COMMON PLACES AND PRIVATE SPACES: LIBRARIES, RECORD-KEEPING AND ORDERS OF INFORMATION IN SIXTEENTH-CENTURY MEDICINE

I
NOTES ON A LIFE

Scouring the archives for information about Georg Palma, a sixteenth-century municipal physician in Nuremberg, yields the following results. Georg Palma was born in 1543, the eldest son of a physician of French origin, also named Georg Palma.[1] Palma the younger attended Nuremberg's famous grammar school, the *Melanchthonschule*.[2] He left, probably in 1558, to attend the University of Wittenberg, where he matriculated in 1559.[3] He went on to attend Tuebingen and Padua, before graduating from Ingolstadt in 1568, with the title of Doctor of Medicine.[4] The same year he returned to Nuremberg, where he settled down to live. He married well in 1569 and he practised medicine without great fanfare.[5] He cropped up sporadically in the city's social records, as a founding member of the popular music sodality and as an occasional visitor to the Bishop at Bamberg.[6] When he died in 1591, he left little by way of legacy; no great medical discoveries, no printed volumes in which to assert his medical prowess, no children to carry on and commemorate his name. Instead, Palma was mourned by his contemporaries and quietly disappeared into historical oblivion.[7] The only testament to this early modern physician's life was his considerable library, some

[1] Stadtarchiv Nürnberg, B 19/ 120.

[2] Heinrich Wilhelm Heerwagen, *Zur Geschichte der Nürnberger Gelehrtenschulen in dem Zeitraume von 1526–1535* (Nuremberg, 1868); Hugo Steiger: *Das Melanchthongymnasium in Nürnberg (1526–1926): Ein Beitrag zur Geschichte des Humanismus* (Münich, 1926).

[3] Carl Eduard Foerstemann, *Album Academiae Vitebergensis*, 3 vols. (Leipzig, 1841–1905).

[4] Heinrich Hermelink, *Die Matrikeln der Universität Tübingen*, i (Stuttgart, 1906).

[5] Landeskirchl Arch, Nbg, Sebald, 7.11.1569. 'Well' is an understatement. Palma married Helena Paumgartner, the daughter of Hieronymus Paumgartner (1498–1565), patriarch and humanist, and the sister of Hieronymus Paumgartner the Younger, an influential diplomat at the turn of the seventeenth century.

[6] Staatsarchiv Nürnberg, H. 431.

[7] Palma was eulogized by the Altdorf physician and philosopher Nicolaus Taurellus (1547–1606). See *Katalog der Leichenpredigten und sonstiger Trauerschriften kleinerer Bestände in Rudolstadt*, (Stuttgart, 2011), Ma I, Nr. 66a.

eight hundred volumes which he collected over the course of his lifetime and bequeathed to the *Stadtbibliothek*.[8]

When we come to the study of an individual, the limits of the archive are always more apparent. As this modest trove illustrates, tracing Palma's life from municipal records provides little by way of colour. In them, Palma conforms neatly to the picture of a respectable, but undistinguished municipal physician.[9] To search for evidence of Georg Palma's personality, his medical practice, his interests, activities and professional identity, is to turn not to the institution of 'the archive', but to his library. Palma's whole life was mediated by the pages of his books and they in turn serve to reconstruct it.

The books that Palma left behind chronicle his interests, which were many, the pattern of his acquaintances, who were numerous, and the places he travelled, from Germany to Italy and back again. From his annotations, we learn about Palma's likes (effective pharmaceutical remedies) and dislikes (Paracelsians). The records that he kept registered more than he might have imagined; even the unspecified details of his illness lurk amongst their pages, the inexorable descent of his writing from his young, tight calligraphy, to the poignantly spidery scrawl of his final two years, as he rounded letters his hand could no longer quite control.[10]

Yet Palma's library was more than a simple memorial. In addition to his books, his bequest to Nuremberg also included his notebooks. Palma began keeping these in university, and they travelled with him throughout the twenty-five years of his medical practice in Nuremberg. These testaments to his medical learning extend the scope of his record-keeping far beyond the personal. Palma's career unfolded in a century of great change for the pursuit of medicine, as the classical and medieval reliance on Galenic theory slowly gave way to a more 'modern' set of empirical practices.[11] Over the

[8] Karlheinz Goldmann, *Geschichte der Stadtbibliothek Nürnberg* (Nuremberg, 1957).

[9] Andrew Russell (ed.), *The Town and State Physician in Europe from the Middle Ages to the Enlightenment* (Wolfenbüttel, 1981); Mary Lindemann, *Medicine and Society in Early Modern Europe*, 2nd edn (Cambridge, 2010); Katherine Park, *Doctors and Medicine in Early Renaissance Florence* (Princeton, NJ, 1985).

[10] On the production of the early modern scholarly self, see Gadi Algazi, 'Food for Thought: Hieronymus Wolf grapples with the Scholarly Habitus', in Rudolf Dekker (ed.) *Egodocuments in History: Autobiographical Writing in its Social Context since the Middle Ages* (Hilversum, 2002), 21–44; Gadi Algazi, 'Scholars in Households: Refiguring the Learned Habitus, 1480–1550', in Lorraine Daston and Otto Sibum (eds.), *Science in Context* xvi:1–2 (2003) (special issue: *Scientific Personae*).

