

Phrenitic People
Patients and Therapies in Imperial and Late-Antique
Cultures (First–Sixth Centuries CE)

In the first centuries of our era, the doctrinal representation of our disease, along with many other medical ideas, tends to consolidate around the authority of Galen. Certain models of *phrenitis* become dominant in learned medicine: it is an affection of the brain with fever simultaneously involving other parts of the body, especially the chest, along the lines discussed in Chapter 4 through the examples of Aretaeus and Galen. These two authors, despite their differences, both foreground the brain as localization (Galen) and/or target of therapy (Aretaeus).¹ But other roads were taken and remained open alongside this main narrative, as a variety of voices outside official medicine show.²

Doctrines discussing a disease in terms of physiological theory in any case tell only part of the story: a different, broader testimony is offered by the observations and reports of the lived manifestations of a physical illness and in the existence of patients. These documents produce a richer picture and offer us direct (if in their own way still problematic) access to the human beings who were flesh and blood to the physician's annotations and

¹ A good overview of the vulgate view of the disease in the early centuries of our era is offered by the ps.-Galenic *Introductio seu Medicus* (second century CE), which should perhaps be understood as a school handbook of medicine (see Petit 2010): '*phrenitis* is an ecstasis of the intellect with acute derangement (*ekstasis dianoias meta parakopēs sphodras*) and nonsensical motions of the hands, crocodysm and carphology, and a high fever. It mostly arises from a cause such as excess of bile. It fixes itself in the brain, or meninges, or as some say in the *phrenes*, which is how the diaphragm is referred to (*synistatai de peri enkephalon, ē mēningas, ē hōs tines legousi peri phrenas, ho diaphragma kaleitai*). This is the appropriate therapy, if one can prognosticate it from its beginning: phlebotomy, cupping, blood-letting, clysters and abstinence from food as appropriate. Once the disease is established, soporific embrocations and sleep-inducing ointments and a wet diet' (14.732–33 K.). Cf. Devinant (2020) 169 on the 'non-Galenism' of this schematization, and on what, he warns, is the apparent stability, the '*stabilité de surface*' in the medical authors of the first centuries CE (183 n. 344), perhaps with some overstatement, as other authors, especially those discussed in terms of delocalization in Chapter 3, share Galen's pragmatism when it comes to nosological discussion; 158 on the sole (dubious) passage in *Mot. Musc.* 2.6 (35.13–20 Rosa = 4.445.8–446.1 K.) where Galen appears to suggest that *phrenitis* can be categorized as a 'disease of the soul', a *pathēma tēs psychēs*.

² See Chapters 3, 6 and 8.

diagnoses.³ Apart from Galen, this clinical information is mostly to be extracted from nosological treatises from the early centuries of our era. Nosology as a genre – a list of diseases *a capite ad calcem*, roughly organized into sections addressing causes, description and therapy – represents a post-Hellenistic approach to pathology to which Galen belongs only marginally, even though his immense corpus of writing offers a great deal of information about clinical and nosological aspects. The fact that, as was partially apparent in the last chapter, *phrenitis* becomes obviously important in medical discussions at this time is reflected by the place it occupies in other nosological treatises: in addition to Aretaeus, *Anonymus Parisinus* and Caelius Aurelianus put it first in their lists (as did Celsus in his discussion of *insania*⁴); medical authors seldom fail to mention it in representative catalogues of diseases;⁵ and Galen, as already noted, repeatedly gives it exemplary status. Parallel to this, *phrenitis* becomes more visible among lay audiences, escaping the technical environment of medical treatises, as will be discussed in Chapter 6. In agreement with these trends, we might infer, *phrenitis* was in turn more frequently diagnosed and more closely observed in clinical terms, and generally more present in contemporary language and the public imagination.

I turn now to the medical information preserved by material from the first centuries of our era (first–seventh centuries CE), dividing the discussion into authors preceding and contemporary to Galen, and thus fundamentally independent of him, and those after Galen, who reflect the massive influence exerted by his doctrine, the ‘Galenism’ which shapes the discussion in medieval receptions of Graeco-Roman medicine.⁶

Nosology in Practice: *Anonymus Parisinus*

Exemplary of the main trends in nosology as far as *phrenitis* is concerned is the *Anonymus Parisinus* (*AP*), a nosological text dated to around the first century CE, regarding the doxographic style and reliability of which

³ On patient reports and their problematic nature in ancient medicine, see Thumiger (2015), (2018c); the discussions in Petridou and Thumiger (2015).

⁴ See Chapter 3.

⁵ In medical contexts, *phrenitis* is not only generally considered a central example of an important disease, but is also evoked out of context as a ‘typical’ disease, as in Soranus *Gyn.* 3.1 (94, 13–15 Ilberg): diseases are defined as states ‘against nature’, whereby *phrenitis* or *lēhargos* are examples of pathological states which are ‘partial’, i.e. ‘localized’ (*merikon*) and ‘acquired’ (*hypobebēkos*).

⁶ This is Temkin’s classic formulation (1973), variously re-qualified by more recent scholarship: see e.g. Bouras-Vallianatos (2019) and other discussions in that collection.

caution is needed.⁷ Much use was made of this author's reports of classical and Hellenistic sources in Chapter 2, since he summarizes the views of his predecessors in his sections devoted to the 'causes' of each disease, including in our case (*phrenitidos aitia*). I turn now to this author's assessment of signs (*sēmeia*) and therapy (*therapeia*) for *phrenitis*.

The disease *phrenitis*, first of all, is the first in the treatise and receives one of the longest discussions, confirming its localization in the head within the traditional organization *a capite ad calcem*, but also its primary relevance as mental disease and nosological concept *tout court*. As the anonymous author discusses the signs of the disease, he emphasizes continual fever (*synechēs pyretos*); a quick, small, thick pulse (*sphygmōs dediō[g]menos, smikros, pyknos*); and continually shallow breathing (*anapnoē synechizousa kai mē diistasa teleiōs thōraka*) as somatic indicators – all these in line with the importance of the pulse as a diagnostic tool in this period (*AP* 1.1, 2.23–4.2 Garofalo).⁸

The signs included by the Anonymous concerning mental health and vitality are 'constant sleeplessness and trouble of the mind (*agrypnia diēnekēs kai paraphora tēs dianoias*)', which are typical features. In addition, there are aspects with an ethical or personal quality: a patient may 'sometimes get angry and savage and run outside (*pote men orgizomenou kai agriainontos kai exō trechontos*)', while 'at other times he is happy and sings, or lies down (*pote de hilarou kai aidontos ē katakeimenou*)'. These variations in mood as a result of illness were already described by Celsus and show the acquired power of the nosological label *phrenitis* as a container of subgroups and psychological variations.⁹ In addition, patients might need to be reminded to drink, or might refuse to do so (1.2, 4.2–4 Garofalo), signs which indicate dryness, but also potentially a damaged awareness of bodily functions.

This treatise also mentions the well-known signs of crocydism and compulsive hand movements combined with hallucinatory delusions and groping, which are described in detail ('raising his hands into the air, or pulling lint off robes, or picking at straws and pulling chaff from the wall and seeming to pluck hair, although catching nothing, as if groping about'). The worsening of the disease is revealed by exacerbating signs: chilled extremities, complete insomnia, delirium or silence (*parakopē ē aposiōpesis*), laughing or depression (*gelōs ē katēpheia*), red eyes that move

⁷ On this author's doxography, see van der Eijk (1999a).

⁸ See von Staden (2000); Coughlin and Lewis (2020), esp. 221–25.

⁹ And notably unlike classical medicine, where the reverse is the case: univocal signs generate or are expressed in the disease label through a one-way move.

rapidly and are full of tears. Patients collect lint (*krokodyzousi*). Their tongue lacks moisture, and their appetite may vary (*orexis allois allē*). When the danger becomes more acute, 'the *hypochondrion* contracts and is pulled up (*prosentēinetai kai anaspatai*), the neck and face sweat, the belly exudes catarrh (*koilia katarrei*), the body trembles'. When the moment of death approaches, finally, patients 'utter high-pitched screams, speak indistinctly (*asaphē lalousi*), stutter, their pulse weakens, and they have difficulty breathing and wheeze' (I.3, 4.5–15 Garofalo).

None of the signs the Anonymous lists is new, as comparison of his text to some of those from the classical period makes clear. Alongside the familiar cognitive and behavioural features and the signs that can be explained as consequences of high fever, however, there is some development: an ethical and emotional component; the possibility of individual variation; the elements of pulse and respiration; an affection of the belly with catarrh; and a detailed sense of progressive exacerbation. Unlike in Celsus, in this account psychology remains subordinate, and one senses the underlying tension between *caput* (in the visible signs of the face and head: sweating, red eyes and so forth) and torso (the catarrh in the belly, the difficult breathing, the tense, elevated *hypochondrium*) as locations. But no clear choice is made between the two: 'Consider these *as a whole* (*tauta panta*) signs of *phrenitis*', the author writes (I.3, 4.16 Garofalo).

Therapeutic Measures

As for therapeutics, the range of remedies is composite and bears the signs of the anatomical tension between head and chest Galen will stigmatize as contradictory in the formulations of other doctors.¹⁰ They can be summarized as psychotherapeutics; dietetic measures and other bodily interventions; and pharmacology.

Psychotherapeutics or soothing measures are the first to be mentioned by the *Anonymus Parisinus*, at the very beginning, and mostly match the directions found in Celsus, perhaps reflecting the same trend in approaching distress of a mental kind: to place patients in the light, dimming it if necessary (I.I, 4.18–21 Garofalo),¹¹ and most importantly, to calm them when they experience delirious fantasies (*en de tais tōn parakopōn phantasiās*) 'with the help of words (*tēi apo logou boētheiai*)' and persuasion

¹⁰ See above, p. 108.

¹¹ A traditional move, according to Celsus; cf. the later treatise usually included in the Hippocratic *Corpus Seven* (*Hebd.* 51, 76.84–89 Roscher = 8.670.15–17 L.).

(*parēgorēsomen*); to convince them that those around them are ‘friends, not enemies’; but also to rebuke them when necessary (*hote de kai epiplēxomen*). These details recall Celsus’ advice and must derive from a common source: one ought to gratify patients in various ways (*synaresthentes*), announcing unknown facts to them,¹² and bringing their wives and children or someone to whom they have an erotic attachment (*ei de kai pros tinas erōtikōs echousin*) into their presence (I.6, 6.16–24 Garofalo).

Also common to the measures recommended by Celsus and the Anonymous are restraining or coercing these patients, procedures classical medicine ignored (I.3, 8.22–10.2 Garofalo). When the disease worsens, frightening them (*ekphobein*) might be a necessary last resource, if patients become aggressive and violent, or misbehave more generally; when they pose a threat to others, whether physicians or family, ‘slaps and blows’ (*rhapismois kai epiplēxesi*) may be used. Only through physical restraint are these patients led to understanding and reason and calmed down (*apodeiliōsi*); otherwise ‘they will not understand (*ou syneisousin ei mē sōmatikōs biasthōsi*)’ – explicit early advocacy for a cognitive impact of physical intervention on patients’ bodies. That passive exercises such as the use of hammocks, in accord with individual strength and the state of sleep or delirium (I.3, 6.12–13 Garofalo), are also present, is part of the same ‘holistic’ approach, which aims at mental health *qua* psychological datum. There is also a class element at work here: bonds are more necessary for individuals of lower social provenience (slaves) than for those who lead an ‘honest, free life (*epi tōn biou eleutherou kai katharou*)’. The latter constitute a class of patients whom restraint would exacerbate rather than tame (I.3, 10.3–7 Garofalo). Holding them tightly by the hands and embracing them gently is recommended instead, a use of physical contact that recurs in late-antique physiological therapy as seen in nosological discussions of mental disorders.¹³

These points all go in the same direction as the ethical approach testified to by Celsus, with cognitive, emotional and relational aspects inserted within the nosological picture. In addition, they expand the social frame to include children, wives, friends and lovers, as well as the controversial (and popular) feature of the erotic remedy, a *topos* in the early centuries of our era.¹⁴ Class and ethical discriminations are also part of the patient’s profile and determine different therapies for different social statuses.

¹² Cf. Celsus 124.11–26 Marx, on provoking them with intentional errors or announcing happy news.

¹³ On touch in the Hippocratic tradition, see Kosak (2015); Thumiger (2020a) generally on ‘psychotherapeutic’ measures; and the classic Entralgo (1970) 159–72. The class specification returns in Paul of Aegina as well (3.6.2, 145.31–146.1 Heiberger; see below, p. 180).

¹⁴ Cf. Thumiger (2018a), (2021c).

Somatic measures to be adopted include bleeding and purging (1.2, 4.22–5 Garofalo) and phlebotomy (1.3, 9–13 Garofalo). Fasting and dietetic specifics are also recommended (1.3, 6.1–3 Garofalo), including drinking honey-water to relax the stomach (1.3, 10.8–10 Garofalo), bathing and a restorative regimen after improvement has begun to be apparent (1.3, 8.9–13 Garofalo). All these are directed to the respiratory tract in the chest and to the digestive parts. Other therapeutic measures centre on the head, such as embrocation with green rose oil and other ingredients (1.3, 6.4–15 Garofalo). At a later stage of the disease, inflammation ‘of the middle part’ may appear (*en tois mesois phlegmonē*), against which cupping with scarification is prescribed: the involvement of the lower location in the body for phrenitics returns here. Haircutting is mentioned in parallel with this, although it is to be avoided at the beginning of the illness (1.3, 8.10–12 Garofalo), and application of somniferous ointments to the face is also recommended. Sleep-inducing agents should also be given as draughts or suppositories (with various recipes offered at 1.3, 7, 8, 9, 10).

Neighbouring Diseases: lēthargos, pleuritis, and pneumonia

Nosological treatises are a precious source for exploring the relationships and overlaps among neighbouring diseases and their position in the taxonomy to which they belong. *AP* also explores and highlights points of contact with *phrenitis* in its discussion of other diseases. *lēthargos* comes just after *phrenitis* in the treatise, reflecting the important association between the two which recurs for centuries to come in all medical sources.¹⁵ Surveying the causes mentioned by thinkers in the medical tradition (1.1–3, 10.16–27 Garofalo), the Anonymous mentions ‘affection of the psychic faculty in the meninx (*pathos tōn peri tēn meninga psychikōn dynameōn*), where (*eph’ hōn*) it is precisely that *lēthargos* occurs’ (attributed to Erasistratus, 1.1); affection around the heart (‘the chilling of the psychic *pneuma* around the heart’, attributed to Diocles, 1.2); and the brain again burdened by excessive cold phlegm and causing the patient to fall into a comatose state (*kataphora*) (attributed to Hippocrates, 1.3).

The signs of *lēthargos* are continuous fever and a distinctive pulse (2.1, 12.1–5 Garofalo); difficulty in conversing and interacting, with delirium and oppression (2.2, 12.5–8 Garofalo); a swollen, flushed face; and various signs traditionally regarded as mental. As in the case of *phrenitis* (2.5, 4.11–13 Garofalo), when

¹⁵ And several traits in common with pneumonia: see Chapter 2, pp. 22, 32 n. 27, 45.

the illness becomes worse, 'the *hypochondrion* is pulled up (*hypochondrion anaspatai*), the hands tremble a bit, and patients have difficulty swallowing (*katapinein ou dynontai*) (2.6, 12.13–16 Garofalo). In the therapy, interestingly, other points also connected with *phrenitis* return: a concern about light (2.1, 12.1–2 Garofalo); embrocations (2.1–2, 12.22–14.3 Garofalo); phlebotomy (2.3, 14.12–14 Garofalo); the phenomenon of *kōma* (2.4, 14.15–18 Garofalo); and a lack of awareness of natural functions such as excretion (2.5, 14.19–16.7 Garofalo) and swallowing (2.6, 16.8–13 Garofalo). Scarification and cupping are suggested, although these are common measures (2.6, 16.8–10 Garofalo). Also recommended are hot water to the head (2.8, 16.20–18.2 Garofalo), shaving and passive exercise (2.9, 18.3–4 Garofalo).

Pleuritis is located by ancient authors in or around the *pleura* or lungs, according to the report by *AP* (e.g. by Hippocrates: 8.1–4, 56.26–58.16 Garofalo). The localization of pleurisy in *AP* is the same as that of *phrenitis*, in line with what appears to have been the case in the Hippocratic texts (8.4, 58.11–16 Garofalo). Its symptoms are a sharp, piercing sense of pain in the *pleura* or upper chest, and fever and expectorations, accompanied by various mental or mind-related symptoms: 'They suffer roughness of tongue, sleeplessness, agitation, distress.' Most relevant, 'sometimes . . . they become delirious, the *hypochondrion* is pulled up, difficulty in breathing increases' (8.1–3, 58.18–60.9 Garofalo). *Pneumonia/peripleumonia*, finally, is only briefly described in this text as an inflammation of the lungs (*pneumonos phlegmonē*), and in a report of Praxagoras' views it is seen as contiguous to *pleurisy*: one is located 'in the part near the ribs', the other 'in the part near the lobes' (9.1–2, 64.16–21 Garofalo). Signs are fever, a heavy chest, difficulty in breathing, a thick pulse and coughing. The appearance of the face is affected (glossy eyes, blushing, bulging blood vessels). As for therapy, the vast majority of the suggestions are dietetic and pharmacological, and aim at curing the bodily physiology of the disease. At 9.11 (68.23–24 Garofalo), however, it is again said that 'we shall allay the delirium with embrocations on the head and sponging of the face'.

Still in this imperial author, then, perhaps precisely because of his comprehensive interest in doxography and lack of systematic ambitions, the ambiguity between the chest (with lung symptoms and breathing issues) and the head (partially in aetiology, but always in the signs and therapy) remains irreducible and even dominates. Compromises vis-à-vis localization and a potentially 'holistic' nature are reaffirmed as a marked peculiarity of our disease. At the same time, *Anonymus Parisinus* offers a sample of the themes addressed by nosology at this stage in Greek medicine, marking a profound difference

from the Hippocratic works: the discussion of the ‘name’; the question of localization; the definition of causes and systematic description of manifestations; the therapy; and the relationship of the disease to other, similar ones.

