Medical Recipes and the Composition of the Talmud

This chapter will demonstrate that it is possible to reconstruct the sources that were dissected by the composers of the Talmud for the purpose of compiling an erudite symposiac commentary. Reassembling should be possible, and quite easily so, if there was some truth to the thesis outlined in the previous chapters. According to this thesis, the composers arranged the Talmud from excerpts. The final work, then, brought together different languages and dialects but also different literary forms and styles. The fact that the composers altered their excerpts as little as possible should enable the reassembling of original sources based on language, style, and/or distinct use of vocabulary. In many cases, however, the result may not turn out as smoothly as the example given here, a medical treatise. Many sources may have preserved heterogeneous content in a uniform style, a consistent thematic thread throughout different styles, or a mix of both. This may be ascribed to the fact that most excerpts were likely taken from people's notebooks of *collectanea*, that is, already excerpts.

The recomposition and discussion of the medical treatise here has two main objectives. First, it serves as an argument that underlines the claims made in the previous chapters that the Talmud is thoroughly composed of excerpts, many of which were attributed to a certain sage in a secondary step by the composers to maintain the dialectic structure. Second, the contextualization of the treatise within cognate Greek and Latin examples provides further grounds for connecting the Talmud with the premises of Greco-Roman intellectual culture.

THE LIST OF RECIPES IN TRACTATE GITTIN IN PRIOR SCHOLARSHIP

The proof section of the Gittin commentary on *gordiagos*, familiar by now through the discussions in the previous chapters, offers a list of medical recipes (b. Git. 68b–70a). This accumulation of recipes, most of them unattributed, clearly differs and stands out from the Talmud's usual dialectic structure. Scholars, most notably Giuseppe Veltri, David Freeman, and Markham Geller, have therefore concluded that the passage constitutes an independent medical source.¹ Veltri, for one, provides an annotated translation of the recipes and points to numerous near parallels in other rabbinic works and in Greek and Latin medical texts to make sense of the many *hapax legomena* in the recipes. He describes the intellectual background of the recipes as empirical and considers the passage to be a first attempt by rabbinic sages to codify their medical knowledge. The passage, in his assessment, is therefore not a medical treatise predating the composition of the Talmud but, rather, a collection of recipes that was systematically arranged by rabbinic scholars for b. Git. 68b-70a and its textual purpose there.²

Freeman, on the other hand, defines the boundaries and content of the passage and concludes that it was "an entire, complete treatise with a beginning and an end."³ Freeman finds the potential origins of the passage in folk medicine, a type of medicine that he locates in opposition to professional and theorized Greek medicine. Following this line of argument, Freeman concludes that folk medicine is "transmitted orally and not textually."⁴ Nevertheless, Freeman points to the invention of "compendia of domestic medicine," which resulted from Cato's and Varro's works on agriculture, in which they also presented veterinary cures.⁵ As to why the treatise was included in the Talmud, Freeman suggests that there may have been a lack of reliable medical professionals and that

⁵ Freeman, "Gittin 'Book of Remedies," 161.

¹ Giuseppe Veltri, Magie und Halakha: Ansätze zu einem empirischen Wissenschaftsbegriff im spätantiken und frühmittelalterlichen Judentum, TSAJ 62 (Tübingen: Mohr Siebeck, 1997); David L. Freeman, "The Gittin 'Book of Remedies," Korot 13 (1998); Markham J. Geller, "An Akkadian Vademecum in the Babylonian Talmud," in From Athens to Jerusalem: Medicine in Hellenized Jewish Lore and in Early Christian Literature, ed. Samuel Kottek, Manfred Horstmanshoff, Gerhard Baader, and Gary Ferngren (Rotterdam, Netherlands: Erasmus, 2000).

² See Veltri, Magie und Halakha, 261.

³ Freeman, "Gittin 'Book of Remedies," 157.

⁴ Freeman, "Gittin 'Book of Remedies," 160.

the recipes provided "straightforward information" and "came without abstraction, rhetoric, theory, dogma, or appeals to pagan gods."⁶

Geller similarly looks at the passage with a comparative eye – in his case to Akkadian medical texts. He finds many Akkadian loanwords and calques in the recipes and concludes "that the Talmudic *Vademecum* is based either upon Akkadian sources, or alternatively on Aramaic translations from Akkadian medical texts, which preserved both Akkadian loanwords and calques."⁷

Despite their different perspectives on the passage, the three scholars agree that the Gittin commentary contains a "Book of Remedies" (Freeman), a "Medical Handbook" or "*latrosophion*" (Veltri), or a "*Vademecum*," that is, a concise, practical, and systematic arrangement of cures (Geller). The approach taken in this chapter differs from these prior ones, while at the same time continuing some of the research paths these scholars initiated. Thus, following Veltri, it will be argued that the treatise shares strong ties with Greek and Latin treatises; following Freeman, the passage as such will be assessed within the late antique fashion to produce concise treatises of simple remedies; and, in the wake of Geller, the local nature of the treatise will be highlighted.

To reassemble a source based on its distinct style is, of course, to apply form criticism. Form criticism as a method to study talmudic literature has been advanced most notably by Abraham Weiss, who distinguished among "collections," midrashim, and aggadot as possible external literary sources.⁸ As an example of a medical collection, Weiss mentioned passages that contain most of the recipes in the original treatise that has been reassembled in the appendix to this chapter: b. Shabb. 110a–b; b. Git. 67b; and b. Avod. Zar. 28a.⁹ He further observed that variation among attributions

⁶ Freeman, "Gittin 'Book of Remedies," 164.

⁷ Geller, "Akkadian Vademecum in the Babylonian Talmud," 16.

⁸ Midrashim, for example: b. Meg. 10b–17a (Esther); b. Shabb. 113b–114b (Ruth); b. B. Batra 13b–17a (parts of Job); see David Goodblatt, "Abraham Weiss: The Search for Literary Forms," in *The Formation of the Babylonian Talmud: Studies in the Achievements of Late Nineteenth and Twentieth Century Historical Literary-Critical Research*, ed. Jacob Neusner (Leiden: E. J. Brill, 1970), 99–100. On the use of halakic midrash collections in the Talmud and how to disentangle them from (in his words) "the redacted text," see Menahem I. Kahana, "The Halakhic Midrashim," in *The Literature of the Sages; Second Part: Midrash and Targum; Liturgy, Poetry, Mysticism; Contracts, Inscriptions, Ancient Science; and the Languages of Rabbinic Literature*, ed. Ze'ev Safrai, Joshua J. Schwartz, and Peter Tomson, vol. 3 of *The Literature of the Jewish People in the Period of the Second Temple and the Talmud*, Compendia Rerum Iudaicarum ad Novum Testamentum 2/3/2 (Leiden: Brill, 2006), 58–67.

⁹ See Abraham Weiss, *Studies in the Literature of the Amoraim* [in Hebrew] (New York: Yeshiva University, 1962), 174 and 264n2.

diminishes in clusters of text material that shares certain criteria. This material might, therefore, constitute a source external to the rest of the text, which Weiss conceived of as having grown layer by layer. For Weiss, the prime indicators of an external source were mainly (1) attribution to a certain sage and (2) content. Weiss thus found that an excursus might be indicative of an external source but remained critical of that idea.¹⁰ More recently, Catherine Hezser enlarged the toolbox of talmudic form criticism by clearly pointing to stylistic features: "If neither technical terms nor attributions are available for separating a text from its context, a change in formulation and style may help to determine its beginning and end."¹¹

My intention here is to integrate these prior approaches to form criticism into the empirical model of book production outlined in Chapter 2. Based on this model, every distinguishable literary unit is either already a source or part of a larger composition, since the composers worked with excerpts. There are no "external sources," since no text is more external than another: they are all equally external and are all subject to being compiled into a whole. Attributions thereby become the least indicative factor for an external source, since they are most prone to having been added or adapted by the composers. Content may be indicative but not necessarily, considering the late antique intellectual aspiration for *poikilia*, thematic variegation. Following this argument, most indicative for a distinct source are style, shared vocabulary, and reused motifs. For the reassembly of the medical treatise, the distinct style of the recipes, not their attribution, is decisive. This argument is supported by the presence in the Talmud of differently worded recipes that are similarly sometimes attributed and sometimes anonymous, as well as by comparison with contemporaneous medical treatises.