[11] For an overview of these developments see Lindemann, *Medicine and Society in Early Modern Europe*; Nancy Siraisi, *Medieval and Early Renaissance Medicine* (Chicago, 2009); Andrew Wear, *Knowledge and Practice in English Medicine, 1550–1680* (Cambridge, 2000).

course of the sixteenth century, new plants and botanical discoveries led to increasingly complex pharmaceutical remedies, Vesalian anatomy accompanied innovations in surgery, and the textual critique of Galenic medicine slowly gave way to observation, case studies and clinical practice. Palma's books bear witness to these new orders of medical knowledge, while his notebooks demonstrate their limits.

As the essays in this volume demonstrate, the sixteenth century was also a period of change for record-keeping. The recent turn to archives within social history has seen historians examine archives as institutions — their formation, the role they played in the political landscape and the way in which their material collections came into being.[12] Their work has led to a general conception of the fifteenth and sixteenth centuries as an interval where record-keeping exponentially increased, both in terms of the number of documents generated and the patterns of their preservation.[13] Case studies of record-keepers and record-makers have added to this impression, as well as provided insight into the variety of ways in which this increase in documentation could function, from a means of self-expression to a tool in the administration of rule.[14] At the same time, from within the history of science, scholars such as Ann Blair have examined the epistemological impetus for recording, noting and taking note, as well as the consequences of writing down and keeping what might appear to be more ephemeral records of thought.[15] Sixteenth-century efforts to sort, manage and comprehend burgeoning amounts of information contributed to the development of new disciplines of knowledge, as well as new ways of communicating it.[16]

[12] See the two special issues of *Archival Science*: Ann Blair and Jennifer Milligan (eds.), 'Towards a Cultural History of Archives', *Archival Science*, vii, 4 (2007); and Randolph Head (ed.), 'Archival Knowledge Cultures in Europe, 1400–1900', *Archival Science*, x, 3 (2010).

[13] Filippo de Vivo, *Information and Communication in Venice: Rethinking Early Modern Politics* (Oxford, 2007).

[14] Filippo de Vivo, 'Paolo Sarpi and the Uses of Information in Seventeenth-Century Venice', in J. Raymond (ed.) *News and Networks in Seventeenth-Century Britain and Europe* (London, 2006); Filippo de Vivo, 'Ordering the Archive in Early Modern Venice (1400–1650)', *Archival Science*, x (2010); M. T. Clanchy, *From Memory to Written Record, England 1066–1307*, 2nd edn (London, 2009).

[15] Ann Blair, *Too Much to Know: Managing Scholarly Information before the Modern Age* (Yale, 2010); Ann Blair, 'Note-taking as an Art of Transmission', *Critical Inquiry*, xxxi (2004).

[16] Anthony Grafton and Lisa Jardine, *From Humanism to the Humanities: Education and the Liberal Arts in Fifteenth and Sixteenth Century Europe* (Chicago, 1986); Pamela Smith and Benjamin Schmidt (eds.), *Making Knowledge in Early Modern Europe: Practices, Objects and Texts, 1400–1800* (Chicago, 2008).

One reason why medicine should be of particular interest to social historians of the archives is that early modern medical developments have been shown to rely on changing forms of record-keeping and on new developments in representing these records. Sharing case studies of patients was one of the most important bases of medical learning. As far back as antiquity, Hippocratic texts such as the Epidemics gave literary form to the medical impulse of record-collection. At least as early as the fourteenth century, physicians kept manuscript records of medical cases, particularly unusual cases.[17] As the technologies of paper and print improved, cases such as these were increasingly circulated in the form of letters, or in printed volumes. Gianna Pomata has traced the later sixteenth-century emergence of new genres such as *consilia* and *observationes*, which attempted to create a literary form for the practice of sharing opinions and conducting empirical work.[18] These books joined already popular genres such as commonplaces, *practica* and commentaries on Galenic works in creating a public sphere for a certain kind of medical practice, one which adhered to the superstructures of Galenic theory, while orienting itself ever closer to empirically driven, clinical practice. As the ongoing work of Volker Hess and Andrew Mendelsohn demonstrates, the relationship between major epistemological developments in medicine and written practices continued through the seventeenth century, expressed in new forms of written prescriptions, clinical records and an emphasis on seriality.[19]

Such literary developments mapped slightly erratically onto the day-to-day practices of educated physicians. Early municipal physicians, such as Hartmann Schedel (1440–1514) in Nuremberg, kept extensive pharmaceutical records that preceded much of the printed literature, while casebooks kept by Georg Handsch (1529–1578?), court-physician in Vienna, describe the same epistemological

[17] Gianna Pomata and Nancy Siraisi (eds.), *Historia: Empiricism and Erudition in Early Modern Europe,* (Cambridge, Mass., 2005); Nancy Siraisi, *History, Medicine and the Traditions of Renaissance Learning* (Michigan, 2007).