The Signs of *phrenitis* in Imperial Nosology

In the early centuries of our era, a tendency to economy becomes apparent in Graeco-Roman nosology, with a coalescence of signs and details around a number of prominent syndromes, among which *phrenitis* stands out.¹⁶ This is apparently brought about by a need to impose order, through lists and taxonomic schematization, on the wealth of clinical information inherited from the earlier tradition. At the same time, the grid of a ‘modern’ theoretical understanding (anatomical and physiological) is imposed on the older material, as we have seen notably in Galen.

The Galenic commentaries on Hippocratic treatises can profitably be understood as versions of such a move, both going back to the details observed by the Hippocratics and reinterpreting them within new scientific models, and adding the fruits of newly established methodologies and models, notably neurological theories and pulse diagnosis. Authors who engage less, or less explicitly, with their predecessors, such as Aretaeus, display similar tendencies towards systematization. The result, in respect of the descriptions of *phrenitis*, is a richer, more complex syndrome in which we begin to glimpse the characteristics of a modern representation of disease. What follows is a survey of the main signs, which emerge as common to different medical authors, and which remain central in the tradition of the disease after the end of the ancient world.

Fever

Since early times, fever had been a central marker of *phrenitis*.¹⁷ In the Hippocratics, it was a key part of the disease’s affiliation with winter chest ailments. In later authors such as Diocles and Erasistratus, it apparently converged into the concept of inflammation, *phlegmonē* of a topical kind (the brain, meninges or diaphragm being affected) that accompanies it up to modern times. In others, such as Celsus, fever seems to sustain the

¹⁶ For a comprehensive discussion of the signs of *phrenitis*, see Pigeaud (1981/2006) 71–100; Centanni (1987).

¹⁷ See Pigeaud (1987/2010) 34–36 on fever as a differential sign in *phrenitis*, and more generally 67–69; Hamlin (2014) 17–88, 43–53 on Galen.

delocalized, systemic, atypical account of the disease. In nosology, fever becomes a differential element to distinguish *phrenitis* from other mental afflictions, notably *mania*. Fever also remains important for another fundamental reason: it constitutes a gravitational point for many of the observable manifestations of *phrenitis*, which are often of a typhoid kind and associated with overheating and drying.

'Fever', of course, must be defined. In modern medicine, the term might be taken to indicate, rather straightforwardly, 'a body temperature that is higher than normal' (with 'normal' usually indicated as a range). But for a world that lacked the concept 'temperature' as continuum (as opposed to 'hot' vs 'cold'), and that had no way to measure such entities with precision and no interest in them as a physical datum, the use of the modern term needs qualification. If we can, as I would argue, legitimately read *pyr* (πῦρ) as an experience to a substantial extent superimposable upon our 'fever', we must nonetheless be cautious, especially since this pathological sphere is too predominant in ancient medical literature to be taken as a strong indicator of a disease state we can recognize. Hamlin has carefully explored and exposed the network of demographic, environmental, scientific and socio-medical variables and biases that must be discounted when we apply the term to premodern contexts.¹⁸

Areteaus, in his therapeutic discussion, speaks of a fever 'of a continuous type' as characteristic of *phrenitis*: 'Nor do they have long intermissions, but they experience short and ill-marked remissions' (*Th.Ac.* 5.1, 92.33–93.2 Hude). For Galen, an accompanying continuous fever is also a particular element differentiating *phrenitis* from other kinds of insanity, as explained at *Caus. Symp.* 2.7 (7.202 K.): 'All forms of delirium (*paraphrosynai*) are dissonant movements (*plēmmeleis* . . . *kinēseis*) of the hegemonic faculty (*tēshēgemonikēs dynamēōs*), caused by malignant humours or by a bad mixture of the cerebral humours. Those with fever are called *phrenitis*, those without it *mania*.'¹⁹ In *Comm. Hipp. Epid.* VI, 1.29 (52.7–20 Wenkebach = 17A.882–83 K.) Galen discusses various typologies of fever based on their heat, and in particular the nature of the plague described by Thucydides. He criticizes the medical categorizations offered by other authors and writes: 'Some of the ancients called this kind of fever (i.e. that causes ulcers on the skin) phrenitic fever, like lethargic, pleuritic, peripneumonic.' Galen disagrees, however, because 'the fever of the

¹⁸ Hamlin (2014) 6–12, 24–30.

¹⁹ The same point returns at *Comm. Hipp. Prorrh.* I, 1.1 (5.3–5 Diels = 16.493 K.): 'All those are said to be manic (*mainesthai*) who are deranged without fever, those with fever to be phrenitic (*phrenitizēin*).' On the two types of *paraphrosynē*, *mania* and *phrenitis*, see Singer (2018) 389–90.

phrenitic is found to display a biting heat (*tēn thermasian echōn daknōdē*) in every part of the body equally and continuously to the touch (*dia pantos homotonōs en panti chronōi tēs epiballomenēs haphēs*).²⁰ Likewise at *Diff. Resp.* 3.9 (7.937 K.) we read that ‘these diseases that happen with continuous fevers are of the kind [Hippocrates] demonstrates in his book *On Regimen in Acute Diseases*. These are acute, those the ancients call *pleuritis* and *peripleumonia* and *phrenitis* and *kausos* and all the others of this kind, whose fevers are mostly continuous.’²¹

Among the symptoms of fevers described by Galen at *De Cris.* 11 (200.2–5 Alexanderson = 9.752 K.) are ‘strong pains to the head and neck, heaviness with or without fever. In phrenitics, spasms sometimes with yellow vomit; some of them die very quickly.’ Several details described here recur for *phrenitis* elsewhere as well, along with heaviness of the temples, darkened vision, tension and pain in the *hypochondria*, and epistaxis; the latter is also mentioned as a sign of *phrenitis* at *Loc. Aff.* 5.4 (8.330 K.).²² Galen is well aware of the generality and frequency of the signs that characterize fevers (*kausoi* and other diseases with ardent fever) and, as we have seen, is very concerned with the cogency of signs as a methodological question. In this spirit, at *Comm. Hipp. Prorrh.* I, 1.15 (31.1–5 Diels = 16.545–46 K.) he comments on the following Hippocratic point: ‘Those who are severely out of themselves with fever and sweating become phrenitic.’ He writes: ‘We define this formulation as strident/contradictory (*asymphōnon*); its sense is so obscure, that the nouns in it can be interchangeably separated or conjoined.’ Galen proceeds with a critique of the unclear, ambiguous syntax of this author, which in his eyes fails to establish any clear interdependence between basic signs such as fever, derangement, sweating and so forth. What is notable for us is the role of fever as container already perceived by Galen himself to be dangerously loose, as by Celsus before him. Celsus in fact drew the distinction between insanity due to fevers and insanity due to *phrenitis*, but did not develop this as fundamental to the definition of the disease (122.17–24 Marx).

Already in the Hippocratics, fever came with a plethora of heat-related signs, such as a rough tongue, thirst and dryness; these symptoms are

²⁰ More on the topic at *Comm. Hipp. Epid.* VI, 1.29 (56.19–57.15 Wenkebach = 17A.889–91 K.).

²¹ On the course of fevers, and *phrenitis* as an example, see also *Dieb. Decr.* 2.13 (9.897 K.), where Galen mentions Diocles in agreement.

²² At *Comm. Hipp. Epid.* III, 3.34 (132.4–5 Wenkebach = 17A.686 K.), Galen writes that *phrenitis* and ardent fever have a common cause, but differ in their *locus affectus* (*koinēn* . . . *echonta tēn aitian, diapheronta de tois paschousi topois*): the first is in the liver and stomach, and especially its mouth, the second in the brain. On this topic, see also Ahonen (2014) 156–58.

picked up by imperial authors as well. As expected, one of them is sweat: at *De Cris.* 3.3 (170.7–9 Alexanderson = 9.707 K.) it is said that ‘the good kind of sweat resolves *phrenitis*, and especially if abundant from the head and if warm, with the whole body sweating’. The idea, it seems, is that pressure and heat are relieved via the head, a process blood flow can also favour: ‘Through haemorrhages through the nostrils, *phrenitis* is even more safely resolved.’ In fact, fevers are directly related to the rise of bile to the head, as explained at *Comm. Hipp. Epid. III*, 3.12 (117.5–7 Wenkebach = 17A.661 K.): ‘High fevers (*kausoi phrenitikoī*) derive from the excess of bile falling on the liver and stomach, and become phrenitic when they rise to the head.’²³

At *Comm. Hipp. Prorrh. I*, 2.2 (53.14–26 Diels = 16.592 K.) Galen writes that headaches, insomnia and *asapheia* – a lack of clarity in speech – should be reckoned among phrenitic signs (*tōn phrenitikōn esti sēmeiōn*), and ‘since we have seen *phrenitis* to be a particularly dry (*xēron malista*) illness, any symptom of dryness occurring in the organs close to the head or sharing something with it also signals oncoming derangement, by virtue of which signs the disease is called the ‘the one with thirst/the thirsty one’ – *to dipsōdein*/τὸ διψῶδει is the transmitted form – ‘in the discussion above’. These are all classic manifestations of high fever, and their constant presence in *phrenitis* testifies to the strong embodied nature of the syndrome.

Sensorial Receptiveness

We have already observed that a notable element in Aretaeus’ analysis is the importance he assigns to the ambience created around the patient to protect his sensory health; the physician opens the chapter on precisely this topic. ‘A house of moderate size . . . a mild temperature’ are prescribed; the patient and those who live with him should ‘be ordered to preserve quiet’ (*hēsychiēn agein*, 91.12–15 Hude).²⁴ The reason for these recommendations is the extreme sensory sensitivity, tactile and visual, of phrenitic patients: they ‘have acute hearing and are affected by noise’ (*oxyēkooi gar ēde psophou kathaptomenoi*, 91.16 Hude), and are extremely prone to visions. For this reason, ‘walls should be smooth, level, without projections, unadorned with a frieze or paintings; for painting on a wall creates

²³ For a full discussion of the localization of fevers in the body, with special reference to the *hypochondrion*, see *Comm. Hipp. Epid. III*, 2 (63.10–64.23 Wenkebach = 17A.580–82 K.).

²⁴ Some of these ‘psychotherapeutics’ have already been discussed with reference to Celsus and Caelius Aurelianus.

excitement' (91.17–18 Hude). And again, since 'certain false appearances float before their eyes (*pro tōn ophthalmōn amphaireousi tina pseudea indalmata*, 91.18–19 Hude)' and easily cause them to grope and become busy with their hands (91.20–21 Hude), bedclothes should be plain, to avoid giving patients the opportunity to surrender to the urge to pluck. Light and darkness should also be modulated to suit each individual and the nature of the attack under way (92.2–8 Hude):²⁵ light is recommended, for instance, to keep the patient from being scared by confusing perceptions or 'strange images (*xena indalmata*)' (92.5 Hude). This hypersensitivity of the sensorial faculties is present *in nuce* in some Hippocratic remarks, such as those about the vividness of dreams in phrenitics,²⁶ and in the mention of floccillation as a recurrent behaviour. In this later period, medicine combines these traditional details and traces an image of impaired cognition: the senses impart deceptive information, and patients fall prey to images larger than life, both in dreams and awake.

The Hippocratic discussion of the vividness of phrenitic dreams just referred to is corrected by Galen at *Comm. Hipp. Prorrh. I*, 1.5 (20.10–21.18 Diels = 16.524–27 K.), in a long passage that nicely illustrates once again the complex interpretation imposed by imperial medicine on traditional signs. The observations made by physicians from the past are fitted into a comprehensive system: reading that 'dreams in phrenitics are conspicuous/clear' (*Prorrh. I*, 5, 75.10–11 Polack = 5.512 L.), Galen comments as follows:

Satyrus the student of Quintus, whom I had as my teacher before Pelops, explained this saying thus: 'Of those things which appear clearly in phrenitics and are done by them, those that seem to us to be seen or done, are not real images matching reality but all conspicuous dreams.' The fact that other people arising from sleep walk around while still asleep, but with their eyes open, like people who are awake, has been narrated and described in many places. But whether such things are done by phrenitics as well, is among the points that remain obscure to us. Whatever the truth might be, this inquiry does not help establish a prognosis. If I suggest that the preceding dreams of phrenitics are seen so clearly, that they are disturbed out of sleep and jump forth or speak because of the clarity of what they see, this adds something to the pre-notion of this disease; the very dryness is the cause of *agrypnia* and of the perspicuity of dreams. In this way, then, in melancholics as well all their visions seem perspicuous in dreams. Among those who are healthy, the

²⁵ For criticism, see also ps.-Galen, *De Optima Secta ad Thrasybulum liber* 22 (1.167 K.): 'Besides this, they also stupidly take over the idea of darkness for phrenitics. Because if darkness exacerbates *stegnōsis* (stoppage), exacerbated *stegnōsis* exacerbates derangement.'

²⁶ See Chapter 2, p. 28.

dreams of those who have eaten modestly are perspicuous, while for those who are full or drunk, these appear to be without images, because the images flow in front of them due to the obscurity in such a way that they leave no sign or residue in memory; in this way too, whatever affections accompany the humidity of the brain are comatose, somnolent and without images.

It is thus the dryness of this disease and of these patients' physiological states that causes the neatness of the images they perceive, just as humidity dulls the imagination, and torpor makes perceptions heavy and opaque. Through the language of dryness, wetness, fluid engorgement and flow, Galen is thus able to sketch out a mechanism of interaction between physiology and cognition based on the received Hippocratic sign, and forges a vocabulary for it.

Damage to Cognitive Faculties

Senses and images constitute only one level of the psychological and psychopathological portrait of the *phrenitic*, although perhaps the one most readily mentioned in medical literature on the history of mental disturbance.²⁷ While Galen is not as interested as Aretaeus or Celsus are in the emotional and personal sphere touched by phrenitic pathology, his elaboration on cognitive and imaginative damage has a depth and richness unmatched in other authors. In *Comm. Hipp. Prorrh. I*, 1.4,²⁸ as we have seen, Galen distinguishes precisely among types of mental damage in *phrenitis*, with – according to him – unprecedented precision. As he points out, in the presence of such damage the physician must check whether the ‘muscles’²⁹ (*myes*) of these functions are affected, or if the problem is with the source of their impulses, the brain:

Since everyone calls *phrenitis* such a condition, in which they see damage to the *phrenes* (φρένες), which is how they call intellect and reasoning (*noun kai dianoian*), one should first inquire in which part of the body the seat of psychic intellect is located (*en ôi tou sômatos moriôî to phronoun tês psychês estin*) . . . Therefore, it is necessary to identify the symptoms that express this damage . . . *I was the first to define (heurethê de hêmin) what the damaged faculties are, namely the critical capacities: intelligence, perception and memory (hê . . . kata proairesin energeia kai dianoësis, aisthêsis te kai*

²⁷ On which, see McDonald (2009) 120–52; Pigeaud (1987/2010) 95–127; Ahonen (2014) 119–21.

²⁸ 17.1–18.3 Diels = 16.517–20 K.

²⁹ Another difficult term, that does not map precisely onto our notion of ‘muscle’. See the introduction by Debru (2005); Gregoric and Kuhar (2014) on the problems posed by *neura* and muscles in Aristotle.

mnēmē). The damage to these functions will indicate the type of affection . . . ; and if one finds none of the muscles [which are the voluntary organs of those actions] to be damaged, one should suspect an encephalic lesion.

We learn more about the ‘types’ of mental affection at *Loc. Aff.* 4.2 (8.225–26 K.), in a passage which explores problems in the sensory organs. Here three kinds of *phrenitis* are distinguished, depending on which type of damage prevails:

There are two simple types of *phrenitis* (*haplai men dyo*), and a third which is a combination of the two (*synthetos de ex amphoin*). Some people suffering from *phrenitis* make no mistakes at all in distinguishing visual impressions (*peri tas aisthētikas diagnōseis tōn horatōn*), but base their judgement on an abnormal thought process (*ou kata physin echousi tais dianoētikais krisisin*). Others, to the contrary, commit no errors of judgement, but have a distorted sense perception (*enioi d’ empalin en men tais dianoēsesin ouden sphallontai, paratyptōtikōs de kinountai kata tas aisthēseis*). Yet it happens that others are affected in both ways (*allois de tisin kat’ amphō beblaphthai symbebēken*).³⁰

In a remarkable passage at *Comm. Hipp. Prorrh. I*, 1.27 (39.22–41.26 Diels = 16.564–68 K.), Galen combines humoral explanation with hard-wired encephalocentrism to account for the variety of symptoms, sensory-motor and dianoetic, which *phrenitis* produces, each of the two kinds ramifying in turn into more manifestations, depending on the section of the brain affected.³¹ Discussing the Hippocratic aphorism that ‘frequent changes in *phrenitis* are spasmodic’ (*ta en phrenitisi pykna metapiptonta spasmōdea*), he takes the occasion to scrutinize the nature of sudden changes in cases of *paraphrosynē* and in *phrenitis* in particular. At issue is not the change from bad to better, but from one *type* of bad symptoms

³⁰ The distinction closely resembles the famous one drawn by Jaspers and his school between ‘content’ and ‘form’ in madness, which was then taken up by the history of psychopathology (cf. Jaspers 1923/1963, 58–59). Pigeaud (1987/2010) explores the partially superimposable distinction between ‘illusion’ and ‘delusion’ vis-à-vis appraisal of reality; see also Pigeaud (1983) on the ancient philosophical and medical traditions.

³¹ Localization in the brain, and the separate but related topic of ventricular localization, is a difficult chapter in the history of medicine, evidence for it being episodic and unsystematic. See Young (1970) on the history of localization in modern science; Grunert (2002) 152–66; Green (2003); Rocca (2003) 245–47 for a summary of the material, and 196–98, although he dismisses the present Galenic evidence for subdivision of different areas of the brain in favour of a view of Galen’s doctrine as involving ‘the hegemonic faculties’ of the brain as a whole; the observations in Debru (2010); Guenther (2015) for the place in history of modern neurology; Wright (2016) 129–30, 182–94, discussing Nemesius (as the earliest occurrence), Posidonius and Galen, (2018); the essays in Ambrosio and MacLehose (2018) on various chapters in the historical ‘imagi(n)ing on the brain’ in Western cultures.

to another, the quality of the symptoms (40.7–8 Diels = 16.564–65 K.). These manifestations are caused by variations in humoral flows, and each case is appropriate to the body part where the imbalance fixes itself, and reflects the power of the individual humour. His explanation is long but worth quoting. With *phrenitis*

one can conjecture from the permanence of the disease in those parts, that the humour inflicting the affection is found in the head (*ek tou diamenein ep' autōn tēn phrenitēn estērichthai tis an en tēi kephalēi ton to pathos ergazomenon hyponoōseie chymon*). In fact, the reflux is in the brain itself, affecting now one part of it, now another, *maintaining a fixed disease conceptualization*, but with symptoms that change by part (*ontōs oun kat' auton ton enkephalon hē metarrysis estin, allote kat' allo meros autou ti gignomenē, tēn men idean tou pathou phyllattousa, kata meros d' hypallattousa ta symptōmata*).