DIFFERENTLY STRUCTURED TALMUDIC RECIPES IN THE HANDS OF THE COMPOSERS

The commentary on the lemma *qordiaqos* in tractate Gittin (68b–70a) contains therapies for twenty-five conditions. That said, I would like to clarify that I use the term "recipe" to refer to a compound unit consisting

¹⁰ Weiss, Studies in the Literature of the Amoraim, 184–190. On the implications and complications of working with attributions in form criticism, see Anthony J. Saldarini, "'Form Criticism' of Rabbinic Literature," JBL 96, no. 2 (June 1977). Saladrini eventually suggests a focus on comparison but also a consideration of the "relative date" (274).

¹¹ Catherine Hezser, "Form-Criticism of Rabbinic Literature," in *The New Testament and Rabbinic Literature*, ed. Reimund Bieringer, Florentino García Martínez, Didier Pollefeyt, and Peter J. Tomson, *JSJSup* 136 (Leiden: Brill, 2010), 100.

of a condition and a therapy. The conditions in Gittin are first arranged according to the body part affected by the disease, thereby proceeding from head to foot. Then follow conditions like fever or skin diseases that concern the body as a whole. The sequence of recipes is interrupted by small dialogues, which engage the recipes in the overall talmudic discourse, and by stories, which appear to prove the effectiveness of the recipes. The literary structure of the recipes follows two different patterns. Thus, the passage, thematically consistent as it may seem, is again shown to be a cluster of excerpts and editorial remarks.

One of the two recipe types is clearly more dominant than the other, with its listing only sporadically interrupted by the other one. The basis of the passage thus seems to be a treatise of recipes with an identical style. Consistent with their *modus operandi*, the composers of the Talmud treated every recipe as a single thematic unit. If the other excerpts they had selected for this particular commentary yielded recipes with matching or complementary conditions, or additional information, they interrupted and enhanced the list or even a recipe. In fact, we already encountered such an instance in the proem to the commentary on *qordiaqos* discussed in Chapter 3. There, one type of recipe against sunstroke (in roman) was supplemented with another one (in italics):

Abaye said: Mother told me: For the sunstroke of one day: a pitcher of water; for that of two days: bloodletting; for the one that lasts three days: red meat on coals and diluted wine; for a longer sunstroke: bring ['vi'', leity] a black hen and tear it open crosswise. Shave the middle of [the patient's] head and place [the hen] on [the head] until it sticks.¹² Then [the patient] should go down and stand neck-deep in water until [the patient] becomes tired from the world upon him. Then [the patient] should submerge himself, ascend, and sit down.

And if not, he should eat leeks and go down and stand neck-deep in water until he becomes tired from the world upon him. (b. Git. 67b)

From the way in which the composers present the two recipes, they seem to belong together. Yet their stylistic forms are so distinct that, upon closer investigation, it becomes clear that they are excerpts from two different sources.

In both sources, conditions are preceded by the preposition "for" (-ל, *le*), as in "for the sun[stroke]" (לשמשא, *le-shimsha*) or "for the ear" (לשמשא, *le-udna*).¹³ The introduction of the therapies, on the other hand, varies and thus offers a first criterion for differentiation. One type of

¹² According to Mss. Arras 889, Vatican 140, and Vatican 130.

¹³ b. Avod. Zar. 28b.

therapy, to which the one in italics above belongs, is introduced with a verb, most often the verb *leity* [ליתי] in the third-person masculine future, with the intention of issuing a directive, meaning "he shall bring." The other recipe type, the one printed in roman, lists the necessary ingredients for the therapy immediately following the condition. This recipe type does so without addressing anyone, as if an invisible colon (such as the one I inserted in the English translation above after "For the sunstroke of one day") marked a pause between the end of the condition and the beginning of the therapy. This distinction is indicative of the source of each recipe, as further analysis of their structure will show.

Both types of recipes sometimes offer alternative therapies to cure a condition, but they are more common in what I will call the "verb recipe" because it introduces therapies with a verb (usually "bring") in contrast to the "pause recipe" (with the invisible colon). Verb recipes may amass up to eleven alternative therapies for a single condition. In the appendix to this chapter, the reader will find fifty-seven verb recipes for reference. Numbers given in parentheses in the following discussions refer to the recipe's number in the appendix. The recipe listing eleven alternative therapies is number 36. Alternatives to the verb recipe are always introduced with "and if not [very lo]." The "pause recipe," on the other hand, introduces its occasional alternatives with "or [xl]." Here are two examples of the two types, starting with the "verb recipe":

For [-5] the blood of the head:

Bring cypress, tamarisk, one myrtle, marsh grass, and *yabla*. Boil them together and pour 300 cups over one side of the head and 300 cups over the other side of the head.

And if not, bring a white rose and boil it. Pour 60 cups over one side of the head and 60 over the other. (b. Git. 68b; recipe no. 1 in appendix)

Since all of the pause recipes in the Gittin passage are without alternatives, I will add an example from tractate Avodah Zarah:

To [-5] stop the blood [from flowing out of a wound]: cress in vinegar. To [-5] heal the wound: scraping of cynodon and scrapings of a thornbush or a compress from a garbage dump.¹⁴ (b. Avod. Zar. 28a)

¹⁴ The term μαγγ, translated as "compress," is inferred from a passage in b. Shabb. 134b (*DJBA*, see "μαγκ). The components of the recipes vary considerably between the manuscripts and the prints. Yet the main features I wish to present here, the invisible colon before the pause and the introduction of the alternative, remain the same. Since the manuscripts do not help in providing an intelligible translation, the translation follows the text of the Vilna standard printed edition.

As becomes clear from these two examples, the verb-recipe type tends to be much more detailed. In addition to offering a list of ingredients, it also states the actions to be taken to process the ingredients. This contrasts with the pause-recipe type, in which even information concerning the exact posology (dosage) of ingredients is reduced to a minimum.

The two types of recipes appear repeatedly throughout the Talmud. Apparently, the composers of the Talmud had two different treatises of medical recipes at their disposal with some overlapping conditions, but they never presented one recipe type as if it were an alternative to the other. Instead, they left the excerpts intact and placed them next to each other. Even if they used single recipes in a dialogue, they did not change the original structure. An example for the use of a recipe in a dialogue is found in tractate Avodah Zarah, where the composers apparently found three excerpts concerning the "pustule" under the keyword "harvest": one saying (in roman), one pause recipe (in italics), and one verb recipe (in bold). From these they created the following piece:

Rav Safra said: "This pustule is a precursor of the angel of death."¹⁵ What is its cure? *Rue in honey or parsley in tilia-wine*. In the meantime, **bring a grape similar to the pustule and roll it on the pustule: a white [grape] for a white pustule and a black one for a black pustule**. (b. Avod. Zar. 28a)

To bring together the pause recipe and the verb recipe, both of which apparently referred to the same condition, the composers draw on a structure known from three other excerpts. In doing so, they resort to a method of composition already discussed in the previous chapter: the use of a template. Two excerpts of this pattern are now found in tractate Gittin, one in Avodah Zarah.¹⁶ In each of these excerpts, someone is inflicted with a deadly disease. Therefore, the recipes do not offer therapy but, rather, a means to prolong the patient's life so that he can make a will. Each time, these measures are introduced with the term used here: "in the meantime."¹⁷ It follows that the original formulation of the

¹⁵ Similarly, the next passage in b. Avod. Zar. 28a calls another boil a "precursor of the angel of death," while a saying in b. Ned. 41a and attributed to Rava holds that "if fever were not a 'precursor of the angel of death,' it would be beneficial."

¹⁶ b. Git. 70a and b. Avod. Zar. 12b.

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recipes before they were used in this discursive structure was most likely as follows:

For the pustule: Rue in honey or parsley in tilia-wine. (pause recipe)

For the pustule: **Bring** a grape similar to the pustule and roll it on the pustule: a white [grape] for a white pustule and a black one for a black pustule. (verb recipe)

Here, as elsewhere, the composers are very reluctant to interfere with the content of the recipes or to change their style. In this case, however, the addition of "in the meantime" distorts the usefulness of both therapies by burdening the patient and especially their caregivers with procuring both sets of ingredients. Presented as alternatives, by contrast, the therapies would have enabled the choice of the more convenient and available set of ingredients. But the composers' priority is obviously not to present practical medicine, which was likely the objective of the original treatises, but to use medical knowledge rhetorically and to keep up with the discursive structure. Otherwise, they would have left the treatises intact.

