

Understanding contagious diseases: Baillou's notes on Julien Le Paulmier's *De morbis contagiosis*

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Summary. A Wellcome library copy of Le Paulmier's *De morbis contagiosis* (1578) was extensively annotated by De Baillou over at least fourteen years. After reading it through once, he embarked on a more detailed reading, filling its margins with many notes, comments and contradictions, as well as compiling an index of remedies and another of topics. His concern throughout is with symptoms and cures, and he does not engage in the theoretical debates common in contemporary plague texts, although the ideas of Fracastoro were already well known. His favoured sources are those of Antiquity, supplemented by more recent Paris publications. He criticizes Le Paulmier on many occasions, drawing on his own experiences and the information given him by friends. His notes also throw light on his religious and political beliefs.

Keywords. annotation; Guillaume de Baillou; Julien Le Paulmier's *De morbis contagiosis*; plague

The Book

Julien Le Paulmier de Grantmesnil, who lived from 1520 to 1588, is famous today largely as the first author of a comprehensive book on cider¹. His promising career as a physician to the nobility, including a period as doctor to the Duke of Anjou, was cut short by the massacre of St Bartholomew in 1572, after which, as a Protestant, he retired to his apple-filled ancestral estate in the Cotentin. He also wrote several tracts on medicine, of which the most important was his treatise *De morbis contagiosis*, published by

¹ Julien Le Paulmier, *De vino et pomaceo*, Paris, D. Le Clerc, 1588; Id., *Le premier traité du cidre*, 1589, Introduction de Michel Reulos, Préface d'Henri-Louis Védie, Bricqueboscq, Editions des champs, 2003, with good commentary and notes. Pierre Carel, *Les médecins et les chirurgiens de Caen*, Caen, A. Massif, 1888, pp. 12-13, and Wilhelm Haberling, *Paulmier de Grantmesnil, Julien*, in *Biographisches Lexikon der hervorragenden Ärzte aller Zeiten und Völker*, Bd. IV, 1932, pp. 532-533, give brief biographies, but there is no modern study of his medical writings.

Denis Duval at Paris in 1578². This treatise on epidemiology is of interest for several reasons, not least its length, 444 pages. In particular, it is one of the very few tracts from the sixteenth century to claim to consider contagious diseases in general, as compared with the many discussions about syphilis and the innumerable plague treatises, especially following the outbreaks of the late 1570s³. Such a lack of overt interest is perhaps surprising, given that Fracastoro had published his *De morbis contagiosis* as early as 1546, and that his ideas had spread widely around Europe by this date⁴. But Le Paulmier can hardly be called a disciple of Fracastoro, for his seven books treat only four diseases, syphilis (Books 1 and 2, with a separate book [3] on the use of mercury), elephantiasis (Book 4), rabies (Book 5) and plague (Books 6 and 7). Nor does he enter greatly into the theoretical questions on contagion that had exercised Fracastoro. Indeed, the name of Fracastoro does not figure in the index, and there is in the text no discussion of the role of contagion.⁵ But what the books do contain is evidence of many sound clinical observations and of personal experience with these diseases, which may account for the success of the study, at least to judge from the number of copies surviving today⁶.

One of them, now in the Wellcome Library, classmark EPB 4856B, was owned by Guillaume de Baillou, whose *Ephemerides* was compiled between 1570 and 1579. Alas, one cannot tell whether De Baillou obtained his copy of Le Paulmier immediately on publication in 1578, or a little later, for the

² Julien Le Paulmier, *De morbis contagiosis libri VII*, Paris, D. Duval, 1578. The treatise was reprinted at least twice, which attests to its merit as a collection of information. A shorter tract solely on plague appeared in 1580.

³ Sam K. Cohn jr., *Cultures of plague. Medical thinking at the end of the Renaissance*, Oxford, Oxford University Press, 2010, pp. 25-32, attempts to quantify Renaissance plague tracts, comparing the Italian pattern with that of France and Germany. For France, see also Joël Coste, *Représentations et comportements en temps d'épidémie dans la littérature imprimée de peste (1490 – 1725). Contribution à l'histoire culturelle de la peste en France à l'époque moderne*, Paris, Honoré Champion, 2007.

