باذن الله تعالى
- 1.21 قلف الصبيان المطهرين اذا اجففت وسحق وخلطت بمسك وشربه صاحب البرص والجذام وقعه قلفة الصبيان تجفف وتدق وتخلط ما شئ من مسك ويسقي من به الجذام فيقف ولا يزيد يؤخذ قلفة الصغير عند ختانه فتجفف ويسحق ويخلط معها مسك خالص وتسقي لمن بدأ في الجذام فيقف عنه باذن الله تعالى
- 1.22 واذا احترقت ويسحقت وشربها من به البرص اذهبه وان احرق ودق وسقي من به برص وشرب بعده الماء وقع ولم يزد وان احترقت ويسقي منها صاحب البرص يبرأ باذن الله تعالى
- 1.23 رجيع ابن ادم اذا اسحق واذيب بماء فاتر ابرأ القولنج لوقته وان اذيب بالخل فابلق رجيع ابن ادم اذا اسحق واذيب بماء فاتر ابرأ القولنج لوقته وان اذيب بالخل فابلق للقولنج يؤخذ رجيع الانسان قدر حمصة ودق فيذاف بخل حادق ويسقي من به القولنج يبرأ باذن الله تعالى
- 1.24 رجيع الانسان وهو حار حين يظهر يخلط بخمر ويسعط به الدابة الممغولة تبرأ لوقته رجيع الانسان وهو حار حين يظهر لحم الدواب يؤخذ رجيع الانسان حارا وتوجر الدابة منه ويخلط مع خمر وتوجر به الدابة فان الخمر يذهب من قوته ومن ساعته يؤخذ رجيع الانسان وهو سخن كما يخرج ويخلط معه خمر يوجر به الدابة التي بها الحمر فيزول باذن الله تعالى

1.20: (a) om. B | علي العين | ويكتحل | ويكحل (a)

(b) W | In T and W another recipe is added, with evaporated child urine, said to be included in the 'chapters on the art (alchemy)' رجيع الصبي حين يولد تجفف وتكتحل به البياض في العين ويقلعه ونفع الغشاوة في العين | رجيع الصبي... في العين

(c) C | برأه | يبرأ | C | اذا جفف وسحق وكحل | يجفف ويسحق ويكتحل (c)

1.21: (a) B | الختان | إختانه (a)

(b) B | لمن في بدن الخدام | لمن بدأ في الجذام | B | الختان | إختانه (a)

(b) G | وجفف ودق وخلط بشيء من مسك وتسقي منه من ابتداء به الجذام فلا يزيد | قلفة الصبيان... ولا يزيد (b)

(c) add. C | وقعه وزال البرص | وقعه | C | وشربها من به برص او جذام | وشربه صاحب البرص والجذام (c)

1.22: (a) B | فيبرأ | يبرأ (a)

(c) om. C

1.23: (a) B | وكان ابلغ | فيزول عنه | B | مقدار | قدر (a)

(b) رجيع الانسان يسحق ويؤخذ منه قدر حمصة فتضاف بالخل حالمض ويسقي منه من به القولنج واسر البول أي رجيع كان من رجيع القولنج... يبرأ (b)

G | اذا أخذ من رجيع الانسان والصبي قدر حمصة ودق واذيف بخل خالص وسقى صاحب القولنج برئ | W | الناس (b)

(c) C | ذهب | أبرأ (c)

1.24: (b) رجيع الانسان اذا W | رجيع الانسان ايضا حارا اذا خلط مع جزء الحرت الحمير والدواب دهن حمرة من ساعته | لحم الدواب... ومن ساعته (b)

G | أخذ حارا كما يخرج ويخلط مع خمر واوجرت منه الدابة ذهب عنها الحمر من ساعته (b)

C | واذا اخذ رجيع الانسان حين يظهر وهو حار وسعط به الدابة الممغولة أبرأها | رجيع الانسان... لوقته (c)

