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The Medical Case Narrative: Distant Reading of an Epistemic Genre

Gianna Pomata

What Is a Case?

In his book *Einfache Formen* (*Simple Forms*, 1930), the literary scholar André Jolles included the case among the nine basic genres that he considered the embryonic elements of literature. Next to the legend, the saga, the myth, the riddle, the proverb, the memorable, the fairy tale, and the joke, Jolles listed the case as one of the elementary cultural forms from which literature arises.¹ What he meant by “case” is the object of what we call “casuistry,” that is, an event, real or fictional, that defies the straightforward application of a legal or moral norm, requiring a delicate act of balancing judgment. “The case is linked to a question,” he wrote, “a question that has to do with the validity and extension of a norm,” and a question that cannot be avoided: the case arises precisely because one has “a duty to decide.”² At the root of the case, according to Jolles, is the weighing and counterweighing of different norms in the attempt to apply them to a challenging set of circumstances.

This means that, unlike the anecdote, the case is not an isolated event.³ Because it is related, explicitly or implicitly, to a set of rules, the case is always part of a frame story. “Once the decision is taken, the case stops being a case. But the frame narrative goes on, and as soon as a case is solved, another comes up, . . . or better yet: the disappearance of a case entails the appearance of another case.”⁴ Jolles refers to the frame story of an eleventh-century Indian collection of tales, the *Kathasaritsagara* (*The Ocean of Tales*). A king is sent to a graveyard to look for the cadaver of a man hanging from a fig tree. The king

finds the body, cuts the rope, and lifts the corpse on his shoulders to carry it away. But the corpse is inhabited by a spirit who starts telling the king stories. Each story involves a question; it is in fact a case. The king must answer: it is his obligation as king to settle the questions. But as soon as he does, the corpse is back hanging from the fig tree. The king has to start all over again—new story, new question, new case to decide.

For Jolles, the literary genre that developed from the elementary form of the case is the novella collection, as we find it all over the world: the *Kathasaritsagara*, the *Gesta Romanorum*, the *Arabian Nights*, the *Decameron*, and so on. Literary historians have used and discussed his insight in this respect.⁵ But the idea of the case as a fundamental cultural form does not apply only to literature. It applies even more fundamentally, I think, to knowledge, including scientific knowledge. “Thinking in cases,” as John Forrester has called it, is a basic cognitive process that we find in many cultures and times.⁶ I suggest that the case should be considered a “simple form” not only in relation to literary genres but also to what I call *epistemic* genres.

Genres: Literary and Epistemic

What do I mean by epistemic genres? Simply put, I mean those kinds of texts that develop in tandem with scientific practices—for instance, the treatise, the commentary, the textbook, the encyclopedia, but also the aphorism, the dialogue, the essay, the medical recipe, the case history, and so on and so forth.⁷ Strangely enough, we don’t have a standard name to indicate this class of genres. And yet, to some extent, the history of such genres already exists: we have, for instance, studies on the history of the experimental article, the textbook, the commentary, the encyclopedia, the atlas, the medical recipe, the essay, the letter as a form of scientific exchange. . . .⁸ But we don’t have a general name for these forms, a name to denote those genres that are deliberately cognitive in purpose. I propose to call this kind of genre *epistemic*, in order to distinguish them in the infinite ocean of texts.⁹ A cognitive dimension may be part of most kinds of texts, but that does not mean that *all* texts have primarily a cognitive purpose. Texts can be related to a wide range of human activities, of which knowledge-making is just one. When I speak of epistemic genres, I mean specifically those kinds of texts that are linked, in the eyes of their authors, to the practice of knowledge-making (however culturally defined).

A distinction between literary and epistemic genres can be useful for historians, especially historians of knowledge. I think that historians of knowledge should recognize that genres are just as important to science as they are to literature, though they have not featured as prominently in the history of science as they have in literary history. Of course it has long been recognized that scientific works, in so far as they are texts, do come in genres. But we have called them literary genres, and we have thought of them as literary genres—that is, as something that has to do with the formal container of the text, but that is not directly relevant to its scientific content.¹⁰ It seems to me, however, that by calling such genres “literary” we miss their distinctive and specific quality. We miss the fact that they are the vehicles of a cognitive project, and that they are shaped by that project. Historians of knowledge should identify epistemic genres as that specific kind of genre whose function is fundamentally cognitive, not aesthetic or expressive—that specific kind of genres whose primary goal is not the production of *meaning* but the production of *knowledge*.

And yes, of course, no distinction between literary and epistemic genres can be, or should be, rigidly drawn. Poetics and epistemology are often interconnected. A great historian of ancient mathematics, Reviel Netz, has shown, for example, that Hellenistic mathematics and Hellenistic poetry were intimately related, in the sense of using not only similar rhetoric strategies but similar thought processes.¹¹ The distinction between the literary and the epistemic can be very blurry in some cases: consider for instance the use of poetry for philosophical and didactic purposes, widespread in Greco-Roman antiquity and in medieval Arabic medicine.¹² Or take the dialogue, a time-honored literary genre that has often been used for epistemic purposes, from Plato to Galileo and beyond. Do we define the dialogue as a literary or an epistemic genre? I would say it can be either one or the other—but the history of the dialogue as an epistemic genre would be different, I think, from its literary history. The same for the letter: we have many studies of the letter as a literary genre, but those studies don’t help us much when we want to understand the use of the letter for epistemic purposes, as it was employed routinely in early modern medicine, natural history and astronomy.¹³ There is a distinction to be drawn between the literary and the epistemic, a distinction of course that can never be taken for granted, since it changes from culture to culture, and in the same context over time. And precisely for this reason it can help us see the specific ways in which meaning and knowledge are produced in a given culture.