⁴ Cfr. Vivian Nutton, *The reception of Fracastoro's theory of contagion. The seed that fell among thorns*, "Osiris", ser. 2, 1990, pp. 196-234; Concetta Pennuto, *Simpatia, fantasia e contagio. Il pensiero medico e il pensiero filosofico di Girolamo Fracastoro*, Roma, Edizioni di Storia e Letteratura, 2008.

⁵ The theoretical section on plague, for instance, (pp. 289-305) attacks those who believe that plague can be caused by putrefaction or from a change in the climate, and supports instead (p. 303) Fernel's notion that this was some pollution of the air through an occult cause. The actual mechanism of contagion is not discussed.

⁶ The Wellcome Library has four copies of the 1578 edition, and British libraries hold more than twenty copies (in various editions).

dated annotations cover only the period from 1583 to 1597, and some of the annotations are not conclusively in his hand. What is, however, clear is the impact that the book had on De Baillou, for he annotated it copiously over a substantial period of time. These marginal notes go far beyond those that are normally found in Renaissance books, which rarely indicate more than a few key words or passages that have provoked interest and occasionally disagreement, and, even more occasionally, reminiscences of cases and remedies⁷. It is not possible here to present more than an outline of the London notes, but a full study, paying particular attention to their chronology, would be valuable especially in throwing light on the development of De Baillou's thought on disease over more than a decade.

Given the length of time which elapsed before his writings appeared in print, a series of personal observations that can be dated at times to within days offers an opportunity to reconsider his activity in the 1580s and 1590s. By then he had completed his *Ephemerides*, as well as many of the case histories that were later published by Thévert as the *Paradigmata* and *Historiae*, and he was thus in a good position to appreciate what Le Paulmier was trying to achieve. His annotations also show the extent of his learning and how much he drew on it for his clinical practice⁸.

The annotations: chronology

A basic outline of his engagement with Le Paulmier's treatise can be easily established thanks to the dates De Baillou inserts at various points in the book, as well as the corrections and cross-references, the layout of the notes on the page, and the slight changes in the handwriting over time. There are at least four different modes of writing that seem to come from slightly different periods, although there is no doubt that all are De Baillou's. Particularly striking are the bold, slightly broad hand with brown ink that writes on the opening and closing leaves and often elsewhere, and a more elegant thinner hand that uses a greyish ink. At other times De Baillou writes in a smaller brown cursive, more typical of a Renaissance writer, and again with significant small variations that suggest that reading continued

⁷ The scattered annotations in the British Library copy, classmark 1167 h 4, are far more typical.

⁸ For a good overview of De Baillou's life, see the article by Joël Coste, above, pp. 95-111, as well as the chronology set out in the introduction to the entry on him in the BIUM website.

over some years. Other readers, both before and after, may have added their own comments, but, without a much lengthier examination of all features of the hands, it is impossible to decide precisely the extent to which this is true⁹. This paper, however, relies only on comments that can be indubitably be assigned to our author, beginning with the title page, on which is written in a flamboyant hand in large characters: *Ex libris Gulielmi De Baillou medici Parisiensis*.

One further comment on the structure of the volume is necessary before passing to an examination of its contents and their significance. It is not clear at what point the book was given its present binding, for there are extensive additional leaves covered with notes by De Baillou¹⁰. The 24 folios at the end contain indexes that he compiled himself to supplement the meagre list of chapter headings at the beginning of Le Paulmier's book. These indexes are of two kinds, one of remedies, the other of topics. They were probably compiled separately on different quires, although begun at the same time. By contrast, the 8 folios that precede the text were originally separate sheets, pasted together into a quire, and, although all are relevant to the book, they contain material that is likely to have been written at various times over several years. The book was bound or, more likely, rebound to include both sets of leaves. In the nineteenth century the Wellcome volume was owned by M. Edmond Fournier, whose handwritten summary of the contents and some of the annotations was tipped in, along with a portrait of De Baillou¹¹.

The most significant feature of the Wellcome volume is that De Baillou's passion for marking when he began or finished a book allows a chronology of his reading to be firmly established. The earliest date is located at the bottom of page 290, at the end of Book 6, *De pestilenti feбри*: October 23, 1583. However, although at least one other word on this page (an *aide-mémoire*) can be ascribed to this period, both can be easily missed, for they

⁹ Since De Baillou's own notes do not begin for certain until 1583, it is possible that some of the annotations belong to a slightly earlier owner, who bought the book when it appeared and then sold it on.