[18] Gianna Pomata, 'Observation Rising: Birth of an Epistemic Genre, *c.*1500–1650', in Lorraine Daston and Elizabeth Lunbeck (eds.), *Histories of Scientific Observation* (Chicago, 2011); 'Sharing Cases: The Observationes in Early Modern Medicine', Early Science and Medicine, xv (2010).

[19] Volcker Hess and J. Andrew Mendelsohn, 'Paper Technology und Wissengeschichte', *NTM Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin / Journal of the History of Science, Technology and Medicine,* xxi (2013); Volcker Hess and J. Andrew Mendelsohn, 'Fallgeschichte, Historia, Klassifikation: François Boissier de Sauvages bei der Schreibarbeit', *NTM Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin / Journal of the History of Science, Technology and Medicine*, xxi (2013).

developments evident in the printed literature.[20] By the seventeenth century, popular figures such as Simon Forman in England produced voluminous casebooks, which refracted the essential medical need for record-keeping through extensive and practical non-medical records.[21] For specific individuals such as Forman, as well as for broader medical communities, the practice of reading, writing and keeping particular types of information was a key part of the project of medical professionalization across Europe.[22] Physicians such as Palma are therefore the ideal group through which to mediate the relationship between the social history of the archive and the epistemological ramifications of note-taking as an intellectual endeavour. As a consumer of printed literature and a compiler of a medical library, as well as a producer of eclectic, private notes, Palma allows us to see how physicians crossed these divides.

It is important to note, however, that while Palma's library, books, notes and records provide insight into a greater set of professional practices, there was nothing programmatic about the knowledge Palma himself recorded. This was resolutely a personal practice. And, as the evocation of Palma's interiority from the pages of his notes on medicine suggests, it is the discontinuity between the printed presentation of common knowledge and the private set of practices which digested it, that I wish to highlight here. While the relationship between the case study to hand and the wider world of medical information provides the subtext to its argument, this paper's thick description of a set of reading practices concludes in a singular argument: that it was in its very particularity that Palma's record-keeping was at its most exemplary.

II
THE LIBRARY AS ARCHIVE IN ACTION

Palma began buying books early. As a medical student at Wittenberg, Palma already owned contemporary works by Rondelet and Carolus Clusius. [23] He continued to buy books throughout his years at university, some written by

[20] Michael Stolberg, 'Medizinische Loci communes: Forment und Funktionen einer aerztlichen Aufzeichnungspraxis im 16. und 17. Jahrhundert', *NTM Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin / Journal of the History of Science, Technology and Medicine,* xxi (2013).

[21] Lauren Kassell, 'Casebooks in Early Modern England: Medicine, Astrology and Written Records', *Bulletin of the History of Medicine*, lxxxviii (2014).

[22] Hannah Murphy, 'Reforming Medicine in Sixteenth-Century Nuremberg' (Univ. of California, Berkeley, Ph.D. thesis, 2012).

[23] There were dedications from books of Wittenberger fellow students and friends in the following of Palma's books: Guilliaume Rondelet, *De ponderibus* (Lyon, 1563) and Carolus Clusius, *Antidotarium, sive de exacta componendorum miscendorumque medicamentorum ratione, libre tres* (Antwerp, 1561).

his teachers, others extra-curricular. [24] By the time the young physician returned to Nuremberg, he had developed a significant library, as well as a handwritten record in the form of inscriptions and dedications, of his friends, collaborators and experiences in university.[25] Throughout his lifetime, he continued to add to this collection. The result was a library which spanned the categories of sixteenth-century medicine, from the surprising to the mundane. Palma's library contained translations of and commentaries on classical texts, and sixteenth-century editions of medieval pharmaceutical texts by Arabic authors, such as Averroes or Avicenna. It featured extensive works in the 'newer' medical sciences, including sixteenth-century botanical and anatomical works, by authors such as Leonhard Fuchs or Andreas Vesalius.[26] Unlike libraries compiled at the beginning of the century, the bulk of Palma's collection was printed, and while classical medical authorities featured prominently, the vast majority of Palma's books were written by sixteenth-century authors, mostly physicians.[27] The contents it counted as medical reflected a hugely diversified field. In addition to well-known medical publications, Palma's books also included vernacular texts, works on balneology, pamphlets and books on astrological medicine and a significant number of works by radical medical writer Paracelsus, his followers and his critics.

In collecting books, Palma was adhering to one of the many ideas about what it meant to be a good physician in early modern Europe. As far back as antiquity, Galen had praised the act of collecting books (in as much as Galen thought that whatever he did ought to be emulated as a vital form of medical learning).[28] Throughout the sixteenth century, humanist physicians across

[24] For example, Gabriele Fallopio, *Observationes Anatomicae* (Cologne, 1562). Leonhard Fuchs, *Compendiara ac succinta admodum in medendi artem, sue introduction* (Hagenau, 1531); *De curanda ratione libiri VIII* (Lyon, 1548); *De Historia Stirpium* (Lyon, 1549); *De historia stirpium* (Lyon, 1551); Antonius Pinaeus, *Historia plantarum* (Lyon, 1561). On Fuchs see Sachiko Kusukawa, *Picturing the Book of Nature: Image, Text and Argument in Sixteenth-Century Human Anatomy and Medical Botany* (Chicago, 2012).

