

*Preface and Methodological Issues***Preface**

A good beginning for a history that stretches over 2,500 years is a glance at the debris still visible in our own time. The disease *phrenitis* is no longer seriously discussed by medical handbooks or taught in faculties of medicine, but traces of the notion are still to be found in the medical consciousness. Consider these two examples of widely available current medical information:

**Phrénite Phrénitis**

**Pneumologie, médecine générale** – N.f. . . . La phrénite est l'inflammation du diaphragme. Syn.: diaphragmatite. Le phrénitis est l'inflammation simultanée du diaphragme et de la plèvre qui entoure le diaphragme (ou plèvre diaphragmatique). Certains neurologues psychiatres 'anciens' parlaient également de phrénitis pour désigner une inflammation du cerveau, non accompagnée de folie.<sup>1</sup>

*Phrenitis* means an inflammation of the brain, or of the meninges of the brain, attended with acute fever and delirium . . . *Phrenitis* is no longer in scientific use. Nowadays meningitis or encephalitis are diagnosed. Relating to *phrenitis*: suffering from frenzy; delirious; mad; frantic; frenetic.<sup>2</sup>

In the online medical dictionary cited in the first quote, *phrenitis* appears to fall under the category of 'pneumology'. It is inflammatory in nature; involves 'the diaphragm' and the 'pleura' of the patient; and in its 'ancient history' was taken to involve the brain, although it did not express itself in

<sup>1</sup> Entry *Phrenitis*, attributed to Georges Dolisi, *Dictionnaire médical en ligne* (<https://www.dictionnaire-medical.net/term/t8341,1,xhtml>). Accessed May 2023 ('*Phrenitis* is the inflammation of the diaphragm. Syn.: *diaphragmatitis*. *Phrenitis* is the simultaneous inflammation of the diaphragm and the pleura surrounding the diaphragm (or diaphragmatic pleura). Some "ancient" psychiatric neurologists also spoke of *phrenitis* to designate inflammation of the brain, not accompanied by madness').

<sup>2</sup> <https://en.wikipedia.org/wiki/Phrenitis>. Accessed May 2023.

madness. In the second text, drawn from Wikipedia, the condition is firmly identified with an inflammation of the brain. These short bits of medical reception, with their own imprecisions and simple misunderstandings, are instructive, since they manage to touch on all the features which, in various forms and combinations, constitute the foundations of this disease throughout its history. They do not, however, appropriately depict any individual stage of the history they represent, and the image of the disease *phrenitis* they offer remains full of contradictions. Where is it seated in the body? What causes it? What is its relationship to madness?

This book aims to reconstruct this history, unpacking the construction of *phrenitis*, tracing its various shifts, and assigning each of the apparently incongruous elements in the definitions quoted above its correct place, as far as possible. These definitions can figuratively be understood as the debris of a lost, larger pathological story, which is all that has reached us.

We can begin by defining *phrenitis* as a disease with mental implications first described in the Greek writings of the Hippocratic corpus (fifth and fourth centuries BCE). It is acute and often deadly, and is characterized by a high fever and a variety of behavioural aspects suggesting a form of derangement. The label '*phrenitis*' survived in Western pathology for twenty-four centuries:<sup>3</sup> it is included in nosological lists, and is discussed and diagnosed as late as the nineteenth century, having undergone a tortuous series of changes, reshapings and elaborations, only to disappear seemingly forever at the turn of the twentieth century.

I discuss *phrenitis* as a 'label'. No one familiar with the history of medicine, and in particular the difficult anthropology of historical psychiatry, can today accept at face value the idea of a 'history' of a disease as ontologically robust as a 'history of metallurgy', for example, might be.<sup>4</sup> Diseases are experiences, constructions and representations long before

<sup>3</sup> In the title of this book, as throughout, I maintain the label 'Western' for 'Western medicine' and 'Western medical tradition', mindful of this being an 'invention' (Cook 2006, 1), and a much less persuasive one when it comes to its supposed Greek and Roman origins ('origins' too being a flawed object of inquiry). This is the fallacy of a quest for precedents in the history of science, which Canguilhem famously called 'the virus of the precursor' (1994, 49–51, quoting Koyré 1973, 72–77). My territory of inquiry changes shape and form through time, with varying geographies (different centres, or different 'hubs "West"', using Jacyna's expression, 2006, 4) and stratifications of all kinds. Still, it finds its narrative culmination in what we today consider 'Western medicine': with Jacyna again (2006, 4) the medicine of 'Northwestern Europe and North America as the regions in which a certain kind of nation-state, with particular social and economic forms, medical organisations, and intellectual culture first generated the widespread view that science in medicine would benefit not only some individuals but all citizens'. My history of *phrenitis* is framed within this composite and complex course of changes and developments, which I understand neutrally, but at whose (self-styled) peak I am necessarily located.

<sup>4</sup> For the concept 'ontological robustness', see Berrios (1996) II.

they become epidemiological or biological data. Freud's use of the now long-dismissed nosological concept and label hysteria, for example, has nothing in common with the Hippocratic gynaecological 'hysterical' complaint.<sup>5</sup> Nor should we think that non-mental disease entities are safer for transhistorical comparison: *typhus* and *tetanus*, for example, are familiar nosological labels to us, but their – merely nominal – continuity with a Greek past does not legitimate any essentialist move.<sup>6</sup>

Three important methodological issues thus pose a challenge to this discussion.

1. First, the distinction if not opposition between mental *health* and mental *illness*. The history and anthropology of medicine have recently been inclined to dismiss this dichotomy and consider the continuum of human health their object instead.<sup>7</sup> This shift in perspective is especially important for a discussion of ancient medical sources, where a sharp opposition between health and illness is missing, and where we even find Galen explicitly rejecting an abstract, fixed concept 'health'.<sup>8</sup> The same is true in the realm of mental pathology, and perhaps even more emphatically so: mental life is observed and assessed with an eye to its nuances and changes, but a fixed, permanent category of mentally ill or disabled individuals is difficult to discover.<sup>9</sup>
2. Second, the opposition between *mental* and *bodily* health and illness. As I have argued in more detail elsewhere, with reference to Hippocratic medicine,<sup>10</sup> historians of ancient medicine generally assume that what prevails in the Graeco-Roman context is the idea of soul and body, of the mental and physiological spheres, as continuous and indissolubly linked – although various articulations of this nexus can be identified.<sup>11</sup> Against this background, an increasingly precise idea of mental or psychological suffering begins to be delineated after the end of the classical era.<sup>12</sup> Even with respect to this

<sup>5</sup> King (1998, 2004); Scull (2009) 12–15 on modern doctors' appeals to ancient authorities for their construction of 'hysteria'.