Distant Reading: An Evolutionary Approach to Genres

We usually think of genres in terms of what the great evolutionary biologist Ernst Mayr called “typological thinking,” that is, we choose an exemplar, or “representative individual,” and through it define the genre as a whole: Conan Doyle’s *Sherlock Holmes*, say, and detective fiction; Plato’s *Symposium* and the philosophical dialogue. Recently, however, the literary historian Franco Moretti has suggested what Mayr would have called a “population thinking” approach to genres. Moretti argues that we should think of genre as a “population” of texts, a dynamic “diversity spectrum” whose internal multiplicity no individual text will ever be able to represent.¹⁴ He invites us to look at genres as biologists look at species, that is, as evolving populations formed by unique but related individuals.¹⁵ His proposal has the double advantage, to my mind, of providing a non-essentialist definition of genre (there is no ideal type that sums up the essence of a genre) while redefining genres as intrinsically temporal structures, which should be studied in their evolving over time. Not simply time but the long time: it is especially the long duration in the history of types of text that this approach can shed light on—their long duration within a culture as well as their variation across cultures. This opens up the perspective of a comparative morphology of textual forms, the systematic study of how genres vary in space and time. “Take a form,” Moretti suggests, “follow it from space to space, and study the reasons for its transformations.”¹⁶

Moretti calls this approach “distant reading,” to be contrasted with the more conventional “close reading” advocated by literary studies.¹⁷ In close reading, the unit of analysis is texts—actually a very small number of texts, those that have become part of the canon. There is nothing wrong with this kind of reading, of course, but what about the rest of the archive, the other 99% of texts that did not make it into the canon? Shifting the unit of analysis from texts to genres, that is, to the wider sets of which texts are part, allows us to include a much larger portion of the archive. Most importantly, it enables us to see things about texts that we don’t see at close range. Moretti has applied these ideas primarily to the history of the novel.¹⁸ Distant reading of the novel means for him to free the novel from its modernist, strictly Western center of emergence and to examine how the genre has originated and mutated around the world. It means studying the history of the novel in a much wider perspective, temporal and spatial.

What Moretti has done for the novel can be usefully done also for epistemic genres. What is the main benefit that a focus on genres

can bring to the cultural history of knowledge? Uppermost in my mind is what I call an antidote to the “The” illusion. When dealing with cultural forms, historians are often convinced that they are describing something unique (*the* rise of the novel, *the* birth of the clinic, *the* emergence of probability).¹⁹ But often, the assumption of uniqueness dissolves when we consider things on a broader canvas. Using a geographic and quantitative approach to literary history, Moretti has shown what an illusion it is to think that there is *one* rise of the novel. He charts the take-off of the novel in Britain (1720–40), Japan (1745–65), Italy (1820–40), Spain (1845 to the early 1860s), and Nigeria (1965–80). Five countries, three continents, over two centuries apart, and he finds the same pattern: a multiple rise of the novel.²⁰

When studying scientific cultures, we are also much at risk of falling prey to the “The” illusion. Because of the academic fragmentation of history into chronological segments, whose practitioners (classicists, medievalists, early-modernists, and modernists) do not often talk to each other, it is all too easy to ignore the long-term evolution, the multiple roots, the genetic links and mutations of the genres to which scientific texts belong. This is true in general but it is especially true—and especially disastrous—for the medical case narrative. It has been argued, for instance, that the medical case developed in Europe and America in the nineteenth century along with the detective story.²¹ Some literary historians have located the origin of the case history in the period between the eighteenth and the nineteenth centuries, a time when there was intense exchange between medicine and literature.²² While these studies have the merit of applying genre analysis to medical texts, their chronology is heavily influenced by Foucault’s dubious argument that *the* birth of the clinic occurred in early nineteenth-century Paris.²³ In general, the focal point of the historiography on the medical case narrative tends to gravitate around the late eighteenth and nineteenth centuries, with only cursory attention to earlier periods and no attempt to reconstruct the long-term lineaments of the story.²⁴ (The only meritorious effort in this direction was attempted over sixty years ago by the great historian of medicine Pedro Laín Entralgo, and still awaits to be emulated and updated.²⁵) This modernist focus has a very serious flaw. It simply ignores the presence of a vast literature of case narratives in pre-modern medicine. It ignores the undeniable evidence that the medical case is an epistemic genre with a history that long predates modernity, a history with ruptures but also deep persistencies and continuities. For about two millennia, the internal memory of the medical profession has kept trace of the earliest case narratives written in Western cultures, the case notes in the Hippocratic

Epidemics. There is simply no way we can legitimately disregard this textual tradition, which offers rich documentation of the case history's roots in the soil of pre-modern medical cultures. We need to trace the history of the medical case narrative as a genre that evolved over a very long period of time, from antiquity to modern medicine, and distant reading can be most useful for this purpose.

What do we see when we look at the long-term development of the medical case narrative? Distant reading suggests, at first sight, that the genre appeared in embryonic form in antiquity, with the Hippocratic *Epidemics*, but also that it disappeared for long periods of time, to emerge again, in new form and with new vitality, in the late Renaissance.²⁶ The pre-modern history of the case narrative, in other words, seems to offer an example of that fascinating phenomenon Moretti calls the "Draculaesque reawakening" of an apparently dead genre.²⁷ How do we account for these appearances and disappearances, latencies and revivals?