¹⁰ For ease of reference, the annotations are cited by the number of the book page on which they begin, even when they run over to the next page; notes on the additional folios are cited as A, for the opening leaves, and B, for the concluding ones, followed by the number assigned them by the Wellcome cataloguer.

¹¹ Son of the great syphilographer Alfred Fournier, Edmond Fournier (1864-1938) edited his father's textbook (1898-1906). His major collection of works on syphilis, including this volume, was sold to Sir Henry Wellcome in 1927 for 90,000 francs, marked on the Wellcome copy of the sale catalogue as the equivalent of (then) £726 (Fournier, 1927).

are entirely surrounded by the very detailed comments and observations made a few years later, beginning in late 1589. This suggests that in 1583 De Baillou merely dipped into the volume for individual pieces of information, and did not give it the attention that he devoted to it later. He probably bought the book out of interest and looked up a few things of importance, but realized only a little later its significance for his own work.

An elegiac couplet inscribed at the end of Le Paulmier's address to the reader (p. 4) and dated November 22, 1589, marks the beginning of a closer engagement with the volume. "We seek information on the Spanish disease; actual experience of this plague we leave to others".

*Notitiam Hispanici morbi nos quaerimus; hujus
Linquimus ast aliis experimenta luis.*

Shortly after this De Baillou composed his own address to the reader, a poem in 18 couplets, written on January 17, 1590 (f. A 4v), and further extended and copied out as we have it on March 2, 1590¹². In similar poetic vein, a week later, on March 11, he wrote seventeen lines of hendecasyllabics, a more complex metre, on "The sad results of venereal disease" (f. A 5r). I quote only the ending: "The book you will read on the pestilential illness that Venus creates shows the price of divine vengeance and anger against the libidinous. Yet God in his kindness has also granted us help":

*Quem leges libellum
De morbo et lue quam Venus facessit
Irae Numinis in libidinosos.
At indulsit opem Deus benigne.*

De Baillou is more competent in hendecasyllabics than in elegiac couplets, but both poems display his good classical education. They are no better and no worse than the typical liminal ode of the period, and contain commonplaces familiar for centuries. His classical education is further illustrated by a series of (non-medical) tags taken from Tacitus and written both at the beginning and at the end of Le Paulmier's book. The late sixteenth century was perhaps the highpoint in Tacitus' European influence, and the Roman historian's comments on the follies and failures of emperors fit the somewhat censorious attitude of De Baillou towards sufferers from syphilis.

The rest of these opening folios are filled with recipes and comments on syphilis written at different times. On December 15, 1593, De Baillou

¹² Both poems presuppose a book, but this could well be a poetical conceit.

copied down a powder used by the Germans that does not demand that the sufferer remain at home (f. A 6r). Another German powder is given on folio 8r that was “used in an outbreak in France” Folio A 7r-v contains two dated observations. The earlier (f. A 7v), written in Paris on July 11, 1595, discusses the value of sudorifics, on which De Baillou comments that they do not always work, and that the Italians do not always use them. A year later, on October 25 1596, he wrote on the reverse of the leaf an observation about the use of mercury ointment (f. A 7r). This date is one of the last De Baillou inserted, and its significance lies more in the fact that at this stage, he was still re-reading, or at least still thinking about, what he had read in Book 3, on mercuric treatment for syphilis.