The separation of condition and therapy lends itself to creating a question-and-answer format. Elsewhere, a disease named tsafdina (צפדינא) is the object of discussion.¹⁸ The issue is raised by a story that has its template in the Palestinian Talmud.¹⁹ In both stories, Rabbi Yohanan is treated by a woman for his *tsafdina*, and both times he reveals her secret despite his initial promise that he would not. The consequences for the woman differ in the two stories. The identity of this *tsafdina* disease does not, however, become clear from the story. Fortunately, the composers of the Babylonian Talmud found an excerpt with a saying in Hebrew with the information that the disease begins in the mouth and ends in the bowels. Based on this saying, the composers focused on diseases of the mouth, equating *tsafdina* with hypersensitive gums. Drawing from both medical treatises, two pause recipes (in italics below) and one verb recipe (in bold below), the composers culled symptoms and three causes for the disease. Constructing a questionand-answer pattern, the composers attributed each of the three recipes for the treatment of gums to a different rabbinic sage.

Rav Nahman bar Yitzhaq said [Hebr.]: "*Tsafdina* is different because it starts in the mouth and ends in the bowels."

What is its symptom [lit., "sign"]?

¹⁸ b. Avod. Zar. 28a // b. Yoma 84a.

¹⁹ y. Shabb. 14:4 (14b) // y. Avod. Zar. 2:2 (40d).

[If] too much is placed on the gums, blood issues from between the rows [of teeth].

From what does it come?

From [eating] very cold wheat, or from [eating] very hot barley, or from [eating] leftover fish hash.

What did she [i.e., the female healer from the story] do for him [Rabbi Yohanan]?

Rav Aha, the son of Rava said [Hebr.]: "Yeast water, olive oil, and salt."

And Mar bar Rav Ashi said: "Fat from the goose in the wing of the goose."

Abaye said: "I did all of these, and I was not cured. Until this *tayya'a* told me: 'Bring pits from olives that have not finished ripening more than a third. Burn them on a new hoe and affix [the residue] to the [affected] row [of teeth].' I did this, and I was cured!" (b. Avod. Zar. 28a // b. Yoma 84a)

Here we can observe the application of the same methods we saw in the previous chapters. Based on an earlier statement, the excerpt in Hebrew, the composers defined the mysterious disease *tsafdina*. According to this definition, they chose cures and transformed them into sayings – in the case of Abaye even into a *chreia* – in order to sustain the dialogic structure of their symposiac work.

Again, the method is productive and engaging: with considerably little effort, three cures are added to the ongoing discourse. At the same time, the composers' procedures are highly repetitive. For example, it is quite common for the composers to ask, "What is its cure?" and then immediately insert a therapy, either attributed or unattributed.²⁰ Repetition can also be observed in the way in which the above verb recipe is framed as an account of Abaye's personal experience in the form of a *chreia*. The composers use the exact same formula elsewhere, where they let a *tayya'a*, a nomadic Arab, and Rav Papa recount their application of a verb recipe and exclaim, "I did this, and I was cured!"²¹

The passage cited above is further instructive since it exposes an irregularity with regard to the posited treatise of pause recipes: one of the recipes is not in Aramaic but in Hebrew. The matter deserves further investigation, which cannot be undertaken here. The change in language points to the possibility that the treatise with pause recipes was either bilingual or partly translated or the composers had both an Aramaic and Hebrew treatise at their disposition.

²⁰ E.g., b. Ketub. 77b; b. Git. 67b, 70a; b. B. Qam. 85a; b. Avod. Zar. 28a, 29a.

²¹ b. Avod. Zar. 29a.

PAUSE- AND VERB-RECIPE TREATISES AND THEIR LITERARY CONTEXT

Due to its more elusive structure, which can be absorbed completely in a dialogue, the pause recipe is less easily detectable in the talmudic corpus than is the more distinct verb recipe. I will, therefore, conclude my observations on the pause recipe with some further remarks before focusing exclusively on the verb recipe.

Strikingly absent from pause recipes are (often) indications concerning the necessary amount (posology) of any given materia medica and, almost always, their specific preparation. The recipes therefore seem somewhat deficient and inferior to verb recipes. In addition, one may wonder how the recipes could have worked without instructions with regard to posology, preparation, and ingestion or application. An answer to this mystery can be found by comparing the recipes to cooking recipes such as those collected in the cookery book called Apicius.²² In fact, many of the recipes in Apicius have the same structure as the verb recipes, in that they begin with an instructive verb and offer alternatives introduced by the Latin *aliter*, meaning "otherwise." The structure of the pause recipe is also present among the cooking recipes, although almost exclusively concerning sauces. This explains fairly well why these recipes need no posology and no, or not much, instruction as to their preparation: The categorization as sauce already refers to the main characteristics of the final outcome. Ingredients need only be listed, and it is evident that they need to be cooked or at least stirred together to produce a sauce; posology can be adapted individually according to taste. We read, for example, in *Apicius* the following recipe: "Sauce for wild goat: pepper, lovage, caraway, cumin, parsley, rue seed, honey, mustard, vinegar, liquamen, and oil" (8.3.1).23

It appears that the pause recipes were excerpted from a source that classified recipes not according to condition but by the type of remedy they yielded: potions, broths, poultices, balms, or suppositories. A fourth-century papyrus from Egypt suggests the existence of such structures in medical treatises, although its prescriptions are admittedly more complex than those in *Apicius* or the talmudic pause recipes. Judging from the remaining corrupt thirteen folia, the Michigan Medical Codex

²² See Christopher Grocock and Sally Grainger, *Apicius: A Critical Edition with an Introduction and an English Translation of the Latin Recipe Text* (Totnes, UK: Prospect Books, 2006), 13–22, for a recent introduction to the work.

²³ Translation follows Grocock and Grainger, Apicius, 267.

(P. Mich. 758 = P. Mich. inv. 21) appears to have presented recipes "according to type of medication, with pills and lozenges preceding wet and dry plasters. A similar pattern was used by Galen in his *De compositione medicamentorum secundum locus*."²⁴ The treatise prefaces recipes with headings such as "A plaster, which promotes cicatrization" (Inv. 21 B verso, Plate 2b).²⁵ As with the sauces in the cookbook, then, these headings already indicate the consistency and final use of the medication. A simple list of ingredients was enough, perhaps with occasional recommendations as to their posology in case of an aggressive substance.

In at least one instance, the composers of the Talmud included such a pause recipe together with its original heading. Along with the attribution, which the composers appended to the recipe, it reads as follows:

ABAYE SAID: "Mother told me: One salve for every pain: Seven measures of [forbidden animal] fat and one of wax." Rava said: "Wax and pitch."²⁶ (b. Shabb. 133b)

The original recipe most likely read:

One salve for every pain Seven measures of [forbidden animal] fat and one of wax. Or: wax and pitch.

The component "forbidden animal fat" supports yet another connection to healing salves as they are prescribed in Codex Michigan (Inv. 21 A recto, Plate 1a) and in similar treatises by authors such as Galen, Oribasius, Aetius, and Paulus Aegineta, who list recipes for salves made from pig fat, wax, white lead, and lithargo.²⁷

I suggest, therefore, that the composers of the Talmud had access to two medical treatises with different outlooks and hence different structures for their recipes which they have integrated into their collection of excerpts. They used them, especially the pause recipes, in the form of single excerpts, and there may be fewer pause recipes than verb recipes included in the talmudic text. In some cases, both recipes list therapies for the same condition. Such recipes were either used in combination, as we have already seen, or separately, as the next example shows.

²⁴ Ann E. Hanson, introduction to *The Michigan Medical Codex (P. Mich.* 758 = P. Mich. *inv.* 21), ed. Louise C. Youtie, Michigan Papyri 7, American Studies in Papyrology 35 (Atlanta: Scholars Press, 1996), esp. xx.

²⁵ Youtie, The Michigan Medical Codex, 18.

²⁶ The etymology of the Aramaic word that is traditionally translated as "pitch" is unknown (see DJBA, see "קלבא").

²⁷ See Hanson, introduction to The Michigan Medical Codex, esp. xviii.