<sup>6</sup> On this point, cf. Gourevitch (1982). See Dols (1992) 31 on *phrenitis* as disease entity; n. 56 for the meningitic interpretation: 'In modern terminology it may, perhaps, have included delirium as a consequence of infections of the central nervous system such as encephalitis, meningitis, cerebral malaria, and psychoses that today might be subsumed under the heading of schizophrenia and are distinct from manic-depressive psychoses.'

<sup>7</sup> See Eghigian (2011), Dowbiggin (2011) on approaches to mental health; Wassermann and Hinote (2011), Armstrong (1995) on medical care more generally; Keil *et al.* (2016).

<sup>8</sup> See the discussion in Lewis *et al.* (2016) 29–34; Singer (2023), preface. <sup>9</sup> See Thumiger (2016).

<sup>10</sup> Thumiger (2017); see also Singer (1992), Gundert (2000).

<sup>11</sup> See van der Eijk (2015), Singer (2017) on Galen's psychological writings, and Nutton (2013).

<sup>12</sup> See Thumiger and Singer (2018a).

period, however, we are never safe from the fallacy of anachronism when we trace parallels between ancient psychiatric concepts and our own, which are informed by previously unknown and radically different kinds of dualism. The concept of *phrenitis* was accordingly born within a firmly materialistic environment, and its strong physiological roots are of great importance in all stages of its history.

3. Third, the recognition of *disease entities*, the construction of a disease taxonomy. In the field of mental pathology in particular, although disorders and diseases we understand as ‘mental’ were already recognized in the Hippocratic texts, no reliable list of ‘psychiatric entities’ *qua* psychiatric can be found. The label ‘disease of the soul’ was not used in medical texts, and the approach to disturbances of the mental sphere or the physiology of the body was, as noted above, similarly materialistic. As anticipated, *phrenitis* is perhaps the best candidate for the first psychiatric entity of antiquity – a disease in which derangement was constitutive from the beginning. But the question remains open: when and why did the ancients begin to engage with the idea of ‘disease entity’ (a pathological experience characterized by a recognizable pattern of onset, symptomatology, course and outcome) in the mental sphere? In other words: when did this concept emerge not only as a label, but as a mark of an awareness of a conceptualization of ‘mental nosology’ with all its implications and historical significance? The emergence of a classificatory tendency is a shaping aspect of medicine at the beginning of our era: this is evident in the importance Galen attributes to the study of nosological semiotics and definitions, but also in the work of Aulus Cornelius Celsus (first century CE), in nosological treatises of the imperial era such as the one known as *Anonymus Parisinus* (first–second centuries CE), and in the collections on acute and chronic diseases composed by Aretaeus, Soranus and Caelius Aurelianus, or the monographs on individual diseases produced by Rufus (on *melancholy*, and on *satyriasis* and *gonorrhoea*).<sup>13</sup>

The unstable nature of disease concepts is not only evident to the modern scholarly gaze. A sophisticated relevant discussion is preserved by Plutarch (first–second centuries CE) in his *Quaestiones convivales*, where the philosopher addresses a key question, ‘If it is possible that *new diseases* should arise and why’ (*Quaestiones convivales*, 8.9 = 731a–732b):<sup>14</sup>

<sup>13</sup> Cf. the discussion in Thumiger and Singer (2018a), Singer (2020a).

<sup>14</sup> On the topic of ‘new diseases’ in ancient medicine, see Harris (2022).

Philo the physician stoutly affirmed that the disease we call *elephantiasis* was a disease *recognized only a bit earlier* (*ou pro pollou pany chronou gnōrimon*); since none of the ancient physicians speak a word about it, though they often enlarge upon small, frivolous and obscure trifles. And I, to confirm it, cited Athenodorus the philosopher, who in his first book of *Epidemic Diseases* says that not only that disease, but also the *hydrophoba* or water-dread (occasioned by the bite of a mad dog), were first *discovered* in the time of Asclepiades. At this the whole company were amazed, thinking it very strange that new diseases should first take origin and arise at a given time in nature, and no less strange that these occurrences (*symptōmata*) should *not be noticed* (*to lathein*) *for such a long time*. Yet most of them inclined to this last opinion, as being most agreeable to man, not in the least *daring to imagine that Nature created novelties* (*tēn physin . . . philokainon einai*), or would in the body of man, as in a city, create new disturbances and tumults. For diseases and conditions follow their own wonted, familiar path (*nosēmata kai pathē koinēn tina kai patrion hodon badizein*). And Diogenianus added that *even the passions and diseases of the mind go on along the same old road they formerly did*; and yet the *viciousness of our inclination is exceedingly prone to variety, and our mind is mistress of itself, and can, if it pleases, easily change and alter*. Yet all her inordinate motions have some sort of order, and the soul has bounds to her passions, as the sea to her overflowing. And *there is no sort of vice now among us which was not practised by the ancients*. There are a thousand differences of appetites (*pollai . . . epithymiōn diaphorai*) and various motions and types of fear (*myria . . . kinēmata phobou kai schēmata*); the forms of grief and pleasure are impossible to number,

Yet are not they of late or now produced,

And none can tell from whence they first arose.

*How then should the body be subject to new diseases, since it has not, like the soul, the principle of its own alteration in itself* (*idian . . . hōsper hē psychē kinēseōs archēn oikothēn ouk echonti*), but by common causes is joined to Nature, and receives a temperament (*krasin*) whose infinite variety of alterations *is confined to certain bounds, like a ship rolling and tossing in a circle about its anchor*? Now there can be no disease without some cause, it being against the laws of Nature that anything should lack a cause. Now it will be *very hard to find a new cause*, unless we fancy that some strange air, water or food, never tasted by the ancients, should descend to us out of other worlds or intermundane spaces. For we contract diseases from those very things which preserve our life; since there are no peculiar seeds of diseases, but the disagreement of their juices with our bodies, or our excess in using them, disturbs nature. These disturbances have still the very same differences, although now and then called by new names.<sup>15</sup> For names depend on

<sup>15</sup> Awareness of the names of diseases as a topic is found already in the Hippocratics: see *Progn.* 25,5 (50 Jouanna = 2.190 L.): 'Do not regret the omission from my account of the name of any disease. For it is by the same symptoms in all cases that you will know the diseases that come to a crisis at the times

custom, but the passions on Nature; and these being constant and those variable, this mistake has arisen. . . . *The intensification or increase of a thing makes it more or greater, but does not trespass on the essence of that thing. Thus elephantiasis, being an intense scabbiness, is not a new kind; nor is water-dread distinguished from other melancholic and stomachic affections except by degree.* And I wonder that we did not observe that Homer was acquainted with this disease, for it is evident that he calls a dog rabid from the very same rage with which, when men are possessed, they are said to be mad (my italics).