Most interestingly, distant reading also suggests that the evolutionary dynamic of the case narrative was closely intertwined with that of two other fundamental epistemic genres, the recipe and the commentary. The genetic link between medical recipe and case is easy to see: a recipe was often recorded together with a brief account of the case in which it had proved effective. That is why often, though not always, the case narrative emerged in conjunction with the recipe collection.²⁸ The link between case and commentary, on the other hand, is less obvious, and has been much less noticed. A very useful suggestion in this regard, however, comes from Jolles's theory of the case. As we have seen, Jolles argued that case and rule are genetically connected: the case arises out of the need to apply the same rule to varying individual circumstances. If this is the human predicament from which the case originates, we may expect to see casuistry (medical, but also moral, legal, and so on) develop in those situations in which: a) there is as yet no fully established norm; or b) a normative canon exists, but it needs to be adjusted to new situations, and it is questioned and challenged in the process. Consequently, we may expect to find the case, either in medicine or the law, to be closely related to the epistemic genre devoted to the interpretation, transmission and adaptation of canonical normative texts, i.e., the commentary, such as, for instance, the gloss on Roman Law, or in medicine, the scholia on classical authors. The case, in fact, is a gloss that connects the canonical rule to a specific context, relating a medical (or moral and legal) principle to the *hic et nunc*, the here and now, of specific circumstances.²⁹

I have examined the link between recipe and case elsewhere.³⁰ Here, I will focus on the less obvious association between case and commentary. This association involves conflict and tension, because case and commentary are very different genres, in some respects at cross-purposes with each other. Case records are typically an informal kind of text, close to daily practice and not overly charged with philosophical or theoretical ambition. The opposite is true of the commentary, usually a formalized, high-status kind of text, aimed at establishing an authoritative reading of the canon. This tension, as we shall see, may help us understand the fluctuating fortunes of the case in ancient medical cultures.

From Case Notes to Commentary:
The Rise and Fall of the Case in Ancient Medicine

The Hippocratic seven books of *Epidemics* contain over three hundred case narratives, dating roughly from the period between 410 and 350 BCE, and written probably by at least three different authors whose identity we don't know. This form of writing was unprecedented in classical Greece and in the ancient Mediterranean world, and it was destined to have tremendous influence on the subsequent medical tradition, in both Latin and Arabic medical cultures. Does this mean that the case narrative first developed as a genre in Greek antiquity? Yes and no, depending on how we look at genre. Genres can be *etic*, that is, concepts employed by the external observers of a culture, such as literary critics and historians; and they can be *emic*, that is, categories used by the native actors of that culture.³¹ If we use an *etic* definition of the medical case, viewing it as any narrative of the course of disease in an individual patient, then the answer to the previous question is obviously yes. But if we talk of genre in the *emic* sense, then things are much less clear. We can argue that a genre is *emic* in a certain culture only if we find evidence of genre-awareness by the natives: a specific name by which the genre is called, as well as some indication that readers and writers recognized it as a distinct and specific writing form, with its own rules and structure. Do we find awareness of this kind in ancient medical sources? Was the case an *emic* genre in ancient medicine? The answer is that the evidence is mixed.

There is no name for cases in the Hippocratic *Epidemics* (the term *epidemiai* means visitations, whether of the disease or of the physician we are not sure).³² Nor is there, in ancient Greek medical culture, a

discussion of how the form should be structured. The *Epidemics* contain a broad range of disparate material, including, next to case narratives, weather observations, diagnostic and prognostic advice, and therapeutic maxims. The earlier books are more rigorously prognostic, with a strict concentration on the description of symptoms and few indications of treatment. In the later books (especially books Five and Seven) therapeutic information is much more frequent, a sign that the genre did not adhere to strict rules in this respect.³³ And yet it is clear that the different authors who wrote down the *Epidemics* over the course of nearly a century followed to some extent the same format by giving close attention to case narratives, which take up a preponderant amount of the text. What kind of writing was *Epidemics* in the eyes of ancient physicians? Galen, the greatest medical authority of antiquity and an intimate connoisseur of the text, on which he wrote a detailed commentary, called them “not treatises, nor works meant to be divulged among the Greeks, but rather *notes* (*hypomnemata*).”³⁴

Notes: not a text to be published but an informal jotting down of information for private purposes. In a seminal article on the impact of literacy on Greek medicine, Iain M. Lonie argued that the books of *Epidemics* were the product of the kind of literacy that made writing a private practice in Greek culture.³⁵ Unlike Egyptian and Mesopotamian medicine, Lonie pointed out, Greek medicine was not recorded by a professional class of scribes. Mastering the Mesopotamian and Egyptian alphabets required a long professional training, and consequently writing in these cultures (including medical writing) was a specialized scribal enterprise. The simplicity of the Greek alphabet, in contrast, meant that literacy was much more generally accessible, and that is why writing in Greece was often used informally as an aide-mémoire for private transactions. It is this kind of writing that we find in the *Epidemics*, the self-addressed note-taking, jotting down particular encounters with sick persons at particular times and places. However informal, the note-taking in *Epidemics* displays a marked and self-conscious cognitive purpose: these notes were not just a record of what had been observed, but also a signpost indicating direction for further observation and enquiry. Hence the frequency of questions in the text, questions that could be about specific aspects of a case (“Timenes’ niece had difficulty breathing. . . . Was she carrying an infant? I don’t know”³⁶) or general issues (“Is it true that in all suppuration . . . the disease comes towards night?”³⁷; “Sedimentation after urination is more frequent in children. Is it because they are warmer?”³⁸). Setting down notes of this kind was part of the process of finding one’s way

forward to the unknown. In the Hippocratic *Epidemics*, writing is not so much the record of an already completed thought process as it is a way of thinking, and thinking with a specific purpose in mind. The cognitive goal is uppermost, and that's why we should recognize that we are dealing with an epistemic genre.