Different clinical manifestations, Galen adds, clearly follow the affection in different regions of the brain, involving now sight or hearing, now smell, now touch, and so forth:

And now the author of the present book mentions these changes, saying that they suffer from floccillation or carphology and, after a state of deep calm, in a little while they jump up and do something manic, and next they become calm again, blaming some non-existent external object – for example, like those who order that the trumpeters or flute-players be driven away when there is not even one of them there.³² For just as carphology or floccillation are damage to the optical perception (*blabē tēs optikēs ... aisthēsēōs*), so these others are damage to the acoustic perception (*tēs akoustikēs*), and there is a similar symptom for the olfactory perception (*kata tēn osphrantikēn*), like those who complain of foul-smelling odours that are not there. There are also those who order that something which is there be taken away, saying that it is too heavy, or too hot, or too pungent or cold to the touch, while in such symptoms the damaged tactile perception is at work (*tēs haptikēs aisthēsēōs en tois toioutois symptōmasi beblammenēs*) . . . Often we observed such forms of derangement persisting continuously while the patient was in a maddened state (*hai toioutai parakopai dia pantos men en tōi paranoein*), but changing its fashion in accord with each type of affected faculty (*hypallattomenou . . . tois tropois kata panta ta genē tōn psychikōn energeiōn*).³³

³² Galen refers to the case of the doctor Theophilus hallucinating pipe-players also at *Symp. Diff.* 1.4.3 (224.18–226.8 Gundert = 7.60–61 K.), in a discussion of kinds of *paraphrosynē*. See King (2013b) for this peculiar musical element as a topic in Greek stories of psychopathology.

³³ See also *Comm. Hipp. Epid.* III, 3.35 (134.14–16 Wenkebach = 17A.690 K.) on continuous derangement as phrenitic sign; cf. 3.47 (139.15–16 Wenkebach = 17A.700 K.).

So much concerning sensory stimuli and their interpretation by the patient. Other types of damage are more ‘purely’ cognitive, independent of sensory appraisal, such as memory or emotional excitement:

And so, just as I have listed them with regard to the senses, so in the same way as far as reason is concerned, we see that reasoning, judgement, memory³⁴ and intelligence (*kata logon kai gnōmēn mnēmēn te kai noēsin*) are sometimes subject to change in phrenitics, so that at times they anger themselves, but sometimes they enjoy themselves or engage in serious discourse, although they are deranged (*paraphronountas*).

Remarkably, other capacities may remain intact throughout these episodes of derangement:³⁵

And so, I have heard of orators who would rehearse during an attack of derangement (*en parakopēi*), and of a grammar teacher who would read a book thinking it was Bacchylides or Sappho, or a mathematician or geometer who went through the theorems of his own art. And if, while solemnly reading these things, after a while they remembered something filthy or unholy, what in the *Epidemics* is called ‘being foul-mouthed’ (*aischromythein*) – the change was not from mean to appropriate, but from bad to bad, as deranged patients sometimes appear at their boldest when caught sight of at one point, and then meek and cowardly just afterward. For such symptoms appear to be fundamentally identical: they fear things that are not to be feared, indeed at times are afraid of the smallest things. An example of such an occurrence, it seems to me, [the author of *Prorrhetikon*] wrote in the following statement, that says ‘passing urine without realizing, bad’. So consider someone who suffers the changes mentioned above, in the urine and in other matters, in which the memory is damaged; and imagine that in turn all his sensory representations are damaged, just as the dianoetic is.

The broad variety of forms of disturbance, finally, depends on the regional complexity of the brain as it is struck by different humours with different intensities:

Of these the cause is in the brain, but the reflux affects now one part of it, now the other (allot' allon) alias alium ipsius locum . . . quod transfluit³⁶. We have illustrated that these refluxes arise from each of the receiving parts (*tōn dechomenōn moriōn*) pushing the residue towards another (*eis heteron*).

³⁴ On damage to memory in *phrenitis*, see Julião (2018) 228–35.

³⁵ On ancient remarks about this phenomenon of ‘selective’ madness, see Thumiger (2017) 60.

³⁶ This is the Latin translation given in Kühn’s edition (Durling 1961, n. 157, Vassaeus, Johannes), also interpreting the expression *allot' allon* (ἄλλοτ' ἄλλον) as locative, ‘regional’, conceptualizing the brain as an organ subdivided into functional areas.

It thus makes sense that the humour which brings the pathology, flowing down from one part of the brain into the other, should in turn be pushed away from it, and that falling on the nerves which originate there, it should cause spasms. Hippocrates himself said that this affection comes from repletion and evacuation.³⁷

A comprehensive physiological picture of humoral overflow in this way explains emotional, imaginative-sensory and reasoning-cognitive disturbances, as well as motor impairment: the source of everything is in the brain and the nerves originating there, with the humoral element allowing for a flexibility and complexity of internal reactions that encephalocentrism alone could not provide – a picture very similar to that of *De morbo sacro*, despite Galen's surprising lack of engagement with that Hippocratic treatise.³⁸

We thus discover two accounts of the distinct cognitive damage that occurs in the disease *phrenitis*. The first is subdivided into hallucination, on the one hand, and impaired judgement, on the other (with a mixed version to complete the picture). The second is tripartite, depending on the type of cognitive damage (to the intellectual faculty, the sensory faculty, or the memory), partly superimposable on the first.

In various texts, Galen offers precise clinical examples of phrenitic patients which better illustrate the distinction. The first case is a famous one, namely his own personal experience. As a young man, Galen too once fell sick with *phrenitis*:

Stricken by a burning fever during summer, it seemed to me that I saw sticks of dark straw protruding from my bed, as well as similar pieces of wool from my garment. I attempted to pull these out. When I was unable to catch onto anything with my fingers, I renewed this effort more steadily and forcefully. When I heard two friends who were present telling each other, 'He is pulling wool and straw', I understood that I had the affection of which they spoke, but I realized that I was not deranged in my reasoning faculties and said, 'What you say is right, but help me, to keep me from suffering from *phrenitis*.'³⁹ Then they busied themselves applying wet dressings to my head. Throughout that entire day and night, I remained agitated by frightening dreams, shrieking loudly and even trying to get out of bed; but on the next day all symptoms subsided. (*Loc. Aff.* 4.2, 8.226–27 K.)⁴⁰

³⁷ *Comm. Hipp. Prorrh. I*, 27 (40.9–41.26 Diels = 16.565–68 K.).

³⁸ The relevant passage is at *De morbo sacro* 14 (25.12–26.10 Jouanna = 6.387 L.).

³⁹ On this famous passage, see also Devinant (2020) 291–92.

⁴⁰ Cf. Aretaeus, *Morb. Chr.* 1, 6 on *mania*, for a similar distinction regarding 'another species of *mania*', that of patients who have 'a madness of judgement only; for in all other respects they are

The patient, Galen, is here beginning to hallucinate, but his judgement remains sound and he is capable of intervening promptly by asking for help. Even more precise theoretical distinctions regarding the nature of derangement and hallucinations following damage to the *hēgemonikon* are made at *Symp. Diff.* 1.4 (224.9–226.8 Gundert = 7.60–61 K.). In this case, different kinds of impairment are listed and assigned a precise vocabulary, articulating mental damage along various branches of activity and faculty, which can be weakened individually or together: ‘Often delirium exists in both at the same time, in the ill-functioning [faculty of] representation (*phantasiousthai*) and in the improperly functioning reasoning (*logizesthai*), but sometimes in only one of those two.’ At *Symp. Diff.* 1.4 (226.13–17 Gundert = 7.61 K.) Galen offers another famous *phrenitic* case for the sake of illustration:

In some [people] no *phantasma* appears, but they do not reason correctly (*logizontai d’ ouk orthōs*), because the rational part of the soul is affected in them. Such was the case of the phrenitic [person] who, having closed the doors within, was holding each of the household utensils through the windows and asking passers-by if they would order him to throw them out. He spoke the name of each of the utensils quite precisely, from which it was clear that he was neither impaired in his *phantasia* regarding these objects nor in his memory of names (*out’ en tēi phantasiāi tēi peri auta beblammenos out’ en tēi tōn onomatōn mnēmēi*). Why then did he wish to throw all these objects from a high place and shatter them? This he was no longer able to understand, but by the act itself he was manifestly delirious (*tout’ ouketh’ hoios t’ ēn symbalein, all’ en autōi dē tōide katadēlos egineto parapaion*). In this case the perception of reality and memory is clearly untouched; it is the judgement, reasoning and morality, we might say, that has suffered damage.⁴¹

At *Comm. Hipp. Epid. VI*, 7. 30, 31a and 31b (1315–23 Vagelpohl),⁴² commenting on the Hippocratic passage at *Epid.* 6, 8.10 (175.5–9

sane (*kai esti tēs hypolēpsios he maniē mounon, ta d’ alla sōphroneousi*)’ (43.31–44.1 Hude), but are in particular victims of ‘holy fantasies’ and religious fanaticism.

⁴¹ This patient, or a similar one, is also mentioned at *Loc. Aff.* 4.2 (8.226 K.) in a description of phrenitic behaviour due to impairment of the mental faculties: ‘A man who was confined to his house in Rome in the company of a young wool-worker rose up from his bed and went to the window, where he could be seen and could also watch the people passing by. He then showed them each of his glass vessels and demanded that they ask him to throw them down. The people laughed, clapped their hands, and told him to do so. Then the man grasped one vessel after the other and threw it down. The people laughed and screamed. Later he also asked whether they wanted him to throw down the wool-worker. And when they told him to do so, he complied. When the people saw the man fall from high up, they stopped laughing, ran to the fallen man, who was crushed, and lifted him up.’ On this anecdote, see also Devinant (2020) 288–90.

⁴² On this passage, Vagelpohl (2023) *ad loc.*

Manetti–Roselli = 5.348.1–3 L.), Galen tackles a difficult Hippocratic lemma: ‘VIII 30. Hippocrates said: The mind, distinct from the organs and the things it resides in, thinks inwardly: it feels pain or pleasure, experiences fear or courage, hope or negative thoughts.’⁴³ This passage gives Galen the opportunity to offer some additional comments on mental faculties, with phrenitic parallels regarding damage to reason but not to sensation (nor memory):

A doctor in my home town in the province of Asia visited a person who was suffering from brain fever. The patient then engaged the doctor, drew a sword, grasped it, handed another (sword) to the doctor and wanted him to have a sword fight. Another man was struck by this illness in the city of Cumae.⁴⁴ In his house there was a large sack filled with flour. He emptied this flour on the floor and when the doctor arrived, he wanted him to wrestle with him on this flour as wrestlers do on fine sand in the arena. Another man who had this illness hid behind the door until a person entered. He closed and locked the door and told the person who had entered that he would not open it for him until he had wrestled with him. All these individuals did what they did while (still) recognizing the faces of the people who visited them and remembering their names. That they remembered their names, indicates that they recognized them by their appearance.

We have observed many other behaviours from people with brain fever that indicate that only their mind has been harmed but not the ability to recognize perceptible objects. I therefore think that Hippocrates wanted to mention such people. *Melancholia* also belongs to this category, because people suffering from it clearly perceive everything and remain aware, just not in the mind’s eye.

‘Neurological’ Signs

Some markers of *phrenitis* are also of psychiatric interest from a modern perspective, if more on the neurological side, on our understanding of the term.⁴⁵ These are often associated with fever and dryness in the ancient accounts. For example, there are tremors due to the ‘dry character of the disease’ and its ‘tensions⁴⁶ of the nerves (*ai . . . eutoniai tōn neuron*)’, and once the patient’s energy has dissipated due to prolonged wakefulness and exertion, ‘the nerves dry out and tremors appear’.⁴⁷ The gesturing of the phrenitic is disorderly and uncontrolled: ‘Some puff loudly . . . others

⁴³ On the problems raised by this Hippocratic passage, see Thumiger (2017) 331–32.

⁴⁴ Transliterated as *Kymī*. ⁴⁵ I use this term with the caution expressed in Chapter 4, nn. 6, 26.

⁴⁶ Or lack thereof, ‘slackness’, *atoniai* (ἀτονίαι)? Cf. Diels *ad loc.*: εὐτονίαι L, ἀτονίαι RT.

⁴⁷ *Comm. Hipp. Prorrh. I*, 1.9, 24.25–28 Diels = 16.533 K. Cf. *De trem.* 8 (7.641–42 K.).

move their head and hands in a disorderly fashion (*alogōs*). Later on, 'their strongest sign is *agrypnia*, and most of all that of the troubled kind (*hē tarachōdēs*): this is characteristic of the phrenitic. It is troubled, as I said, if in the course of the hallucinations they scream and jump and can barely recognize their family.'

It is interesting that Galen can superimpose both a phrenitic interpretation and his own neural understanding on a patient for whom neither is explicit,⁴⁸ as at *Comm. Hipp. Epid. III*, 3.91,⁴⁹ a young man who develops a fatal fever after drinking and sexual excess (*ek potōn kai aphrodisiōn pollōn*). Galen comments that 'drinking too much harms the nerves and their origin in the brain. Sex also damages them, as it affects the strength and debilitates the patient. And so this young man, once a toxic amount of humours had accumulated, was taken by a slight fever, as expected. Had it got worse over the course of the days, it would have evolved into *phrenitis* proper (*eis phrenitin akribē*). In this case, quite unusually, Galen seems to reconstruct a history of unhealthy lifestyle as antecedent to the humoral imbalance, sketching a chain of causation and a landscape of predisposing circumstances that can lead to *phrenitis*. At the same time, this shows the many venues through which he remoulds his Hippocratic sources to his own purposes.

Within the neurological manifestations, motor disturbances, such as spasms, are especially important. At *Comm. Hipp. Progn.* 3.39 (365.16–23 Heeg = 18B.294 K.), the discussion of violence and tremors is an occasion for a neurological assessment of the disorderly movements of the phrenitic:

Those signs that appear mainly in serious cases of *phrenitis* indicate spasms in illnesses of this kind in those who are grown up, and especially those of them that come about as the parts of the face are distorted, or the teeth grind, or the eyes are unstable or twisted. In the case of children, merely being sleepless is sufficient, and sometimes being extremely frightened – which he called 'being panic-struck' (<*ekplagēnai*>) – and crying intensely, and an inability to evacuate their bowels.

Children present an extreme version of the severe motor symptoms *phrenitis* may cause in adults.

Spasms, it is explained elsewhere, originate in the overheating and drying up (*hyperxēranthentōn*) of the brain and meninges through the accumulation of yellow bile.⁵⁰ In extreme cases, spasms can be violent at the end, as Galen states when he comments on the Hippocratic lemma

⁴⁸ On this retrospectivity, see again Chapter 4, pp. 49–50.

⁴⁹ 186.8–187.4 Wenkebach = 17A.790–91 K.

⁵⁰ *Comm. Hipp. Epid. I*, 2.56, 78.2–4 Wenkebach = 17A.153 K.

‘The phrenitic affections end with violent tremors’ (*ta phrenitika neanikōs tromōdea teleutai*) at *Comm. Hipp. Prorrh. I*, 1.9.⁵¹ If these are extreme cases, it is a general fact that ‘the vigour of the nerves, because of the dryness of the disease, affects phrenitics for a long time. And when their strength is diminished (*katalytheisēs . . . tēs dynamēōs*) by their troubled insomnia (*agrypnia*) and their many movements, once the nerves are entirely desiccated, at that time the tremors occur’.

This dryness and parching of the nerves may also explain yawning as a symptom – although *phrenitis* is only one possible factor. At *Comm. Hipp. Prorrh. I*, 1.11,⁵² Galen reflects on the Hippocratic ‘Experiences of pain in the *pharynx*: dry, small, suffocating, when yawning, with difficulty clenching and closing the mouth, and links them to derangement; among such cases, the phrenitics are in danger.’ He adds: ‘When, in the presence of these symptoms, a *phrenitis* should arise, of whatever kind, it is dangerous, as is rightly said. But you should not presume that it is unavoidable that *phrenitis* emerge from these symptoms.’ For Galen, as he goes on to explain, these signs are related to a variety of possible forms of damage at the origins of the nerves, in the brain; *phrenitis* could be one such circumstance, but not the only one. As in several of these discussions, Galen takes the occasion of a description of a phrenitic sign to challenge its semiotic cogency, and in the vast majority of cases to deny that it is *idion* (‘specific’) to the exemplary disease *phrenitis*. But for our purpose of offering a sketch of how *phrenitis* was medically perceived and described, all these signs are equal in weight, despite Galen’s ranking and discussion, and following his own pragmatism and realism.⁵³ In a similar spirit, at *Meth. Med.* 12.8 (10.872 K.) Galen points out that a state in which patients ‘lie stretched out and in pain due to severe dryness’ indicates ‘the need for moisture’. This is especially hard to treat in case of fevers. He adds: ‘In particular, it follows the deadly *phrenitides* (*tais olethriais phrenitisi*), and I myself have seen no one who has been saved after having suffered convulsions in this way’; when the cause is dryness rather than biting humour, there is no hope of curing the patient.

Sleep is an important area of psychopathology in ancient medicine, observed in fine detail by doctors from the time of Hippocrates. In Aretaeus, sleep disturbance is an important element in the portrayal of *phrenitis*. A range of *ad hoc* soothing measures for this condition is contemplated in his text on therapy, including head fomentations,

⁵¹ 24.17–28 Diels = 16.533 K. ⁵² 26.7–18 Diels = 16.536–37 K.

⁵³ On which, see again Devinant (2020) 169–90.

applications under the pillow, rubbing the nostrils, ears, face or feet of the patient, and bespoke relaxing measures (94.14–95.3 Hude). He recommends various activities and diversions conducive to sleep, and in particular those familiar to the lifestyle of the individual patient (94.30–95.3 Hude):

to the sailor, repose in a boat and being carried about on the sea, the sound of the beach and murmur of the waves, the boom of the wind, and the scents of the sea and the ship. But to the musician, the customary note of his pipe in stillness . . . to a teacher, intercourse with the prattling of children. Different persons are soothed by different charms to bring about sleep (*alloisi d' alla hypnou thelktēria*).