For Philo, the ancients' silence regarding a disease was an argument for its absence from their world *tout court*. The victorious objection to this is that diseases cannot suddenly come into existence: nature does not capriciously create new things. New pathological causes cannot emerge, since there are key environmental and bodily invariables in the human condition, so that diseases always gravitate around the same points 'like a ship rolling and tossing in a circle about its anchor'. The same diseases thus always existed. Especially in the realm of mental – in Plutarch, moral – life, the same old vices always afflict humanity. The only variation, it is suggested, is one of degree: previously mild diseases can become more intense, and vice versa, but their character remains substantially the same across time.

In this long passage, Plutarch touches all the central nodes for any discussion of nosological taxonomy: the dichotomy between labelling and entity, meaning the difference between the actual *existence* of an object in nature – a disease – and its conceptualization and recognition; a notion of Nature and an unalterable human biological base; and the opposition between kind and degree.<sup>16</sup> These three points show great sophistication, but are also perhaps a reaction to the abundance of disease labels that seem to flourish in the first centuries of our era, as is apparent from a quick glance at the works of the authors listed above. This is one of the most fundamental changes in medicine at the turn of the age and has important consequences for a 'history of a disease' such as this one. Does *phrenitis*, as Plutarch's Diogenianus maintains, exist as a solid fact underlying all its pathological descriptions and conceptualizations? May we practise the essentialist approach defended by Plutarch on the problematic Hippocratic pathological descriptions, for example? Modern readers of ancient texts have indulged in various exercises of retrospective diagnosis,

I have stated'; *Reg. Ac.* 3 (36–37 Jouanna = 2.224–28 L.) on the nonsense of multiplying disease labels to suit the individuality of all possible cases.

<sup>16</sup> For an exemplary recent discussion of these same problems, and an assessment for the history of psychiatry focusing on the case of the concept 'depression', see Sadowsky (2021), esp. 1–22 and 160–67.

offering parallels with malaria, typhoid fever, meningitis and encephalitis.<sup>17</sup> To what extent can we relate *phrenitis* to a medical reality, either in the history of medicine or in our own biological understanding?

### Why Look at *phrenitis*?

The case of *phrenitis* is a special one, given the challenges mentioned above. It is in fact the only ancient disease of the mental sphere (and one of the very ancient few diseases generally) that can be discussed in anything approaching a continuous manner. This is true for various reasons, which will be illustrated in the coming chapters, but which we can begin sketching here.

First, *phrenitis* has a strong connotation in its very name, being explicitly associated with the Greek root *phren-* (φρεν-), which points to the mental sphere. Notwithstanding the technical nature of the term in *-itis*, its meaning and implications must have been obvious to Greek ears, as anyone who knows any Greek today can guess. *Phrēn* (φρήν) and *phrenes* (φρένες) are among the oldest, most traditional terms in Greek psychology, variously used to indicate mental life from as early as our evidence goes, in Homer and the lyric poets. The verb *phroneō* (and cognates) is also commonly used to describe thinking and mental performance, and other cognate terms feed into the same semantic group;<sup>18</sup> this is thus an immediately understandable name and sphere. The speaking name of the disease suggests (a) a concrete localization (the diaphragm and the chest) or an abstract one ('the mind', as well as the subject's character and self); (b) a function (the 'mental functions'); (c) an activity ('thinking'). The disease thus displays 'psychiatric' credentials from the very start.

Second, as already noted, *phrenitis* is eminently a technical term. This has to do not only with the name's classic nosological formation (in *-itis/-ιτις*), but also with the minimal employment of it in non-medical literature for a long part of its early history. Until the beginning of our era, *phrenitis*

<sup>17</sup> See McDonald (2009) 5–8 on the same point, and Lane Fox (2020) 236–52 for a recent discussion of retrospective diagnosis and ancient medicine. In the survey of the history of retrospective diagnoses of *phrenitis* in the Hippocratic *Epidemics* in Graumann (2000) 259, for instance, meningitis is proposed by various medical readers (Souques 1937, Corvisier 1985) for the *phrenitic* case at *Epid.* 7, 112, Littré (1840: 2.571), Sémelaigne (1869) 16, and Jones (1909) 68 referred instead to malaria; cf. Stok (1996) 2325–26. Grmek (1983/1991) 359 n. 31 is of course right when he rejects Joly's translation of φρενίτις with 'encephalitis' as an 'anachronism'; see also Pigeaud (1981/2006) 72–73. Chapters 9 and 10 return to and directly address the final stages in the life of *phrenitis* as a medically recognized disease and pathological experience in the modern and contemporary worlds.

<sup>18</sup> See Appendix 2 for a survey.

remained a scientific and philosophical notion and failed to offer material for comic caricature, tragic hyperbole or transfer into metaphor. As a consequence, it was largely protected from the ‘folk’ appropriation of medical categories that makes the study of *mania* or *melancholia*, for instance, so tortuous and scattered despite apparent elements of persistence and the considerable popularity of the two labels.

Third, right from the start – unlike any other mental pathology in ancient medicine – *phrenitis* appears remarkably codified, firmly attached to a strong physiological indicator that made it easily identifiable and even functioned in some authors as a differential factor: acute fever,<sup>19</sup> accompanied by a firm but changing localization. The localization is firm in the sense that most discussions place the locus of the disease at the centre,<sup>20</sup> but changing, since the locus oscillates from chest to head, mimicking the key dialectic in the history of Western biology between cardiocentrism and encephalocentrism.

Finally, *phrenitis* somehow establishes itself in the Graeco-Roman medical tradition as a core example of insanity, as its best nosological *exemplum*, therapeutic discussions of which can *inter alia* be seen as instructive on a general level: it is paradigmatic both as mental disease and as disease entity. As we shall see, it is significant that two of the best discussions of the disease, by Celsus and Caelius Aurelianus, place it at the beginning and allocate their most extended efforts to it, and also that Galen returns again and again to *phrenitis* when he discusses what a ‘disease’ is, what the safe indicators and symptoms for the diagnosis of one are, and so forth. These factors allowed *phrenitis* to survive with recognizable, consistent features throughout the history of ancient medicine and to remain relevant to modern medical thinking.<sup>21</sup>

Looking back at the four points made above brings out a major contrast inherent in the conception of *phrenitis*. On the one hand, there is an explicit appeal to traditional vocabulary, and on the other a strong element of novelty. Despite its conventionally popular, vernacular name, this is a ‘new’ disease concept, whose firm physiological

<sup>19</sup> See Pigeaud (1987/2010) 34–35; Drabkin (1955) 226.