What was the cognitive goal of the Hippocratic case notes? Consider the following: "Sputum when it is rounded indicates delirium, as with the man of Plinthion. He bled from the left nostril. The disease left him on the sixth day."³⁹ The sentence implies a movement from the private reference to "the man of Plinthion" (the case as signpost) to the general maxim: "sputum when it is rounded indicates delirium." In the *Epidemics*, the purpose of writing is the discovery of maxims, that is, rules for diagnosis, prognosis, and treatment like those that we find in another Hippocratic text, the *Aphorisms*. We should note the special character of this way of thinking. The Hippocratic maxim is not an inductive generalization (in the sense of a descriptive statement), as we might so easily consider it. Instead, it is meant primarily as a prescriptive guide for action: it is a precept, a rule. It would be misleading to understand this thought process as induction: in fact, it is a way of proceeding from particular experience to particular experience, from case to case, groping towards guidelines for the handling of future cases. The close attention to a series of cases is directed to the search for rules of medical practice.

So Jolles was right: case and rule are intimately connected. Here also, in ancient medicine, we find that recording cases served the purpose of finding rules for the solution of case-related questions. For the Hippocratics, however, there was no established medical norm or canon to draw on, no settled theoretical guidelines to apply to their practice. Thinking in cases was for them a genuine search for rules of medical conduct based on direct experience, not on the interpretation of a received doctrine. It was a truly open-ended cognitive project, as evident from the list-like format—very simply, one case after another—that they adopted for registering their cases.⁴⁰ (The *list* is obviously a sort of Ur-genre here—possibly to be considered, among epistemic genres, as a pre-constituent of a genre, a "simple form."⁴¹) Again, the cognitive function is uppermost. The list by its very nature suggests the incorporation of new information; it invites expansion and elaboration. It is a matrix in which new entities can be identified and memorized even without a firm conceptualization of what they are, as when for instance a description of a disease called *icterus* is followed by other descriptions in which symptoms

and treatment are varied, but the name remains the same, the new item being introduced simply as “another icterus.” So the list allows the memorization and recording of experiences that appear similar (“another icterus”) without a formal definition of what “icterus” is, thus making up for the absence of an elaborate nosological doctrine.⁴² Hippocratic nosology, in fact, was rather underdeveloped, as indicated by the limited vocabulary of disease: the Hippocratic authors tended to distinguish between superficially similar diseases by significant variations in symptoms, without giving each variant a specific name. The list format confirms, moreover, Jolles’s insight about the seriality of the case, the fact that it is never an isolated fragment but always part of a series. The open-ended list, the primary textual structure in the *Epidemics*, suggests, embryonically, what would be the full-fledged form of the genre in later times: the case collection.⁴³

The case notes in the *Epidemics* were certainly a new form of writing in antiquity. Did they establish a new genre? Yes and no. Yes, because several centuries after the *Epidemics* we find some evidence that physicians drew consciously on the Hippocratic model in writing their cases. But also no, because the foremost and most influential medical authority of late antiquity, Galen himself, did not adopt the *Epidemics* format of the case records. On the positive side, we can count for instance the twenty-one cases attributed to Rufus of Ephesus (ca. late first century CE), possibly a mini case collection, which have survived in Arabic translation.⁴⁴ Fragments of cases by the Byzantine physician Philagrius (ca. mid-fourth century CE) also survive in Arabic, preserved as quotations in a work by the great Arab physician al-Rāzī.⁴⁵ Moreover, the doxographic evidence on the so-called Empiricists, one of the late antiquity medical sects, suggests a strong awareness of the case narrative as a form of writing fundamental to medical practice.⁴⁶ The Empiricists saw themselves as the faithful interpreters and defenders of the Hippocratic legacy against the rival sect of the Rationalists.⁴⁷ In contrast with the Rationalists, who emphasized the role of reason in medicine, the Empiricists did not admit that reasoning (such as the use of syllogistic inference or the search for causes), was of any use in the practice of healing.⁴⁸ What was essential for medical practice, in their view, was the repeated observation of “what happens with what, after what, and before what,” and whether something happens “always, or only for the most part, or half of the time, or rarely.”⁴⁹ Such observation could either be one’s own (*autopsia*), or it could come from the written records of other physicians (*historía*).⁵⁰ Presumably, what the Empiricists called *historía* may have included such case notes

as we find in the Hippocratic *Epidemics* or in Rufus. Given the state of the sources, however, we cannot know for sure.

But then there is also negative evidence, indicating that the case narrative did not become a full-fledged genre, generally recognized and adopted in ancient medicine. The evidence in this sense, as already noted, comes first of all from the works of Galen. When he wrote his cases, Galen typically inserted them in his text as isolated tales: his patients' stories are examples and anecdotes, not cases.⁵¹ He frequently uses a tale about a patient to illustrate a theoretical argument for didactic purposes (in fact, he calls this kind of story *paradeigma*, or example).⁵² Sometimes, the pedagogic purpose of Galen's stories has a moral valence: he uses a case as a cautionary tale illustrating how disease can result from a bad way of life.⁵³ Even more often, he tells patients' stories in order to report his own success in healing, writing in an autobiographical (and self-promoting) mode.⁵⁴ Used in this way, cases become anecdotes, accounts of striking bits of experience, and they acquire a vivid literary efficacy, but they lose much of their cognitive value. Gone is the seriality, the goal of observing, case after case, whether something happens "always, or only for the most part, or half of the time, or rarely;" in the Empiricists' formula. Galen rarely lists cases one after another in order to compare them. Gone, moreover, is the emphasis on the search for new knowledge, the pursuit of maxims for the handling of future cases, as we find it in the *Epidemics*. Galen's exemplary case is mostly a confirmation of already established knowledge, his own doctrine. Cases do not emerge as a prominent part of the text in any of his writings, and never as a genre, a type of text, on their own. Even in *On Prognosis*, a work that contains many stories of Galen's patients, the autobiographical format prevails, and the resulting account could not be more different from the Hippocratic list of case notes.