Restoration of the conditions for a peaceful rest are fundamental: insomnia and excessive sensory response seem to go together.

In Galen, sleep disturbance is also characteristic, and *phrenitis* is defined to an important extent as both identical and contrary to *lēthargos*:⁵⁴ excessive wakefulness and tension, for which, however, the physician from Pergamon notably avoids any psychotherapeutic involvement. In particular, *agrypnia* of a troubled kind (*tarachōdes*) is typical (*idion*) of *phrenitis*, as seen above in the methodological discussion.⁵⁵ In *Comm. Hipp. Prorrh. I*, in fact, Galen devotes considerable attention to articulating sleep disturbances in cases of *phrenitis* and *lēthargos* in a differential spirit: *kōma*, *agrypnia*, *kataphora* and the presence of sleep proper or sleepiness are variously combined in complex ways to describe the pathology, with levels of fine distinction that are at times impossible to grasp.⁵⁶

The topic of sleep was obviously important for Galen, since he devoted an entire treatise, his *De comate secundum Hippocratem*, to commenting on the Hippocratic concept of *kōma*, a condition of pathological sleepiness. At *Com. 2.14–15* an important discussion involves *phrenitis*:⁵⁷ reading Hippocrates, Galen first distinguishes between an ‘oppression, heaviness’ (*catafora*) that is sleepy in kind (*somnolentia*) and one that is not so (*catafora*

⁵⁴ See *Comm. Hipp. Prorrh. I*, 1.1 (6.27–7.1 Diels = 16.496–97 K.): ‘Those affected by lethargic *kōma* can in no way be considered phrenitic. Instead, the patients who are wakeful without *kōma* will be called phrenitics, when they are struck by the affection proper to the disease. It will be called *phrenitis* proper (*hē akribēs*) when yellow bile occupies the seat of the *hēgemonikon* . . . *lēthargos* has a different cause: the *phlegm*. Yet another different illness is *typhōmania*, a disease that arises when the two humours mix without one taking over the other, and without determining as a consequence a purely phrenitic or a purely lethargic state’; cf. *Comm. Hipp. Prorrh. I*, 3.1 (107.17–108.5 Diels = 16.707–09 K.); *Com. 2.12–14* (187.29–188.21 Mewaldt = 7.653–55 K.).

⁵⁵ *Comm. Hipp. Prorrh. I*, 1.6, 22.13–16 Diels = 16.528 K.; see above, pp. 114–18.

⁵⁶ *Comm. Hipp. Prorrh. I*, 1.1 (6.18–7.14 Diels = 16.496–97 K.). ⁵⁷ 188 Mewaldt = 7.655–56 K.

non somnolentia).⁵⁸ Further on, on his reading, Hippocrates distinguishes two types of sleepless (*insomnis*) *catafora*, one that is ‘dull/somnolent’ (*pigra*) and one that is not so. While the first is characteristic of the lethargic, the second befalls phrenitics (188.29–33 Mewaldt = 7.656 K.); under its influence, patients ‘speak and have delirium with no grip on their mind, are particularly ready to be startled’ – all the opposite of lethargics (189.20–27 Mewaldt = 7.655 K.). Further, phrenitics are delirious about matters that make no sense, and are strong enough to get up, which is impossible during lethargic *kōmata*, in which patients do not respond readily to any stimulus. The phrenitic *kōma* is thus an alert comatose state, with no weakening of sensation or movement:

And so these patients lift themselves up immediately when they hear a voice; if touched on any part of their body, they look towards the part involved. In this type of *kōma* the movement is disorderly (*alogōs*): suddenly they are taken by uncontrolled spasms . . . This state is called ‘heavy oppression (*nōthra kataphora*)’ by Hippocrates . . . Already Hippocrates asked himself – and we do the same with him – if these patients should be called phrenitics or something else. In any case, a distinction between the two types of *kōma* is necessary.⁵⁹

Likewise, agitation and a lack of peaceful sleep (*hē agrypnia kai hē tarachē*) characterize *phrenitis* – they are *phrenitika sēmeia*⁶⁰ – and show the involvement of the brain. As a consequence, phrenitic patients ‘scream through their sleep, and get up due to the vividness of their dreams/visions (*dia tēn enargeian tōn phantasmātōn*)⁶¹. Galen also differentiates them from persons suffering from torpor and oppression in *Comm. Hipp. Epid. I*:⁶² ‘If these things [certain affections involving the diaphragm and the *hypochondrion*] arise with troubled sleep and without oppression (*baros*), then he will die phrenitic.’

⁵⁸ This portion of the text is preserved only in a Latin translation.

⁵⁹ Cf. *Com. I.4* (182.15–21 Mewaldt = 7.645–46 K.): ‘Hippocrates too was in doubt about the whole combination of symptoms [*agrypnia* and *kōma*], whether it was opportune to call them phrenitics, or what else. For one should avoid calling them phrenitics, because they are not yet deranged. But when all the symptoms appear to be phrenitic, the pain in the head, loins, *hypochondrion* and neck, one should not be afraid of mistakes or ignorance. No one will deny that these have an obvious probability (of being phrenitic), however not sufficiently.’ Again *Com. I.4* (192.12–19 Mewaldt = 7.663 K.), on a similar concern, the distinction between ‘comatose *kataphora*’ and ‘non-comatose *phrenitis*’; here, as elsewhere, *phrenitis* provides the ideal arena for methodological discussion.

⁶⁰ *Comm. Hipp. Prorrh. I, 1.4* (15.11–15 Diels = 16.514 K.).

⁶¹ *Comm. Hipp. Prorrh. I, 1.5* (20.22–24 Diels = 16.525 K.). Cf. *Loc. Aff. 5.4* (8.329–30 K.) ‘disturbed sleep, frightful and disturbed dreams, awful nightmares with screams and startling, forgetfulness’.

⁶² *Comm. Hipp. Epid. I, 3.19* (132.22–23 Wenkebach = 17A.264 K.).

At *Com. 1.3* (181.15–16 Mewaldt = 7.644 K.) Galen notes that Hippocrates' use of the term *kōma* (κῶμα) differs from the traditional one. 'Hippocrates . . . says (*phēsi*) that *kōma* often arises with troubled sleep/sleeplessness (*agrypnia*) and accompanies the phrenitic condition (*phrenitikois synedreuein*)', and Galen comments:

Had he not anticipated that no phrenitics have a manic outburst, but simply said that those phrenitics who were present died with narcotic *kataphora*, it would have been persuasive to hear that after a conversion into *lēthargos*, they died this way. But since he anticipates that none had a manic outburst, it makes more sense to say that they died with *kataphora* while remaining phrenitic, namely while still deranged. In fact, this is the only discriminating fact, together with fever, that we accept for *phrenitis*, which is otherwise in no way different from *mania* except for fever. For both are damage to the mind, but the one without fever is characteristic of the manic, while to have fever is characteristic of phrenitics. It therefore causes no surprise that when raw humours gather in the body, as shown by the excrement and urine, they become at the same time comatose and deranged: comatose because of the coldness and abundance of the raw humours, and deranged because the humours, as they putrefy, generate acidity and heat.

At *Comm. Hipp. Prorrh. I, 1.33* (46.18–27 Diels = 16.578–79 K.) Galen returns to the same passage:

About such phrenitic patients, Hippocrates writes as follows in the books of the *Epidemics*, that none of the phrenitics was raving . . . but they were dying oppressed by another kind of narcotic state, *kataphora*. In the discussion above, he calls these phrenitics 'unclear' (*asapheis*), as if saying that they are difficult cases not only for non-specialists but also for the doctors. For they think that only those who cry out and jump up are phrenitic, while Hippocrates refers this way to those who are hit in the *phrenes*, even if they appear to be in some form of *kataphora* all the time.

It is clear that this particular kind of *kōma* characterizes a version of our disease, since it appears, despite variations, in a number of different sources.⁶³ It is also clear that Galen considers types of sleep to be indicators of states of mental health generally, with these exemplified by *phrenitis* and *lēthargos*. The underlying physiology is described at *De causis pulsuum* 3.10

⁶³ See also *Comm. Hipp. Epid. III, 3.64* (146.16–147.3 Wenkebach = 17A.713 K.) 'Comatose in particular were phrenitics and sufferers from *kausos*, but also in the case of all the other most important diseases, when they occur with fever. The comatose state creates a density of matter especially in those whose head is affected. It suffers this primarily in phrenitics, but in sufferers from *kausos* it occurs incidentally [or accidentally], for [in them] the heat of the fever brings up the bad fluids (*tous mochtērōus chymous*) to the head (*pros tēn kephalēn*); in that case, those of the crude and cold type (*hoi ōmoi kai psychroi*) were abundant.' I thank P. N. Singer for help with this translation.

(9.140 K.), where a distinction is drawn between two different causes of sleep, a dry and a moist one, with opposite pathological outcomes:

Sleep comes from natural heating or through toil of some sort or through *excessive dryness*, or is caused by food or by *excessive moisture* that is unable to find a way out. The first is healthy and in accord with nature, whereas the second described is the type in cases of *kōma* or *lēthargos*. The state of wakefulness of *phrenitis* and in all cases of insomnia contrary to nature is in antithesis to this, [coming about] at the point where the natural heat dries up excessively and, as if it were burnt up, is for this reason pushed violently towards the exterior.

Voice and Tongue

The feverish dryness of *phrenitis* has consequences for the voice and tongue of these patients, as repeatedly noted in the Hippocratic texts, where a ‘rough tongue’ or ‘lispings tongue’ often accompanies high fevers. At *Comm. Hipp. Prorrh. I*, 1.3,⁶⁴ the Hippocratic aphorism under discussion attributes to phrenitics precisely ‘muffled and dry tongues’ (*hai daseiai glōssai kai kataxēroi*), which Galen connects with those that are *tracheiai* (‘rough’), emphasizing the dryness and roughness caused by the heating generated by yellow bile. At *Comm. Hipp. Prorrh. I*, 1.20,⁶⁵ ‘a trembling tongue is a sign of a mind not well composed’: what is at stake here is this sign and a weakened psychic faculty, as also in the case of *phrenitis*: ‘For when the brain suffers and there is a hot affection, it cannot stay still.’ In both cases, the issue involves heating, dryness and the state of the organs of speech.

Galen also considers this sign in terms of semiotics and cogency vis-à-vis *phrenitis*. At *Comm. Hipp. Prorrh. I*, 1.19⁶⁶ he comments: ‘Derangements with a shrill voice and trembling spasms of the tongue, when these grow tremulous, [the patients] are out of themselves, and in these cases hardening (of the tongue) is fatal.’ This sign, Galen observes, is characteristic but not exclusive:

Whenever derangement appears in *phrenitis*, which is a hot, dry illness, and the dryness is passed on to the trachea, a shrill voice develops, just as a raucous voice derives from being drenched in moisture. But these are not affections proper to *phrenitis*; for they also arise in other diseases and do not last for the whole duration of the phrenitic affection. The tremor of the tongue thus affects the psychic faculty because of the dry condition of the

⁶⁴ 12.6–7 Diels = 16.507 K. ⁶⁵ 36.4–16 Diels = 16.556–57 K. ⁶⁶ 35.18–29 Diels = 16.555 K.

above-mentioned illness. The spasms are instead a consequence of the dryness of the muscles in it (i.e. the tongue), as they suffer together with the head, just as the voice becomes tremulous because of a lack of tone due to the bad mixture in them. *All the symptoms mentioned above arise because of the onset of dryness in the head, and obviously signal affection of the mind.* In all these cases of hardening, [this set of signs] is fatal because of the excessive dryness accumulated in the brain.

In this way, the sign is revealed as characteristic of fevers generally, but not of *phrenitis* specifically. In the same spirit, at *Comm. Hipp. Epid. III, 3.33* Galen comments on the Hippocratic statement regarding a phrenitic quality of certain kinds of voices, writing:⁶⁷

Since the affection to the head belongs to this *katastasis*, which is hot, moist and continuously without wind, it follows that also in phrenitics and those with ardent fever there will be the same symptom due to the same cause, and not because of the constitution proper to the disease in itself. For the phonetic parts dry themselves more than they moisten themselves, as in the *katastasis* being discussed here. And then also the voice becomes metallic and acute because of the dryness of the phonetic organs, and hoarse because of the moisture.

As was the case already in the Hippocratics, a lack of clarity in articulated speech – which in the older sources is often identical to a lack of mental clarity – is associated with overheating and dryness.⁶⁸ Overheated, feverish patients may suffer from a characteristic insecurity of speech, the ‘trembling tongue’ (*hai tromōdeis glōssai*), a general consequence of a weakened ‘mental power’ found in *phrenitis* or due to other causes. This too is not a defining sign for Galen (*ouk . . . tōn oikeiōn tēs phrenitidos sēmeiōn, Comm. Hipp. Prorrh. I, 1.20*).⁶⁹ The trembling tongue, he says, is seen by some as a sign of psychic weakness, while the lack of clarity is instead ‘a sign of cerebral suffering caused by heat that does not allow the brain a state of calm’.

In conclusion, just as this manifestation is not exclusive (*idia*) to *phrenitis*, neither are the muffled tongue or the quality of the voice – the ‘metallic voice’.⁷⁰ These are all interconnected for Galen as features of the

⁶⁷ 131.16–23 Wenkebach = 17A.684–85 K. ⁶⁸ See Thumiger (2017) 417–18.

⁶⁹ 36.6–16 Diels = 16.556–57 K.

⁷⁰ *Comm. Hipp. Prorrh. I, 1.19, 35.21–25* Diels = 16.555 K. ‘Whenever in a *phrenitis* a *paraphrosynē* generates a hot and dry affection, the dryness in it is transmitted to the pipe, making it rough, and the metallic voice (*he phōnē klangōdēs*) follows, just like a hoarse voice (*branchōdēs*) in cases of accumulated humidity, but *not* as identifying markers of *phrenitis*; for these occur in other diseases as well, nor do they occur continuously in cases of *phrenitis*.’ On *hē phōnē klangōdēs*, cf. *Comm.*

dry and hot disease, which also involves urinary incontinence while asleep⁷¹ and a dry tongue. As such, they are ‘common’ but not exclusive (*ouch henikōs phrenitikon alla plēthyntikōs*).⁷²

Urine, Sweat and Other Secretions and Excretions

As we have seen, the urine of phrenitics was described by the Hippocratics as whitish with sediment. Urine and the excreta generally are an object of scrutiny in ancient medicine from its early origins. This tradition of observation continues through the imperial age with the work of late-antique doctors and is substantially developed there, expanding into a separate branch of medical diagnosis.⁷³

For Galen, as we have seen, the quality of urine lacks cogency as a nosological marker. Urine, he explains at *Comm. Hipp. Prorrh. I*, 1.13,⁷⁴ can be white for various reasons, especially diet-related ones. At *Comm. Hipp. Prorrh. I*, 1.4⁷⁵ he notes again that neither urine nor sweat is a sufficient sign. For the vast majority of patients, in fact, bodily products – stools, urine, vomit, sweat, exanthema, sputum and a sense of oppression/unwellness in one particular body part – are not cogent. At *Comm. Hipp. Aph.* 4.72,⁷⁶ Galen also points out that the quality of the urine reflects the general state of the individual, although this is particularly true for acute cases like *phrenitis*: ‘Those pertaining to urine are signs of extreme indigestion/crudity, on which account the disease becomes chronic. Some of these are very damaging when they attack already fading strength, as in the case of *phrenitis*.’ Likewise, he writes later on (*Comm. Hipp. Aph.* 4.72, 17B.760 K.) that ‘a watery

Hipp. Prorrh. I, 1.17, 34.12–17 Diels = 16.553 K. ‘Vomit with nausea is a symptom common to these cases with the malignant fevers, just like the metallic voice.’

⁷¹ *De motu musc.* 2.4 (32.24–27 Rosa = 4.438 K.), *Comm. Hipp. Prorrh. I*, 1.28 (41.27–42.18 Diels = 16.568–70 K.).

⁷² *Comm. Hipp. Prorrh. I*, 1.6 (22.23–24 Diels = 16.529 K.).

⁷³ The tradition of urological prognostics had great success in the late-antique and Byzantine world, as exemplified by Theophilus Protospatharius’ seventh-century *De urinis*, with an overview of traditional doctrines. Stephanus in his *In Magni Sophistae librum de urinis* II (436.5–7 Bussemaker) writes that ‘abundant, thin and white urine passed during fevers signals an interruption in the quartan fever; for he passes thin, white urine during the peaks of fever due to the excess of phlegmatic bile in those who have an unnaturally cold liver’. Cf. ps.-Galen, *De urinis ex Hippocrate, Galeno et aliis quibusdam* 19.610.19 K. ‘In chronic diseases, by and large, there is transparent, white urine because of the state of weakness . . . ; it signals blockage, as is clear in phrenitic cases’, and 19.621.17 K. ‘He passes thin, white urine also in burning fevers, and it signals sharp, severe *phrenitis* (*phrenitida aploun megalēn*)’.

⁷⁴ 28.14–30.14 Diels = 16.541–44 K. ⁷⁵ 15.18–25 Diels = 16.514–15 K. ⁷⁶ 17B.759–60 K.

kind of urine is most negative; such things appear especially in phrenitic patients who are doing very badly'.⁷⁷

Other secretions are also discussed. Sweat is similar, associated with fever generally rather than with *phrenitis* in particular: 'Those who are insane with fever and sweating are phrenitic' (*Comm. Hipp. Prorrh. I, 1.15*⁷⁸); 'Phrenitic difficulties accompanied by chilling and sweating in the upper parts with fevers, as for Aristagora, are fatal' (*Comm. Hipp. Prorrh. I, 1.26*⁷⁹). Linked to heat and dryness is also a symptom that often recurs after Galen, the dense acridic lacrimation of phrenitics: 'When they are about to suffer from *phrenitis*, they have very dry eyes, or a single acridic tear flows from one or the other' (*Loc. Aff. 5.4, 8.330 K.*).