<sup>20</sup> See Chapter 3 for the counter-tendency to this.

<sup>21</sup> The only comparable case of the nosological continuity of a disease related to the mind is epilepsy, which also exhibits a strong physiology and a well-defined symptomatology. Unlike *phrenitis*, however, epilepsy is narrowly limited to a clearly defined category of patients, and is chronic and lifelong.



hardware avoids continuity with archaic and classical poetic models of mental life with their corporeal as well as immaterial components. These tensions deserve more attention than they have received. Indeed, I believe that this combination may be key to making sense of the immediate, highly technical presence of *phrenitis* in medical literature and of the cultural viability the concept enjoyed, guaranteeing its relative consistency across the ages (in contrast to the shifting trajectories taken by *mania* or *melancholia* and their literary appeal).<sup>22</sup>

This book explores the history of *phrenitis* in part chronologically, from the Hippocratics to the end of the late-antique era (Chapters 2–5), when the foundational discussions of the disease were produced. It then looks, if more briefly, at the post-antique history of the concept, including sources in Latin and Semitic languages, and traces the survival of *phrenitis* in medieval medicine (Chapter 7). Along with establishing this medical landscape, the book offers an in-depth exploration of the parallel history of *phrenitis* and the ‘phrenitic’ as a human type from imperial literature to early modernity (Chapters 6, 8). Finally, it considers the revitalization of the notion within the context of advances in anatomical medicine from the beginning of the fifteenth century up to the final mentions of it in the work of eminent nineteenth-century psychiatrists and clinical practitioners (Chapter 9), and then until its final evaporation and dispersion into a number of pathological, psychiatric and lay concepts in modern times (Chapter 10). The archaeology of the disease is my particular subject and focus, although its modern and premodern afterlife confirm these observations and locate *phrenitis* as an exemplary case for historians of psychiatry.

But this study does not trace a chronological trajectory alone. The history of medical concepts is not a linear sequence but a three-dimensional figure, whose various socio-cultural layers greatly complicate the picture. There is a ‘*phrenitis*’ of scientific narrative, the technical term used by professionals and understood by intellectual elites. But there is also a concept received (or *not* received) in lay contexts and hyperbolically or allegorically employed in non-technical genres beginning at a certain point in its history (Chapters 6, 8). All this belongs to the story of *phrenitis* as well.

<sup>22</sup> The formula of ‘anchoring innovation’ partly indicates this mechanism, although I find the image misleading in some ways with reference to ancient science. See Thumiger (2021a) for discussion.

## The Traditional Background

*The Name, the Body Part, the Damaged Function: phren-itis* (φρεν-ῖτις)

I begin with the name. As already noted, mental terms with the root \**phrn* form a traditional cluster in Greek.<sup>23</sup> These include the nouns φρήν-φρένες (*phrēn/phrenes*), the verbs *phroneō* and cognates (φρονέω, σωφρονέω, ἄφρονέω, παραφρονέω, ἄλλοφρονέω); the abstract nouns *sōphrosynē*, *paraphrosynē*, *aphrosynē* and *paraphronēsis* (σωφροσύνη, παραφροσύνη, ἀφροσύνη and παραφρόνησις); and the adjectives *phronimos*, *ekphrōn*, *aphrōn* and *emphrōn* (φρόνιμος, ἔκφρων, ἄφρων and ἔμφρων).<sup>24</sup> The following points can be made regarding the linguistics of the term *phrenitis*:

- a. Vis-à-vis the semantics of *-itis* (-ῖτις) names, especially disease names in Greek, it is obvious and uncontroversial that *phrenitis* is a denominative from *phrēn/phrenes*. This leaves a key question open, given the double meaning of *phrēn/phrenes*: should we interpret this as ‘a disease localized in/of the *phrēn/phrenes*’ or as ‘a disease which affects the mental sphere (*phrēn/phrenes*)’?
- b. Anatomically speaking, what are the *phrēn/phrenes*, and where are they located? What do they *do*?
- c. Why is *phrenitis* (or the adjective *phrenitikos* and the verbs *phrenetiaō*, *phrenetizō*) almost never found in our evidence outside technical literature until the beginning of our era, unlike other terminology of mental disease (not only the common term *mania*, but also the more technical *melancholia* and their cognates, for example<sup>25</sup>)?

A search in Kretschmer and Locker’s *Rückläufiges Wörterbuch*<sup>26</sup> for words ending with the suffix *-itis* suggests that the majority of these nouns, especially

<sup>23</sup> As for the etymology, Chantraine mentions a link with *phrazō* and cognates (‘to cause to understand, to explain’). Sullivan (1988b) 21 declares it ‘uncertain’ and suggests a possible association with the idea of ‘surrounding’ and ‘enclosing’ (*phrassō*, rejected by Chantraine), or alternatively with ‘to quiver, to shudder’ or ‘to care, to worry’. Stefanelli (2010) emphasizes a concrete, physiological meaning and offers a radical revision, attractively associating *-phren* with a root \**bbren*, ‘to burn’: the hot principle of life, ‘il focolare del corpo’, sheltered in the chest. See Mastrelli (1991) for a more detailed survey, and Balles (2002), esp. 5–12, for alternatives.

<sup>24</sup> See Stefanelli (2010) 54–74 for more compounds and morphological discussion. She mentions *aphrōn*, *aphrainō*, *euphrōn*, *euphrainō*, *polyphrōn*, *chaliphrōn*, *aesiphrōn* and *meliphrōn*; see Sullivan (1988b) 276–82 for an even longer list. This evidence strongly reinforces the point that the root would be immediately suggestive to Greek speakers. See Thumiger (2013) 73–75, 86–88 for the medical use of cognate terms, with a list and discussion, and the shorter survey in Appendix 2.