- | | | | |
|------|---|--|---|
| 1.20 | Excrement of a baby: if it is taken when he is just born, dried, ground and rubbed on the eyes of the man suffering from glaucoma and cataract, then he will heal, with the permission of God, may He be exalted. | Excrement of a baby: if it is taken when he is just born, dried and rubbed on the eye, this will be useful for the eye and for the cataract as well. | Excrement of a baby: if it is taken when he is just born, then is dried, ground and rubbed on the eyes of a man suffering from glaucoma, then he will heal. |
| 1.21 | Foreskin of a baby: if it is taken at the moment of his circumcision, dried, ground, mixed with pure musk and given to the man who has just contracted elephantiasis to drink, then he will recover, with the permission of God, may He be exalted. | Foreskins of babies: if they are dried, pounded, mixed with some musk and given to drink to the man who is affected by elephantiasis, then this will cease and will not increase. | Foreskin of babies: if they are dried, pounded, mixed with musk and drunk by the man suffering from leprosy and elephantiasis, then these will cease. |
| 1.22 | And if it is burnt and given to drink to a man affected by leprosy, then this will heal, with the permission of God, may He be exalted. | And if it is burnt, ground, and given to drink to a man affected by leprosy—and he drinks water after it—this will cease and will not increase. | And if it is burnt, ground and drunk by a man affected by leprosy, this will make it cease. |
| 1.23 | Man excrement: if one quarter <i>mitqāl</i> of it is taken, ground and given to drink to a man suffering from colic, then this will be even more effective. | Against colic: if the measure of a chickpea of excrement from an adult or from a child is taken, pounded, mixed with sour vinegar and given to a man suffering from colic to drink, then he will heal, with the permission of God the Highest. | Human excrement: if it is taken, ground, liquefied with lukewarm water, then this will instantly cure colic. And if it is liquefied with vinegar, this will be even more effective. |
| 1.24 | Man excrement: if it is taken—and it should be warm as in the moment in which it comes out—melted with wine and given to a beast which suffers from erysipelas, then this will cease, with the permission of God, may He be exalted. | Against the suffering of the beasts, human excrement: if it is taken warm as they come out, melted with wine and given to a beast, then this will make the erysipelas cease instantly. | Human excrement: if is taken warm as it comes out, is melted with wine and inhaled by the beasts suffering from abdominal pain, then this will cure them instantly. |

- 1.25 وسخ رجل بني ادم اذا غسلت بالماء وشربه انسان حبك حبا شديدا وكذلك المرأة اذا فعلت ذلك
وان اسقت المرأة وسخ قدميها لانسان احبها وكذلك الرجل اذا اسقاها وسخ رجليه
اذا اسقيت المرأة وسخ قدميك احبتك حبا شديدا وان شربت وسخ قدميها احببتها حبا شديدا
- 1.26 اذا اردت ان ينصحك خادمك في خدمته فقلم اظفارك الجميع واحرقهم واسقيهم له في شيء من خمر او بماء فانه ينصحك ويحبك حبا عظيما ويواظب علي خدمتك وكل من شرب من تلك احبك حبا شديدا
وان اردت ان ينصح لك خادمك فقص اظفارك كلها واحرقها بالنار واسقه اياها وكل من سقيت منه من جميع الناس احبك حبا شديدا
- 1.27 بصاق الانسان ينفع من لدغ الهوام
om.
- 1.28 عظم الانسان الميت اذا علق على من به الحمى الربيع ينفع نفعا بينا
om.
- 1.29 للحمى الربيع والمثلثة يكتب في رقاع ان كانت ربعا يكتب في رقاع اربعة وان كانت مثلثة يكون في ثلاثة وان كانت يومين قطعت اثنين وان كان يوما تكتب واحدة نافع ان شاء الله تعالى
om.
- 1.30 بول الانسان اذا غلى النار وطللى به النقرس سكن وجعه وضربانه
om.

1.25: (b) om. W | In G another recipe is added, with the dirt from the feet diluted in wine to induce pregnancy: اذا اردت ان تحبل المرأة فاسقها: وسخ قدميك في نبيذ اغيره ومن الاشربة وهي لا تعلم فانها تحبل C غسالة اليدي الانسان ورجليه اذا شرب احد فعل المحبة امرا عجيبا [وسخ رجل...ذلك] (c)
1.26: (a) جميع اظفارك [اظفارك الجميع] om. B | In B another recipe is added, with human saliva to cure the stings of the hornets: اذا الطخت لسعة الزنبور بريقك فانه يزول المها: (b) W | In W another recipe is added, to increase the flow of milk during the lactation: وقلة اللبن تسقي المرأة من كل يوم من بزر الرطبة مدقوقا في كل يوم وزن درهم ونصف يشرب ايام فيكثر اللبن ويغزر ان شاء الله تعالى C قلامة الاظفارك اذا احرق وشربها احد فعل في محبة ايضا فعلا غريبا [اذا قلمت...اثر فيه] (c)
1.27: (b) بول الانسان اذا شرب نفع من السموم: T | om.W | In G another recipe is added, with human urine against the deadly poisons: المهلكة.
1.28: (b) T | om. W بول [عظم]
1.29: (b) Qur'an 73:15 ('Indeed, We have sent to you a Messenger as a witness upon you just as We sent to Pharaoh a messenger') follows this recipe | om. W G
1.30: (b) W | بول الانسان اذا غلى النار وطللى به صاحب W | بول الانسان اذا غلى النار وعلى به النقرس سكن وجعه وضربانه [بول الانسان...والضربان] (c) النقرس رجله نفعه G