Expectoration – coughing and sputum – was important in the early history of *phrenitis* as well, since the association with derangement was consonant with a localization of *phrenitis* in the chest. Galen tests this sign too in terms of validity – as seen in Chapter 4 – and regards it as relevant but not restricted to *phrenitis*. This chest sign is thus retained by Galen, albeit minimized in its importance as non-exclusive, and is explained as a consequence of the impairment in the brain-centred proairetic capacities, and thus as entirely disconnected from any inflammation, clogging or pathology of the respiratory tract as primary.

Pulse

A fundamental diagnostic element in the medicine of the imperial period is the pulse, inspection of which is increasingly regarded as a major prognostic technique, as we have seen as early as the *Anonymus Parisinus*.⁸⁰ In the case of phrenitics, the pulse is described by Galen as characteristically 'low/small (*mikros*); but very rarely it may appear large (*meγas*), and it has a moderate tone and is hard and sinewy (*sklēros kai neurōdēs*) and overly thick and fast (*pyknos agan kai tachys*). But it also comes in waves; sometimes it will be felt by you as trembling, but at other times as spasmodically intermittent' (*Caus. Puls. 4.14, 9.184 K.*). At *De causis pulsuum* 4.14 (9.186 K.) we read that 'spasmodic intermission in the movement, and its

⁷⁷ What is being discussed here is the Hippocratic *Aph.* 4.72 (426.7–8 Magdelaine = 2.528 L.): 'Those in whom urine is transparent, whitish, bad: it mostly appears in phrenitics.'

⁷⁸ 31.1–26 Diels = 16.545–47 K. ⁷⁹ 39.8–21 Diels = 16.562–63 K.

⁸⁰ At *Anonymus Parisinus* 1.2.1 (3.23–24 Garofalo), *phrenitis* is indicated by 'pulse doubled, small, thick; respiration continuous and not entirely dilating the chest'. On the phrenitic pulse, Pigeaud (1981/2006) 86.

stopping for a rather long interval of time throughout, belongs to phrenitics, as if the heat were taking over and the organs becoming hard’.

The cause of these qualities of the pulse is the bilious humour that causes heating and hardness (*sklerotēs*) in the arteries (*De Caus. Puls.* 4.14, 9.184–86 K.).⁸¹ Rufus, writing in the first/second century CE, likewise says in his *Synopsis de pulsibus* 6.2 (227.1–2 Daremberg) that ‘the pulse of the phrenitic is short and vigorous, because of the continuous motion of the breath due to the lack of sleep’. The second-century CE medical writer Marcellinus in his *De pulsibus* (289–90 Schöne) also describes the pulse of phrenitics as generally frantic and stressed: ‘fast, thick, and irregular, in many cases small/frequent . . . In some cases, it also appears to tremble. There are in addition cases in which the artery falls down and rises up again suddenly. In some cases, there is only shrinking of the artery, in others indeed its collapse. Such a state develops quickly into a “tickling” feeling (*formicatio*).’⁸² Again at *De pulsibus* 431 Schöne, discussing Herophilus, he claims to have often observed the ‘gazelle-like pulse’ the Alexandrian mentioned as a common feature of phrenitic and cardiac dispositions (*en . . . phrenitikais kai kardiakais diathesei*), with a noteworthy conceptualization of the phrenitic ‘disposition’.

Respiration

A kind of pathological respiration is also associated with *phrenitis*. Respiration is an important point of connection between the physiology of pulsation, with its distribution in the body perceived as holistic, which is delocalized, and the chest function of respiration, localized in the lungs and heart, and which *phrenitis* affects or involves, at least in its Hippocratic formulation, where this is

⁸¹ Cf. *Caus. Puls.* 4.14 (9.186 K.) ‘Spasmodic intermission in the movement and not stopping briefly throughout belongs to phrenitics, as when the heat takes over and the organs become hard’; *De puls. ad Tirones* 12 (8.483 K.) ‘The pulse of phrenitics is small; on some very rare occasions, it appears large and has a moderate tone. It is also hard and sinewy, frequent and very rapid. It also has something wavy. Sometimes it might appear to you to tremble slightly, and sometimes to cut off spasmodically’; and at *Caus. Puls.* 14 (9.185K.). ‘Just as the peripleumonic pulse is rarely double-beating, because it is least involved in hardness, so the phrenitic one is very rarely wavy, because it is least involved in softness.’

⁸² Cf. Rufus (first/second century CE) in *Synopsis de pulsibus* 6.4 (227.3–10 Daremberg) on the phrenitic pulse; 8.2.3 (230 Daremberg); ps.-Alexander of Aphrodisias, *Probl.* 4.25.1, where the rapid pulse of phrenitics is also mentioned and opposed to that of lethargics (*hoi phrenitikoī men mikrosphyktoi, megalosphyktoi de hoi lethargikoi*).

explicit.⁸³ At *Diff. Resp.* 3.10 (7.940–41 K.), Galen cautiously discusses a connection between respiration, thirst and *phrenitis*:

For this reason, deep breathing (*hē makropnoia*) is a sign or pathological cause of continuous yawning . . . Because shallow breathing is characteristic of those who do not drink or drink very little; but this is not said clearly – actually, it is expressed as if it were quite symbolic (*touto d' ouketi saphōs, all' ēdē symbolikōteros eirētai*).⁸⁴ For should we think that phrenitics are meant by him here, since others too say that phrenitics drink little, are startled by noises and have tremors? Or [should we think] instead that he means to indicate those in whom the parts around the heart and lungs cool, so that their inhalation is prolonged and they exhale due to being chilled at the same time? For shortness of breath in both is a sign of healing (*eisagomenē gar ex psoin hē brachypnoia sēmeion ietērion*).⁸⁵

In the chapter of *Loc. Aff.* (5.4 = 8.332 K.) that concerns the *phrenitis* that involves the diaphragm, Galen carefully differentiates between the different affections of respiration in these cases, as opposed to cases where the *phrenitis* affects primarily the brain: in the second case, respiration is 'deep and slow' (*mega kai araion*), in the first 'rapid and spasmodic' (*mikron kai pyknon*).

Drinking, Thirst and Lack of Awareness Thereof

Thirst is also an area where mental distress manifests itself at the crossroads between physiological alteration and mental-behavioural disturbance. This is already noted in the Hippocratic texts in several cases where mental disturbance is preponderant, as well as in concomitance with fever.⁸⁶ As such, *phrenitis* is an obvious case, although the classical sources do not discuss thirst as a specific sign in connection with it. Thus at *Comm. Hipp. Prorrh. I*, 1.16 Galen reflects on the lemma 'Phrenitics drink little, are bothered by noise, tremble (*hoi phrenitikoī brachypotai, psophou kathaptomenoi, tromōdees*)'⁸⁷ and comments:

What is said here is true; for they are troubled by noise as timid people are when they hear a sudden strong thundering or realize a wild animal is nearby. But in addition phrenitics all drink little, although they have a dry

⁸³ On the 'organs of respiration' in Galen and the earlier tradition, see Debru (1996) 94–124, 211–42 on pathologies of respiration in ancient medicine.

⁸⁴ At greater length, see *Comm. Hipp. Prorrh. I*, 1.1 (4.1–9.6 Diels = 16.491–501 K.), where Galen assesses the association between respiration and the cognitive sphere, the muscular explanation and the mental-encephalic one (also *Comm. Hipp. Prorrh. I*, 1.4, 13.25–20.9 Diels = 16.511–24 K.).

⁸⁵ Cf. *Prognosis through pulse* 4.8 (9.405–12 K.) on *lēthargos* and other conditions, prognosis, respiration, mental states and sleep.

⁸⁶ See Thumiger (2017) 216–19. ⁸⁷ 33.9–26 Diels = 16.550–52 K.

and hot affection, so that they have a rough tongue due to the extreme dryness. In addition, Hippocrates teaches us that their mind is sick in that aphorism which says: 'Whoever aches in any part of the body and does not feel the pain, his mind is sick (*hē gnōmē nosei*)'. Moreover, in the third book of the *Epidemics*, in which he speaks of the pathological state of phrenitics, he says the same: 'They were notably lacking in thirst.'⁸⁸

Galen here decisively interprets a lack of thirst as having to do with a lack of self-awareness as a psychopathological sign somehow analogous to unmotivated fears, bringing in parallels from other physiological functions also discussed by the Hippocratics.⁸⁹ At *Comm. Hipp. Epid. III*, 3.45,⁹⁰ in the same spirit, he comments on a mention of lack of thirst in the Hippocratic text, writing: 'The talk is about phrenitics, for [Hippocrates] says that they have become thirstless *not so much because of having excessive moisture at the mouth of the stomach, but because of being unaware* of what happens to them, and because the oretic power at the mouth of the stomach has perished in them.'

Psychology and Behaviour

As far as character and psychology are concerned, aggressiveness is a recurring behavioural trait in the disease. This is an interesting ethical elaboration if we compare the imperial material with earlier classical medicine, where a dangerous character is not emphasized as much: the insane may be agitated, easily startled or prone to shouting, but there is no parallel for the complexity of these examples of aggressiveness or for the consequent moralization of the motor phenomenon they allow.

Phrenitics do not display a particular ethical makeup in the Hippocratics, where the focus is on their physiological state. In the late-antique period, a character, an ethical typology, and a peculiar emotional state begin to take shape. This is most evident in the non-technical literature, but also appears with increasing frequency in medical authors. Galen is not a rich source here,

⁸⁸ Galen even considers a textual variant that points in the direction of a lack of awareness of one's disease or physiology: 'Some wrote *brachypoptai*, meaning paying attention to/hearing the most exiguous sounds. And they say this is proven by the fact that he says "troubled by noise", which means being in distress about matters that are quite exiguous (*hypotopeisthai*), i.e. "to be suspicious/hypersensitive"' (33.23–26 Diels = 16.551–52 K.).

⁸⁹ Compare how later, at *Comm. Hipp. Prorrh. I*, 1.28 (42.13–18 Diels = 16.569 K.), Galen insists that urine passed unawares 'is a sign of an abundance of crude humours either being cooked or being filled with *pneuma* . . . and *not of phrenitis, although this can also happen at times in phrenitics*, or not happen, just like any other symptom which is neither proper nor contrary to *phrenitis*'.

⁹⁰ 138.9–12 Wenkebach = 17A.698 K.

however. Outside the impermeable container of his ethical treatises, Galenic psychology remains fundamentally reductionist. This position is most evident in his account of *phrenitis*, which is extensive on all physiological levels, broadly intended (neurological, encephalic, humoral, sensory-motor and cognitive), but close to non-existent when it comes to psychology in the sense of the subjective, conscious life of patients (emotions and character).⁹¹ It is no coincidence that *phrenitis*, Galen's favourite case in many discussions of the physiology of the body, is mentioned only once in his ethical treatises,⁹² while *mania* and *melancholia* are evoked a few times as examples of impaired states of health impacting the state of the mind. For the physician, *phrenitis* was perhaps simply too hard-wired a disease to be subject to ethical or psychological scrutiny – which in turn, I suggest, made it ideal material for allegory in non-medical authors.

Galen's comments about the eyes of the phrenitic open up a perspective on this. This body part is seen in Greek medicine in a quite literal sense as an expression of the state of the individual's mental and ethical health,⁹³ an element that reflects a wider cultural belief, and 'encrusted eyes' are explicitly mentioned as manic signs (*ommata epichnoun echonta, manika*) in this sense in *Prorrh. I*, 17 (77.1–3 Polack = 5.514 L.). Galen has an interesting comment on this passage (*Comm. Hipp. Prorrh. I*, 1.17):⁹⁴ this sign, he says, while common to various diseases – and especially the putrescent sort – appears in phrenitics as well, and in the most aggressive cases (*tōn sphodrotata phrenitizontōn*). Moreover, the eyes of these patients 'have a bold glance (*to blemma thrasy*)', while in putrescent patients the glance is meek (*deilon*). When phrenitics display this sign, they 'are frantic in a furious way (*maniōdōs parapaiousin*)' due to their overwhelming dryness. Here we see Galen wrestling with the variety of Hippocratic data, returning again and again to *phrenitis* as an inclusive category, even when *mania* – a disease he pointedly differentiates from *phrenitis* by virtue of the presence or lack of fever – is being explicitly discussed instead. Galen's engagement with the psychological event tends to return to the bodily manifestation and physiological account, in this case specifically dryness.

⁹¹ Galen seems to admit the existence of *phrenitides* caused by psychological, emotional circumstances, although, significantly, this remains only a hint: at *Symp. Caus.* 1.8 (7.144 K.), after a physiological claim regarding our disease, he inserts the corrective: '[This is the case for] those [*phrenitides*] at least that do not arise from pain or some anxiety (*hosai ge mē dia hypēn ē tina phrontida synistantai*).'

⁹² By this term, I refer to the titles in which Galen engages with human ethical flourishing and its preservation (i.e. those published in Singer 2013).

⁹³ See Thumiger (2017) 86–93. ⁹⁴ 34.7–15 Diels = 16.552–53 K.

Extraordinary strength is also a fundamental characteristic of the portrayal of violence, linked, visually in particular, to the spasms, restlessness and compulsive movements from which phrenitics suffer. At 3.5 in the *Problemata* attributed to Alexander of Aphrodisias, it is observed that these patients are identified as strong during the disease but weak during remission, again due to the drying effect of the illness, emphasizing the polarity between the alternating states:

Why are phrenitics especially strong in their disease, but weak when it remits? Because the dry *dyskrasia* takes over the brain and the nerves, and this imparts tonicity (*tonon*) to the nerves, energizing them (*pros energeian*). Then when they realize they are in remission, from this fatigue a lucid state comes about in the judgement faculties in the ill, and once wetted, their nerves become soft and weak.

Cassius Iatrosophista, the author of the *Quaestiones Medicae et Problemata Naturalia* (possibly from the late second/early third century CE) likewise discusses this remarkable strength in a medical problem (62.1–2 Garzya–Masullo):

Why are phrenitics and manics stronger in their paroxysms (*en tois paroxysmois ischyroteroi*), and why do they have increased strength (*tēn dynamin epitetamenēn echousi*)? One should say, because they are rendered bolder by derangement; for their body is made inflexible/rigid by the excessive contraction (*hoti thrasynontai men hypo tēs parakopēs; dyskampton de autois esti to sōma apo tēs agan sphixēōs*). For this reason, once they have reached remission, they relax/lose strength, not because they are passing from a better to a worse state, but because once the tension is loosened, everyone returns to being able to see without obfuscation.⁹⁵

We now come to variation and inconsistency of character. In this determinist account of phrenitic derangement, mental alterations with their duration and chronology are fundamental. All forms of behaviour that are out of character are seen as characteristic. At *Comm. Hipp. Prorrh. I*, 2.8,⁹⁶ as he comments on the fact that ‘an aggressive reply from a kind person is a bad sign’, Galen explains that the discontinuity in itself signals *phrenitis*, just as the contrary change, from bold to mild, signals *lēthargos*: ‘A person who habitually has a gentle nature, not only reveals his state when he is deranged in a fatal way, but also reaches the point of *phrenitis*

⁹⁵ Compare the *corporis vana fortitudo* mentioned by Caelius, *Morb. Ac.* (42.20 Bendz).

⁹⁶ 59.15–22 Diels = 16.605–06 K.

(*hekei phrenitidos*) when he answers in an aggressive way. In turn, a polite reply in a bold character foresees *kataphora* and *lêthargos* in the patient.’

Aretaeus’ extant testimony, with its focus on therapy, is by contrast especially dense in clinical information aimed at the psychology of the patient in a more comprehensive sense. He opens his discussion of the care of phrenitics with psychotherapeutic aspects: the whole initial section at *Th.Ac.* I (91.12–92.8 Hude) stresses elements of psychology rather than strictly physiological ones. Patients ‘ought to lie in a house of moderate size and mild temperature’; peace and quiet should be maintained by family and guests; the walls should be smooth, devoid of any image, since images might trigger the patients’ disturbed imagination; likewise covers should be smooth, so as not to excite the ill to compulsive picking with their hands (flocillation). The company of friends should be encouraged, but without producing excessive excitement, and an appropriate modulation of light should be obtained to suit the mood of the patient. This approach presents phrenitics as primarily patients of a mental kind, although the usual dietetics and physiological measures follow.

In Aretaeus as well, explicit mental and neurological signs are included: impaired cognition; sensory alteration, especially hallucinations; pathological insomnia; or restlessness and uncontrolled movements of the limbs. Even the voice may change in these patients, this being a traditional marker of psychic alteration in ancient medicine:⁹⁷ ‘Insomnia (*agrypniê*) and false visions (*phantasiê*) are present . . . They become disordered in understanding (*tên gnômên parakineontai*) and their voice changes (*tên phthenxin exallassontai*) . . . The delirium becomes more violent’ (93.31–94.3 Hude). Degrees of delirium signal stages in the progression of the disease and demand different pharmacological options to keep derangement (*paraphorê*) in check (92.17 Hude).

In addition to these general categories, numerous features of general behaviour are important indicators for mental cases, communicating impairment on a holistic level or simply characterizing the patient, the ‘human being’, as phrenitic in the reality of his or her existence. Despite his attention to physiology and the poverty of his comments on phrenitic personal psychology, Galen offers a great deal on the level of assessment through direct observation, again following the path of Hippocratic clinical activity. The behavioural portrait of phrenitics includes disparate elements such as gesturing, a lack of desire or ability to drink, a fixed gaze, sudden weeping and incoherent responses to questions. Patients are deranged and speak senselessly, are afraid for no reason, and pick flecks with their hands. ‘Sometimes they speak aggressively, others remain despondent and hardly

⁹⁷ See Thumiger (2017) 115–43.

answer. Even if they feel pain in some parts, sometimes they do not feel physical contact, even if one touches them forcefully (*ē merous tinos odyneran echontos diathesin oud' holōs aisthanesthai, kan sphodroteron tis autou thigēi*), as described at *Loc. Aff.* 5.4 (8.331 K.).

The most representative individual visible sign of *phrenitis* is surely floccillation or crocydism, which we have already encountered many times.⁹⁸ Galen explicitly interprets it as a form of hallucination, a misrepresentation of reality belonging to the same category as visions. (He pays no attention, however, to the compulsive specifics of the focus on small items, whether dust, pieces of wool, threads or insects.)⁹⁹ We have seen how Galen at *Loc. Aff.* 4.2 (8.226–27 K.) relates his own experience as a phrenitic patient beginning precisely with this sign: 'Stricken by a burning fever during summer, it seemed to me that I saw sticks of dark straw protruding from my bed, as well as similar pieces of wool from my garment.'¹⁰⁰ He explains the nature of this disturbance, which was in his case accompanied by nightmares:

Throughout the entire day and night I remained agitated by frightening dreams, shrieking very loudly and even trying to get out of bed; but on the next day, all symptoms subsided . . . When a bilious humour accumulates in the brain at the time of a burning fever, the brain is affected in the same manner as objects which are burned on a very hot fire. A kind of smoky flame arises, as from an oil lamp. When fumes enter the blood vessels leading to the eyes, they produce optical illusions (*phantasmata*) in these patients.