<sup>25</sup> See Thumiger (2013) 65–73. <sup>26</sup> Kretschmer and Locker (1977).

the technical ones, are formed from nouns; the most obvious denominative genesis is perhaps that of diseases, following the pattern ‘disease of the kidney’ = *nephritis* from *nephros*, or *pleuritis* from *pleura*, and so forth.<sup>27</sup> *Phrenitis* can thus reasonably be taken to be denominative;<sup>28</sup> the Hippocratic texts provide analogies.<sup>29</sup> Morphological discussion of the nature of the compound is not mere pedantry: the denominative origin of the name invites us to think first that localization is core to the original definition of the disease, and second that *phrēn/phrenes* are here anatomical terms (by analogy to similar disease names, but also in consideration of the locative nuance of the psychological term *phrēn* elsewhere in non-medical literature, even where the use is abstract and mental<sup>30</sup>). In classical medicine, in fact, no disease name in *-itis* is constructed to describe a disorder that affects a faculty (e.g. ‘disturbance of vision’ or ‘sleep disorder’). Most important, no disease is called after the alteration of a psychic aspect considered in the abstract: there is no ‘psychiatric’ category as such. In sum, the etymology suggests that, at the beginning of its history, this mental disorder is strongly localized in the body: in the Hippocratics, it is precisely ‘the disease of the *phrēn/phrenes*’.<sup>31</sup>

### *What and Where Are the phrēn/phrenes?*

But this is only the beginning of the problem, not its solution. What are the *phrēn/phrenes*, in fact? Much has been written on the topic, and this is not the place for more than a brief survey of what is known, particularly since conclusions remain ambiguous in many respects.<sup>32</sup>

<sup>27</sup> See overview in Chantraine (1933) 339–40; Kudlien (1967) 70, defining the disease as ‘actually inflammation of the diaphragm [a mental disorder]’ (‘eigentlich “Zwerchfellentzündung” [eine Geisteskrankheit]’).

<sup>28</sup> There is also ambiguity in the accentuation, with changes from one source to the other: Kretschmer (1977) *ad loc.* shows that trisyllabic nouns in the suffix *-itis* are usually properispomenon (accented with a circumflex on the penult) when possible. I therefore adopt the form φρενίτις (although a handful of paroxytone occurrences (φρενίτις) are attributed to late-antique and Byzantine medical texts).

<sup>29</sup> See the list of diseases (among which *phrenitis* features) in the Loeb Hippocrates vol. v1, compiled by Potter (1988) 333–39: these include *arthritis* (‘disease of the *arthra*’, the articulations), *hepatitis* (‘disease of the *hēpar*’, the liver), *nephritis* (‘disease of the *nephroi*’, the kidneys), *pleuritis* (‘disease of the *pleura*’, ribs or side), and *splēnitis* (‘disease of the *splēn*’, spleen).

<sup>30</sup> See Sullivan (1979); Thumiger (2007) 72–73.

<sup>31</sup> Etymology has its limits as an instrument in cultural studies. It should be awarded greater weight, however, in our case than in others, since we are here effectively speaking of the creation of a technical vocabulary by a group of learned physicians. The first occurrences of *phrenitis* are found in the Hippocratic texts.

<sup>32</sup> See Thumiger (2013) on medicine, (2007) 60–86 on literary sources; Onians (1951) 13, 23–30, 39–40; Sullivan (1988b) on Homer; Padel (1992) 20–23, 67–68, (1995) 4–5, 25–28, 104–05, 169; Clarke (1999) 74–79, 83–86, 106–10; Salazar (2000) 113–14; Stefanelli (2010) 19–24, 44–51.

*Where?*

Both the singular and the plural forms of the word indicate a mental event or function with a bodily localization or association. Despite variations in details – always important, as discussed below – we can broadly say that the *phrēn/phrenes* are among the mental organs and functions that form what can be labelled a ‘composite mind pattern’.<sup>33</sup> Recurring elements of this group include *noos*, *phrēn/phrenes*, *psychē*, *thymos* and *kardia*. As Clarke notes, in the Homeric psychological system these tend to be active not in the head but in the torso; this is the case in tragedy and lyric poetry as well.<sup>34</sup> Various readers have proposed more precise corporeal identifications for *phrēn/phrenes*. Chantraine, following Ireland and Steel, explored the various hypotheses for localization. In Homer, an identification with the diaphragm, the sheet of muscle situated under the lungs, seems to be suggested.<sup>35</sup> But other interpretations point to the pericardium,<sup>36</sup> the entrails generally,<sup>37</sup> the lungs in particular,<sup>38</sup> or generally any organ in the upper torso – what in Figure 1.1 is identified as the epigastric and hypochondrial regions.<sup>39</sup> Most recently, Stefanelli rejected this traditional repertoire of interpretations and proposed a physiologically more refined hypothesis of localization, identifying the φρήν with one of the two main cavities found in the torso according to early Greek thought,<sup>40</sup> the more important upper one (‘la camera per eccellenza’), linked *inter alia* to the physiology and psychology of the *thymos*.<sup>41</sup> This association, together with the use of the terms in Homer and other literary sources, points to an analogy between physical breathing (inhaling the *thymos* into the *phrenes*) and mental facts that locates the *phrēn/phrenes* in the upper part of the torso.

Regarding the identification with the diaphragm (see Figures 1.2, 1.3 for a modern anatomical illustration), which will become central in Greek

<sup>33</sup> Thumiger (2007) 67–74. See Padel (1992); Clarke (1999); Pelliccia (1995).

<sup>34</sup> Clarke (1999) 73–74.

<sup>35</sup> Chantraine (1968–70) 1227; Cheyns (1980); Biraud (1984); Furley (1956); Ireland and Steel (1975). See also Sullivan (1988) 7–9, 21–31; Clarke (1999) 75–76.

<sup>36</sup> Körner (1929).

<sup>37</sup> Thus Chantraine (1968–70, *ad loc.*): ‘plus vaguement “entrailles” . . . , “coeur” come siège des passions, “esprit”, siège de la pensée, “volonté”’.

<sup>38</sup> Rogge (1927); Onians (1951) 13–83; Sullivan (1988) 7–29, 21–29; Clarke (1999) 74–77. The lungs are not a strange choice for localizing mental phenomena; see Archilochus fr. 13.4–5 West<sup>2</sup> ‘We have lungs swollen with pain’ (οἰδαλέους δ’ ἄμφ’ ὀδύνης ἔχομεν | πνεύμονας).

<sup>39</sup> Below, p. 13; see Onians (1951). This is certainly the case in instances like *Il.* 16.481, ‘he hit him where the *phrenes* contain the unmovable heart’ (*all’ ebal’ enth’ ara te phrenes erchatai amph’ hadinon kēr*).

<sup>40</sup> As described by Jouanna (1992/1999) 315. <sup>41</sup> Stefanelli (2010) 21, 44–45 and *passim*.