In tractate Shabbat, the composers use a verb recipe, and in tractate Gittin a pause recipe, to counter the effects of drinking water that has been left uncovered overnight (called giluya in rabbinic terminology).²⁸ Such water may have become unsuitable for drinking due to pollution overnight. In Gittin, the pause recipe is just appended to the therapy of a preceding verb recipe, which makes use of *giluva*-water to treat "the arrow," probably a piercing pain in the heart (recipe no. 16). The composers added the pause recipe to counter the side effects of this therapy. Why do the composers not use the recipe against the effects of giluya-water from the verb-recipe treatise from which they took most of the Gittin recipes? Either because they had already finished writing up the commentaries for tractate Shabbat, and so the excerpt was marked as "used," or because they did not want to disturb the original structure of the verb-recipe treatise by moving up the recipe against giluya to the section on heart diseases. Both possibilities are equally justifiable, but the former is more likely because, unlike sayings, catchphrases, or stories, which make different points in different contexts, recipes make only one distinct point and hence need not be repeated. Indeed, I am unaware of the repetition of a recipe within the Talmud in the case of medical recipes, the keywords were unambiguous.

Interestingly, the pause recipe against *giluya* does not come alone but with another pause recipe that most likely followed it in the original treatise. The excerpt obviously disturbs the logical order of the verb recipes that form the bulk of the section. Here is the passage with the pause recipes in italics:

For the "arrow" [piercing pain in the heart]:

Bring the "shaft of an arrowhead," turn it upside down with the bottom on top. Pour water over it and drink it.

And if not, bring water from which a dog drank at night—but beware of [the possible effects of] *giluya*.

For the effects of drinking giluya: one anpaq [a measurement] of undiluted wine.

For a boil: one anpaq of wine with a worm-colored alkaline plant.

For a fluttering heart:

Bring three barley cakes and soak them in a *kamka*-dish that is no older than 40 days, eat them, and afterwards drink watered-down wine. (b. Git. 69b)

²⁸ b. Shabb. 109b and b. Git. 69b.

Both pause recipes propose a potion. This must be the reason why they were grouped together in the original pause-recipe treatise. The composers of the Talmud clearly excerpted them together and here use the entire excerpt, although the recipe to cure a boil clearly interrupts the section of cures for heart diseases.

Treatises of medical recipes tend to list all their recipes in the same form, a practice that should facilitate the reader's understanding of each one's beginning and end. This literary form goes hand in hand with developments in the graphical depiction of the recipes. These involved writing the condition on a separate line, with a different color and/or in the margins, and isolating individual recipes "by an interlinear stroke (paragraphos), or stroke plus double dot (dicolon)."²⁹ The same devices are also used to separate individual *gnōmai* in gnomologies and dialogues in dramatic or platonic texts.³⁰ Similar to these parallel graphic developments and treatments of recipes and maxims, we have observed in Chapter 4 that recipes and maxims are treated equally in the Talmud in that both may stand in place of direct speech. Several examples presented above place recipes into the mouths of sages, thereby turning the recipe into a saying. Like medicine more generally, the recipes made their way into literary performativity.

A particular development observable in medical papyri from Egypt should be associated with the composers' habit of using recipes as discursive items. The phenomenon to which I am referring seems to have been prominent from the second to early fourth centuries, although most manuscripts were copied in the second and third centuries.³¹ These texts present medical knowledge in question-and-answer form, called

²⁹ Anne E. Hanson, "Fragmentation and the Greek Medical Writers," in Collecting Fragments – Fragmente sammeln, ed. Glenn W. Most, Aporemata I (Göttingen: Vandenhoeck & Ruprecht, 1997), 310. For an example of such an arrangement, see the fragments discussed by Nicholas Sims-Williams, "Early New Persian in Syriac Script: Two Texts from Turfan," Bulletin of the School of Oriental and African Studies 74, no. 3 (October 2011). For a general survey of developments, see Isabella Andorlini, "Il 'gergo' grafico ed espressivo della ricettazione medica antica," in Medicina e Società nel Mondo Antico: Atti del convegno di Udine (4–5 Ottobre 2005), ed. Isabella Andorlini and Arnaldo Marcone, Studi udinesi sul mondo antico no. 4 (Florence: Le Monnier Università, 2006), 147–152.

³⁰ See Hanson, "Fragmentation and the Greek Medical Writers," 310.

³¹ David Leith, "Question-Types in Medical Catechisms on Papyrus," in *Authorial Voices in Greco-Roman Technical Writing*, ed. Liba Taub and Aude Doody, AKAN-Einzelschriften 7 (Trier: Wissenschaftlicher Verlag Trier, 2009), 108.

erōtapokriseis.³² The papyri displaying this format relate to different medical topics, but the most interesting ones for the present purpose are those concerned with individual diseases.

The questions in these "question-and-answer formats" examined diseases in a logical way, while at the same time imposing a recurrent structure on medical knowledge, thereby offering scaffolding for (future) arguments. The fragment P. Mil. Vogl. I 15, for example, proceeds with the following set of questions:

What is [name of disease]? What is the cause of [name of disease]? What are the signs of [name of disease]? In what way does [name of disease] differ? What is the treatment of [name of disease]?

The defining contours of the disease, such as its cause, signs, and criteria for differentiation from other diseases, but also its treatment (antidote), are consecutively addressed by these questions. Other fragments may formulate their questions slightly differently, but the pattern remains the same.³³ There are several instances in which the Talmud adopts this structure, as can already be seen in some of the above examples. An almost complete match to the structure adapted by P. Mil. Vogl. I 15 is present in tractate Shabbat:

[Lemma from the Mishnah; Hebr.] But one may eat yo'ezer. [Aram.] What is yo'ezer? Pennyroyal. For what is it eaten? For the fluke worm. On what is it eaten? On seven white dates. What is the cause? [Six causes follow.]

Alternatively, swallow white cress.

Alternatively, let [the patient] fast and bring fatty meat and roast it on live coals. Let him then suck a bone and swallow vinegar. But there are those who say no to vinegar because it is harmful to the liver.

³² For a contextual survey of the twenty-three papyri that belong to this genre, see Nicola Reggiani, "Digitizing Medical Papyri in Question-and-Answer Format," in Ancient Greek Medicine in Questions and Answers: Diagnostics, Didactics, Dialectics, ed. Michiel Meeusen (Leiden: Brill, 2020).

³³ See the chart in Leith, "Question-Types in Medical Catechisms on Papyrus," 110–111.

Alternatively, bring scrapings of *Dilum* dates that have been scraped off from top to bottom.³⁴ Maybe they will come out through his mouth. Boil it in beer from the neighborhood. On the next day, block the holes of [the patient's] hands, and [the patient] should drink [from his hands]. And when he excretes, he should excrete on the date palm. (b. Shabb. 109b)

The composers obviously used here the same method as the medical question-and-answer format to connect the recipe to the mishnaic lemma through the form of a dialogue. Yet because only one of the four therapies mentions the lemma "pennyroyal," the alternatives are stated with no further questions, right next to the causes. The original recipe probably had the following format:

For the fluke worm, which comes from [six causes follow]: Eat Pennyroyal on seven white dates. And if not, swallow white cress ... [three alternatives follow].

Thus, while the parallel to the Egyptian *erōtapokriseis* is striking, the talmudic examples might be better explained not as excerpts from an Aramaic medical catechism but as ad hoc creations by the composers.

David Leith has proposed viewing the medical *erōtapokriseis* as a result of the application of a set of questions that goes back to Aristotle but is still the basis of late antique doxographies. According to Leith, when "faced with a problematic scientific or practical issue, one should ask: Does it exist? What is it? How is it? Why is it? How big is it/How many are there?"35 To these, the authors of erōtapokriseis also added the question: "From what does it differ?" The composers of the Talmud, just like the authors of many excerpts they used, asked the very same questions in order to investigate all kinds of "matters."³⁶ Clearly, as Leith notes, question-and-answer structures are more reflective of the structure of the authors' thinking, of the way they fashioned their argument, than of a direct teacher-student contact, although these dialogues are usually interpreted as originating from the latter and were even called "catechism" by earlier scholarship.³⁷ In the above example as well, the primary concern of the composers was to plausibly explain the lemma yo'ezer in the most conclusive and discursive manner as possible. That, by so doing, they exposed their own reasoning may be an intended pedagogical side effect.

³⁴ The printed editions, several Mss. (Oxford Opp. fol. 23; JTS Rab. 501:1–6; and Oxford Heb. c. 27/10), and the early print editions Soncino and Bomberg read the introductory formula as אלא, while Mss. Munich 95 and Vatican 108 read, אלא, rather.

³⁵ Leith, "Question-Types in Medical Catechisms on Papyrus," 113.

³⁶ For examples, see Yitzhak Frank, *The Practical Talmud Dictionary*, 2nd ed. (Jerusalem: Ariel, United Israel Institutes, 1994 [10th printing 2001]), see (*what*).

³⁷ See Leith, "Question-Types in Medical Catechisms on Papyrus," 122.