The process is also considered at *Problema* 2.54 by ps.-Alexander of Aphrodisias, where the optical *pneuma* is discussed. The text explains that in phrenitic patients the vapours (*hoi atmoi*) go directly from the damaged brain to the optical pneuma, making it difficult for them to see things the way they are.¹⁰¹

Different causes can produce the malignant vapours which obscure vision, although *phrenitis* is one of the most common, and Galen takes it as his chief example:

It can happen in this way also in acute fevers and inflammation of the lungs, when the humours in the body rise as vapours to the head, that the clear

⁹⁸ On this as recurring symptom (*symptōm constant*), see Pigeaud (1981/2006) 82–86.

⁹⁹ See Thumiger (2017) 152–53 on these and on the neurology of this symptom; Walshe (2016) 100 on the medical event; Pigeaud (1987/2010) 124–26 on Galen and hallucinations in cases of crocydism and other *phrenitis*-relevant themes.

¹⁰⁰ See p. 145.

¹⁰¹ Just as in other patients afflicted by an overflow of humours to the head, who see images distorted in size and colour; see also Alexander's *Comm. Arist. Metaph.* 3.5 (312.21 Hayduck), where individuals with jaundice or *phrenitis* are telling examples of persons whose judgement and perception of size and colour are impaired.

fluid around the pupil shares in their exhalation. And wherever and in whatever way it is made turbid, the aforesaid images are generated.¹⁰² But in violent headaches, just as in cases of *phrenitis*, because the head becomes full and some part of the humours reaches the eyes, this causes the same symptoms. And ‘picking at loose flocks’ and ‘picking at things’, verbs habitually used by all doctors, especially for patients suffering from *phrenitis*, have acquired their meaning from the following. Some people have described the image of flocks (*krokydon*) and of chaff, both while this was actually happening and afterward, recalling it later. (*Comm. Hipp. Progn. I*, 23¹⁰³)

And a bit later:

For it seemed to them that in many places the flocks of the bedclothes were protruding, and that there was chaff attached to the walls, and often also that there were many pieces of straw lying on the bedding, and that small creatures were flying past close to their eyes. They attempt to chase these, moving their hands about as if to catch something. As for the other things that appear to be protruding, they attempt to remove the former from the bedclothes and to tear away the latter from the wall. Accordingly, the dispositions producing such symptoms are fairly grave, with acute fever, inflammation of the lungs, and headache affecting them due to their intensity, while *phrenitis* does so because of the pre-eminence of the affected part.¹⁰⁴

Neighbouring Diseases

A useful measure of the ontological status of a disease is its position within a taxonomy or community of diseases synchronically present in a given context. Classical medicine notably placed *phrenitis* among the winter diseases affecting the chest and among high fevers. Celsus clearly positioned it among the kinds of *insania*, as its most representative type; other nosological authors of the early centuries placed *phrenitis* first within an order *a capite ad calcem*, implying its importance and position in the head (meninges and brain). Another important relative positioning which emerges in this period has to do with *mania*, from which *phrenitis* as a mental disorder is differentiated by fever.¹⁰⁵ The most important relation,

¹⁰² See also *Comm. Hipp. Aph. 7.12* (18A.112–13 K.) on the Hippocratic statement ‘*phrenitis* coming on peripleumonia, bad’: ‘Whenever *peripleumonia* arises due to a heated humour, sending up many vapours to the head, it fills the head with vapours and causes *phrenitis*.’

¹⁰³ 237.8–19 Heeg = 18B.73–74 K. ¹⁰⁴ 237.26–238.6 Heeg = 18B.75 K.

¹⁰⁵ Thus explicitly Galen, Aretaeus, Caelius Aurelianus and the encyclopaedists. This distinction remains firm in the following centuries. See below pp. 243, 258, 261 on Avicenna and others; Pigeaud (1987/2010) 67–69.

however, is between *phrenitis* and *lēthargos*, as already posited with Celsus.¹⁰⁶ The relation between these two appears to have a primarily practical importance: this is clear in the fact that the pharmaceutical author Dioscorides often presents and discusses the two together in his notes, and that their course and therapy are presented as symmetrical by several late-antique and medieval authors.

In Aretaeus as well, proximity or convertibility into other diseases is a recurring feature of *phrenitis*. First, *kausos* (καῦσος) can be its co-affection (97.14–19 Hude), with ‘thirst, restlessness, *mania*’ (*dipsos, aporiē, maniē*). Second, Aretaeus is the first (and perhaps only) author to mention the disease *synkopē*, literally ‘collapse of strength’, as a possible outcome of *phrenitis* (*phrenitis gar eutrepton es synkopēn kakon*, 92.22 Hude); in this case, therapy must disregard the delirium and focus on preventing the patient from dissolving his or her strength into vapours and humidity (97.19–23 Hude). Support is given by wine, with its ability to ‘impart pleasure through its sweet smell’ and to ‘soothe the mind in delirium’, two important effects of drinking.¹⁰⁷ *synkopē* is localized in the heart (*kardiē*; cf. 2.3, 21.27–23.12 Hude).¹⁰⁸ Third and most important, since Aretaeus maintains that *phrenitis* has connections in the body with both the chest and the head, affiliation to neighbouring diseases in these two parts is mentioned: *lēthargos*, on the one hand, and the more traditional *pleuritis* and *peripleumonīē*, on the other. Just as for *phrenitis*, the chapter on *lēthargos* survives only in Aretaeus’ book on therapy (*Th.Ac.* 2); here he mentions the importance of moderating light and creating a suitable environment, offering patients interesting conversation, massages and tickling, as well as stimulating images on the wall to inspire their sense of vision – an entire invigorating package identical but contrary to the one for *phrenitis*, where relaxation and calm are key. If excessive sleep prevails, strong measures such as shouting, angry reproach and exciting announcements are in order, ‘the opposite as for phrenitics’, as he specifies (98.8–14 Hude).

The polarity, symmetry and complementarity of the two conditions are clear in physiological terms, but also as an ethical contrast between the excessive, hyperactive, ‘phrenitic’ ways of the one group of patients and the passivity, sleepiness and lack of engagement of the other. For Aretaeus, in *lēthargos* as well both belly and head are in focus, calling for the same prescriptions as for phrenitics (99.10–11 Hude), namely therapy directed at body parts located in the lower chest (bladder, *hypochondrion*). In general,

¹⁰⁶ See Chapter 3. ¹⁰⁷ 97.23–28 Hude. ¹⁰⁸ Cf. ‘heartburn’ (97.10 Hude).

lack of *aisthēsis*, sensitivity (101.23 Hude), is the issue for *lēthargos*, corresponding to the hypersensitivity found in *phrenitis*. This sensory aspect has ethical repercussions, and therapeutic measures for the two are either similar to or mirror images of each other (e.g. here too hair must be clipped, 102.3–4 Hude).

In Aretaeus, *pleuritis* shows no pathological point of contact with *phrenitis*, apart from the close localization, and therapy is addressed to the body exclusively; *peripleumonīē* (2.1, 15.1–16.26 Hude), on the other hand, presents similarities. The latter disease is obviously focused on the respiratory system and its organs and seat in the chest and neck. The description of it, however, includes interesting mental aspects, as was already the case in some of the Hippocratic material.¹⁰⁹ Among these are aberration of mind, *gnōmēs aporiē* (16.6 Hude) and vain fancies, *phantasiai axynetoi*; patients are deranged in their understanding (*paralēroi tēn gnōmēn*) although not violently delirious (*ekstatikoi ou mala*), and have no knowledge of their present suffering (*agnōsiē tōn pareontōn kakōn*, 16.9–11 Hude). There are also visible signs (heat, pulsating veins on the temples, gasping and a dry tongue) which suggest involvement of the brain.

Galen follows similar lines, giving particular emphasis to *lēthargos* as a contrasting and symmetrical condition. At *Symp. Caus.* 3.10 (7.259–60 K.), for example, *phrenitis* is a dry, hot disease, and because of this it promotes and intensifies the active functions. *lēthargos*, on the other hand, is said to be weak, soaking the parts with abundant moisture, and cold.

In his invective against the Thessalians and the followers of Athenaeus at *Meth. Med.* 13.21 (10.928–31 K.), as we have seen, Galen criticizes the fact that, despite their cardiocentric affiliation, they focus their therapeutic attention on the head in cases of *phrenitis* – just as Galen himself would do. He extends the example to *lēthargos* and adds:

Even in those with *lēthargos*, there is no one who does not apply the remedies to the head, for this affection is in a way symmetrical in kind to *phrenitis* (*touto gar to pathos enantion men pōs esti kata tēn idean tēi phrenitidī*). It occurs when the brain, in which the *hēgemonikon* of the soul is located, is affected. Therefore, whenever the humour predominating in the brain is cold, *anaisthēsia* and *akinēsia* befall the person . . . This, then, is common to both diseases (*koinon amphoterōis tois nosēmasin*), both those which occur with *lēthargos* and those which occur with troubled sleep/insomnia.

Phrenitis is thus pragmatically categorized as a ‘wakefulness’-related disease, especially when therapy is under discussion, being defined a little later

¹⁰⁹ See above, pp. 22, 23–27, 32.

as one of the ‘diseases with troubled sleep/insomnia and raving (*tois . . . agrypnitikois kai perikoptikois nosēmasi*)’ that must be cured by ‘making the *hēgemonikon* sleepy and numb, cooling, obviously, the over-heated brain. But in the opposite affections [i.e. *lēthargos*] it is appropriate to rouse and to cut and heat the thickness of the distressing humours which, without putrefaction, creates deep somnolence.’ It thus makes sense that for Galen *lēthargos* should be the obvious resolution for *phrenitis*, as explained in *Comm. Hipp. Epid. VI*, 6.9:¹¹⁰ ‘Just as the quartan fever resolves *epilēpsia*, and fever any sort of spasm or catarrh or asthma, in the same fashion diarrhea resolves ophthalmia, heartburn the passing of indigested food, *pleuritis peripleumonia*, (and) *phrenitis lēthargos*.’¹¹¹

Galen also appears to implicitly categorize *phrenitis* as a mental health issue when he implicates it in previous discussions of other mental disorders.¹¹² Consider his critique of a Hippocratic diagnosis of *melancholia* at *Comm. Hipp. Acut.* 4.37.¹¹³ The original Hippocratic statement runs as follows: ‘In those patients, during fevers the cavity is wet and the mind troubled (*gnōmē tetaragmenē*), and many of them pick flocks and pick their nose and reply to questions only briefly, but by themselves do not say anything sensible. Therefore, these seem to me to be melancholic.’ Galen disagrees with the Hippocratic author and offers instead a phrenitic interpretation:

The other symptoms are typical of phrenitics, but the one involving a wet cavity is sometimes present in *phrenitis* but is not specific to it, so that it is appropriate to treat the wet cavity independent of the definitions/territories (of *phrenitis*) and to consider other therapies proper to *phrenitis*. The therapy this author described does not target *phrenitis* precisely, but appears to me to want to cure a disposition arising from a situation in the cavity, which involves the head by sympathy, so that there is delirium with affection of the cavity. He writes that such cases are ‘melancholic’, incorrectly; for such cases arise more because of yellow bile when it reaches the cavity.

¹¹⁰ 351.4–8 Wenkebach = 17B.343–44 K.

¹¹¹ The ps.-Galenic *Definitiones Medicae* (19.414–15 K.) confirm the importance of the theme of sleep and oppressive torpor, the *katochos* Galen discusses at length in various places, bringing together *phrenitis* and *lēthargos*: ‘*katochos* is lack of sensation of the soul with a fixing of the whole body. There are three types of *katochos*. For one is somnolent, which happens in *lēthargos*. The second is wakeful, in which *tetanos* and the so-called *hysterikē pnix* appear. The third kind of *katochos* is that which one would not inappropriately call phrenitic *katochos*. It arises from a mixture of two sicknesses, *katochos* and *phrenitis*, just as is the case with *typhomania*.’

¹¹² On the methodological complexity of Galen’s position vis-à-vis conceptualizing the ‘diseases of the soul’, with which we cannot engage here, see the important discussion in Devinant (2020), with key conclusions at 298–302; also Devinant (2018).

¹¹³ 306.25–307.14 Helmreich = 15.802–03 K.

It is clear that Galen focuses here on a sign of mental significance, floccillation, and takes it in the abstract to be associated, by virtue of other physiological details, to a general phrenitic make-up.

Finally, in Galen, as in Aretaeus, *phrenitis* can be co-present with ardent fevers (*kausoi*) or follow them, with different outcomes. He comments on a passage in Hippocrates as follows (*Comm. Hipp. Epid. I, 2.78*):¹¹⁴

In those who had become phrenitic without having had *kausos*, none of the above-mentioned symptoms occurred, but death came around the sixth day to those who had become phrenitic after a *kausos*, the severity of their disease having been doubled (*diplesiasthentos autois tou kakou*).

Both pathological forms are caused by yellow bile, with *kausos* hitting the stomach, while *phrenitis* affects the brain and its membranes (*Comm. Hipp. Epid. I, 2.75*):¹¹⁵

The same humour causes burning fevers and *phrenitis*, but occupies different places (*ou ton auton de topon echōn*). When it settles in the brain and in the meninges, it causes *phrenitis*. Before it settles, when it flows down through the vessels in the meninges, it brings not *phrenitis* but those forms of *paraphrosynē* which occur at the peak of fevers.¹¹⁶

Age, Season, Profiling, Predispositions

While the profile of patients prone to our disease was not made particularly clear in earlier medicine, external factors and aspects of profiling begin to appear in the nosology being discussed here, more fully contextualizing the disease. In Galen, the typical phrenitic is said to be neither very young nor old, but just ‘past the young age’, as we read in *PHP* 8.6.31;¹¹⁷ this age-profile is shared, however, with *pleuritis*, *peripleumonia* and *lēthargos*. The age-specification is in any case not rigid: at *Comm. Hipp. Aph. 3.30*¹¹⁸ we also learn that ‘the forms of *phrenitis*, burning fever, cholera, dysentery hit the young no less than those past their prime (*tois neaniskois ouden hētton ē tois parakmazousi ginontai*), taking their origin from the yellow bile’.¹¹⁹

¹¹⁴ 91.32–92.2 Wenkebach = 17A.182 K. ¹¹⁵ 88.26–89.6 Wenkebach = 17A.175–76 K.

¹¹⁶ Cf. *Comm. Hipp. Epid. I, 2.20* (58.22–59.21 Wenkebach = 17A.112–14 K.) on the connection between these two kinds of fever.

¹¹⁷ 518.19–20 De Lacy = 5.695 K. ¹¹⁸ 17B.645–46 K.

¹¹⁹ Commenting on *Aph. 3.30* (408.11–13 Magdelaine = 4.500 L.): ‘for those beyond this age, wheezing, cases of *pleuritis*, cases of *peripleumonia*, *lēthargos*, *phrenitis*, *kausos*, *cholera*, chronic diarrhoea . . . cases of dysentery, haemorrhoids/haemorrhages’.

As for triggering circumstances, in Galen summer heat is predominant in favouring the disease (alongside springtime, youth and a hot nature), as we read at *Com.* 2,7;¹²⁰ Galen himself, as we have seen, fell prey to the disease in summer. The development of the description of *phrenitis* in the direction of a dry, bilious ailment determines this emphasis on heat, sun and summertime. We are a long way from the Hippocratic chest infection linked to the cold months of the year.¹²¹

Similar information, to the effect that *phrenitis* is not a cold disease, is found at *Comm. Hipp. Epid. VI* 7.50 (1255.14–16 Vagelpohl): ‘So *phrenitis* is a disease of the warm nature and one that corresponds to the warm age of life, and it stays in opposition to a cold nature and cold age’ (and, as such, to *lēthargos* – my translation). Again: ‘When someone is scattered in his movements, fidgety, vehement, clumsy, irritable, he has the disposition for wandering of the mind with fever, which is called “hot *phrenitis*” (“heiße *phrenitis*”); opposite this is a ‘cold *phrenitis*’ – *lēthargos*, we might suppose: ‘In cases of madness with fever, the person who is dumb, slow, sluggish is predisposed to fall into cold *phrenitis*, which is called *lēthargos*’ (*Comm. Hipp. Epid. VI*, 7.38, 1219.17–1221.2 Vagelpohl).¹²²

¹²⁰ 186.4–10 Mewaldt = 7.651 K.

¹²¹ Galen seems to distance his understanding most radically from the Hippocratic interpretation of *phrenitis* as a winter ailment, as his attempt to bring his predecessor into agreement with himself testifies. At *Comm. Hipp. Epid. I*, 2.76 (89.10–19 Wenkebach = 17A.176–77 K.), he comments on the discordant Hippocratic statement that ‘there were (a) few cases of *phrenitis* also in the summer’ (the majority, it seems to be implied, were normally in winter), and explains this as follows: ‘Part of [the summer], until the Dog [i.e. the heliacal rising of the star Sirius, in July–August, n.d.t.], was cold; but part, until Arcturus [the rising of the star α-Boötis, or *Ursa Maior*, in spring] was hot and dry. For this reason, the summer was not such as to cause replenishment of the head in this period, nor could the south wind, which arises around Arcturus until the equinox. Nor was the weather wet, moist or stable for some time in the period between the Dog and Arcturus. But (clearly) what [Hippocrates] says is that when abundant bile was poured into the regions around the head, then also cases of *phrenitis* occurred (*hoti cholēs pollēs enechtheisēs en tois kata ton enkephalon chōriōis kai phrenitides egenonto*).’ On *phrenitis* and summer heat, see also ps.-Alexander of Aphrodisias, *Probl.* 1.76, which discusses the example of dogs maddened in the summer and evokes *phrenitis*: ‘Why do only dogs become mad (*lyttōsin*) in the summer? Because of the *prolēpsis* of the dry mixture: for they are dry by nature, and especially during the summer heat. And so the humid components and *krasis* in them burns ardently when they are heated and dried. They thus rave (*mainontai*) just as phrenitics do (*kathaper phrenitiōntes*).’ On the construct ‘sun disease’, see Appendix 1.