Galen was, however, an attentive reader of the Hippocratic *Epidemics*, even if he did not see them as a model for medical writing. He wrote a lengthy commentary on them (that is, on the four books that he considered authentically Hippocratic), using them as a source of medical insight.⁵⁵ Paradoxically, considering Galen's lack of interest for the Hippocratic case notes as a form of writing, his commentary played a crucial role in the transmission of the *Epidemics* to later centuries. This is because in his commentary Galen cited (and thus preserved) extracts from the Hippocratic original: he would quote a small portion of the text (a "lemma"), comment on it, and then proceed to the next lemma. In this way, he incorporated almost the entire text

of the *Epidemics* into his own work. Galen's commentary thus became an important vehicle for the transmission of the Hippocratic text itself. Syriac and Arabic scholars, for example, came to know the *Epidemics* mostly through the translations of Galen's commentary.⁵⁶

A primary goal of Galen's commentary on the *Epidemics* was to use the Hippocratic work to provide support for his own theories. He contested other readings of the text, especially that of the Empiricists, with whom he was engaged in a life-long polemic.⁵⁷ He read the text with heavily "theory-laden" eyes, often projecting his own doctrine and conceptual assumptions into it.⁵⁸ This is also how he read the Hippocratic case histories, as props for his own ideas. Commenting on Book One of *Epidemics*, when he reached the part of the text where the case notes begin, he noted: "Particular phenomena are very useful for the confirmation of general concepts. They also serve the students who want to understand as examples of the general concepts that are based on them."⁵⁹ He was stating here his belief that cases are relevant insofar as they are "examples," empirical illustrations of general points of doctrine. Though he believed that medical practice was inevitably embroiled in the handling of particulars, he also believed that in medical knowledge the theoretical and universal had priority over the empirical and individual. Right after the passage cited above, he goes on to explain that he will not discuss the cases in his commentary because he had already done so in his previous works, where he had appropriately selected and quoted the cases from *Epidemics* that were relevant for the particular issue he was writing about: for instance, all the cases of people with respiratory problems in his work *On Difficult Breathing*; all the cases of "crisis" in his *On Critical Days*, and so on. In his commentary on *Epidemics*, therefore, he would limit himself to considering only those accounts of patients that were illustrations of general points made by Hippocrates in his work *Prognostic*.⁶⁰ This is very revealing. It tells us how Galen viewed the correct use of case notes: they should be mentioned under a certain disease category as confirmatory evidence or as illustrative material. He did not see them as a fundamental research tool, as they were for the Hippocratics.

Peter E. Pormann, a scholar who has studied the transmission of the Hippocratic *Epidemics* to Arabic medicine, has noted that the impact of Galen's commentary on "the genre of case notes" still awaits scholarly exploration.⁶¹ One thing seems clear, however. Either embedded in Galen's commentary or in his other works, the cases from the *Epidemics* lost their visibility as an autonomous form of writing. In this process, they also lost some of their epistemic significance. Once

reduced to “examples” of general points of doctrine, their cognitive role became ancillary to theory, and especially to the teaching of doctrine: from epistemic, it became pedagogic. Eclipsed by the focus on the generalization and systematization of medical knowledge brought about by Galen’s commentary, the case notes disappear as an autonomous genre.

A new genre may originate from the branching out and autonomization of forms of writing that had originally coexisted within the same textual matrix. It is the process that Marilyn Nicoud has called “*la marche d’autonomisation*” of genre: a textual subgenre separates from its original container and develops into a genre on its own.⁶² In Galen’s use of the *Epidemics* we see the reverse happening. The case notes, which had emerged as a new form of writing in the Hippocratic texts, become a subordinate and secondary segment of another kind of text. Not “the march of independence” of a new genre, but the opposite: the disappearance, or at least the temporary eclipse, of a genre.

The demise of the case notes as epistemic genre seems related to the new prominence acquired by the commentary in late antiquity, with Galen and after Galen. Studies of the origins of the commentary in Greco-Roman culture have shown that it developed within a constellation of genres—lexica, paraphrases, scholia, etc.—whose purpose was to elucidate a text while conferring on it the status of normative canon.⁶³ The *Epidemics* case notes, in contrast, were originally presented as deriving their validity not from a canonical text but from personal experience. In his massive and successful effort to turn the Hippocratic tradition into a medical canon, Galen had to sacrifice this aspect: he reduced cases to examples, pieces of support for his theory-centered reading of the Hippocratic text.

As epistemic genres, case notes and commentary are profoundly different. While the case is a textual tool attuned to the acquiring and recording of knowledge derived from personal practice, the primary goal of the commentary is the correct interpretation of authoritative textual knowledge. Case and commentary seem to be rooted in two different modes of cognition: knowledge based on practice for the case, and knowledge based on textual interpretation for the commentary. This is a fundamental difference that has played a very important role in the dynamics of cognitive practices. It is because of this difference, as Jolles suggested, that the interest for case-knowledge tends to be inversely related to the strength of a normative canon. Case-knowledge thrives in those situations in which either there is no normative canon (as with the Hippocratics) or the dominant canon is being questioned

and criticized. Case-knowledge wanes, in contrast, whenever the normative canon stands unchallenged.