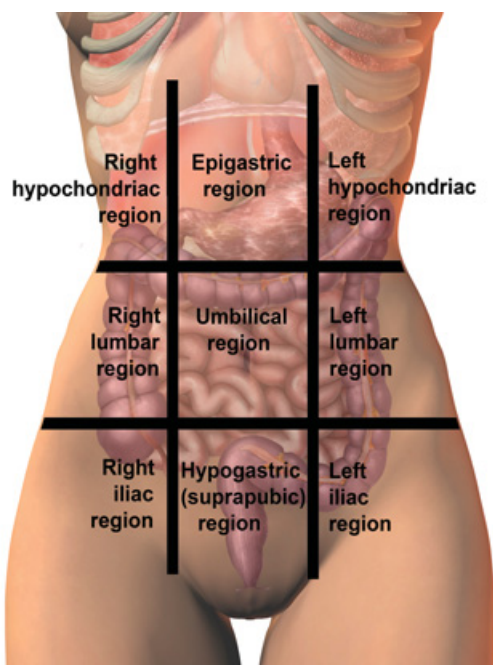


Figure 1.1 Regions of the abdomen, illustration. Getty Images/Carol & Mike Werner/Science Photo Library.

medicine, Galen comments that Plato was the first to replace the traditional (and misleading) term *phrenes* with *diaphragma* to indicate that portion of the body.<sup>42</sup> The clear identification of *phrēn/phrenes* with this ‘separating wall’<sup>43</sup> (at least when the term is used literally) is first found in the Hippocratic, then in the *Timaeus* (as an upper limit for the location of the appetitive soul at 70a3; as pathologically important at 84d7). It is often employed by Aristotle, who speaks of the *phrēn/phrenes* at *HA* 506a7 as a *diazōma*, ‘frame’ or ‘belt’, and elsewhere as a *paroikodomēma kai phragmon*, ‘partition wall and fence’ (*PA* 672b20).<sup>44</sup> At the same time, *diaphragma*

<sup>42</sup> *Loc. Aff.* 5.4, 8.327 K.; see also *PHP* 8.9, 534–37 De Lacy = 5.724 K. On Galen’s discussions of wounds to this body part, see Salazar (2000) 16; Fischer-Homberger (1978) for a history of damage to the diaphragm and mental disorder.

<sup>43</sup> An identification often accepted by modern scholars; see Snell (1977) 38.

<sup>44</sup> On this passage, cf. van der Eijk (2015) 224.

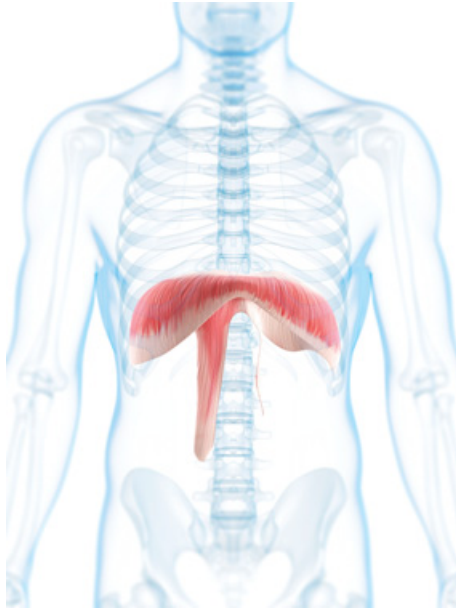


Figure 1.2 Diaphragm, illustration. Getty Images/SCIEPRO/Science Photo Library.

(absent from Homer and the tragedians) also appears as a synonym in technical vocabulary to indicate the muscle sheet below the lungs proper, as well as partitioning cartilages generally.<sup>45</sup> Finally, *hypochondrion/ta hypochondria* is also a relevant term (see Figures 1.1–1.3 for imaging in current anatomical terms) due to its location in the upper chest as well as its general character, which becomes important in ancient psychopathology.<sup>46</sup> This term is used by the Hippocratics to identify the “part(s) lying below the cartilage”, i.e. the soft abdominal region below the ribs stretching to both sides of the body,<sup>47</sup> the epigastric-lung region on the side of the chest.

<sup>45</sup> E.g. Hipp. *Epid.* 2, 2.24, 42 Smith = 5.98 L., in the palate; Arist. *HA* 492b17, between the nostrils. Cf. Galen, *Comm. Hipp. Epid.* 6, 1.4 (19.21 Wenkebach = 17(1).824 K.).

<sup>46</sup> The story of the connection between ‘hypochondriac disease’ and melancholy is sketched out by van der Eijk (2015); see also the essays in Stracevic and Lipsitt (2001), with particular interest in the connection between ‘*hypochondria*’ and anxiety disorder.

<sup>47</sup> van der Eijk (2015) 14–15. Only in the post-classical period is the term used to indicate a ‘hypochondriac disease’.



Figure 1.3 Human respiratory system, illustration. Getty Images/PIXOLOGICSTUDIO/Science Photo Library.

### *What?*

The question of localization, important for our medical discussion, is subordinate to the function indicated by *phrēn/phrenes* in non-technical use. What are the pragmatic uses of the terms in regard to mental life?

First, these are the most frequent mental terms used to indicate the individual mind in ancient epic and drama, and especially in tragedy. These two genres, although highly stylized and conventional, and as such far removed from medical texts, are fundamental for the reconstruction of ancient psychology due to their attention to and richness of detail in both descriptions of mind–body interactions and the exploration of ethical questions. The singular *phrēn/φρήν* is found in poetry (Homer, tragedy, lyric) to indicate the mental sphere in a personal sense, with a high degree of abstraction and even, one might say, metaphorically.<sup>48</sup> It appears to have