¹²² In his translation of this passage, Pfaff wrote ‘Schlaflosigkeit’ rather than ‘Schlafsucht’ (my *lēthargos*) because the single Arabic manuscript available to him contained the term *sahar* (cf. *Comm. Hipp. Epid. VI*, 506.8–11 Pfaff: ‘wo ich das Wesen der Epilepsie, der Aphasie, der Paralyse, der kalten Phrenesie, die Schlafsucht heißt, der heißen Phrenesie, der Melancholie, der Traurigkeit’, ‘I have presented the nature of epilepsy, aphasia, paralysis, cold *phrenitis* that is called lethargy, hot *phrenitis*, melancholy, sadness’). The correct reading *sahw*, which corresponds to *lēthargos* and confirms my interpretation, is preserved in Ḥunayn ibn Iṣḥāq’s summary of the commentary, the Masā’il. I thank Uwe Vagelpohl for this clarification; he translates ‘absent-mindedness’, however, which fails to express the symmetry of *phrenitis*–*lēthargos* as hot and cold brain fever respectively I am discussing here.

These ‘cold’ and ‘hot’ models aside, there is only sporadic information about what might make a patient more prone to falling ill with our disease. At *Comm. Hipp. Epid. III*, 3.72,¹²³ for example, in a physiognomic spirit, we are told that ‘the red-faced and those prone to *melancholia*, having thick, hot blood, were likely to be taken by phrenitic diseases or forms of *kausos* or blood-stained forms of dysentery in the vast majority of cases’. Even emotions can have an impact, as *Comm. Hipp. Epid. VI*, 2.40 explains:¹²⁴ fear can cause the blood to become serous and lead in turn to *agrypnia*, and ‘if there is a bad humour, not only does the serous part of the blood circulate in the blood vessels, but it will also cause forms of *paraphrosynē*, *phrenitis* and *mania*’.

Diet and what we would call lifestyle can also play a part, although they are not systematically foregrounded. At *Comm. Epid. III*, 3.91¹²⁵ Galen comments on the young man in Moelibea discussed by Hippocrates (*Epid.* 3, 17, III.10–13 Jouanna = 3.146 L.) and mentioned previously. The youth had a fever and ultimately died ‘as a result of drinking and sexual activity’ (*ek potōn kai aphrodisiōn*). Galen retrospectively explains this death as a phrenitic outcome: it may (*eikotōs*) have begun with a moderate fever, with the passing of time it became worse, and it ultimately resulted in a true and proper *phrenitis* (*eis phrenitin akribē periēstē*). The reason is that excessive drinking and sexual activity can damage the nerves and their origin, the brain (*ta te neura blaptousin kai tēn archēn autōn, ton enkephalon*). Most important, Galen stresses the nature of each individual, his or her *ēthos* (ἦθος), as a determinant: ‘In men of an unstable and troubled nature (*kouphois kai tarachōdesin*), a small cause is enough (*epi smikrais prophasesin*) to unleash the disease. For those, on the other hand, who have the opposite nature (*ēthos*, i.e. one that is stable and calm), more substantial triggers are needed (*epi megalais aitiais*).’

Cure and Prognosis

Surprisingly for a modern reader, *phrenitis* does not attract much specific therapy of a physiological kind, despite its importance. In general, measures target the patients’ over-heated, flushed head, and try to induce sleep in order to favour calm and relaxation. In reference to this period, it would be poor anthropology to distinguish ‘scientific’ therapy from folk or magic methods. We should nonetheless, albeit with some reservation, group here

¹²³ 153.20–23 Wenkebach = 17A.725 K. ¹²⁴ 109.21–23 Wenkebach = 17A.984 K.

¹²⁵ 186.11–187.4 Wenkebach = 17A.791 K.

the measures invented by professional doctors who insert themselves in a tradition of incremental scientific discourses, and leave other methodologies, more reliant on traditional, symbolic and ritual elements, to a separate discussion in which non-technical sources are surveyed, even if there is a grey area between the two categories.¹²⁶

As for pharmacology, at Gal. *Meth. Med.* 13.21 (10.930 K.) various methods of purging are proposed for diseases that involve humoral excess, *phrenitis* among them: fasting, phlebotomy, washing and the application of *oxyrrhodinum*, a mixture of vinegar and rose oil, to the head. The latter, a mixture of rose oil and low-quality wine or vinegar, is a recurrent recipe mentioned at *Simpl. Med.* 3.9 (11.559 K.) as a remedy often recommended for the initial stages of the disease, as well as at *Comp. Med. Loc.* (12.523–24 K.), where Galen reports that Apollonius ‘orders that vinegar be mixed with rose oil, as for the phrenitic and lethargic. At the beginning of diseases, most doctors usually employ that’, although he criticizes the lack of precise indications of the quantities recommended. Later he moves on to explaining the efficacy of this acrid mixture precisely in terms of its ability to reach deep beneath the skin:

In the case of phrenitics, since all the external parts of the cranium are insensitive, as are the skin and the surrounding pericranial membrane, some conveniently begin by mixing old wine/vinegar, following the principle I exposed at length in my treatise on pharmacology when I said that it is appropriate for *conditions which are deep seated within the body (tais en tōi bathēi tou sōmatos ginomenais diathesesin)* to apply different *pharmaka* from those destined for illnesses which are superficial (*tōn epipolēs ginomenōn diatheseōn*).

Phrenitis is then a ‘deep’ illness, and suitable substances should be chosen for it, capable of reaching deep under the ‘insensitive’ (*apathēs*) layer of the cranium.¹²⁷

The acrid recipe is also found in the *De materia medica* of the famed Greek doctor and botanist Pedanius Dioscorides (first century CE), who recommends, as others do as well, ‘combining old wine/vinegar and rose oil as ointments for the lethargic, phrenitic, skotomatic, epileptic, those with chronic cephalgism, paralytics, etc.’ (*Mat. Med.* 3.78.2, 91.10–13 Wellmann). When speaking of ‘cow-parsnip’ (*sphondylion*), he further claims that ‘when drunk, it can cure hepatic diseases, hicterus, . . . epileptics,

¹²⁶ Cf. Chapter 6.

¹²⁷ The lack of sensation of phrenitics vis-à-vis their *locus affectus* is interesting and a suitable bridge to the ethical and delocalized history of the disease; see pp. 109–10 and below, pp. 203–05.

hysterical suffocation . . . Together with oil in embrocations to the head, it applies to phrenitics, lethargics, headaches' (*Mat. Med.* 3.76, 88.9–89.5 Wellmann). Dioscorides generally discusses *lēthargos* and *phrenitis* in succession when affections involving the head are at issue: at *Mat. Med.* 3.38 (50.7–51.11 Wellmann) we find a special preparation for both, while at *Mat. Med.* 1, 103, 96.1–3 Wellmann 'inhaled seed of pennyroyal moves to cleansing, as a plaster resolves headache, and is used for soaking with oil and vinegar in *phrenitis* and *lēthargos*'.¹²⁸

Another category of pharmacological remedy targets the need to restore a state of peace and quiet. In the Galenic *Ther.* 15 (14.271 K.) we read that 'often the *theriakē* [a powerful animal-based remedy] halted the derangement in phrenitic patients (*parakopas gennaiōs epausen*), bringing about sleep, and through sleep making the troubles of the mind and the entanglements of nightmares (*tas tēs gnōmēs tarachas te kai peripolkas phantasias*) cease'. Severus Iatrosophista (second–fourth centuries CE?) in his *De instrumentis infusoriis seu clysteribus ad Timotheum* (18.12–19 Dietz) follows the same principle by targeting the head with specific herbal ingredients:

Another use of the *kolokynthis* is for the *kentaurion*; for it brings specific, so to speak, topical relief for affections of the head (*tois peri kephalēn pathesin*) . . . This is most helpful for phrenitics; at best it works marvellously for those with *karos*, *mania* and *melancholia*, most of all for those whose brain abounds in excretions (*epi tōn perittōmatikon enkephalon echontōn*).

This formulation confirms that in this period *phrenitis* is finally accepted as a disease of the head with humoral manifestations (here the abundant excretions).

The use of wine is controversial in cases of mental disturbance, as is stated clearly by Caelius Aurelianus in his remarks on its inappropriateness in critical phases of *phrenitis*¹²⁹ and on the importance of using it in moderation. At *Comm. Hipp. Epid.* VI, 5.1,¹³⁰ Galen is more open in this respect, but he also acknowledges the crucial importance of recognizing exactly the correct time and quantity. He writes, a bit self-evidently:

If giving wine should be beneficial, giving it will help. If, however, upon giving it at the wrong moment it causes *paraphrosynē* or *phrenitis*, acting as pathogenic, then it is neither healthy nor a help. So who is responsible for determining the benefit? Clearly the one person who can establish the right moment. And how do the Greeks refer to this person? Well, is it not clear to

¹²⁸ Cf. *Euporista* 1.5 (154.5–12 Wellmann) along similar lines.

¹²⁹ E.g. *Morb. Ac.* 1.1 (68.9–11 Bendz) concerning *phrenitis*.

¹³⁰ 255.17–24 Wenkebach = 17B.226–27 K.

everyone that he is called ‘the doctor’? So the doctor is more powerful than wine when it comes to the preservation of health and action.

A similar concern is shared in a *Problem* in ps.-Alexander of Aphrodisias, where the author wonders: ‘Why can both water and wine have a trigger effect when given at the wrong moment in cases of fever, and cause *phrenitis* (*phrenitin kataskeuazei*) despite being opposite substances (for water is cold, while wine is hot)?’ (*Probl.* 1.96).

The psychotherapeutics for phrenitic patients, the chapter of the history of the disease to which a modern reader can perhaps best relate, is most attended to by authors whose anatomical, localized orientation was less strong or whose physiological account was more flexible: Asclepiades (as far as we can tell from the little we know directly about his clinical practices), Celsus and Caelius Aurelianus,¹³¹ as we have seen, but also Aretaeus, whose take on localization was more fluid than that in others. These authors offer the richest discussions. Aretaeus has much to contribute regarding psychotherapy for these patients, as well as describing the cures their bodies require. These include first the typical corporeal interventions: dietetic measures, moderate venesection, the consumption of liquid food, and pharmacological preparations appropriate to fevers. Then there are localized measures: cooling the head by means such as damp applications and fomentations is a central feature – the head should not be warm – but anything moist should be kept away from the neck and the nerves that depart from it. The head also receives massages on the temples and ears, with effects that are emotional and psychological as well, targeting the predisposition to furious anger in these patients: ‘For by stroking their ears and temples, wild beasts are overcome, to make them cease from their anger and fury’ (94.28–29 Hude). The hair should be cut (96.16 Hude), again to keep the head fresh. In parallel, however, localized attention is directed to the chest in agreement with the double positioning of *phrenitis* in this author: the *hypochondria* and belly (*hē koiiliē*) (95.3 Hude), the liver (*hēpar*, 95.9 Hude), as well as the spleen (*splēn*, 95.13 Hude), receive embrocations and cataplasms drenched in various substances. Moreover, the bowels (*hē koiiliē*) should be stimulated, since these patients are often constipated (96.2–3 Hude). Galen, on the other hand, assigned cognitive and psychotherapeutic therapies to a separate class of emotional complaints, those discussed in his ethical writings, and once *phrenitis* had been classified as a hard-wired bodily disease, he disregarded the psychology of its healing process almost entirely.

¹³¹ See above, Chapter 3, pp. 80–81.

After Galen: Summary and Consolidation

All late-antique nosology after Galen is massively shaped by the work of the physician from Pergamum, at least in the ‘flag topics’ in regard to which he made full use of his argumentative powers; *phrenitis* is certainly one of those. The topics that have already emerged regularly in regard to the definition of our disease are the encephalic localization (brain, meninges or the area around them; within the brain, the ventricular location becomes a topic); inflammation and overheating;¹³² and humoral imbalances. In terms of the manifestations of the disease, sleep, hallucination and derangement, along with fever, dominate. The therapeutics elaborate on those already seen, with a combination of dietetics and pharmacological, environmental and occupational psychotherapeutics.

In post-Galenic medical authors, the most extensive sources on *phrenitis* are of a compilatory sort, found in authors usually defined as ‘encyclopaedists’: Oribasius (fourth century CE),¹³³ who does not however discuss *phrenitis* extensively in the extant portion of his main work, the *Medical Collections*, but summarized the topic in the *Synopsis to Eustathius*; Alexander of Tralles (sixth century CE); Aetius of Amida (*Libri Medicinales*, fifth–sixth century CE); and Paul of Aegina (seventh century CE). All of these discuss *phrenitis*, mostly elaborating on previous sources (Galenic and other), but in some cases inserting additional details. It is to a large extent through the versions ‘digested’ by these authors that the earlier medical tradition is preserved for clinical use for several centuries to come, through the Middle Ages and beyond. Despite their derivative and largely unoriginal nature in terms of simple content, therefore, their role is fundamental for the reception of Graeco-Roman medicine in postclassical and medieval times.¹³⁴ The following are, in more detail, the key topics they highlight when it comes to *phrenitis*.

The Centrality of the Brain and its Ventricles

Oribasius takes the encephalic location of *phrenitis* for granted. Elaborating on the Galenic ventricular articulation and encephalic localization more generally,¹³⁵ at *Coll. Med. (Libri incerti, 159.19–23 Raeder)* he firmly defines

¹³² See e.g. ps.-Alexander of Aphrodisias, *Probl.* 2.67: excessive heat is again significant for phrenitic patients and the affection they suffer in the brain, and the state of the *enkephalon* is always central to this pathology.

¹³³ On Oribasius, see Gäbel (2022) 4–5. ¹³⁴ See below, Chapter 7.

¹³⁵ Localization in the brain is exposed in sufficient detail in Galen when he discusses *epilēpsia at Loc. Aff.* 3.9 = 8.174–75 K., as well as at *Comm. Hipp. Prorrh. I* (see above, p. 142 n. 31).

phrenitis as damage to the first part within the tripartite model of the living body (brain, heart, liver).¹³⁶ Likewise, Aetius¹³⁷ (whose writing on *phrenitis* is much more extensive) presents the brain as the most straightforward and clear localization of the disease in his discussion of the doctrine of Poseidonius of Byzantium (*Medical Books* 6.2, 125.4–128.5 Olivieri).¹³⁸ The disease is here ‘an inflammation of the meninges which surround the brain, accompanied by acute fever which brings derangement and impairment of the mind (*hē phrenitis phlegmonē esti tōn peri ton enkephalon mēningōn meta puretou oxeos parakopēn kai paraphoran tēs dianoias epipherousa*)’ (125.4–6 Olivieri). A description of the damage caused by *phrenitis* to the three ventricular areas of mental functioning, engendering different variants of the disease, familiar from the Galenic discussion, follows:¹³⁹

There are now very many kinds of *phrenitis*, but the most important are three: for some are damaged only in the imaginative faculty, but in them the *logistikon* and memory are preserved; or only the *logistikon* is damaged, but the imaginative and memory are spared; or the damage is in the *phantastikon* and *logistikon*, while memory is spared. When memory is damaged in diseases with fever, by and large the *logistikon* and the *phantastikon* are damaged together with it. And so, when the frontal part of the brain alone is damaged, the *phantastikon* is harmed, while if the central cavity (*tēs mesēs koilias*) of the brain is damaged, there is a change in the *logistikon*, and when in the posterior part the back of the brain is damaged, it destroys the mnemonic faculty, and together with it also the other two in most cases. And so, in cases in which the *phantastikon* is damaged, they can judge correctly, but they have alien imaginations; in cases in which only the *logistikon* is damaged, they imagine correctly but do not judge properly; in those in which the mnemonic is damaged, they cannot recall anything of what happened previously, but they also cannot either imagine or judge correctly in most cases. It is appropriate, then, to apply the most medicament to the most damaged part, but not to neglect the others. (125.9–26 Olivieri)¹⁴⁰

¹³⁶ In addition, in a discussion of embrocations (*Coll. Med.* 9.22.3, 24.19–22 Raeder) he explains that ‘one needs to know that in the case of phrenitics one should focus on the forehead and temples, and stay away from the top of the head and the posterior parts: for these do not bring about cooling, as the origin of the nerves is located there’.

¹³⁷ On Aetius on diseases of the brain, see now at length Gäbel (2022).

¹³⁸ A (perhaps) fourth-century medical author; cf. Gäbel (2020), (2022) 23–25.

¹³⁹ See above, n. 135.

¹⁴⁰ The localization in Nemesius, *Nature of Man* 13 (69.17–20 Morani; 13.54–65) is even more precise: ‘The organ of memory, too, is the posterior cavity of the brain, which they call the cerebellum and the *enkranis*, and the psychic pneuma within it’ (20); cf. Siraisi (1987) 212–14; Rocca (2003) 245–47; Ahonen (2014) 158 n. 77; Wright (2016) 129–30, 182–94; Wright (2018). On the reception of these localizations in the brain by a set of Arabic and Hebrew readers of Galen, see Wolfson (1935) 74–77; Marshall and Magoun (1998) 27–42 for an illustrated survey of the ventricles throughout the history of Western medicine.

Already at *Libri Medicinales* 5.72 (46.30–47.1 Olivieri) as well Aetius identifies a category of nervous diseases to which *phrenitis* belongs: ‘Some suddenly suffer from orthopnoea, oppression, *lēthargos*, *phrenitis*, parotid gland tumour, with spasms, tremors or *apoplexia*, and to summarize, *the whole nervous system and the head suffer*.’ Paul of Aegina’s chapter dedicated to *phrenitis* (3.6, 144.4–6 Heiberg) offers a similar formulation: ‘*Phrenitis* is an inflammation of the meninges, when the brain becomes inflamed together with them, or when there is an unnaturally overheated state in it.’

The Survival of the Chest Localization and Pathology

Aetius, in his compilation, mentions the ‘split’ location of *phrenitis* – encephalic as well as in the torso – but does so indirectly, on the occasion of the mirror discussion of *lēthargos*, according to Archigenes and Poseidonius. At 6.3 (128.6–10 Olivieri) he describes two versions of the disease, one located in the *phrenes* and *splanchna*, the other in the brain:

There are two types of *lēthargos*, for in some cases the primary affection (*prōtopathēsanta*) in the *phrenes* and *splanchna* leads to sympathy (*eis sympathēian agei*) with the brain, while in another the primary affection begins in the brain, and in some cases it attacks straight at the beginning of the disease, in others through a change from one of the other acute diseases.