[25] Winfried Dotzauer, Deutsche Studenten an der Universität Bourges: Album et liber amicorum (Hain, 1971).

[26] A. Wear, R. K. French and I. M. Lonie (eds.), *The Medical Renaissance of the Sixteenth Century* (Cambridge, 1985); Siraisi, *Medieval and Early Renaissance Medicine.*

[27] As a comparison see Richard Stauber, *Die Schedelsche Bibliothek: Ein Beitrag zur geschichte der Ausbreitung der italienischen Renaissance, des deutschen humanismus und der medizinischen Literatur* (Freiburg im Breisgau, 1908).

[28] On Galen's own library see Vivian Nutton , 'Galen's Library', in Christopher Gill, Tim Whitmarsh and John Wilkins (eds.), *Galen and the World of Knowledge* (Cambridge, 2009), 19–34. On ancient libraries, see Jason König and Tim Whitmarsh (eds.), *Ordering Knowledge in the Ancient Roman Empire* (Cambridge, 2007).

early modern Europe were busy buying books, although Palma's library was notable among his peers for its size.[29] The printed literature that Palma and other physicians bought has often been said to describe a humanist world, and the library that Palma bequeathed to the city of Nuremberg broadly supported this claim.[30] By bequeathing the library to the municipal collection, Palma solidified its institutional visage.

Palma's library, however, was neither a static institution nor a simple, approved reading list. It was a field of practice, one which produced new orders of knowledge, rather than simply reflecting those which already existed. As a student, Palma supplemented lecture courses on Galen with books on contemporary medical controversies and new trends in anatomy and botany. In Nuremberg, his active search for new medical information was aided by his careful consideration of its applicability to patients. Books, and their configuration in his library, allowed Palma to pursue new avenues of inquiry, such as pharmacy and to put into dialogue diverse, even opposed, writers, such as Paracelsus, Theodore Zwinger and Walther Bruel. For Georg Palma, books were mechanisms by which his humanist academic education was transformed into practical workable knowledge.

Far from demonstrating a straightforward reception of sixteenth-century medical idioms, Palma's book collection comprised a highly eclectic record of its peaks and troughs. Owning a book did not mean that it had earned a stamp of approval. It did not necessarily even mean that it had been read. There were whole genres represented by Palma's book collection that he never opened, as, for example, the astrological books purchased in 1568 from the estate of his

[29] In the middle of the century, Conrad Gesner (1516–63), physician and natural historian in Zurich, had about three hundred books, a private library which was considered large both by his contemporaries and by historians. Nicolò Leoniceno, who, at the time of his death in 1524, had the largest collection of Greek natural philosophy and medical books yet catalogued, owned 117 Greek texts, of which at least seventy-five were manuscripts. For the most part, I would estimate that medical libraries, belonging to university-educated physicians, averaged at less than one hundred volumes. See Urs B. Leu, Raffael Keller and Sandra Weidman, *Conrad Gesner's Private Library* (Leiden, 2008); Vivian Nutton, 'The Rise of Medical Humanism: Ferrara, 1464–1555', *Renaissance Studies,* xi (1997), 6–7; Bernd Lorenz, *Allgemeinbildung und Fachwissen: deutsche Ärzte und ihre Privatbibliotheken* (Wiesbaden, 1985); Renate Juergensen, *Bibliotheca Norica: Patrizier und Gelehrtenbibliotheken in Nuernberg zwischen Mittelalter und Aufklaerung,* 2 vols. (Wiesbaden, 2002); Bernd Lorenz, *Allgemeinbildung und Fachwissen*, 21–3.

[30] Nutton, 'Rise of Medical Humanism', Siraisi, *Medieval and Early Renaissance Medicine.*

fellow physician, Georg Forster.[31] Many of these remain uncut today. Not only were they untouched in Palma's collection, they passed to him as remnants of another physician's library, where they had also been left unread.

The way in which Palma used his books demonstrates the exigency of his reading practice. Palma was a dutiful reader and, fortunately, a copious annotator.[32] A well-read book in his library is easily spotted. He wrote epitaphs down the cover and across the title page and jotted his comments in the margins. Palma peppered his entire collection of books with excerpts, annotations, quotes, epitaphs and epigrams. Non-verbal markings were also common, mostly in the form of identifications of parts or sections of text. To this end he underlined, bracketed and separated by small ticks or dashes. In some cases he had blank pages bound with his volumes, on which he scrawled page after page of commentary.

Rather than simply underlining a text's message, Palma's reading process fundamentally altered and translated the content of his books. More often than approving, his marginalia were corrective. This was most notably true of the many Paracelsian texts he collected — coincidentally, the same number as the astrological pamphlets — despite the fact that he actively disagreed with their contents and their inchoate philosophy.[33] The pharmaceutical bent to his marginalia was pronounced. His most annotated book was a copy of Walter Bruel's *Praxis Medicinae,* in which Palma made notes on the

[31] Stadtarchiv Nürnberg, B 19/ 120. Two different dates are given for his death in this list: 1568 and 1579. It is improbable that he died in 1579, as he disappeared from the lists of registered municipal physicians in 1568.