- | | | | |
|------|--|---|--|
| 1.25 | If you give the dirt from your feet to a woman to drink, then she will love you passionately; and if you drink the dirt of her feet, then you will love her passionately. | If a woman gives the dirt from her feet to a man to drink, then he will love her; and the same happens with a man, if he gives the dirt from his feet to drink to her. | If you wash the dirt from human feet with water and someone drinks this, then he will love you passionately. And it is the same for the woman, if she does so. |
| 1.26 | If you want that your servant is well disposed towards you during his service, clip all your nails, burn them and give him them to drink with some wine or water, then he will be well disposed towards you, will deeply love you, will be constant in his service; and everyone who drinks this will deeply love you. | If you want that your servant is well disposed towards you, clip all your nails, burn them in the fire, and give them to drink; then anyone who drinks it will deeply love you. | If you cut your nails the upside-down, burn them and give them to drink to the one whose love you deeply desire, since this potion will leave a sign inside him. |
| 1.27 | <i>om.</i> | Human saliva is useful against the sting of harmful insects. | <i>om.</i> |
| 1.28 | <i>om.</i> | Bone of a dead man: if it is hung on the a man suffering from quartan fever, then this will be really useful to him. | <i>om.</i> |
| 1.29 | <i>om.</i> | Against quartan and tertian fever write on a slip of paper: write 'four' if it is a quartan fever, write 'three' if it is a tertian fever, if it is a fever that comes every two days write 'two', and if a fever comes everyday write 'one', and this will be useful, God willing. | <i>om.</i> |
| 1.30 | <i>om.</i> | Urine of a man: if it is boiled on a fire and rubbed on the feet of a man suffering from gout, then this will be useful to him. | <i>om.</i> |

- 1.31 إذا اردت ان يحبك انسان فاغسل جيب
قيمصك واسقيه من ماء وهو لا يعلم
فانة يحبك حبا شديدا
- وان اردت ان يحبك انسان فاغسل
جيب قيمصك بالنبيذ واسقيه اياه وهو لا
يعلم فانه يحبك ويكرمك
- 1.32 إذا اردت ان يكشر الحمام في البرج
فادفن في رأس انسان ميت ويكون له
مدة زمان قد مات فانه يكشر فيه الحمام
كل مكان
- وان كان لك برج حمام و اردت ان
يكثرون ويزيدون فادفن جمجمة ميت
قديم
- 1.33 لبن الجارية الحبشية اذا خلط بشيء من
دهن الزنبق وسعط به صاحب الفالج
واللوقة ابرأه لوقته ومقدار السعوط منه وزن
قيراط للرجل وللطفل وزن حبة ويخلط
معه في بعض الاوقات عنزروت ابيض
ويقطر في العين للحمرة تبرأ
- للقوة والفالج قضيب الانسان يسعط
بلبن جارية حبشية وان وضع معه شيء
من زنبق مضرب حتى يختلط ويسعط به
الرجل وزن قراط والصبي وزن حبتين
- 1.34 يؤخذ لبن حبشية ويخلط معه دهن زنبق
وعنزروت ويسعط به صاحب اللقوة في
الوجه فانه يبرأ باذن الله تعالى
- ويذاف ايضا بعض الاوقات على قدر
الاحتمال كندس وعروق كندس من كل
واحد جزء ويسحق ويذاف في اللبن
ويقطر عليه الزنبق ويسعط به فانه نافع
ان شاء الله تعالى
- 1.35 للمغل اذا امغلت الدابة تاخذ عظم
ميت وتسحقه سحقا ناعما ويذيه بماء
حار وتسقه للدابة فتبرأ باذن الله تعالى
- لوجع الضرس يؤخذ عظم انسان ميت
فيمر به على الضرس فيسكن

1.31: (b) om. W | إذا اردت | أو ان اردت | G | بالنبيذ | G | ويكرمك | om. G

(c) مائة [ماء] L

1.32: (a) om. B | فانه يكشر فيه الحمام | om. B | [ويكون] (b)

(b) ومكثرة الحمام يدفن في برج الحمام جميع من كل مكان | أو ان كان...ميت قديم (b)

add. B رأس الميت من بني ادم اذا وضع في برج الحمام اجتمع اليه الحمام صاحب الفالج | إذا اردت...مكان (c)

G | وإذا دفنت جمجمة قديمة في برج الحمام كثر الحمام W | الوجع | ميت قد يموت | الوجع (a) 1.33:

(b) وإذا كان بانسان فالج او لقوة يؤخذ لبن W | وللوقة وفالج يسعط بلبن جارية حبشية بوجع جارية مع شيء من زنبق مضروب مختلط [للقوة...مضرب] (b)

G جارية حبشية مع شيء من زنبق يضرب

(c) om. C | ويخلط...تبرأ | C | للرجل قيراط وللطفل وزنة حبة | وزن قيراط للرجل وللطفل وزن حبة | om. C | لوقته (c)