<sup>48</sup> On the problems with ‘metaphors’ of the mental in ancient poetry, see Pelliccia (1995) 22–37; Padel (1992) 9–11; Clarke (1999) 108–10. Specifically regarding φρήν, see Briand (1993) on Pindar; Ireland and Steel (1975) and Cheyns (1980) on Homer; Solmsen (1984) on tragedy; Sullivan (1977a), (1978) on Xenophanes, (1977b) and (1985) on Empedocles, (1987), (1994), (1997) and (1998b) on Homer,



a fundamentally locative and comitative sense,<sup>49</sup> that is, the *phrēn* acts in cooperation with the self rather than in opposition and dialogue with it (unlike, for example, the *thymos*). Notably, no one ever ‘speaks’ or ‘listens to’ his own *phrēn*,<sup>50</sup> as in the famous idioms in which a character speaks or listens to his θυμός in epic or lyric poetry; the *phrēn* is rarely presented as an independent active agent in Homer, and even when it develops into an entity separate from the foregrounded subjectivity, it generally entertains a harmonious rather than antagonistic relationship to the self. (To use a modern expression, it tends to be ego-syntonic rather than ego-dystonic.) As a mental term, φρήν has no strong qualitative characteristics; unlike *thymos* or *kardia*, it does not suggest intense emotions such as anger or courage, and it can also identify life and vitality.<sup>51</sup> It is the place where thoughts are ‘slowly pondered’,<sup>52</sup> and where e.g. artistic creativity operates, as in Democritus 68 B 129 D.–K. ‘[The poets] think divine things in their mind (*phreni theia nountai*).’<sup>53</sup> *phrēn* can also be qualified by a wide range of adjectives, qualitative aspects and emotions, suggesting that none of them is specific to it.<sup>54</sup> It accordingly seems to approach the sense ‘character’ or ‘seat of self, a person’s deepest core’;<sup>55</sup> this is seen most poignantly at Euripides, *Hippolytus* 612, where the hero famously justifies himself for not keeping his promises by saying that ‘My tongue swore, but my *phrēn* did not’ (*hē gloss’ omōmoch’; hē de phrēn anōmotos*). In the singular, *phrēn* appears only once in the Hippocratic texts;<sup>56</sup> in general, it seems to have

(1988a) on Hesiod (1989a) on Pindar and Bacchylides, (1989b) and (2002, 551–53) on Hesiod; Woodbury (1988) on Aristophanes; Snell (1977).

<sup>49</sup> Sullivan (1979) 161; Webster (1957) 16. See Thumiger (2007) 72–73.

<sup>50</sup> Compare the only apparent exception at Pi. *Pae.* 4.50: ἔα, φρήν, ‘let it be, heart . . .’, is how the poetic voice addresses itself. This is a reluctant *phrēn*, but still in harmony with the mood of the subject, and thus different from the antagonistic fury of the θυμός; see Clarke (1999) 312–14, 313 n. 58 on the Pindaric quote; Pelliccia (1995) 115–267.

<sup>51</sup> In part like *psychē*; see Clarke (1999) 193 n. 72, 206, 209. <sup>52</sup> Furley (1956) 8.

<sup>53</sup> Cf. Empedocles 23 B 9 D.–K. on philosophical reasoning; also 23 B 15, 133 D.–K. on persuasion.

<sup>54</sup> In tragedy. On the Homeric use, where the meaning is more strictly locative and concrete adjectivizing is minimal, see Combella (1975). See also Kazanskaya (2013) on the range of colour, from black to white, that can be attributed to *phrenes*; Grošelj (1952), Hartmann (1933) and Briand (1993) on the expression ‘white *phrenes*’ (λευκαῖς φρασι) in Pindar (*Pyth.* 4.109); Combella (1975) on ‘Agamemnon’s black heart’ in Homer.

<sup>55</sup> See Clarke (1999) 305 on this point: ‘*psychē*, *phrenes* and “I” amount to the same emotional agent’ (discussing Archil. fr. 196); Sullivan (1983) on love and *phrenes*.

<sup>56</sup> At *Coac.* 571 (Potter 250 = 5.716 L.), in a long description of signs deduced from observations of urine. At the beginning, we read that ‘urine unconcocted for a longer time . . . foretells an apostasis and pain, especially in the region below the diaphragm (ὑπὸ φρένα), and in cases where pains are moving about in the loins, or to a hip – this whether fever is present or not’.



a more abstract, mental meaning and perhaps lends itself less well to technical use.<sup>57</sup>

In Homer and tragic poetry, the plural *phrenes* has basically the same semantic range as the singular and the same usage characteristics.<sup>58</sup> Notably, it appears to refer more stably and clearly to a bodily location than the singular *phrēn*: it is more concrete and localized, and more exposed to affection. (An example is Io's 'distorted mind', *diastrophoi phrenes*, as a result of derangement at [Aeschylus] *Prometheus Bound* 673.)

It is not only the poets who are aware of the mental associations that appear to be traditional to, and perhaps immediately felt in, this part of the body. The fifth-century encephalocentrist author of the *Sacred Disease* takes time to scathingly refute any association between *phrenes* and *phronein*,<sup>59</sup> as does Aristotle (if more positively, recognizing the participation of this part in mental reactions, in a cardiocentric spirit) when he discusses the *phrēn/phrenes* as the physical diaphragm, but also as a neighbour of the seat of the soul, the heart.<sup>60</sup> In general, the medical idea of a mental relevance of this body part seems to have been widespread, if controversial.<sup>61</sup> All these suggestions, anatomical and psychological, are active in the name *phrenitis* and will later participate in the richer and more psychologically rounded late-antique elaborations on the disease.

## A Fuzzy Label

Returning to the disease label *phrenitis* in light of the history of the *phrēn/phrenes* sketched out above, the lack of unanimity about the latter

<sup>57</sup> This also had a lasting appeal throughout the history of the Greek language; see Piccardi (2009) for the expression ἀρχέγονος Φρήν, 'primeval Mind', in Nonnus (*Dionysiaka*, 12.68) and its archaizing effects.

<sup>58</sup> See Stefanelli (2010) 44 with n. 77 on the singular/plural binary. Scholarship has generally considered the plural prior to the singular, possibly in consideration of its larger number of occurrences: cf. Cheyns (1980); Snell (1977) 35–37. Clarke (1999) 77 conflates the two in his discussion. By means of a careful analysis of the pragmatic use of the term, Stefanelli (2010) 46–47 proposes identifying plural *phrenes* with the two cavities in the torso, the gastric and the upper.

<sup>59</sup> *Sacred Disease* 17 (30, 3–17 Jouanna = 6.392 L.).

<sup>60</sup> *PA* 3.10 (672b24–673a28); see Chapter 2 for discussion of these biological-medical testimonia.