In late antiquity, and fundamentally through the Galenic reshaping of Hippocratic ideas into a coherent body of medical doctrine, medicine acquired a normative canon that was destined to last for centuries, throughout the middle ages. In a situation of strong consensus over the medical canon, accompanied by a newly theory-centered system of medical teaching, case-knowledge had a much diminished role in learned medical culture. We see this happen on both sides of the Mediterranean, in Christian and Islamic territories, in both medieval Latin and medieval Arabic medicine, wherever Greek medical texts were transmitted and read primarily through the lens of the Galenic interpretation. In Arabic medicine, for instance, the stark conclusion reached by the scholars who have examined the history of the medical case in the medieval period is that “with the growing standardization and dogmatization of the doctrine, the case seems to have disappeared from medical writing.”⁶⁴ Interestingly, they find that the case as a form migrated in other directions, most signally towards the genres of entertaining literature. They speak of a process of *Literarisierung* (“literarizing”) through which the medical anecdote was incorporated into literary texts. In other words, the medical case morphed from epistemic to literary form—a sign that its cognitive function in medical practice was no longer perceived and appreciated.⁶⁵

For medieval Latin medicine, things seem at first sight to be different, but only at first sight. In fact, a new late medieval medical genre, the *consilia*, appears *prima facie* to be devoted entirely to individual cases. The *consilia* were collections of advice sent by a physician to patients who had consulted him by letter. So we may expect these texts to be something like case collections, but this is not at all what they are: the *consilia* could not be more different from case notes. First of all, a description of the case was out of the question, since the physician had not actually seen the patient. Most importantly, the writer’s goal was not describing the individual case.⁶⁶ Though starting from a case, the *consilium* dealt typically with a disease, not with a sick person, and the description of the symptoms was usually minimal, dwarfed by the heavy apparatus of references to the authorities. The individual case, in fact, was just a pretext to delve into the exegesis of canonical works. So the *consilia* have an uncanny way of resembling commentary rather than case notes, as suggested by the fact that they are often organized by topic following the table of contents of a Scholastic medical textbook, such as Avicenna’s *Canon*.⁶⁷ Far from

being a revival of case-writing, they are a clear indicator of the lack of interest in case-knowledge that we find in late medieval Scholastic medical thinking, a way of thinking that was deeply shaped by the commentary, and that privileged the theoretical side of medicine over its practical side.

And yet it would be wrong to assume that case notes as a form of medical writing disappeared completely in the middle ages, either in Arabic or Latin medical cultures. Scholars working on medieval Arabic medicine are discovering fascinating evidence of case-writing in a medical genre called *muyarrabat*.⁶⁸ These were texts very closely related to medical practice, often a private form of writing by a physician, to be shared only with his students.⁶⁹ The *muyarrabat* contained recipes of remedies that a particular practitioner had found useful in the course of his work, often also including, in brief outline, the case in which the remedy had been tried and found to be useful. These Arabic texts seem very similar to the recipe collections that went under the name of *experimenta* in the Latin middle ages.⁷⁰ The *experimenta* also contained recipes that were claimed to have been tested and found effective. (Empirically tested knowledge is precisely what the word *experimenta* meant in medieval Latin and what *muyarrabat* meant in Arabic.⁷¹) Both the Arabic *muyarrabat* and the Latin *experimenta* seem to have been essential for the survival of the practice of writing down cases in medieval medicine. Their comparative study would be tremendously useful for the history of the case narrative in this period. And yet there is no denying that although *muyarrabat* and *experimenta* provided a textual niche for the survival of the case notes as medical writing, their focus was not on the cases themselves but on the recipes. They were essentially recipe collections.

It is only in the late European Renaissance, as far as I know, that we see the emergence of texts that are actually and primarily case collections. They form a new and important medical genre called *observationes*. In the *observationes*, most strikingly, the hierarchy of case and commentary was reversed: no longer subordinate to the elucidation of doctrine, the case narrative became the primary object of attention.⁷² But this happened in a context in which, as we may expect, the traditional medical canon was no longer unassailable and the search for a new canon was well under way.

Ancient *epidemiai* and *historiai*, medieval *muyarrabat*, *experimenta* and *consilia*, early modern *observationes*: distant reading allows us to see them all as part of the pre-modern history of the medical case narrative, linked to each other by the textual traditions that regulate the transmission of writing and knowledge. A driving force of these traditions is genre. The history of these forms, as we have seen, can tell us much about how medical texts, like all texts, are shaped by the dynamics of genre.

NOTES

1. Jolles, *Einfache Formen*, 171–99. The book has been translated into French, Italian and Spanish, but not into English.

2. *Ibid.*, 190–91, 198 (my translation; all translations are mine, unless otherwise specified).

3. *Ibid.*, 179. On the difference between case and example, anecdote, parable, see Koch, “Der Kasus,” 196–201; see also Von Moos, *Geschichte als Topik*, 27, on the case “as problem-oriented antipode” to the illustrative example.

4. Jolles, *Einfache Formen*, 191.

5. For discussion and critique of Jolles’s theory of “simple forms,” see Eikermann, “Einfache Formen” and “Kasus.” On the link with the novella, see for example Nolting-Hauff, *Die Stellung der Liebeskasuistik*.

6. Forrester, “If p, then what?”

7. On the notion of “epistemic genre” see Pomata, “The Recipe and the Case,” 131–35; “Epistemic Genres and Styles of Thinking.”