He seems to have begun his closer reading in late 1589 – the liminal poem on page 4 is dated November 22, 1589. He finished Book 4 on May 23, 1590, “the day that the theologian Dr. Heurnius was buried” (p. 279), and by a few weeks later, on St John’s Eve, he had finished the next book, on rabies. The section on plague and pestilential fever took him longer, until May 22, 1592 (p. 443). Interestingly, he then began to reread the whole work on February 16, 1593, a task that he expected would not be without fruit, “*non infructuosam*” (p. 1). On October 14 he had completed his “*lectio exactior*” of the first two books, and finished his index to them the next day (p. 165, f. B 7r). He did not begin his reading of the next book, on mercury, until November 21, the day on which his wife returned bringing with her a young bride from Nogent, presumably to her wedding. The forty-one pages and the index took him until January 28, 1594 (pp. 207, 247, f. B 12r, 13r), and Book 4 of his re-reading, on elephantiasis, occupied him from February 4 to Thursday, April 7, 1594, with the index taking two more days, until Easter Eve (pp. 208, 247-248, 264, f. B 16v). The next book, on rabies, he began on July 8, unusually giving the date in French, not Latin (p. 265). How long the two books on plague took him, he does not say, but, to judge from his work on the indexes it occupied him for a long while. The index to these books was not completed until Ash Wednesday, February 27, 1596 (f. B 22v), and his index of drug recipes not until March 11, 1597 (f. B 6r).¹³ He had worked through the night to complete it, later adding the comment that this was the very night that Amiens was captured and sacked by the clever and treacherous Spaniards, the same nation that out of ill will towards the French had introduced into France the deadly venereal disease (p. 11). He continued to go back and add cross-references and notes for several months, the last

¹³ Both years are clearly written, and the later date must be correct. Unless De Baillou made a mistake or believed that the year changed on March 1, the year’s gap remains.

dated comment being inserted on November 6, 1597 (p. 280).

Although there are many annotations that survive from his first reading, his re-reading was “*exactor*” indeed. Few pages lack annotations, often sprawling all the way down the margin and occasionally onto an adjoining page, in addition to the typical underlinings and catchwords that can be found in most academic books from this period. It is this range of comment that distinguishes De Baillou’s involvement with the book from that of many other readers of medical texts. One can find elsewhere many examples of annotators who add references to authors old and new, who summarize passages of interest, who explain unfamiliar words, or who add reminiscences of their own or others’ medical practice, and, very occasionally, one can find a reader engaging in a critical dialogue with the author, but De Baillou does all this, and more. The examples in the following pages are concentrated largely on Book 1, on syphilis, and on the last two books, on plague and pestilential fever, but this does not mean that the remaining books are not equally heavily annotated or do not contain similar information that throws light on De Baillou’s intellectual development.

De Baillou’s reading and experience

As might be expected of any respectable doctor of the period, De Baillou knew his Galen and his Hippocrates, including such unfamiliar works as Galen’s *De causis procatartictis* and Hippocrates’ *De usu liquidorum*, as well as other writers from Antiquity such as Celsus, Vitruvius, Dioscorides, Pliny and Rufus¹⁴. A little more surprising is the use he makes, when discussing syphilis and rabies, of the *Problems* ascribed to Alexander of Aphrodisias, a contemporary of Galen (pp. 14, 44, 275, 385), although these had long been familiar through translations by Theodore Gaza, Politian and Giorgio Valla¹⁵. The moderns are represented by Fernel, Fuchs, Garcia D’Orta, Johannes Lange, Matthioli, Rondelet, and, less familiar, the *Enchiridium chirurgicum* of Chaumet, published in 1560¹⁶. There is, perhaps surprisingly, no reference to Fracastoro and his theory of seeds of diseases, and, as one would expect, none overtly to the Paracelsians. Commenting on

¹⁴ I give merely one example of each author: Galen, p. 353; Hippocrates, p. 360; Celsus, p. 80; Vitruvius, p. 170; Dioscorides, p. 369; Pliny, p. 170; Rufus, p. 302.

¹⁵ C. Pennuto, *Simpatia, fantasia e contagio*, cit., pp. 411-412.

¹⁶ Fernel, p. 361; Fuchs, p. 277; Garcia, p. 65; Johannes Lange, p. 170; Matthioli, p. 280; Rondelet, p. 331; Chaumet, p. 264.

the origin of syphilis De Baillou commends as “an elegant book” (p. 10) De la Popelinière’s *Les trois mondes*, published at Paris by P. l’Huilliere in 1582, which described the European expansion to the Americas and which showed “*rationibus palpabilibus*” that syphilis had ravaged the human race long before the French expedition to Naples¹⁷.

De Baillou spends relatively little time on terminology, although he explains (p. 292) the difference between *epidemia* and *pestilens* (the former is only pestilential if it is deadly), and he gives modern French names for substances only rarely – a brief mention of *jambon de Mayence* (p. 341), and a comment that Cariophylla, *vulgo oilletts, oeilletts* (he gives two spellings), are not available in pharmacies in a crushed form, though that would be very good (p. 335). He adds also later a marginal reference to the value of a “*conserve d’oilletts*” (p. 397).