It is significant that the discussion of *lēthargos* that follows presents many of the well-known points of complementarity with *phrenitis*. More explicitly, at 5.48.13 (29.20–21 Olivieri) Aetius speaks of the relationship between *phrenitis* and yet more diseases, saying that haemorrhages through the nose often resolve *phrenitis* but not *lēthargos* or *peripleumonia*, again pointing at the parallel with a lung disease, exposing the lasting trace of the archaic association with the chest.¹⁴¹

Paul of Aegina’s chapter dedicated to *phrenitis* (3.6, 144.8–28 Heiberg) explicates the possibility of sympathy with the diaphragm, again following Galen in *On the Affected Places* 5.4:

The cause of this disease is an excess either of blood or of blood containing yellow bile, sometimes even yellow bile being overcooked and mutating into black bile, in which case the *phrenitis* is most severe; *it occurs when the brain suffering together with the diaphragm through the nerves maintains the affection through the nerves that are spread through it*. The derangement (*parakopē*) that comes at the height of burning fevers or arises through sympathy with

¹⁴¹ See above, p. 22.

the stomach is not *phrenitis* but simply a *paraphrosynē* . . . But if the *phrenitis* develops through sympathy with the *phrenes*, then the breathing is anomalous and it pulls up the *hypochondria* and these have considerable heating, just as they in turn, because of the brain, display heating and flushing in the face and full blood vessels.¹⁴²

Alexander of Tralles' discussion of *phrenitis* at I.13 (509–27 Puschmann, *Peri phrenitidos*) uniquely emphasizes the controversy regarding the localization as a well-known point of conflict. This is an important bit of information, since it acknowledges something about *phrenitis* which is hidden in plain sight in most other authors in this period: its problematic location.

That *phrenitis* is one of the most acute and dangerous diseases (*tōn oxytatōn esti kai epikindynotatōn pathōn*), everyone agrees. Whence it arises (*hothen de synistatāi*), and under which condition suffered by the brain, and which part [of it] is affected, and about the therapy for the disease – everyone treats this as controversial (*ti paschontos tou enkephalou kai poiou merous autou kai peri tēs therapeias tou pathous, touto pasin amphibēteitai*). (I.13, 509.3–6 Puschmann)

Later the question of the phrenitic location is tackled and resolved by dismissing it:

The main signs of *phrenitis* are of such a kind and magnitude. From the start, the cause is in the brain; for *phrenitis* proper does not arise from affection of any other part, unlike what some think, that phrenitics become so from an inflammation of the diaphragm. This is not true, but once the brain itself is inflamed (*kai autos ho enkephalos epeidan phlegmainēi*) it causes the powerful derangements, as are characteristic of cases of phrenitis (*hōs eoikenai phrenitisin*). (5II.17–20 Puschmann)

The Relation of phrenitis to lēthargos and other Diseases

The traditional association is perpetuated by all these authors and remains central in Byzantine and medieval medicine as well. Oribasius (*Syn. ad Eust.* 8.I.2 = 244.8–11 Raeder) pairs *phrenitis* and *lēthargos* as diseases which attract similar therapeutic measures, mostly phlebotomy and applications with *oxyrrhodinum*. The two are seen by him as mirror images and capable of curing each other (*Coll. Med.* 45.30.55 = 195.30–33 Raeder): '*Phrenitis* is a cure (*iamata*) for *lēthargos*, and *lēthargos* tames those who are

¹⁴² Cf. also 3.6.2 (145.25–27 Heiberg) on the *sympatheia* between the two parts.

continuously out of themselves and undoubtedly phrenitic (*aparalogistōs phrenitikous*).¹⁴³

At 6.2 Aetius as well mentions *lēthargos* as parallel to *phrenitis*: ‘For mostly in those who, coming from a *phrenitis*, have been cooled through narcotic *pharmaka*, there is a change to *lēthargos*’ (128.10–12 Olivieri). At 6.3 (= 131.16–19 Olivieri) he reports in regard to Archigenes and Poseidonius ‘about *katochos* and *katalepsis*’, diseases seen as a combination of *phrenitis* and *lēthargos* already in Galen:¹⁴³ ‘You will find that there is a disease in the middle between *phrenitis* and *lēthargos*, which is a kind of *paranoia* or *parakopē* (*eidos paranoias ē parakopēs*). Doctors usually called it *katochē* or *katalepsis* because of the settling humour, especially melancholic.’ Again at 6.4, in regard to patients with *katochos*, who manifest symptoms similar to phrenitics, he says: ‘Sometimes they scratch the nearby walls and speak foolishly (*haplōs eipein*), in ways not at all similar to phrenitics or lethargics (*oute phrenitikois to pan eoikasin oute lēthargois*)’ (132.9–11 Olivieri). Paul of Aegina also underlines the contiguity with *lēthargos*: ‘And *lēthargos*, a form of damage affecting the *logistikon*, has the same location as *phrenitis*, I mean the head, but through an opposite substance. For it arises through moister and colder phlegm running through the brain’ (3.9.1 = 147.6–8 Heiberg). He too mentions the disease *katochos* as a comparable ailment: ‘We have already clarified the substance of the disease *phrenitis* in the chapter on this disease. But [consider now] the signs that are on the whole common somehow to *phrenitis* and *lēthargos*, as the opposite substance prevails’ (3.10.1 = 149.1–5 Heiberg). Most interesting, Alexander of Tralles (1.17 = 591.10–12 Puschmann) identifies a link between *melancholia* and *phrenitis*, where some patients with *melancholia* can display phrenitic behaviour: ‘Some of them (the melancholic) laugh all the time and their imagination is always full of hilarity, while others appear to suffer from anger and tension, *as in the case of those who are called phrenitic (phrenitikois onomazomenois)*’. Here ‘phrenitic’ already appears to embody a type, despite the fact that earlier literature had repeatedly recognized and classified different typologies for the behaviour of such patients;¹⁴⁴ Galen in particular described the comatose, passive type alongside the aggressive one. The profile offered by Alexander is that of the furious, violent madman, the ‘so-called phrenitic’.

¹⁴³ See above, p. 142.

¹⁴⁴ This bipolarity was traditional already in the Hippocratics, e.g. notably with melancholy; see Thumiger (2017) 57–58.

The existence of different versions of the disease *phrenitis* is thematized in these authors as well. Alexander of Tralles in his discussion (*Peri phrenitidos*) follows Galen in distinguishing *phrenitis* from *paraphrosynē*:

What is the cause of *phrenitis*? *Phrenitis* proper arises from yellow bile, whenever going up it causes inflammation (*phlegmonē*) around the brain or its meninx (*peri ton enkephalon ē tēn en autōi mēninga*). For before it goes up and fixes itself, it causes not *phrenitis* but *paraphrosynē*.

He continues:

For the form of *phrenitis* is not only one, but [there can be] also different ones. In one, the ochre bile (*hē ochra cholē*) establishes itself, and it is milder; another involves yellow bile (*hē xanthē cholē*), is much more severe and brings higher fevers; the third is most aggressive, called *theriōdes*, in which the yellow bile is uncontrollably overheated and overcooked. (509.10–23 Puschmann)

He also mentions the ‘false *phrenitis*’ Galen describes, the peculiar state of ‘phrenitics who are already chronic’, and the issue of differential diagnosis. All these authors engage with such ‘false *phrenitis*’, which will be picked up by medieval medicine and, with the discomfort with definition it betrays, constitutes an interesting point of taxonomic maturity.

Therapeutics

Aetius reports on the therapeutics for *phrenitis* in general and independent of *locus affectus*, and regardless of the ventricular localization of the illness he had explored; as we have often noted, these are the more holistic and psychotherapeutic kinds of measures. Detailed suggestions are accordingly offered about the ideal environment for the disturbed patients (6.2 = 125.27–126.6 Olivieri):

Now it is necessary to speak of the care for the phrenitic (as a whole). It is necessary to let the patient lie down in winter in a warm house, and in the summer in a fresh one, and to order him and the others in the house or nearby to maintain a calm environment. And those who are made worse by light should lie in a dark home, while those who are instead made calm by light should be in a well-lighted home.

Aetius also mentions venesection (although for him it should be practised cautiously),¹⁴⁵ purging of the stomach and embrocation of the head with warm rose extract,

¹⁴⁵ On this, see also 3.14 (= 274.3–5 Olivieri).

For when the meninges are inflamed, neither the cold nor the very hot are harmless. Because the cold, on the one hand, clogs the pores and hinders the residues in the head from flowing through, while the very hot, on the other hand, doubles the inflammation, so that in the summer one must apply rose oil, especially lukewarm with a little vinegar, but in winter rather warm. (126.20–127.1 Olivieri)

In this summary, Aetius combines traditional physiological measures with classic remedies from the tradition of soft medicine for the mentally disturbed: the importance of a particular environment, the role played by calm, the modulation of light and darkness. Elsewhere in his *Libri Medicinales* Aetius summarizes the manifestations and therapy of *phrenitis* and *lēthargos* combined: at 1.146 (72.15–19 Olivieri) he discusses pain in the head and its therapies in chronic cases of *lēthargos* and *phrenitis* and reports on the use of *oxyrrhodium* for both, since ‘it stops the upsurges of blood’. Combining a psychotherapeutic tradition with the more strongly deterministic Galenic account, when he returns to therapy at 3.6 (= 264.1–5 Olivieri), he recommends use of a hammock for patients weakened by fever or hellebore, but also for phrenitics. Unlike Galen’s practice, psychotherapeutics and soft measures are combined with physiological interventions.

Paul of Aegina as well offers a combination of bodily measures (venesection, pharmaceutical interventions, head embrocations) and environmental and other psychotropic remedies, for example the creation of a suitable ambience, modulating light and darkness, and soothing or binding patients as necessary. Here Paul offers an especially competent summary of the character of the phrenitic, based on Galen and others:

The patient should be placed in a location with moderate light and temperature, after any colourful picture has been removed (for such things bring distress), where some concerned friends should visit and provide suitable company, sometimes addressing them gently, other times startling them with harsh remarks. (3.6.2 = 145.12–16 Heiberg)

Some comments appear attentive to social distinctions and a consciousness of class:

And in cases of *akinēsia*, you must remember to leave space, if some are very rich (*zaploutoi*), for them to be supported/helped by slaves (*dia paidōn*), whereas otherwise they should be bound tight with ropes (*desmois perisphingomenoi*); for disorderly movement (*ataktos kinēsis*) of the *dynamis* can bring about a *synkopē* (*synkoptikē estin*). (3.6.2 = 145.31–146.1 Heiberg)

In a different version, the feet should be fastened with ropes, but not tightly, and examined/palpated for the sake of preventing spasms (3.6.2 = 146.2–3

Heiberg). To conclude, 'it is important to aid the recovery of phrenitics by avoiding excess of wine, strong emotional alterations (*orgas*), excessive food and most of all exposure to the sun (*hēliokaias*)' (3.6.2 = 146.17–18 Heiberg).

Alexander of Tralles gives similar indications: again venesection and embrocation of the head with rose oil and vinegar, especially if hallucinations become more severe. There are also specific indications regarding houses (519 Puschmann):

One must consider the house in which the patient spends his time, so that the air should not be too thick or humid or cold or the least bit hot, lest a thickening of the pores affect the head or an overflow, but it should be quite temperate, so that in the good mixture the psychic pneuma can be tempered and relax. Let it also be more light than dark, so that through his perception the patient might be able to gain awareness of matters familiar to him (*hōste dia tēs aisthēseōs eis synaisthēsīn erchesthai tōn synēthōn ton kannonta*).

The same psychological and social advice returns:¹⁴⁶

For this reason, some friends, the closest, should also stay close to him, so that he will respect their mild advice when he interacts with them. Nor should any person of the household or any relative with whom he has had reason for pain or anger be allowed to enter; for this is a trigger and causes disturbance and is a clear cause of strong upsetting. Nor should friends visit in a crowd, since many people simply become a cause of much confusion, and in addition they make the air thicker with their breathing moistly. They should watch out not to move in a scattered manner but gently, lest they hit the bed and move it; for this is exacerbating, and among other things it deprives the patient of sleep.

Finally, massage and physical interaction can do some good:

Those present should hold all the limbs firmly but gently, and calmly massage them, especially in the lower part, and especially when the patient suffers spasms. The legs should be tied with bandages, since this procedure turns the (pathological) substance downwards and also makes the cramps milder. Even better is to foment the extremities after rubbing.

In addition, dietetic details are offered which cannot be summarized here (519.6–521.3 Puschmann). Wine (525–27 Puschmann), generally considered a fortifying but strong substance, even dangerous, remains a point of therapeutic controversy. Alexander too recommends caution: '(One should) venture to give phrenitics wine not treated with *gypson*, in

¹⁴⁶ As in Aretaeus; see above, p. 162.

cases when the trouble with sleeping is serious and their strength is fading and the fevers are no longer vehement or very hot, but there appears to be a form of coction in the urine' (525.28–527.1 Puschmann). It is especially appropriate to give wine to those who were already accustomed to drinking it while healthy. Here Alexander introduces a note regarding the character of the phrenitic: 'In addition to these, it is appropriate to give wine to everyone who suffers from *paraphrosynē* with moderation, for it changes their *thymos* and their angry disposition into benevolence, and brings sleep by producing "coction of food" (= digestion) quickly, and promotes the recovery of the whole body' (527.4–8 Puschmann). He also refers to the gastric area as relevant: 'In cases in which the inflammation in the *hypochondria* is not severely fierce and the *dynamis* is not fading, I strongly urge giving wine.' In this case, in fact, the benefit will exceed the damage. Fundamental with wine is balancing the benefits and the risks, a calculation which ultimately lies with the physician. This repeats the point already made by Galen:¹⁴⁷ for Alexander, 'the doctor is stronger than wine' and 'it is the task of the doctor to measure and judge such matters (*iatrou d' esti to metrein kai krinein ta toiauta*)' (527.17 Puschmann).

Other Themes

Finally, several other elements from previous pathologies are retained by these compilers; their presence is fundamental for the future portrayal of these patients. The quality of urine (mentioned for example by Aetius at 5.37 = 22.26–23.4 Olivieri) remains important as an indicator. The same is true of the pulse (Paul at 2.11.24c = 93.4–8 Heiberg) and for the whole variety of clinical manifestations, largely traditional: neurological (on our definition), sensory, motoric (alteration of sleep patterns, spasms, hallucinations, tremors), psychological (strong emotions, anxiety, torpidity), behavioural (crocydism, aggression, recklessness), sometimes with additions which appear less technical in their provenience. Alexander of Tralles, for instance, stands out for reporting a belief about prophecy (509–11 Puschmann):

Signs of emerging *phrenitis*. What signals impending *phrenitis* are most of all a continuous and intense state of troubled sleep (*synechēs kai epitamenē agrypniā*), troubled sleep and leaping up, and appearances of images as in dreams, *such as to make some people conjecture that they are aware of the future*

¹⁴⁷ See above, pp. 172–73.

*and are attempting to offer predictions (hōste kai tinas hyponoein eidenai ta mellonta kai prolegein ethelein).*¹⁴⁸

The usual manifestations (aggression, hallucinations, crocydism, altered respiration) accompany this; these appear also in Paul of Aegina (144–46 Heiberg).

Conclusion

The extent and relative position of *phrenitis* in nosological treatises, and Galen's constant – indeed, overwhelming – reference to it as a paradigmatic mental and acute disease, make it apparent that this is one of the most powerfully conceptualized disorders in this period, clearly codified and readily recognized as experienced in the ancient world, especially in the first centuries of our era. This state of affairs is corroborated by Galen's influence, but antecedent tendencies and independent strands are also visible.

To summarize the medical doctrines elaborated over the course of these six centuries of medical history, the defining topics of our disease are, from a strictly physiological point of view, fever, troubled sleep (*agrypnia*), a specific pulse and sensory disturbance. *Vis-à-vis* localization, the brain (and its ventricles) and membranes are central, with the nerves, the diaphragm and the *hypochondria* involved by sympathy, along with the stomach. Finally, the *depth* of the affection, reaching beneath the surface of the skull far into the *enkephalon*, is important. Behaviourally, an aggressive and disordered 'type' emerges. Its markers are spasm and crocydism; being startled and disordered, but also comatose and weak; sudden changes and behaviour out of character for the patient; a lack of awareness of one's own physiology (notably, urination) and of one's state of illness altogether; a propensity to sudden anger and aggression; supernatural strength and 'tension'; and nonsensical laughter.

In theoretical terms, different 'phases' of the disease are recognized and various types thereof. *Phrenitis* can be primary ('idiopathic' or 'protopathic') or secondary (by sympathy); genuine, mixed or 'false'; and three types can be distinguished, depending on the damage it causes. Its relationship to *lēthargos* is confirmed and elaborated, while the diaphragmatic version of the disease is included but marginalized. These points all

¹⁴⁸ The idea that the state of the body might influence dreams and their prophetic quality was reported by Aristotle, *De divinatione per somnia*; see especially 463b17–19 and 464a18–28 on the connection between mental inferiority or pathology and vivid, even prophetic dreams.

confirm a strong conceptualization and a substantial investment in taxonomy. In humoral terms, pathological centrality is given to yellow bile, ochre bile, blood and putrefaction of bodily fluids. Physiologically, heat and inflammation are key: *phrenitis* remains first and foremost a fever. It is a summertime, dry disease (bringing thirst, tremors, a dry tongue), and overheating characterizes it physiologically, seasonally and environmentally. In a metaphysical sense, finally, the themes of hallucination, heightened senses and even prophecy give the suffering individual a touch of the extraordinary.

This long chapter has taken us deep into the details of medical and biological reflection. To complete the picture, a key question awaits, which involves the status of *phrenitis* as experience and popular concept outside the world of medical professionals. The elements listed above prove useful building blocks for the powerful allegorical construct '*phrenitis*' in the centuries to come. But medicine is not the only influence here: the ethical reflections offered by philosophers writing in Greek and Latin at the beginning of our era are also a fundamental set of sources, which converge with the medical material to produce the description of the phrenitic in post-classical European culture, as we will see in Chapter 7.