REASSEMBLING AND PLACING A MEDICAL TREATISE USED BY THE COMPOSERS OF THE TALMUD

The above observations are indicative of the fact that the composers of the Talmud used at least two stylistically different medical treatises. In this section, I will propose that the verb-recipe treatise can be reassembled based on the distinct style of its recipes and the lengthy and substantial excerpt of this treatise in tractate Gittin 68b–70a. This excerpt is indicative of the overall structure of the treatise and facilitates the search for suitable comparanda. These, in turn, are necessary to justify the reconstruction.

Indeed, the formulaic style of the verb recipe follows the pattern of Greek *euporista*, simple remedies. These are often structured along the lines of the formula: "For [Πρός] XY, take [$\Lambda \alpha \beta \omega \nu$] ... or [$\ddot{\alpha} \lambda \lambda o$] ...," which corresponds to the Aramaic pattern of the verb recipe "For [-b] XY, take/"bring" [$\dot{\gamma}$ " and if not [$\dot{\gamma}$ " $\dot{\gamma}$ " Next to the Greek cognates, there are also some Syriac recipes of this structure found in the third part of the collection called *Syriac Book of Medicines*. This section contains a similar yet, like the whole book, eclectic list of simple remedies which are less consistent in their literary structure. Only some of these recipes begin their therapies with a verb, while others first state the ingredients before proceeding to their preparation. This latter structure is reminiscent of the talmudic pause recipes and yet different, since the Syriac recipes add the mode of preparation. The conditions are introduced with *le* (Δ), "for," alternatives with *o* (∞ "), "or."³⁹ We can quite

- ³⁸ ליתי ליתי ליתי ליתי אי לו... 3⁸ ליתי ליתי ליתי אי לו... 214, in Karl Preisendanz, ed. and trans., with Albert Heinrichs, ed., Papyri Graecae Magicae: Die griechischen Zauberpapyri I, 2nd rev. ed., Sammlung wissenschaftlicher Commentare (Leipzig: K. G. Saur Verlag, 1973). A good example is already one of the earliest Greek recipe books, P. Ryl. III 531 (third century BCE), which contains prescriptions partially parallel to the Hippocratic gynecological treatises. The following recipe can be found in the best-preserved section: πρός τούς ἀπὸ τῶν ὑστέρων πνιγμούς· ένυδρίδους τοὺς νεφροὺς ξηράνας δίδου ὄσον τοῖς τρισὶν δακτύλοις **λαβεῖν** ἐν οἴνωι εὐώδει. τοῦτο καὶ πρὸς τοὺς τῶν διδύμων πό- νου(ς) βο{ι}έθει καὶ κλυστήριον ἔστιν ὕστερων. This translates as, "Against suffocation from the uterus. After desiccating otter's kidneys, give them in the quantity of a three-finger pinch, to take with perfumed wine. This also helps against the pains at the testicles and is a washing for the uterus." The next recipe starts with ἄλλο (allo). Both pros and allo are set apart from the rest of the recipe in the margins to indicate the beginning of a new recipe. Many thanks to Prof. Nicola Reggiani (University of Parma) for providing me with this reference, the transliteration, translation, and an image of the particular section.
- ³⁹ Ernest A. W. Budge edited and translated a manuscript of the Syriac Book of Medicines (SBM) in two volumes, originally published in London (1913). A partial edition with translation of a different manuscript was published by Richard Gottheil ("Contributions

confidently conclude that the verb recipes belonged to or even constituted an Aramaic *euporiston*, a treatise of simple remedies. Such treatises were quite popular throughout the Mediterranean and adjacent areas, especially between the fourth and seventh centuries.⁴⁰

Unfortunately, collections of simple remedies (euporista) suffered considerable neglect by scholars in the past, when historians of medicine were primarily interested in theory-based medicine, of which these recipes were not seen to be a part. Scholarly interest has turned only very recently to these recipes - and this time not only with regard to their biochemical effectiveness or relationship to Hippocratics or Galen but also in consideration of their literary makeup, their structure, their deviation from a Vorlage or main source, the strategies followed by collectors, and, more generally, what these recipes tell us about everyday life in late antiquity.⁴¹ Yet many euporistic treatises have, to date, not been edited, let alone translated, and the growing bulk of medical papyri from Egypt is only now being digitized.⁴² Many may also have been lost, since the extant treatises attest to a wide geographical dispersion. The treatises at our hands can, nevertheless, assist in recomposing the Judeo-Aramaic treatise that was divided by the composers of the Talmud into useful excerpts and in reintegrating it into its initial intellectual context.

Treatises of simple remedies are well-structured collections of recipes that are usually based on prior (minor) collections by either laypeople or doctors. Recipes could be obtained through personal expertise or exchange, or collected through careful reading. The author of the *Medicina Plinii*, composed in the third or fourth century, for example,

to Syriac Folk-Medicine," *Journal of the American Oriental Society* 20, no. 1 [January 1899]). For an updated review of scholarship on this section of the SBM, see Stefanie Rudolf, *Syrische Astrologie und das Syrische Medizinbuch*, Science, Technology, and Medicine in Ancient Cultures 7 (Berlin: de Gruyter, 2018), 113–116. My thanks to Marion Pragt (KU Leuven) for helping me with my reading of the Gottheil manuscript. The mix of recurring styles in the SBM recipes is worth a closer analysis. Moreover, the therapies noticeably often use eggs, quite in contrast to those in the Talmud.

- ⁴⁰ See Burkhard Meissner, Die technische Fachliteratur der Antike: Struktur, Überlieferung und Wirkung technischen Wissens in der Antike (ca. 400 v.Chr.-ca. 500 n.Chr.) (Berlin: Akademie Verlag, 1999), 328, and Christian Schulze, Die pharmazeutische Fachliteratur in der Antike: Eine Einführung, 3rd ed., Beihefte zum Göttinger Forum für Altertumswissenschaft 10 (Göttingen: Edition Ruprecht, 2007), 101–108.
- ⁴¹ See, e.g., the collected essays in the volume edited by Lennart Lehmhaus and Matteo Martelli, eds., *Collecting Recipes: Byzantine and Jewish Pharmacology in Dialogue*, Science, Technology, and Medicine in Ancient Cultures 4 (Berlin: de Gruyter, 2017).
- ⁴² See Nicola Reggiani, ed., *Digital Papyrology*, 2 vols. (Berlin: de Gruyter, 2017), as well as the project "Medicalia Online," www.papirologia.unipr.it/CPGM/medicalia/vocab/ index.php.

created a condensed *brevarium* out of Pliny the Elder's pharmacognosy in books 20–32 of the *Natural History*. "Pseudo-Pliny" turned Pliny's information into recipes by enhancing the ingredients with a posology and explanations regarding weights and measures.⁴³ He also used the structure, discussed above, which proceeds from head to foot, before moving to diseases and deficiencies affecting the whole body, adding a short list of antidotes at the end.

In general, the diversity in the organization of recipes in these treatises is striking. Pseudo-Apuleius (fourth century) organized his recipes in the Herbarius according to medical plant, while Sextus Placitus's collection (also fourth century) lists them according to beneficial substances derived from animals.44 Four fragments in Early New Persian written in Sogdian Script appear to be part of a recipe treatise arranged according to substances, or, at least, oils, similar to the Michigan Codex discussed above.⁴⁵ A short manuscript (Ms. Cairo 45060) dating from the sixth or seventh century and found "in a jar, buried in the floor of a monk's cell," offers a miscellaneous range of conditions, from eye disease to the draining of a cistern, conception, or leading someone astray, and may reflect the needs with which supplicants tended to confront the monk.⁴⁶ The basic structure of the Coptic recipes is again identical to that of the Talmud's verb recipe: For [condition] + therapy, with the therapy starting with a verb. Most of the very concise recipe books, however, adopted the top-down structure as a way of orientation, proceeding from there to diseases affecting the whole body, adding recipes that belonged in neither category in the end.

As the above examples show, recipe treatises were composed all around the Mediterranean and adjacent areas.⁴⁷ The geographical range

⁴³ Like other Latin treatises, it is stylistically inconsistent.

⁴⁴ On the *Herbarius*, see Schulze, *Die pharmazeutische Fachliteratur in der Antike*, 102, and the foreword to his recent edition and German translation by Kai Brodersen, *Pseudo-Apuleius Herbarius*. The *Herbarius* offers an index of diseases and deficiencies in a top-down manner with reference to the particular beneficial herb. On Sextus Placitus, see also Schulze, *Die pharmazeutische Fachliteratur in der Antike*, 106–107.