Of greater interest are the records of his own experiences, whether as doctor or as a member of the public observing how magistrates distribute corn during plague (p. 325), and noting the leaden colour of the body of Gomin, the pharmacist (p. 434), who died of a malignant fever¹⁸. Some cases that are not his own he may have read of, or simply been told about, like that of the surgeon from Bordeaux who cured *strumae*, swellings in the neck, with mercury (p. 123). At Lyons in time of plague, so he was informed (p. 409), one took a purgative of Spanish broom that was less powerful than heliobore but which by moving the humours up and down prevented the poison of plague from gaining a hold. This had helped many, unlike the use of antimony, which could work to expel humours from around the heart, but, says De Baillou (p. 405), that is an observation that comes with a warning, and is not a prescription, *consilium*. He quotes (p. 420) a doctor from Geneva who had observed that many people in hospital with plague coughed up blood, something he himself had seen. This he had also noted in “*exanthematous variolae*”, especially when they involved the chest, while in whooping cough bloody sputum was coughed up almost from the very first day.

He was particularly interested in cases of plague that seemed to go against the standard assumptions about humours. So, for instance, Mademoiselle de Fleury was at first sleepy, although she was not a phlegmatic type, but then could not sleep (p. 425). There were others for whom the reverse was

¹⁷ The absence of a reference to Fracastoro in this context by Le Paulmier or De Baillou is striking.

¹⁸ But none, as far as I can tell, are mentioned in his *Consilia* or *Paradigmata*. Unless a date is specifically given, it is impossible to decide which of the many plague epidemics of the time is being referred to.

true. He was not afraid to criticize or to raise doubts. Le Paulmier had written that ditchers and “mechanics”, by which he may mean people like blacksmiths or masons, who were constantly hard at work could be bled with greater zeal than others, a statement roundly denied by De Baillou from his own experience (p. 415). He has seen many such men suffer syncope far more often than others whom one might suppose physically weaker. But he agreed with Le Paulmier that those who were roused to sudden anger were likely to be among the first to fall victim to the plague, as he had seen with his own eyes (p. 348). He was also well aware that the symptoms of plague could easily deceive the doctor, let alone the public at large. Sufferers from plague might well be wrongly diagnosed as suffering from apoplexy. So in April 1592, when a young boy died of what was termed a ‘pestilential apoplexy’, De Baillou thought that his spots and pustules were those of plague, but the parents, misled by the appearance of the rash, did not. They became themselves infected and then died (p. 414)¹⁹. Other observations raise questions of epidemiology. Why for instance, he wondered (p. 395), during a time of plague do all other diseases seem to have less effect, so that plague itself seems to be the sole dominant ruler ?

On page 290 De Baillou stresses the importance of taking particular notice of what happened in plague if the patient’s fever seemed to come to an end. This he had learned from his teacher, Nicholas Legrand, Nicolaus Magnus, a very famous Paris doctor and, in his pupil’s opinion, almost second to none²⁰. He had recommended the use of mercuric ointment in plague. But when De Baillou reached page 423 he found that Le Paulmier had completely rejected this remedy as both useless and dangerous. All he could do was to refer back to his earlier comments, leaving it still undecided whose view he would follow.

Conclusion

Dr. Fournier and an unknown cataloguer in the Wellcome Library were convinced that they knew why De Baillou had devoted so much time and effort to an author whose name can hardly be said to be familiar even to

¹⁹ In a long note at pp. 288-289, he discusses plague and its infectivity.

²⁰ Magnus (1520-1583) was the author of *De medicis pulveribus*, Paris, “in aedibus S. Colinaei”, 1545; for his powders against plague, see f. 4r-v. At *Paradigmata* 74 (*Opera omnia*, III, Geneva, De Tournes, 1762, p. 533), he notes that Magnus, “et nomine et re prae ingenia magnus”, had suffered from palpitations since his late teens.

specialists in Renaissance medicine. De Baillou, they thought, had it in mind to produce a much larger, revised edition. There is something to be said for this view: some words are crossed out, and others are paraphrased, while De Baillou appears to be in perpetual dialogue with the author²¹. But this type of annotation is common in medical books of the time, and there are none of the changes that would indicate a consistent attempt to make a revised edition. No printer could have turned the majority of notes into a successful revision.