<sup>61</sup> As the fifth-century CE medical author Caelius Aurelianus summarizes the matter (*Acut. I*, VIII, 52.19–24 Bendz): 'Now some say that the brain is affected, others its fundus or base, which we may translate *session*, others its membranes, others both the brain and its membranes, others the heart, others the apex of the heart, others the membrane which encloses the heart, others the artery which the Greeks call *aortē*, others the thick vein (*phleps pachēia*), others the diaphragm.' No ancient text corresponds precisely to all these theories, but Caelius' overview gives a good idea of the topographics of the disease and of ancient views about the mental faculties (since he continues (52.25–26 Bendz): 'In every case they hold that the part affected in *phrenitis* is that in which they suspect the ruling part of the soul to be situated'); see below, p. 88 on this passage. Cf. Rocca (2003) 18 n. 9; Mansfeld (1990) 3106–08.

necessarily affects how we understand the former. Although *phrenitis* is certainly derived from *phrēn/phrenes*, the nature of the disease cannot, or at least cannot entirely, be accounted for via etymology. The Hippocratics, as we have seen, are uneasy about the traditional associations of *phrenitis* with *phrenes*<sup>62</sup> and completely ignore *phrenes* as a mental item. These associations, with all their vagueness and contradictions, nonetheless remain active in the reception of the term by classical audiences and maintain their potential precisely through their polysemy and contradictions and the disputes they never fail to engender. In ancient framings of *phrenitis*, we thus encounter denials of its localization in the diaphragm; localization in the diaphragm, but denying any mental quality to this part; and localization in the heart, with *phrenes* interpreted abstractly as ‘mind’. Perhaps we should compare the linguistic concept ‘iconym’<sup>63</sup>, Silk’s term for a traditional word which

has no circle, no centre. It has only a few scattered connotations: a set of random associations, like ghostly rings, perhaps randomly overlapping, but largely unrelatable, and all in all leading nowhere. The random association will consist partly of earlier literary contexts (from which the knowledge of the word presumably comes), partly, perhaps, of aural associations of the kind that we tend to read as ‘re-etymology’. There is a diffuse reference, then, too diffuse to begin to derive a referent from it.

This description of untranslatable Homeric poetic terms illumines a general principle of pragmatic linguistics relevant to *phrēn* too: the key role played by usage and interconnections, as opposed to neatly defined semantic areas. The label *phrenitis*, despite the controversies regarding its relation to *phrēn/phrenes*, and about where the latter are located and what they do,<sup>64</sup> functions in a similar way, by performing at least the following functions: it gestures towards mental life, expresses pathology and indicates a location – or rather locations. As a label, it is thus both fuzzy and broad, qualities that are valuable for constituting efficient taxonomic orders: a label or category must constitute a ‘hub’ for medical or epistemological concepts.<sup>65</sup>

<sup>62</sup> Like other traditional concepts they (partially) use and incorporate; see Thumiger (2017) 419–22.

<sup>63</sup> Silk (1983) 312, which Clarke (1999) n. 72 p. 31 usefully applies to the understanding of psychological terms.

<sup>64</sup> Clarke (1999) takes too much for granted (or falls into a circular argument) when he concludes: ‘What goes on in the φρένες? The activity must be what is represented by the verb φρονέω, which is derived from the noun by way of the compounds in -φρων.’

<sup>65</sup> Kutschenko’s fitting metaphor (2011).

## Technicism

Finally, a survey of non-medical literature shows beyond any doubt that *phrenitis* is eminently a technical term in the initial centuries of its existence. Aristophanic characters can use the verb *melancholaō* ('to be atrabilious', 'to be melancholy-mad') hyperbolically for 'raving';<sup>66</sup> the common term *mania* is found everywhere in non-medical material to indicate a pathology, but also to mean 'madness' in a generalized or hyperbolic sense;<sup>67</sup> and the 'sacred disease' is diagnosed as explaining deranged and morally unsound behaviour in Herodotus.<sup>68</sup> But *phrenitis* seems not to enter the pool of recognized medical commonplaces as either possible material for comic exaggeration or an erudite specification, or as part of intellectual remarks until much later on.<sup>69</sup>

### Status quaestionis

The scholarship on the Greek vocabulary for mental life, and on φρήν/φρένες and related terms in particular, is extremely rich. But not one of the many scholars who have devoted attention to this traditional branch of ancient studies has addressed the medical use of *phrēn/phrenes* or the obviously pertinent term *phrenitis* as part of the story. Apart from the seminal discussions by Pigeaud (1981/2006) 71–100 and (1987/2010), the only extensive studies of the disease are an unpublished doctoral thesis by McDonald (2009, 2014), a competent and thorough survey that does not aim, however, to problematize the term in cultural-historical terms; another thesis, by Murphy (2013), which surveys *phrenitis*, together with *mania* and *melancholia*, in Aretaeus and Caelius Aurelianus; and Bornemann's (1988) doctoral study of the Arabic tradition, with a general discussion of the disease. Other, article-length contributions are Byl and Szafran (1996) and Pigeaud (1994) on individual texts (Hippocratic and Caelius Aurelianus, respectively),<sup>70</sup> and more recently the reconstructions of the Arabic milieu by Carpentieri, Mimura and others, and reflections on the Christian material, with particular reference to the localization in the brain in Wright's dissertation (2016), article (2018) and book (2022). More surprising, no attention has been paid to the disease outside the restricted

<sup>66</sup> E.g. *Av.* 14; *Ec.* 251; *Pl.* 903. <sup>67</sup> E.g. Plato's *Laws* 934c–e. <sup>68</sup> E.g. at 3.33.

<sup>69</sup> For a summary of the issues involved in the traffic between Greek technical prose and non-technical genres, see Langslow (1999) 184–88. For the occurrence of the word in Menander's *Aspis* as a telling exception, see below pp. 59–61.

<sup>70</sup> Devinant (2020) contains much important discussion of *phrenitis* in Galenic psychopathology; cf. in general 88–89 n. 37, 107–09, 167–68, 175–76, 249–51, 290–91.

field of the history of medicine. As a result, one of the most important pathological categories in ancient medicine, and a highly visible medical concept in Western intellectual life from the beginning of our era to modernity, remains obscure.

### Images

Images of objects, whether pictorially or photographically produced, are never a neutral reflection of reality. When it comes to the human body, there is no externality of a 'reality' or 'true image' we can look at from a distance. Most decisively, from an epistemological point of view, the emergence of any image of the body necessitates the intrusive actions of opening, dissecting, contrast colouring, slicing, desiccating, displaying and disposing in perspicuous ways, irradiating with radioactive waves or locating in a magnetic field.<sup>71</sup> The hyper-clear images on pp. 13–15, as products of artificial modern didactic simplification, would perhaps have meant nothing to a Homeric audience. I nonetheless offer them as pragmatic guidance to my use of the main referents, on current anatomical understandings, of the key bodily locations in our discussion of *phrēn/phrenes*: diaphragm, lungs, heart, stomach, *epigastrium* and hypochondriac regions.

<sup>71</sup> See the discussion in Keßler and Schwarz (2018).