8. Just a few examples out of a rich and growing literature. On the experimental article: Bazerman, *Shaping Written Knowledge*. On the textbook: Campi et al., *Scholarly Knowledge*; Wübben, “Mikrotom der Klinik.” On the commentary: Guilet-Cazé, *Le commentaire*; Fioravanti, et al., *Il commento filosofico*; Henderson, *Scripture, Canon and Commentary*. On the encyclopedia: Brown, *A Brief History of Encyclopedias*; Lehner, *China in European Encyclopedias* (especially 39–49: history of encyclopedias in cross-cultural perspective). On the atlas: Daston and Galison, *Objectivity*. On the medical recipe: Goltz, *Studien zur altorientalischen und griechischen Heilkunde*, 14–24, 96–196, 247–50, 303–22; Totelin, *Hippocratic Recipes*; Leong, “Collecting Knowledge”; Rankin, *Panacea’s Daughters*. On the essay: Black, “Boyle’s Essay.” On the letter: Langslow, “The *Epistula*”; McNeely, *Reinventing Knowledge*, 123–33.

9. Note that I use cognitive and epistemic as synonyms, because I do not want to imply a hierarchy of forms of knowledge with science (episteme) at the top.

10. But see the useful reflections on the study of the cognitive aspects of medical genres (though they don’t call them “epistemic”) in Nicoud, *Les régimes*, vol. 1, 27–28, and Totelin, *Hippocratic Recipes*, 47–49.

11. Netz, *Ludic Proof*, 229.

12. Schiesaro, “Didactic Poetry”; Taub, “Translating the *Phainomena*,” 119–38; Bray, “Third and Fourth Century Bleeding Poetry,” 75–92.

13. See, for medicine, Maclean, “Medical Republic,” 15–30; and especially Siraisi, *Communities of Learned Experience*. For natural history, Delisle, “Accessing Nature,” 35–58; Bethencourt and Egmond, *Cultural Exchange*. For astronomy, Mosley, “Tycho Brahe’s *Epistolae astronomicae*.”

14. See Moretti, *Graphs*, 76.

15. Moretti draws especially on Ernst Mayr's philosophy of biology. Mayr introduced the distinction between "typological" and "population" thinking in order to highlight the new concept of biological species introduced by Darwin's evolutionary theory. Typological thinking (as exemplified for instance by Plato) looks for an ideal type that underlies the variability of observed entities. Population thinking, in contrast, as exemplified by Darwin, starts from the assumption that species are populations of individuals and that each individual has unique combinations of features. It is these individual variations that lead to the evolution of the species, and that's why they are at the center of evolutionary theory. See Chung, "On the Origin of the Typological/Population Distinction."

16. Moretti, *Graphs*, 90.

17. Moretti, "Conjectures," 43–62.

18. Moretti, *The Novel*, vols. 1 and 2.

19. Moretti, *Graphs*, 27.

20. *Ibid.*, 5–6.

21. Montgomery Hunter, *Doctors' Stories*, 21–23.

22. See Gailus, "A Case of Individuality"; Pethes, "Epistemische Schreibweisen"; *idem*, "Ästhetik des Falls."

23. For a reassessment of Foucault's *Birth of the Clinic* (1963), see Hannaway and La Berge, eds., *Constructing Paris Medicine*.

24. A modernist focus (in spite of the promise in the title) features also in the important study by Hess and Mendelsohn, "Case and Series."

25. Laín Entralgo, *La historia clínica*. I am currently engaged in a book project on the long-term and cross-cultural history of the case narrative in pre-modern medical cultures.

26. On the early-modern revival of the case history see Pomata, "Sharing Cases," and "Observation Rising."

27. Moretti writes about the "Draculaesque reawakenings" of novelistic sub-genres in *Graphs*, 31.

28. On this link see Pomata, "The Recipe and the Case."

29. On the relation of the gloss to a specific temporality, and more generally on its link to the case, I am indebted to Ginzburg, "Ein Plädoyer," 34.

30. Pomata, "The Recipe and the Case."

31. See Headland et al., *Emics and Etics*.

32. Langholf, *Medical Theories in Hippocrates*, 78–79.

33. Deichgräber, *Die Epidemien*, 169; Smith, "Generic Form," 144–58.

34. Galen, *De difficultate respirationis*, 2. 8, in *Opera*, ed. Kuehn, vol. 7, 854–55 (my emphasis and translation). Within the literary typology of the Hippocratic texts developed by the team of the Canadian *Projet Hippo*, the *Epidemics* are classified as "notes." See Maloney et al., *Répartition des oeuvres hippocratiques*, 4.

35. Lonie, "Literacy," 145–61. See also Marganne, *Le livre médical*, 15–34, 102–17.

36. *Epidemics* 4.26 (Loeb Classical Library Hippocrates vol. 7, 123).

37. *Epidemics* 5.77 (*ibid.*, 205).

38. *Epidemics* 6.3.7 (*ibid.*, 239).

39. *Epidemics* 6.6.9 (*ibid.*, 265, but I follow here Lonie's translation in "Literacy," 157, as well as his interpretation).

40. The list format features also in those Hippocratic works that have been conventionally called Cnidian, which file diseases in the order from head to toe, presenting symptoms and therapy as lists of separate items, paratactically arranged. See Lonie, "Literacy," 150. For parallels with Mesopotamian and Egyptian medical texts, which also present lists of diseases, see Sigerist, *History of Medicine*, 298–318, 409–22.

41. On the significance of the list in the transition from oral to written culture see the chapter "What's in a list" in Goody, *Domestication*, 82–103.