⁴⁵ Sims-Williams, "Early New Persian in Syriac Script," 362.

⁴⁶ Marvin Meyer, ed., Ancient Christian Magic: Coptic Texts and Ritual Power, Mythos: The Princeton/Bollingen Series in World Mythology (Princeton: Princeton University Press, 1994), 270.

⁴⁷ Further examples are Marcellus Empiricus, *De medicamantis* (Byzantium); Cassius Felix, *De medicina* (Cirta, North Africa); Theodorus Priscianus, *Euporiston* (books 1 and 3, probably North Africa); or a fragment in PGM VII, lines 193–214 (eight recipes, two variants, Egypt; see Schulze, *Die pharmazeutische Fachliteratur in der Antike*, 101–108). For PGM VII, see Hans D. Betz, *The Greek Magical Papyri, Including the Demotic Spells* (Chicago: University of Chicago Press, 1996), 112–124.

of the treatises and the recurring similarities in their structure make it very likely that someone would have collected recipes and created a Jewish-Aramaic *euporiston*, thereby following the mannerisms and needs of their time. Indeed, the time frame of the treatises is also fitting: the shorter ones all range from the third to the sixth centuries.

The conditions listed in the talmudic treatise seem to be a mixture of technical terms (e.g., zilhata [no. 2 in the appendix], shavriri [nos. 4-5], and shigrona [no. 26]); colloquial terms (e.g., "cooking" [no. 11], "arrow" [no. 16], and "sting" [no. 21]); and descriptive ones (e.g., "For the blood of the head" [no. 1] or "For blood that comes from the nose" [no. 6]).⁴⁸ The technical terms may be translations (and later corruptions) from Greek or Akkadian medical vocabulary, as both languages were spoken at some point in the Mesopotamian plain. In recipe no. 2, for example, tsilhata (צילחתא) seems to be derived from the root ts-l-h (צילחתא), "to cleave, split," which links the condition to the Greek term hemicrania, "half head." The term captures the feeling that people experience when suffering from a severe headache ("migraine"). Shavriri, on the other hand, is likely a corruption of Akkadian *sí-nu-ri* or *Sin-lurmâ*, a term referring to occasional blindness.⁴⁹ This presumption finds even further support in two Akkadian instructions on how to cure a patient from this very affliction, which use elements similar to the ones in talmudic therapies for "shavriri of the night" and "shavriri of the day." These elements concern the cord and the children (in recipe no. 4), the mention of a door and the placing of something into the patient's hand, which they should eat (in recipe no. 5). The condition and the therapies, however, underwent considerable change during the several hundred years that separate them.⁵⁰

The case of the Akkadian similarities certainly testifies to the local origins of these recipes, as Marten Stol pointed out. But they do not justify the assumption that the whole treatise is based on an Akkadian *Vorlage*, as has been proposed by Markham Geller.⁵¹ Evidence of a similar mix of Akkadian and Greek terminology and concepts is also present in the Mandaic *Book of the Zodiac (Sfar Malwašia)* and is likely the natural

⁴⁸ See the appendix for the recipe corresponding to the number.

⁴⁹ See Marten Stol, "Blindness and Night-Blindness in Akkadian," JNES 45, no. 4 (October 1986).

⁵⁰ E.g., the condition is specified as night blindness and day blindness, a distinction that cannot be found regarding this condition in cuneiform treatises. See Stol, "Blindness and Night-Blindness in Akkadian," 297. Moreover, the talmudic therapies do not smear anything in or on the eye, while both Akkadian instructions include this measure.

⁵¹ See Stol, "Blindness and Night-Blindness in Akkadian," 298, and Geller, "Akkadian Vademecum in the Babylonian Talmud."

consequence of a thorough investigation into a natural topic by people living in a diverse culture with a mixed heritage.⁵² Generally, most of the loanwords or cognates in the Talmud are of Akkadian origin: an estimated 4.6-4.7 versus 3.6-3.7 percent of Iranian origin and 2.0-2.1 percent of Greek origin.53 An exceptionally high percentage of Akkadian loans and calques is present in the vocabulary for local plants and trees, which form the bulk of the vocabulary used in the therapies.⁵⁴ Since the same names for plants and trees are used throughout the Talmud and not just in the recipes, they appear to have been part of the standard language and do not necessarily point to an Akkadian treatise as the basis of the talmudic one. Similarly, units of measurement and household items are, in the treatise as elsewhere in the Talmud, often Persian calques.⁵⁵ The recipes also make use of local goods, such as the "drinking cup from Mahoza" (no. 14), an oft-mentioned place in the context of rabbinic activity, or the typically Babylonian sauce kamka, made of vinegar or sour milk, which also finds its use (no. 17).⁵⁶ Rather than the translation or mere adaptation of an older treatise, the recipes appear to be local and recent but, like the rest of the texts assembled in the Talmud, broadly informed.

Not only ingredients and measuring vessels are culturally marked. The methods to prepare ingredients are bound to local customs as well. This is evident where ingredients and foodstuffs overlap and are thus intertwined with local food-preparation customs. Less evident are cases in which practical knowledge is transferred from the household to

⁵² See Mladen Popović, Reading the Human Body: Physiognomics and Astrology in the Dead Sea Scrolls and Hellenistic-Early Roman Period Judaism (Leiden: Brill, 2007), 74n23 and 108n205.

⁵³ See Theodore Kwasman, "Loanwords in Jewish Babylonian Aramaic: Loanwords in Jewish Babylonian Aramaic: Some Preliminary Observations," in *The Archaeology and Material Culture of the Babylonian Talmud*, ed. Markham J. Geller, IJS Studies in Judaica 16 (Leiden: Brill, 2015), 336.

⁵⁴ See Kwasman, "Loanwords in Jewish Babylonian Aramaic," 340–341. Interestingly, names for local fauna reveal an exceptionally high number of Greek calques (Kwasman, "Loanwords in Jewish Babylonian Aramaic," 359–361).

⁵⁵ See Kwasman, "Loanwords in Jewish Babylonian Aramaic," 341. To give some examples, *šustag* (hankerchief) is mentioned in recipe no. 21; *angustbān* (signet-ring, seal) in no. 31; *bārag* (horse) in nos. 30 and 31; and *ātrung* (citron, probably Middle Iranian) in no. 38. Recurring measures are the *anpaq*, the *kabīz*, and the *griv*.

⁵⁶ Mahoza is not the name of one city but of the five or, according to another source, seven cities forming the conurbation of Ctesiphon; see St. John Simpson, "The Land behind Ctesiphon: The Archaeology of Babylonia during the Period of the Babylonian Talmud," in *The Archaeology and Material Culture of the Babylonian Talmud*, ed. Markham J. Geller, IJS Studies in Judaica 16 (Leiden: Brill, 2015), 7. For *kamka*, see *DJBA*, see ".ccx". Other mentions include b. Avod. Zar. 35b, b. Pesah. 76a, and b. Hul. 112a.

medicine, or vice versa. A "rim of dough," for example, is used to keep a mixture of garlic, salt, and oil in place on the aching molar tooth (no. 9). Such a "ring of dough" also effectively separates two vessels when the impure vessel needs to be scalded in the pure one.⁵⁷ Thus, it appears that while the author of the talmudic *euporiston* was obviously aware of other medical treatises, he or, perhaps, she was genuinely interested in composing a local one.⁵⁸

Several authors of euporistic treatises explicitly state the purpose of their work. Some want to provide travelers with a literary first-aid kit (e.g., Pseudo-Pliny, Marcellus), while others want to make medical knowledge accessible to a broader public (Priscianus, Marcellus, Pseudo-Apuleius). The treatises of professional doctors, however, aimed not at informing the public but at providing friends – often patrons – sons, or students with basic medical knowledge (Oribasius, Serenus Sammonicus, Scribonius Largus). Since the recipes of the talmudic treatise do not express a special concern for injuries and diseases that are more likely to occur en route than at home, it does not seem to fall into that category.⁵⁹ Rather, the concise nature of the treatise, the use of colloquial language, and the absence of any surgical measures associate the treatise with those aiming to provide laypeople with access to therapies, thus granting them independence from doctors, a concern expressed in Priscianus, Marcellus, Pseudo-Apuleius, and Pseudo-Pliny.⁶⁰