[32] Like collecting, practices of early modern reading have been the object of some study, though no study has examined with particular care differences in either the objects or practices of reading across disciplines. Roger Chartier, *The Order of Books: Readers, Authors and Libraries between the Fourteenth and the Eighteenth Centuries*, trans. Lydia Cochrane (Stanford, 1992); Roger Chartier, *Forms and Meanings: Texts, Performances and Audiences from Codex to Computer* (Pennsylvania, 1995); Marina Frasca-Spada and Nicholas Jardine (eds.), *Books and the Sciences in History* (Cambridge, 2000); Kevin M. Sharpe, *Reading Revolutions: The Politics of Reading in Early Modern England* (New Haven, 2000); Jennifer Anderson and Elizabeth Suaer (eds.), *Books and Readers in Early Modern England: Material Studies* (Pennsylvania, 2011). On marginalia more specifically: H. J. Jackson, *Marginalia: Readers Writing in Books* (New Haven, 2001); William H. Sherman, *Used Books: Marking Readers in Renaissance England* (Pennsylvania, 2008). While the history of reading practices has focused in the main on marginalia, medical marginalia has not been studied. An exception is Helen King, *Midwifery, Obstetrics and the Rise of Gyneacology* (Aldershot, 2007), based on deep readings of specific texts, which take account of marginalia to analyze reader responses.

[33] See Murphy, 'Reforming Medicine in Sixteenth-Century Nuremberg', 139–45.

pharmaceutical preparations it involved. Palma inserted corrections across his annotated books, including modifications to particular remedies, highlighted ingredients in others and references to similar remedies in other texts. In many books, he simply excerpted, lifting small nuggets of valuable information from what he deemed to be the surrounding dross.[34]

As an early modern physician, Palma's library was representative in important ways. Its size, breadth and contemporaneity together, made a cultural statement about the authority and vitality of sixteenth-century medical knowledge. At the same time, it was deeply personal. The way in which Palma acquired his books, for example, was contingent on his teachers, on his acquaintances and on his incidental interests. As well as medical annotations, his marginalia included inscriptions and dedications from fellow students and friends. These superimposed a material network of sociability over the printed names of classical authors, transforming a classical text into a contemporary record.[35]

The mediation between books and practice was complicated and deeply individual. The marriage of manuscript and text in which Palma's book-buying and note-taking resulted, continued to describe his literary medical activities, but it also informed his medical practices. The library as a common place, or, as it was perhaps more frequently thought of, an institution, was not the end-result but merely the starting point for the practice of professional, municipal medicine. Palma's library develops the commonplace image of the physician; while his notebooks show the way in which that commonplace was negotiated and applied to the demands of practice.

III
NOTES AS KNOWLEDGE IN PRACTICE

If Palma collected and reassembled his printed texts in the light of his medical practice, his private notebooks illustrate the way in which printed Galenic pro-formas helped him think through the dilemmas of doing medicine on a day to day basis. The notebooks from Palma's time as a municipal physician fall into two categories. The first revolved around his reading and comprised notes on printed texts. The second included records of non-textual origin, primarily remedies or cures recommended by local colleagues or correspondents. Together, they mapped his reading onto his practice, and vice versa.

[34] For example, Walter Bruel, *Praxis Medicinae: Theorica et empirica Familiarissima Gualtehri Bruele, In qua pulcherrima dilucidissimaq, ratione morborum internorum cognitio erundemq, cruatio traditur* (Antwerp, 1579).

[35] Winfried Dotzauer, Deutsche Studenten an der Universität Bourges: Album et liber amicorum (Hain, 1971).

The dialogue between literate culture and medical practice was obvious everywhere within these notebooks, most obviously in the first kind, which essentially comprised an extended record of Palma's reading. So for example, Cent VIII.9 works through books by Arnald von Villanova, Johann Winter von Andernach, Leonhardus Jacchinus, Paracelsus and Mercuriale. Cent VIII.10 excerpts Rembert Dodoens, Helidaed de Padoanis, Jacques Houllier, Johannes Fienus and Paracelsus. On each page Palma cited the book he was reading, making note of the author, the title, and where necessary the volume or book, chapter and page number. He then proceeded by excerpting remedies, creating a kind of pharmaceutical commonplace book.

The second kind of notebook kept by Palma followed the patterns of his day-to-day practice even more closely. This category was distinguished by its orientation around a disease. Cent VIII.8, for example, contained nominal chapters on coughs, phlegm, scabies and the Hungarian sickness.[36] Cent VIII.11 deals exclusively with *Melancholia Hypochondriaca*.[37] Overall, Palma's notebooks display a preoccupation with pestilence, particularly the so-called Hungarian Disease, which visited Nuremberg with increasing frequency and disastrous results in the latter half of the sixteenth century. Epilepsy, haemorrhoids, menses, asthma, urinary infections and melancholy all received multiple entries.[38] In the second of his two Erlangen notebooks, epilepsy appears nineteen times, with dysentery close behind, counted twelve times, and haemorrhoids making eleven entries.