42. Lonie, "Literacy," 152–53, from which I also borrow the "icterus" example.
43. On the development of the case collection as a full-fledged genre in early modern Europe, see Pomata, "Sharing Cases."
44. Rufus von Ephesos, *Krankenjournalne*. On the Hippocratic inspiration of Rufus's cases, see Álvarez Millán, "Greco-Roman Case Histories," 27–30.
45. See Ullmann, *Die Medizin im Islam*, 79–81.
46. We have only indirect access to the ideas of the Empiricists, which have reached us mostly through the summaries given by the ancient medical writers Celsus and Galen. See Stok, "Celso e gli empirici," 63–75. Galen's works on the Empiricists are collected and translated in *Three Treatises on the Nature of Science*. On the Empiricists, the fundamental study (with collection of sources) remains Deichgräber, *Die griechische Empirikerschule*.
47. On the Empiricists' claim to be the true interpreters of Hippocratic doctrine, see Galen, *De experientia medica*, 13.4 (*Three Treatises*, 69–70).
48. Galen, *De sectis*, 1 (*Three Treatises*, 3–5).
49. Galen, *Subfiguratio empirica* (*Three Treatises*, 31).
50. Galen, *Subfiguratio empirica* (*Three Treatises*, 25–26, 34–36). On the Empiricists' notion of *historia* see Deichgräber, *Empirikerschule*, 298–301; on their concept of observation, see Pomata, "A Word of the Empirics," 8–15.
51. See Lloyd, "Galen's Unhippocratic Case Histories," 115–31. Laín Entralgo had already noted as much (*La historia clínica*, 67); see also Álvarez Millán, "Greco-Roman Case Histories," 30–33.
52. See for instance *Ad Glauconem de medendi methodo*, 1.9 (*Opera*, vol. 11, 27–29); *Methodus medendi*, 9. 4 (*Opera*, vol. 10, 608–11).
53. See García Ballester, "Elementos," 47–65.
54. This self-promoting use of patients' stories is especially evident in Galen's *On Prognosis*.
55. Galen commented on Books One, Two, Three and Six: he considered Books Four, Five and Seven as spurious. Among Galen's many commentaries on Hippocratic writings, that on *Epidemics* is his longest and one of his most important. See Pormann, Introduction to *Epidemics in Context*, 25–48. On Galen's use of the commentary more generally, see Flemming, "Commentary."
56. Pormann, "Case Notes," 247–84. The Greek original of Galen's *Epidemics* commentary has survived only in part. We have it in its entirety only in a ninth-century Arabic translation, based on a Syriac intermediate version.
57. Galen's polemic with the Empiricist reading of *Epidemics* is contained in the preface to the first book of his commentary, a part of the text lost in the original Greek and only accessible to us through the Arabic translation. See Van der Eijk, "Exegesis," 36–41, and Pormann, "Case Notes," 250.
58. I borrow the expression from In-Sok Yeo, "Hippocrates," 442. Convincing evidence of Galen reading his own theory into the *Epidemics* is also provided by van der Eijk, "Exegesis," 25–48.
59. Galen, *Comment. III in Hippocratis Lib. I Epidemiarum*, in *Opera*, vol. 17a, 252, cited and translated by van der Eijk, "Exegesis," 42.
60. Van der Eijk, "Exegesis," 42–43.
61. Pormann, "Case Notes," 272.
62. Nicoud, *Les régimes de santé*, vol. 1, 145.
63. Sluiter, "Dialectics of Genre," 183–203.
64. Kurz and Reichmut, "Zwischen Standardisierung und Literarisierung," 229.
65. This cross-over of the medical case into the field of literature happened also at other times in the long-term history of the case narrative, most signally in Europe in the Romantic period, as studies by Pethes and other scholars have shown. In addition to the studies cited above, n. 22, see Pethes and Richter, *Medizinische Schreibweisen*.

66. See Agrimi and Crisciani, *Les 'consilia' médicaux*; Crisciani, "L'individuale."
67. For instance, the huge collection of *Consilia* by Bartolomeo Montagnana, a fifteenth-century professor of medicine at the University of Padua, was organized according to the order of Avicenna's *fen* (sections) by his former student, the physician Hartmann Schedel (Bayerische Staatsbibliothek, Munich: Cod. Lat. 25).
68. On the *muyarrabat* as a medical genre, see Álvarez Millán, Introduction, in *Abu l-'Ala' Zuhr* (m. 525/1130): *Kitab al- Muyârrabat*, 35–60; also Álvarez Millán, "The Clinical Account," 195–214.
69. The case notes of the great Arab physician al-Rāzī (d. ca. 925) have survived thanks to the fact that they were published by his students after his death, under the title *Book of Experiences*. On this source, see Álvarez Millán, "Practice versus Theory"; also Pormann, "Medical Methodology." Cases were also included in al-Rāzī's huge compilation known as *The Comprehensive Book on Medicine* (*Continens* in Latin translation). See Álvarez Millán, "Greco-Roman Case Histories," 36–37. Some of these cases were translated into English by Max Meyerhof (see Meyerhof, "Thirty-three Clinical Observations"). Owsei Temkin discovered their Latin translation, as a separate text, in a 1509 Venice edition of the *Continens*, and republished them (see Temkin, "Medieval Translation").
70. See McVaugh, "The Experimenta."
71. On the medieval meaning of *experimentum/experimenta* see Agrimi and Crisciani, "Per una ricerca su *experimentum*," 39–47. On the meaning of *muyarrabat* (from *muyarrab* = tried, tested) see Lev and Chipman, *Medical Prescriptions*, 150.
72. On the reversal of the hierarchy of case and commentary in the *observationes*, see Pomata, "Sharing Cases," 207–08, 212.

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