Instead, we have the rare example of a reader stimulated to read and reread a text, and to engage with it on a variety of levels. De Baillou valued the work for its exhaustive presentation of symptoms, for its clarity, and, above all, for its therapies. Leaving aside his detailed index of remedies, many of his comments relate to diets and, particularly, drugs. He devotes a long note to the use of heating remedies in fever (p. 389), and confirms from his own observation the value of opiates in treating syphilis (p. 383). But he remains doubtful about the value of acid cardiacs (p. 337), and agrees with Le Paulmier that no amulet has yet been found that is effective against the plague (p. 362). On page 41, he responds to Le Paulmier's recommendation of alexipharmaca and sweating as a remedy for syphilis by asserting that it is ridiculous to spend an enormous amount of effort to dry the body with drugs that remove moisture and then to expend no less effort in making it moist again. His comments in the front papers on powders used in Germany and on sudorifics in Italy (ff. A 7v, 8r), show his willingness to look outside France for remedies, and he puzzles over the question why sweating appeared to act as a cure for the English sweat (p. 404).

But primarily these notes tell us about De Baillou himself, a man both patriotic and religious, for he often notes the religious feast day as well as the date. One can follow him as he reads and re-reads, going back to provide references to passages that he has just come across later in the book. One can see him thinking about what Le Paulmier has to say, as well as developing his own thoughts, for his annotations are rarely just in the form of a reference or a '*nota bene*'. Such an insight into the mind of a Renaissance doctor is rare indeed, and must be taken into account by anyone seeking to understand De Baillou.

Like Le Paulmier's, his medicine is typically Parisian in its strong adherence to Galen and Hippocrates, particularly as mediated through Fernel, and, if De Baillou knew of Paracelsian remedies, which is likely, they are

²¹ Good examples of questions raised can be found on pp. 1-2, 123, 412-413.

hidden under the epithet ‘German’²². Surprisingly perhaps for someone who was writing, or had just completed, his *Ephemerides*, climate plays little part in his comments on pestilential fevers, and neither he nor Le Paulmier appears interested in the sort of differentiation introduced by Fracastoro. Indeed, his own view of what is a “seed of plague” is very much at variance with that of Fracastoro. It is something already present in most of mankind that can be easily provoked by some procatartic cause to become harmful. In other words, the body is already prepared to fall ill with plague²³.

But to say this is also to miss the point of these annotations. De Baillou is writing as a practical physician, concerned with understanding diseases and with treating the sick. Neither he nor Le Paulmier bothers with the long theoretical discussions of plague or syphilis that introduce many writings on the subject, but they concentrate upon the means whereby to recognize and treat the disease. This is a new De Baillou, distinct from the author of the *Ephemerides*, at least in part, and helps to fill in some major gaps in our understanding of this famous yet mysterious writer. The closest parallels to these notes are to be found in his clinical records and in the fragments on diseases that constitute the *Paradigmata*, but there are few exact correspondences, if any. Rather, these notes face in two different directions. They show how much he could use his own experiences to criticize the ideas of a former Parisian colleague, while at the same time they show how well he could assimilate useful information provided by others. Even if it is unlikely that they were made with an eye to a second edition of le Paulmier or a new book on diseases by De Baillou himself (which cannot be ruled out entirely), they offer a glimpse into his method of working that is available for few other Renaissance authors. Erudition and diligence they have aplenty, but more than that, they reveal a scholar who is constantly thinking about what he reads, and is prepared to challenge and supplement what he finds there – and that is no empty compliment.

²² Germans, ff. A 6r, 8r.

²³ “*Credo enim maximam hominis partem semen pestis unumquem in se inclusum habere quod a procatartica causa facile suscitatur... Ergo corpus jam erat preparatum*” (p. 329). The source is ultimately Galen, *On Antecedent Causes* [*De causis procatartictis*], edited with an Introduction, Translation and Commentary by R.J. Hankinson, Cambridge, Cambridge University Press, 1998, VIII 108, p. 107.