Organizing notebooks around diseases meant reorganizing well-known books into categories determined by practical, medical interests. For example, on 15 October 1571, Palma began a notebook with the topic of women's fertility, inspired, at least in part, by his encounter with a 17-year-old patient named Anna, for whom he prepared several decoctions (a method of extracting chemical remedies by mashing and boiling herbs and plants) of his own devising.[39] On the following pages, Palma recorded cures by Johann

[36] Stadtbibliothek Nürnberg (hereafter StB N), Cent VIII.8 Husten, Kraetze, Katarrh. The 'Hungarian Sickness', as it was more commonly termed in Nuremberg may also have been known as 'English Sweating Sickness' and was probably a form of typhoid. Volcher Coiter, *Externarum et Internarum principalium humani corporis* (Nuremberg, 1573).

[37] A form of melancholy tied by Galen to indigestion, see Stanley Jackson, 'Melancholia and the Waning of Humoral Theory', *Journal of the History of Medicine*, xxxiii (1978), 367.

[38] Universitätsbibliothek Erlangen, (hereafter UB Erlangen), MS. 1142. Epilepsy: fos. 13^{v}, 14^{v}, 16^{r}, 17^{v}, 25^{v}, 27^{r}, 30^{r}, 35^{v}, 37^{r}, 37^{v}, 38^{r}, 43^{r}, 48^{r}, 48^{v}, 51^{r}, 62^{r}, 86^{r}; Dysentery: fos. 8^{v}, 11^{r}, 18^{r}, 24^{v}, 27^{v}, 28^{r}, 28^{v}, 29^{r}, 30^{r}, 31^{v}, 33^{r}, 36^{r}; Haemorrhoids: fos. 9^{v}, 24^{v}, 35^{r}, 39^{v}, 40^{v}, 41^{r}, 45^{r}, 88^{r}, 107^{v}, 109^{r}, 116^{r}.

[39] StB N, Cent VIII.8.

Vochs (b.1508) for fever, observations on Nicholas Massa's tract on plague, a compilation of thoughts on the Hungarian fever which he credited to his colleague Joachim Camerarius the younger (1534–98), and then more Massa, on techniques of pharmaceutical preservation. The notebook then shifted form again, turning to consider the signs of particular diseases: leprosy, pestilence, melancholy and phlegm.

As the breadth of sources Palma cited in these pages might indicate, this set of notes drew together authors, books and chapters originally devised to be read in different circumstances. Voch's cure for fever was taken from a tract on pestilence.[40] Massa's tract on plague (the 'Neapolitan disease') was published in a larger compendium on the Galenic theory of the 'French disease'.[41] By citing them next to each other, Palma put together comments on patients, consideration of symptoms, reflections on techniques; all of which would have originally sat under very different headings, in very different books. At first glance, this may not seem to make much difference. However, Palma's use of vernacular categories of diseases rather than Galenic headings was representative of a great transformation in the entire corpus of sixteenth-century medical books. His notes demonstrate a shift away from the well-established organizational structure which followed the parts of the body, towards something derived from use: an ontological appreciation for the disease as a category. They also illustrate the primacy of categories of use as a determining factor for assembling his reading practice.

Much of the information he recorded in these notebooks was derived from letters and private experiment, as well as conversation with local figures including pharmacists and other 'artisanal' practitioners.[42] This second set of Palma's notebooks therefore drew in knowledge hitherto not considered part of the canon of learned medicine, such as folk cures, local remedies, as well as local regulations and ordinances. This began as early as university, where among the collected notes on lectures and regurgitated information, a design for a common bathing cure sprawled across

[40] Johannes Vochs, *Opusculum Praeclarum de omni Pestilentia* . . . de diuturna peste morbi gallici (Cologne, 1537), 74.

[41] Juan Almenar *et al.*, *Morbi Gallici Curandi Ratio* . . . maligna ulcera conficiendis lucubratio (Basel, 1536).

[42] On the importance of 'artisanal epistemology' see Pamela Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago, 2004). The term has been taken up in a variety of different disciplines. For a concise study of the term and its place within the broader history of science, see the review article, Pamela Smith, 'Science on the Move: Recent Trends in the History of Early Modern Science', *Renaissance Quarterly*, lxii (2009).

fifteen folio sides.[43] Palma's next manuscript, which he began in Tuebingen, exclusively collected recipes, among them a treatment by Leonhard Fuchs, dated 1564, and two recipes from Heinrich Wolff and Hieronymus Herold. Far from declining when he left university, the quantity of notes taken by Palma grew when he returned to Nuremberg. In his years of practice there, Palma included many accounts of conversations with his stepbrother Leonhard Stoeberlein, an apothecary and his colleagues in Nuremberg, Joachim Camerarius and Volcher Coiter.