وللقوة يؤخذ لبن الجارية الحبشية ويذاف فيه كندس وعروق من كل واحد جزء ويسحق ويذاف في اللبن ويقطر عليه الزنبق [ويذاف...فانه نافع] (b) 1.34:

T الزبيق | الزنبق | G | وللوقة يؤخذ لبن الجارية الحبشية ويذاف فيه [ويذاف ايضا بعض الاوقات على قدر الاحتمال W | ويسعط منه صاحب اللقوة

1.35: (a) om. W | إذا امغلت دابة فخذ عظم ميت اسحقه وضيغه بما حار واسقيه للدابة فتبرأ [للمغل...فتبرأ] (a)

(b) om. W | الذي يشتكي وجعه [فيسكن] om. W | به | om. W | انسان (b)

- | | | | |
|------|---|---|---|
| 1.31 | If you want that a man loves you, wash the pocket of your shirt and give him the water to drink—but he should not be aware of it—then he will love you, and honours will be bestowed upon him. | If you want that a man loves you, wash the pocket of your shirt with wine and give it to drink to whomever you desire—but he should not be aware of it—then he will love you. | If you want that a man loves you, wash the pocket of your shirt and give him the water to drink—but he should not be aware of it—then he will love you passionately. |
| 1.32 | If you want that the pigeons multiply in the pigeon house, bury there the head of a man who died a long time ago, then this will make the pigeons multiply. | If you have a pigeon house and you want that the birds multiply and increase in it, then bury there the skull of a man who died long ago. | If you want to gather pigeons in a pigeon house, take the head of a man who died a long time ago, bury it in this pigeon house, then the pigeons will gather there from every direction. |
| 1.33 | Take the milk of an Abyssinian woman, mix it with lily oil and sarcocolla, make it inhale to a man suffering from facial paralysis, then he will recover, with the permission of God, may He be exalted. | Against paralysis and facial paralysis: take the penis of a man, make it inhale with the milk of an Abyssinian woman; give it with some lily oil, whipped until it is well mixed, then let the man inhale one carat of it, or two grains for a child. | Milk of an Abyssinian girl: if it is mixed with some lily oil and inhaled by a man suffering from paralysis and facial paralysis, this will heal him; the correct amount for inhalation is one carat for a grown man, and one grain for a child; and if it is mixed with a few ounces of white sarcocolla and applied in drops in the inflamed eye, then this will cure it. |
| 1.34 | <i>om.</i> | Also mixed with a few ounces of hellebore and roots—in the sufficient amount, one part of each oneground and mixed with the milk, with the addition of some lily oil in drops and inhaled, then it will be useful, God willing. | <i>om.</i> |
| 1.35 | Against an upset stomach: if the stomach of an animal is upset, take the bone of a dead man, pound it into a fine powder, liquefy it with warm water and give it to that beast to drink, then this will recover, with the permission of God, may He be exalted. | For the pain of a molar: if the bone of a dead man is taken and passed over the aching tooth, then the pain will cease. | <i>om.</i> |

- 1.36 Against an upset stomach, again: Mediterranean moon carrot, pounded into a fine powder, mixed with the urine of a baby and given to drink to the animal, then this will recover, with the permission of God, may He be exalted.
- Against the colic of an animal: if a handful of Mediterranean moon carrot is taken, ground into a fine powder, mixed with the urine of a child and given to the animal, then it will recover.
- If the Mediterranean moon carrot is taken, ground into a fine powder, liquefied with the urine of children who have not reached puberty, and given to the animal suffering from an upset stomach with oil to drink, then this animal will instantly recover.
- 1.37 If you want to be the only one who can approach a woman, in the moment in which it is cut, take her hair, burn it and grind it, then apply this on the outer opening of the urethra at the moment of coitus, then nobody but you will approach her.
- If you want to be the only one who can approach a woman, in the moment in which it is cut, take the hair that falls from her head, burn it, pound it finely, and place it on top of the outer opening of your urethra and have sexual intercourse with her.
- If you want to make it so that only you can approach a woman, take the extremities of the hair, burn it until they become ash, place it on top of the outer opening of urethra at the moment of coitus, then nobody but you will be able to touch her, and this is amazing.
- 1.38 If one part of human semen and one part of lily oil are taken, melted and a man suffering from facial paralysis inhales it—the same quantity for three days—then he will recover, with the permission of God, may He be exalted.
- Against facial paralysis: if one part of human semen and one part of lily oil are taken, mixed and inhaled on an empty stomach for three days, then this will cure it.
- If one part of human semen and one part of lily [oil] are taken, a man suffering from facial paralysis inhales it—the same amount for three days—then he will recover.
- 1.39 Dried human excrement: if it is taken, ground, mixed with rock salt and a bit of colocynth, applied on the eye of a beast affected by the glaucoma, then this will disappear; it is also useful against the inflammation that causes lachrymation in the eyes of the beasts.
- Against the whiteness in the eye of an animal: if the dry excrement of a man is taken, burnt, ground into a fine powder, mixed with a bit of rock salt and musk, and applied on the eye of an animal, then this will make the glaucoma disappear.
- If one part of human semen and one part of lily [oil] are taken, a man suffering from facial paralysis inhales it—the same quantity for three days—then he will recover.