- ⁵⁸ There is one gynecological treatise attributed to an otherwise unknown Metrodora, probably dating to the sixth century. See Laurence M. Totelin, "The Third Way: Galen, Pseudo-Galen, Metrodora, Cleopatra and the Gynecological Pharmacology of Byzantium," in Lehmhaus and Martelli, *Collecting Recipes*, 104 and 108. It seems, however, that attributions of treatises to women also occurred because this seemed more appropriate, as in the case of sex manuals. See Holt N. Parker, "Love's Body Anatomized: The Ancient Erotic Handbooks and the Rhetoric of Sexuality," in *Pornography and Representation in Greece and Rome*, ed. Amy Richlin (New York: Oxford University Press, 1992), 96. (Parker was imprisoned in 2016 for the possession of child pornography.) Somewhat more reliably, epitaphs and statues honor female doctors, who apparently worked side by side with their husbands or fathers, and several male authors give credit to women (Parker, "Love's Body Anatomized," 122–124).
- ⁵⁹ The recipes given in the *Medicina Plinii*, for example, address all kinds of sore feet, which are likely to occur when people walk a lot. Some address injuries that may result from a considerable amount of horseback riding. Interestingly, gynecological diseases are omitted, as if the author assumed that women would not travel, while some recipes for small children (e.g., teething) are present; see Kai Broderson, ed. and trans., *Plinius' kleine Reiseapotheke* (Stuttgart: Franz Steiner, 2015), 11–13.
- ⁶⁰ Absence of technical instruments is a distinct feature of euporistic treatises. See Meissner, Die technische Fachliteratur der Antike, 270.

⁵⁷ b. Avod. Zar. 76a-b.

The intent to instruct sons and students, however, may have been the reason why the composers of the Talmud included the treatise because the recipes, in their own way, enable people to care and judge for themselves. This intent appears to converge with the overall purpose of the Talmud, which generally discusses topics from different angles and leaves the final reasoning to the reader. The inclusion of medical recipes further supports the aspiration to polymathy and strengthens the link between the Talmud and the symposiac works mentioned in Chapter 1. These make equal use of medical knowledge, which they place into the mouth of doctors as well as lay-people.⁶¹ Indeed, one dialectic ("symposiac") intervention may point at how the composers saw the nature of the recipes and the people who use them:

... and if not, open a jug of wine in [the patient's] name.

Rav Aha son of Rava said to Rav Ashi: "If someone had a jug of wine he would not come before the master. Rather, he should become accustomed to eating morning bread, since it is beneficial for the entire body." (b. Git. 69b)

The composers let Rav Aha express concern about the costly nature of the therapy. People, it is implied, who prefer the free medical advice of a rabbinic sage over a physician's costly counsel obviously do not have money to buy a jug of wine. The composers thus subtly criticize the fact that the treatise does not live up to its promise of offering "simple and procurable recipes", since some therapies are simply not affordable to everyone. By way of correction, the composers subsequently refer to a baraita (now found in tractate Bava Metzi'a 107b) that lists a total of fourteen advantages of "morning bread" and suggest the patient should stick to this cheaper option.

CROSSING GENRES AND EXPANDING THE CLASSIFIABLE

Medical recipes were a recurring part of erudite literature in late antiquity. They had made their way from a specialized expert community into general knowledge. Educated people were expected to know about diseases and cures. There were several reasons for this change in approaching medicine or, rather, displaying knowledge. One was certainly the imperial and private sponsorship of "Greek heritage" by the Ptolemies, which turned several previously nonperformative arts, among them

⁶¹ See Rebecca Flemming, "The Physicians at the Feast: The Place of Medical Knowledge at Athenaeus' Dinner-Table," in *Athenaeus and His World: Reading Greek Culture in the Roman Empire*, ed. David Braund and John Wilkins (Exeter: University of Exeter Press, 2000), 478–479.

rhetoric and medicine, into public spectacles.⁶² Similar to the orators of the Second Sophistic, for example, Galen staged public anatomical performances.⁶³ Another reason is that the recipe, in its concise form, lent itself to the style of literary composition in the imperial period and late antiquity. Like the saying or maxim, it is a ready-made piece of information, an excerpt par excellence, so to speak, that can be used in the beginning of a story or inquiry into a topic, as part of a dialogue, or as part of the conclusion. While recipes can be observed to have been used as sayings and like maxims, they engaged in other literary and logical ways with their new literary contexts and seemingly inspired the reformulation of literary givens in the form of recipes.

The many alternative therapies sometimes stated for a single condition show that medicine was not perceived as static. Rather, attention was paid to the patient's age, temperament, temperature, bodily condition, and even character; some physicians also cared about the sex of the patient, the location, the season, or the lifestyle.⁶⁴ The choice of therapies enabled people to pick the appropriate one. Moreover, as Columella (first century) explains in his agricultural treatise *De re rustica*, region and season may also be a problem and impede the procurement of a certain ingredient.⁶⁵ Case stories that sometimes follow a recipe in the Talmud to prove its efficacy are in line with this ideological and sometimes inevitable alteration and adaptation of ingredients: They never make use of the exact same therapy given in the recipe. A certain Ravin from Naresh, for example, is said to have cured Rav Ashi's daughter of intestinal pain with a potion made with only half the number of peppers stated in the preceding recipe (b. Git. 69b; recipe no. 20).⁶⁶

⁶² See Francesca Schironi, "Enlightened Kings or Pragmatic Rulers? Ptolemaic Patronage of Scholarship and Sciences in Context," in *Intellectual and Empire in Greco-Roman Antiquity*, ed. Philip R. Bosman (London: Routledge, 2019).

⁶³ See Daryn Lehoux, What Did the Romans Know? An Inquiry into Science and Worldmaking (Chicago: University of Chicago Press, 2014), 6–7; on the spectacles, see specifically Katharina Luchner, Philiatroi: Studien zum Thema der Krankheit in der griechischen Literatur der Kaiserzeit, Hypomnemata 156 (Göttingen: Vandenhoeck & Ruprecht, 2004), 77–87.

⁶⁴ See Galen, *Glaucoma* 1.1, and the Hippocratic Corpus in *Epidemics* 1.3.10. On lifestyle, see Celsus, *De medicina*, proem. 52–53.

⁶⁵ Rust. 7.7-8.

⁶⁶ Other examples include the following: in b. Yoma 84a, the mother of Abba ben Martha (or Abba Minyumi) uses gold/copper instead of straw; in b. Shabb. 109b, the mother of Rav Aḥadvoi bar Ami reduces the amount of ingredients (she takes only a fifth) and additionally places a brick in the oven; and in b. Shabb. 110b, an Arab (*tayy'a*) enhances the recipe with sleep and warmth.

Thus, we see that recipe medicine was not static but, rather, considerate of the individual patient on a case-by-case basis. This type of medicine corresponds on a logical level to the form of legislation adopted in rabbinic literature, which is also case based. Casuistic law, as opposed to principle-based law, attends to the need of the individual and, therefore, has its own advantages.⁶⁷ The recipes thereby match the premises governing the Talmud on a logical level in the way they have to be adapted and decided but also on a compositional and quite physical level as distinct units that can be used as building blocks in the production and deduction of arguments, like sayings or maxims. Similar hermeneutics were therefore applied to the recipes by authors of the texts compiled in the Talmud, but also by the Talmud's composers.

Therapies, then, were individually adapted. But what about conditions? A distinct linguistic marker seems to indicate that conditions were indeed sometimes altered to meet individual circumstances. The way in which recipes distinguished between general conditions and more specific, individual ones can be illustrated based on the Pseudo-Galenic *Euporista II* (approximately fourth century) and the gynecological treatise *Metrodora* (approximately sixth century). Both treatises generally introduce their recipes with "for" (*pros*, $\pi \rho \phi_s$).⁶⁸ Thus, the recipe "For the damaged virgin" in *Metrodora* similarly starts with said *pros* – the condition refers to virgins in general. In contrast, a recipe in *Euporista II* concerns not "damaged" virgins in general but virgins damaged by rape, and it reads: "The woman who was raped that she may appear like a virgin [again]." The formulation of the condition has been changed from "For XY" to the more individualizing "The woman who"⁶⁹

A similar linguistic turn is perceivable in the Talmud regarding very specific afflictions but also conditions that result from someone's behavior. This differentiation between general and individual afflictions allows for an expansion of the catalogue of treatable conditions. Since the purpose of adapting the condition is to individualize, the introduction is sometimes further adapted. Thus, we find "The one who ..." used for

⁶⁷ This is the explanation of Javolenus, a Roman senator and jurist of the first century, who cautioned against the dangers of rigid principles; see Leib Moscovitz, *Talmudic Reasoning: From Casuistics to Conceptualization*, *TSAJ* 89 (Tübingen: Mohr Siebeck, 2002), 92. Moscovitz himself remains skeptical about this explanation, since "many tannaitic laws were apparently not motivated by functionalist considerations" (92).