While Palma often made direct allusion to knowledge gleaned from social conversation, even when he did not the source of his information was often local. This was particularly true in the case of colleagues with whom he worked closely. A relatively large section of Palma's second notebook is devoted to notes from a book purportedly by Camerarius. On page 66, as part of a discursive entry on pestilential fever, in which Palma also cited Hippocrates, he pulled a note on fever 'from the book of D. Joachim Camerari'.[44] Since Camerarius never published a book with information on fever, he must have either reported what he planned to write or let Palma see an unpublished copy, or a manuscript he owned. Later, Palma jotted down a brief note on 'Ad Coitem',[45] with no mention of a referenced text.[46] The blend of social, written and oral knowledge also applied to the most frequent of Palma's informants, Johannes Crato von Kraftheim (1519–85). [47] Crato, although famous across Germany, was not a prolific publisher. We can therefore assume that his interjections into Palma's medical practice were the result, possibly, of old lectures that Palma may have attended at Wittenberg, of direct correspondence, indirect correspondence or reported correspondence, or of direct verbal communication in other instances that escaped record. A final point worth noting is that Palma collected recipes for a variety of practices, many of which were technically under the purview of other professions. This was the case, for example, with gynecological remedies, which would normally have been administered by midwives, and with particular surgical treatments, habitually the preserve of barber-surgeons.

All Palma's notebooks bear evidence of use. As with his books, markings, annotations and marginalia provide evidence of consultation over time. Although he rarely amended material, he frequently inserted new notes over old notes, sometimes squeezing them into margins or the foot of already

[43] StB N, Cent V.42, 115^{v}–130^{r}.

[44] UB Erlangen, MS. 1141, fo. 66 (68).

[45] *Ibid.*, fo. 99 (101).

[46] *Ibid.*, fo. 29 (32).

[47] UB Erlangen, MS. 1142, fo. 59^{v}.

filled pages. Like printed encyclopedias, which had developed such information-management systems to accommodate burgeoning information, Palma developed written systems of navigation, such as registers and indices.[48] These expanded over the lifetime of the notebook, and Palma added page numbers to accommodate them. Later additions to the indices were lists of symptoms, one of the few signs that not only did Palma apply remedies, but he diagnosed diseases as well. That Palma used his notebooks is reflected even in their material form. Unlike heavy commonplace folios, they were light, durable and flexible. Their far-flung resting places bear witness to their evident portability.[49]

This use was private. Unlike the library, which formed a cultural statement about medicine, albeit one in which I have been concerned to emphasize the element of deeply individual contingency which fashioned it, the privacy of Palma's notebooks, perhaps counter-intuitively, reveals more general insight into hands-on medicine. Writing down practice was itself a form of practice, and it generated knowledge as well as recording it. By writing down anecdotal evidence, practical alterations and overheard or conversational remedies, Palma's notebooks physically integrated his practical concerns, his trial and error experiments and his personal canon of medical lore into his library.

Palma's use of records abutted his book collecting in interesting ways. His notebooks reveal that he borrowed the organizational categories of what he read. He thought through his medical practice in terms that he had learned from the world of books, books which themselves functioned as a means of furthering and often departing from the world of the university. At every step, his library and his notes provided a safe space in which eclectic practices took root. But that they took root in the library was key. This was not a straightforward departure from the world of classical knowledge.

Palma left silences too, some of which undercut the portrait of efficacious practice he wished to construct. Patients, for example, were conspicuously absent from Palma's notebooks. As with the elusive 17-year-old Anna, a small number of Palma's notes link his reading to specific medical cases. Cent VIII.9 mentions cures 'for the daughter of Caspar Nutzel', for 'Martin Tucher' and 'the noble Margaretha', but fails to elaborate on either the details of the remedies used, or the case histories of the patients in question. Even the diseases for which Palma treated these clients are absent. Palma mentioned these cases in much the same way as he did the books that he read: he included a name as a heading, and a brief reference to other

[48] Ann Blair, 'Reading Strategies for Coping with Information Overload *c.*1550–1700', *Journal of the History of Ideas*, lxiv (2003).

[49] Notebooks by Palma can be found in Erlangen and Bamberg as well as in Nuremberg.

information deployed.[50] In this sense, Palma's notebooks were not practical casebooks, but finding aids, demonstrating the interpenetration of text and manuscript. They helped him navigate copious volumes of printed information and apply it to practice, but they did not aim to record the interactions he had with patients. This serves to distinguish them from the records of other, later practitioners, such as Simon Forman or Richard Napier.[51] It also distinguishes them from the sixteenth-century books which aimed to facilitate and streamline the processes of medical thinking that underpinned practice. While growing numbers of medical *practica* presented guides to thinking through diagnosis, prognosis and treatment, Palma produced no written records of the material formulas or mental thought processes that medical treatment entailed.[52] In Palma's notebooks, the work of medical deduction, while facilitated by the tools of citation and recollection, was not essentially carried out by the practice of writing.

IV
BETWEEN COMMON PLACES AND PRIVATE SPACES

What does one case study have to offer our more general understanding of the relationship between medicine and other forms of knowledge, and medical record-keeping and the social history of the archive? In 2007, Peter Burke's closing comments to the first special issue on the history of the archive called for the gathering, storing and employment of information to be 'subdivided and above all personalized'.[53] In this sense, Palma's notes join the ranks of other case studies in the social history of the archive, which have demonstrated the way in which personal use could attenuate the collection of state records and the creation of state archives.[54]

The value of such case studies rests not just in what they add to the comparative history of archives, but in their ability to bring to light the way in which records were used in the early modern period. The case of physicians is particularly germane, since the effective practice of medicine increasingly

[50] StB N, Cent VIII.9, 31[r], 'pro filia Caspar Nutzel'.