1.40	om.	om.	بصاق الانسان اذا طلى به التأليل على الريق ابرأها وقلعها وكذا دم التيس
1.41	يؤخذ منى الرجل وهو حار يطلي به البرص فيزول باذن الله تعالى	وللبرص يطلي موضعه بالمنى الحار فانه يذهب باذن الله تعالى	منى الانسان اذا أخذ وهو حار وطلّى به برص غيره ابرأه
1.42	بول صبي لم يبلغ الحلم او صغير فيسحق على النار ودهن به العين الوارمة المحمر لوجعه فتسكن باذن الله تعالى	بول الصبيان الذين لم يبلغوا الحلم يسخن على النار ويؤخذ سفنجة فيغمس فيه ويكمد به العين الوارمة من الرمذ والحمرة فيبرأ ويسكن باذن الله	بول الصبي قبل البلوغ اذا جعل في اناء وحمى على النار وأخذت صوفة وغمست فيه وطلّى بها العين التي بها ورم احمر برأت بقدرة الله تعالى
1.43	قال بعض الحكماء بول الصبي فجمعه في وعاء نحاس وغلاه على النار حتى ينعقد ثم جفف واخلط معه ملح وزعفران وجعله في بوندقه ثم اوقد عليه فانه الرصاص ثم يأخذه ويحله بالماء ويخلط معه شيئا من مسك ويحتكل به صاحب البياض في العين فيجلبوه باذن الله تعالى وكان المتقدمين يسمونه الجوهر النفيس وهذا اعلى ما يكون	وقال بعض الحكماء يؤخذ بول الصبي ويجمع في قدر نحاس ويطبخ حتى ينعقد ثم تركه الى ان يجف ثم يسحق ويخلط ملحاً ويعجن بالماء الزعفران ويتركه في بوظقة من ايلي واوقد عليه بالجمر حتى يدور فاذا داب مثل الفضة وسبكه حله بالماء واخلط معه شيء من مسك وانحل به البياض العتيق والحديث يقلعه ان شاء الله تعالى وكان القدماء يسمونه لجودته ونفعه الجوهر الذي لا ثمن له	اذا أخذت شيئاً من ابوال الصبيان وجعلت في قدر نحاس وطبخته ينقد فاذا ننقد جففه واخلط به ملح الطعام واسحقه بالماء الزعفران واجعله في بوندقة واوقد عليه فلانة يذوب كما تذوب الفضة فاجعله بسبيكة وحكه على المسن بالماء والمسك واكمل به العين التي عليها البياض فانها تبرأ وتقلع البياض وهو مجرب والحكماء يسمون الجوهر النفيس الذي لا قيمت له

C وكذلك يفعل دم التيس [وكذا دم التيس] C موضع التواكيل ايما [التأليل] L التواليل [التأليل] (c) 1.40:

B فيزول [ذهب عنه] B اذا طلى [يطلي به] (a) 1.41:

G واذا طلى البرص بالمنى الحار ذهب [وللبرص... فانه يذهب] W فيذهب [فانه يذهب] (b) In T, G, and W this recipe is after 1.38

(c) om. C

B تسكن [فتسكن] B يدهن [ودهن] B يسحق [فيسحق] B الصبي الذي لم يبلغ [صبي لم يبلغ] (a) 1.42:

بول صبي لم يبلغ الحلم او صغير فيسحق [بول الصبيان... ويسكن] om. W [فيبرأ] W بها [به] W فتغمس [فيغمس] W يسحق [يسخن] W يبلغ [يلغوا] (b) G على النار ودهن به العين الوارمة المحمر لوجعه فتسكن باذن الله تعالى

C برأها [برأت] (c)

B فتأخذه [يأخذه] add. B وزعفرانا واعقده بعد ذلك [وزعفران] om. B [حتى ينعقد ثم جفف] B وحطّه [فجمعه] om. B [قال بعض الحكماء] (a) 1.43:

يؤخذ حليه تدق وتعجن بالماء وتلطخ به ثدى المرأة فان لبنها ينقطع، In B another recipe is added, to stop the flow of milk, B فيجليه [فيجلبوه] وحكى بعض العلماء في بعض كتب الصنعة انه أخذ بول الصبيان في قدر نحاس ويطبخه حتى انعقد ثم قلاه فلما [وقال بعض الحكماء... يقلعه] (b) جف سحقه واخلط معه ملحاً وعجنه بالماء الزعفران في بؤدقة طين من بئر ايلي ثم وقد عليه بالجمر فداب كما يدوب الفضة ثم يسكنه وكان يحله بول الصبيان في قدر نحاس ويطبخ حتى W بالماء ويخلط معه شيئاً من مسك ويكحل به البياض الجديد والعتيق من غير اداء للعين ويلقط الحمرة والورم ينعقد فاذا جف سحقه مع شيء من ملح وعجنه بالماء الزعفران وصبره في تونقة من طين ايلي ثم يوقد عليه بالجمر فانه يدور كما تدور الفضة ثم يسكنه الجوهر [لجودته ونفعه] om. W [وكان القدماء] G لحاله ويخلط معه شيء من مسك واكتحل به البياض العتيق والحديث فيقلعه من غير اذي للعين om. W [الذي] W الدوائى

البياض [البياض] C الذي [التي] om. C [عليه فلانة] C وجعل [واجعله] C وسحق [واسحقه] C [ينقد] om. C [وجعلت] om. C [اذا أخذت شيئاً من] (c) C وهو الذي يسموه الحكماء الجوار النفيس [والحكماء... لا قيمت له] C قلع البياض وابرأها [فانها تبرأ وتقلع البياض وهو مجرب] C من الجدرى

1.40	<i>om.</i>	<i>om.</i>	Man saliva: if it is rubbed on the warts, then this will cure and erase them; the blood of the billy goat has the same effect.
1.41	Human semen: if it is taken when it is warm, and rubbed on a leprous part, then the leprosy will disappear, with the permission of God, may He be exalted.	Against the leprosy: the part affected by it has to be rubbed with warm semen, and then it will disappear, with the permission of God, may He be exalted.	Human semen: if it is taken while it is warm and rubbed on a leprous part, then this will change its colour and will cure it.
1.42	Urine of a boy who has not yet reached puberty, or of a baby: if it is ground on the fire and rubbed on a swollen eye against the pain, then this will calm it, with the permission of God, may He be exalted.	Urine of a boy who has not reached puberty: if it is warmed on the fire, then a sponge is taken, soaked in it, and applied as a hot compress on a swollen eye due to ophtalmia and inflammation, then this will heal and the pain will be calmed, with the permission of God.	Urine of a boy before puberty: if it is put in a vessel, heated on the fire, then a woollen cloth is taken and soaked in it, then the eye affected by the red swelling should be rubbed with it, then this will heal it by the power of God, may He be exalted.
1.43	Some wise man said that child urine should be collected in a vessel, boiled on the fire until it thickens, then it should be dried and mixed with salt and saffron and made into pills, then set it on fire, and this is lead; then one of them should be taken, dissolved in water, mixed with a bit of musk and rubbed on the eyes of a man suffering from glaucoma, then the eye will be cleared up. The ancient man used to call it 'the precious substance'.	Some wise men said: take the urine of some boys in a copper cooking pot, cook it until it thickens; then leave it until it dries, pound and mix it with some salt and knead it with saffron water; leave it in a melting pot, kindle the embers under it until it moves in circles; when it has a circular movement like silver when is melted, dilute it with water, and mix it with a bit of musk; it can be used to dissolve and remove both the chronic and the recent glaucoma, God the Highest willing. The ancient men used to call it 'the priceless substance'.	Take the urine of some boys, put it in a copper cooking pot, cook it until it thickens; once it has thickened, dry it, mix it with cooking salt, pound it with saffron water, make it into pills and place it on fire, it will liquefy as the silver does, then give it the shape of a bar and rub it on an old man with water and musk, and rub it on an eye affected by glaucoma, then this will heal it and remove it: this has been tried out. The wise men call this 'the precious substance that has no equal'.

- 1.44 يؤخذ لبن جارية يذاب فيه شيء من زعفران يبسير من لعاب السفرجل ويقطر في العين يسكن الوجع والضربان ويزيل البثرة وللرمل والبثر في العين يؤخذ لبن جارية ويضاف اليه شيء من زعفران وحب السفرجل ويفتر قليلا ويقطر في العين فيسكن الوجع والضربان باذن الله تعالى والرمد العتيق فانه يبرأ باذن الله تعالى
- 1.45 *om.* علاج يمنع ثدى الجوارى والابكار ان يكبر يؤخذ اول دم يخرج من الجارية البكر اذا حاضت فيمسح به حلمتي الصبية فان ثديها لا يكبران
- 1.46 *om.* *om.* وان مسح جبهة كبش في شحم تمساح لم يقدر ينطحن كبش كلب البحر
- 1.47 *om.* *om.* اذا اكتحل احد بمرارته اذهب بياض العين
- 1.48 *om.* *om.* واسنانه من جانب الايمن يقوي الجماع
- 1.49 *om.* *om.* وكل عين تنفع الم العين
- 1.50 *om.* لضربان في العين يؤخذ دم حائض طري يلطخ به العين من خارجها فيسكن الضربان دم الحيض وهو حار طرى اذا الطحت به العين ازال ما بها من الحمر والورم

1.44: (a) *om.* B(b) *om.* W G | [ويضاف] G | [يفتر قليلا] *om.* W | [يفسكن] G | In T an incantation is added, against the inflammation of the eye: العين

رقية للرمم الم تراء الى ربك كيف مذ الظل ولو شاء لجعله ساكنا الى اخر الآية ثم تقول اسكن ايها الوجع كما سكن عرش الرحمن: لبن جارية اذا اذيب فيه شيء من زعفران مع شيء من يسير الزعفران بل من لعاب السفرجل وقطر في العين سكن يؤخذ لبن...البثرة L C البثرة (c)

C الوجع والضربان وازال البثرة

1.45: (b) *om.* W | [فان ثديها لا يكبر] *om.* G | [ان يكبر] *om.* W | [والابكار] *om.* G | [علاج يمنع]

C دم حيضة الجارية اول حيضها اذا لطخ به العين زار ما بها من الحمرة والورم قائدة السمن (اذا اردت...ينكسر)

1.46: (c) *om.* C1.47: (c) *om.* C1.48: (c) *om.* C1.49: (c) *om.* C1.50: (b) *om.* W | جميع ذلك [الضربان] G | يسكن [يفسكن] W G | من خارج [من خارجها] G | تلطخ W | فيلطيح W G | العين [في العين] (c) *om.* C

1.44	If the milk of a black woman is taken, mixed with a bit of saffron and a grain of quince, heated on a fire and applied in drops to the eye affected by pustules and chronic inflammation, then these will heal, with the permission of God, may He be exalted.	Against the inflammation and the pustules in the eye: if the milk of a maiden is taken, mixed with some saffron and a grain of quince, warmed a little and applied in drops in the eye, then the pain and the pangs will cease.	Milk of a maiden: if it is taken, mixed with a bit of saffron and of the mucilage from a quince, applied in drops in the eye, then the pain and the pangs will cease, and the pustules will disappear.
1.45	<i>om.</i>	The remedy which prevents the breasts of the girls and of the virgins from growing: if the first menstrual blood of a virgin is taken when it appears for the first time, rubbed on the breasts of a young girl, then they will not grow.	If you want that the breasts of a woman remain as they are without being damaged, take the blood from the first menstruation of a girl, rub it on the top of the breasts, and then they will not be ruined.
1.46	<i>om.</i>	<i>om.</i>	If the forehead of the ram is wiped with crocodile fat, then the ram will not be able to fight with the shark.
1.47	<i>om.</i>	<i>om.</i>	If the eyes of a man are rubbed with its gall, then the glaucoma will disappear.
1.48	<i>om.</i>	<i>om.</i>	His teeth from the right side give power to the coitus.
1.49	<i>om.</i>	<i>om.</i>	Every eye is useful against the pain of the eyes.
1.50	<i>om.</i>	Against the pain of the eyes: if some fresh menstrual blood is taken and spattered on the eye from the outside, then the pain will cease.	Menstrual blood: if it is taken while it is warm and fresh, and it is is spattered on the eye, then the irritation and the swelling will subside.

- 1.51 *om.* دواء للتسمن يؤخذ شحم الوز فدقه ويخلط معه بورقا وكمونا كرمانيا ودق القمح ثم يلقم منه دجاجة حتى تسمن فمن أكل من تلك الدجاجة سمن حتى يضيق جلده عليه
- إذا اردت ان تسمن المرأة خذ شحم اوزة انثى واخلىط معها من البورق والكمون الكرماني ودقيق الحلبة ودق ذلك جميعا وبلعه لدجاجة سوداء تسعة ايام متوالية ثم اذبحها واطعمها فكل من أكل من ذلك يسمن سمننا عظيما من ذكر او انثى
- 1.52 يؤخذ حلبة تذاف وتعجن بالماء ويلطخ به ثدى المرأة فان لبنها ينقطع
- لقطع لبن المرأة يؤخذ الحلبة فتدق ويعجن بالماء وتضمّد به الثدي فان اللبن ينقطع
- إذا اردت ان تقطع لبن المرأة خذ شىء من حلبة واسحقها واعجنها بالماء واطل بها ثدى المرأة يسقطع اللبن
- 1.53 إذا اردت ان يدر لبن المرأة فتأخذ حنطة تدق وتذاف بزيت وتأخذ صوفة يكون لونها ازرق وتلق على عود وتغمس في ذلك الزيت والطح بها رأس الثدي فيدر اللبن باذن الله تعالى
- واذا انقطع اللبن ويقعد في الثدي فيؤخذ خنطلا فيدق ويذاف بزيت وتلف صوفة على عود وتكون لون السماء ويلطخ بها رأس الثدي فيدر اللبن
- وان اردت ازداده ودق حنطة واعجنها بالزيت وخذ صوفة زرقاء لفها على عود واغمسها في الزيت واطل بها رأس الثدي يدر اللبن
- 1.54 إذا اردت ان تخرب دار عدوك فخذ عظم ابن ادم فادفنه في داره فانها تخرب يتشت شمله
- om.*
- 1.55 *om.* وان كان اللبن قليلا واحبت ان يكثر لبنها ويزيد فاسقها في كل يوم بزر الحلبة يدر لبنها باذن الله تعالى
- om.*