[51] Lauren Kassell, *Medicine and Magic in Elizabethan London: Simon Forman, Astrologer, Alchemist and Physician* (Oxford, 2005).

[52] Andrew Wear, 'Explorations in Renaissance Writings on the Practice of Medicine', in A. Wear, R. K. French and I. M. Lonie (eds.), *The Medical Renaissance of the Sixteenth Century* (Cambridge, 1985).

[53] Peter Burke, 'Commentary', *Archival Science,* vii (2007), 391.

[54] Jacob Soll, 'How to Manage an Information State: Jean-Baptiste Colbert's Letters to His Son', in Ann Blair and Jennifer Milligan, *Archival Science,* vii (2007); 'From Note-Taking to Data Banks: Personal and Institutional Information Management in Early Modern Europe', *Intellectual History Review,* xx (2010).

depended on a physician's ability to navigate ever-greater sums of information. Effective methods of sharing medical knowledge in the form of case studies, *practica* and other printed texts began to emerge in the same period. But like the creation of institutional archives, these kinds of professional commonplaces relied on obscuring, as well as revealing.

We need to think about particularity in systems of keeping information, just as much as we think about particulars informing the knowledge that is kept. One thing that is clear from Palma's collection, notebooks and records is the way in which keeping record satisfied an individual in unique and subjective ways. Whether borne of anxiety, practicality or simple pleasure, Palma's system of taking notes derived not from the simple adoption of pro-formas, but from long years of practice. In reflecting on the silences within archives, Natalie Zemon Davis has spoken of 'the intellectual pleasure a document can bring to a historian, unexpected surprises that unsettle any notion of complete knowledge'.[55] Truer words could not be applied to Palma's sixteenth-century collection of documents.

The limits, or the framework for note-taking as an epistemological praxis have to remain personal. The discrepancy between printed genre and the private space of practice was not just a by-product of personal note-taking, it was purposefully created, part of the professional identity of physicians at a moment of disciplinary fluidity.[56] Print created the illusion of common places from private spaces. Both remedy and exchange were eventually codified in the forms of medical genres. However, while printed *Consilia* and *Observationes* help historians detect an urgency for the new epistemic practices of observation or consultation, such genres stemmed from a much more eclectic set of practices, practised by a wide-ranging set of learned experts with diverse interests.

Palma's collection of other physicians' remedies illustrates the gulf between the public presentation of medical knowledge and the way in which it was gathered and practised. Although physicians such as Palma were obviously aware of the literature on and pro-formas for commonplacing, they did not compile their notebooks in order to observe the habits of humanism. Within the field of early modern medicine, shared practices did not 'fashion' a public identity so much as constitute a communal one.[57] Rather than a set of principles which informed the taking of notes, or a set of conclusions resulting

[55] Natalie Zemon Davis, 'The Silences of the Archives, the Renown of the Story', in Susanna Fellman and Marjatta Rahikainen (eds.), *Historical Knowledge: In Quest of Theory, Method and Evidence* (Newcastle, 2012), 87.

[56] Murphy, 'Reforming Medicine in Sixteenth-Century Nuremberg'.

[57] See for example the epistolary practices of physicians. Nancy Siraisi, *Communities of Learned Experience: Epistolary Medicine in the Renaissance* (Baltimore, 2013).

from their outcome, medical practice was immanent within the written record of notes themselves. The spectrum of Palma's note-taking provides a glimpse into one individual's particular kind of decision-making, one heavily reliant on text but ultimately aimed at practice. It therefore glossed not just his perception of the place of medical practice but also, crucially, the right way to write about it. His library and notes both conceptualized the interpersonal communications of his peers in his anecdotal notebooks, and excluded them from the end-result, the library he bequeathed to Nuremberg.

The sometimes uneasy relationship between Galenic narrative and note-taking that Palma's jottings detail continued to imbue the function of record-keeping within medicine, well into the seventeenth century. Volcker Hess and Andrew Mendelsohn have demonstrated the importance of increasingly codified forms of recording information to the practice of medicine and its development.[58] But the gap between these constructed genres and the creation of medical practice is profound. Looking at the way in which physicians enacted their own regimes of disclosing information, as well as the way in which they themselves engaged in keeping and preserving information (and the difference between disclosing and preserving is not a simple one), reveals how professional expertise depended in part on creating that difference, as well as navigating it. Later physicians would write these conflicts into casebooks, like Simon Forman, whose massive archive of patient records forms the basis for much ongoing reflection about the possibilities and limits of medical empiricism.[59] This tension, historical but rarely historicized, was one fabrication of the sixteenth century. It underpinned not only the changing orders of medical practice in sixteenth-century scientific developments, but the place of its professional practitioners as well.

Oriel College, Oxford *Hannah Murphy*

[58] Volcker Hess and J. Andrew Mendelsohn, 'Case and Series: Medical Knowledge and Paper Technology, 1600–1900', *History of Science*, xlviii (2010).

[59] Lauren Kassell, 'How to Read Simon Forman's Casebooks: Medicine, Astrology and Gender in Elizabethan London', *Social History of Medicine,* xii (1999).