G ثم أكلها [فمن... عليه] *om.* W | *om.* G | هذه [تلك] G | واطمعه [ثم يلقم] G | الودك W | الورل [الوز] W G | وللتسمن [دواء للتسمن] (b) 1.51: (c) [يسمن سمننا عظيما] C | وكل من لحمها واشرب مرقته [واطعمها] C | سبعة ايام [تسعة ايام] C | ودق الجميع [ودق ذلك جميعا] C | ذلك [تسمن المرأة] (c) C ذكرًا كان [من ذكر] C سمن

1.52: (a) *om.* B

(b) *om.* W | In W another recipe is added, to stop the flow of milk, ولقطع اللبن وعقده في الثدي يؤخذ حنظل مسحوق يدق بزيت تلف الثدي فان اللبن ينقطع, ناعما W | يدق [فتدق] *om.* W | يؤخذ (b) C قطع [تقطع] (c)

1.53: (a) B | وتلق [وتلق] B | صوفة زرقاء [صوفة يكون لونها ازرق] B | وخذ [وتأخذ] B | وضمفها [وتداف] B | دقها ناعما [تدق] B | فخذ [فتأخذ] (a) *om.* B | ذلك B | ولقطع اللبن وعقده في الثدي يؤخذ حنظل مسحوق يدق بزيت تلف الثدي فيؤخذ حنظل مسحوق يدق بزيت تلف الثدي فان اللبن ينقطع... فيدر اللبن (b) ومما يدر اللبن يؤخذ حنظل يدق ويذاف بزيت W | ويلطخ رأس الثدي فيدر اللبن المنعقد وبالله نستعين وعليه نتوكل ونستعين في التوفيق لما عرضناه G | تلف صوفة على عود وتكون الصوفة مثل لون السماء ولطخ رأس الثدي من ذلك فانه يدر اللبن C فانه يدر [يدر] C | صوفة من صوف ازرق [صوفة زرقاء] (c)

1.55: (b) *om.* W | ومما يكثر اللبن ان تسقي المرأة كل يوم بزر الرطبة مدقوق وزن درهم ونصف بشراب [وان كان اللبن... يدر لبنها] *om.* W | (b)

- 1.51 *om.* Remedy for fleshiness: if the fat of a goose is taken, pounded, mixed with natron, cumin and corn flour, then fed to a hen for some days until it gets fat, then the one who eats this hen will become fat to the point that his skin will become too tight for him. If you want that a woman becomes fleshy, take the fat of a female goose, mix it with natron, cumin and fenugreek flour, pound everything together and make a black hen swallow it up—the same quantity for seven days—then slaughter it and feed it to the woman, then everyone—man or woman—who eats this will become extremely plump.
- 1.52 Take some fenugreek, dissolve it and knead it with water, spatter the breasts of the woman with it, and then her milk will stop. To stop [the flow of] milk in a woman: take some fenugreek, grind it into a fine powder, knead it with water and bandage the breasts with it, and then the milk will stop. If you want to stop the milk of a woman, take some fenugreek, grind it, knead it with water and rub it on her breasts, then the milk will stop.
- 1.53 If you want that the milk of a woman flows copiously, take some common wheat, pound it, mix it with oil, take a blue woollen cloth and hang it on a branch and soak it in this oil, spatter it also on the breasts, and then the milk will flow copiously, with the permission of God, may He be exalted. If the flow of milk has stopped and the milk has coagulated in the breasts, some colocynth has to be taken, ground, mixed with oil, wrapped in a woollen cloth around a branch—the wool should have the colour of the sky—and the breasts have to be spattered with this, then the milk will flow copiously. If you want to increase the flow of milk, pound some common wheat, knead it with oil, take a blue woollen cloth and wrap it around a branch, soak it in oil and rub it on top of the breasts, then the milk will flow copiously.
- 1.54 If you want to destroy the house of your enemy, take the bone of a man, bury it in his house, then this home will be destroyed and its parts dismembered. *om.* *om.*
- 1.55 *om.* If there is only little milk and you want to increase it, then give her fenugreek seeds everyday, and the milk will flow copiously, with the permission of God, may He be exalted. *om.*