⁶⁸ On the dating of these works, see Totelin, "Third Way," 108 and 104, respectively.

⁶⁹ Ως γυνή ή ..., see Totelin, "Third Way," 111-112, for these recipes.

male patients or people in general suffering from very specific conditions but also "The woman who ..." or "The nursling who"⁷⁰

A list of seven such recipes addressing the nursling appears in tractate Shabbat 134a, while another list of seven recipes, five addressing conditions affecting men or men and women, and two recipes concerning only women, are found in tractate Shabbat 109b-110a. As I have argued elsewhere, the list of recipes that address the newborn seems to have a nonhuman empirical basis. Most likely, the recipes were developed not for newborn babies but for young goats.⁷¹ It may be asked, therefore, if recipes with individualizing conditions such as "The one who …" are situated in a somewhat liminal space between tested medicine and projected, probable, and hermeneutic medicine. This notion can be illustrated with an analysis of the other list of seven recipes in Shabbat 109b-110a. The number seven already betrays the artificial and artful nature of the list and provides the recipes with a certain cosmic integrity.⁷²

The seven recipes in this passage can be summarized as concerning, roughly speaking, "problems with snakes":

- 1. The one who swallows a snake.
- 2. The one who was bitten by a snake.
- 3. The one who has a snake wrapped around him.
- 4. The one of whom a snake wants to take possession/is jealous.
- 5. The one after whom a snake is running.
- 6. The woman who has seen a snake and does not know whether [the snake] has set its mind on her or not [in a sexual manner].
- 7. The woman who is mounted by a snake.

Only one of these conditions is paralleled in other recipe books, namely, "The one who was bitten by a snake." And indeed, apart from the different introductory formula for the condition – "The one who …" instead of "For …" – the structure of this particular recipe is identical with the structure of verb recipes. I therefore included it in the reassembled Aramaic treatise, from which the composers most likely took it (no. 44). The composers must have adapted the introductory formula for the recipe to match this snake list.

⁷⁰ איתתא האי, and ינוקא האי, respectively.

⁷¹ See Monika Amsler, "Babies or Goats?! A Critical Evaluation of b. Shabb. 134b and the Question of the Relationship between Veterinary and Human Medicine in the Talmud," in *Female Bodies and Female Practitioners in the Medical Traditions of the Late Antique Mediterranean World*, ed. Lennart Lehmhaus (Tübingen: Mohr Siebeck, forthcoming).

⁷² See Lehoux, What Did the Romans Know?, 176–199, esp. 192, on numerology as a theory of broad applicability in late antiquity, and Catherine Michael Chin, "Cosmos," in *Late Ancient Knowing: Explorations in Intellectual History*, ed. Catherine Michael Chin and Moulie Vidas (Oakland: University of California Press, 2015), on cosmic symmetry.

The recipe against snake bite, and the first on the list, the one against swallowing a snake, are both appended with a story that seemingly illustrates their actual implementation and effect. While the recipe for the snake bite needs to be enhanced with a clause to match the story (2b, below), the stories that follow on the recipe against the effects of swallowing a snake (1a–c, below) implement the recipe as it has been stated, a rare and singular case, as proof stories normally deviate in some details from the prescribed therapy (see discussion above). Most likely, recipe 1a was derived from the stories (1b–c, below) by the composers of the Talmud in order to create a list of seven, rather than that the recipe was proven by the stories.

"Problems with Snakes" I

- 1a. The one who swallows a snake should be fed with dodder in salt and then run three [Roman] miles (מילי).
- 1b. Rav Shimi bar Ashi⁷³ saw a certain man who swallowed a snake. He appeared to him as a horseman (פרשא). He gave him dodder in salt to eat and made him run three miles in front of him. And [the snake] came out of him, piece by piece.
- 1c. There are also those who say that Rav Shimi bar Ashi swallowed a snake. Elijah came and appeared to him as a horseman. He gave him dodder in salt to eat and made him run three miles in front of him. And [the snake] came out of him piece by piece.⁷⁴
- 2a. The one who was bitten by a snake: Bring (*leiti*) the embryo of a white female donkey, tear it, and place it [on the bite].
- 2b. However, these words apply only if [the jennet] was not found to be *terefah*.
- 2c. There was a Bar Qasha in Pumbedita who was bitten by a snake. There were thirteen white donkeys in Pumbedita, and they tore them all open, but each one was found to be *terefah*. There was [a donkey] left in the vicinity of Pumbedita. But by the time they went there [to fetch it], a lion had eaten it.
- 2d. Abaye said: "Maybe the snake of the rabbis bit him, as it is written: 'The one who tears down a fence shall be bitten by a snake'" (Eccl. 10:8) (b. Shabb. 109b–110a).

The straightforward transformation of the content of stories 1b and 1c into a recipe (1a) clearly reflects the work of the composers: The case of someone swallowing a snake is unheard of in medical treatises and is at best a singular and unlucky case, therefore suitable to be introduced by the formula "The one who." After having culled their excerpts relating to snakes for this commentary, the composers had several recipes in front of

⁷³ Ms. JTS Rab. 501:1–6 has "Rav Hiyya bar Ashi."

⁷⁴ Elijah is reported in 1 Kgs. 18:46 to have fled King Ahab from the Carmel all the way to Jezreel.

them and two stories mentioning a cure. It was considerably easy to transform the information they provided into a recipe, thereby making it a list of seven recipes.⁷⁵ The recipe against a snake bite (2a) could be made to match the story (2c) with the addition of the condition "if [the jennet] was not found to be *terefah*."

Similarly unparalleled in other treatises is the third condition on the list, a snake wrapped around a person, or conditions 4–7, which appear to envision a personified snake with intention and will, pursuing men and raping women. Rather than reflective of a medical school or empirical expertise, the recipes are apparently the result of an exceptical tradition that is accustomed to considering even the most unlikely and even paradoxical cases. In this vein, for example, we find in the Talmud the discussion of a case in which someone intends to thrust a knife into a wall and, in so doing, accidentally slaughters an animal in the proper way.⁷⁶ This is intellectual exercise par excellence, stretching the bounds of possibility toward the plausibly paradoxical.

Recipes 4–7 become indeed plausible if their ideas about snakes are examined as being constructed like the characters of Solomon, Ashmedai, and Benaiah (Chapter 4), that is, based on an inquiry into the literary biography of snakes. Thus, if we turn to the biblical book of Genesis, we find the exegetical reasons for some of the conditions and the basis for their plausibility. According to Genesis 3:1-6, a snake seduced Eve into eating the fruit of the forbidden tree. This snake had apparently been able to walk, since God cursed it with crawling on its belly after the incident (Gen. 3:14). From this information it can be inferred that snakes have intention and will, as well as "cursed feet." They target humans in order to seduce them into doing something against God's command. Rabbinic literature repeatedly makes the case that the snake seduced Eve in a sexual manner, since the verb used in Genesis 3:13, when Eve explains to God what the snake did to her, allows such an interpretation.⁷⁷ Accordingly, rabbinic hermeneutics posit that the snake was punished because it wanted to mate with Eve; it became lascivious when it saw Adam and Eve copulate and then seduced Eve while Adam was sleeping; and, finally, it left a foul smell in Eve after copulating with her.78

⁷⁵ This aspiration is similarly observable in the list of seven recipes concerning the newborn in b. Shabb. 134a; see Amsler, "Babies or Goats?!"

⁷⁶ b. Hul. 31a; cf. also the cases of accidental intercourse in b. Yevam. 54a.

⁷⁷ The root is נשא.

⁷⁸ The snake wanted to mate with Eve (t. Sotah 4:17–18); the snake seduced Eve while Adam was sleeping (Gen. Rab. 18:6–19:3); after copulating with her, the snake left a foul smell in Eve (b. Shabb. 146a // b. Yevam. 103b).

Given this information, it becomes more plausible that a snake would be jealous of a man and pursue him, most likely because of his wife. This brings us to the fourth recipe on the list:

"Problems with Snakes" II

The one of whom a snake is jealous: If there is a friend with him, he should ride on him for four cubits.

And if not, he should jump across a channel.

And if not, he should cross a river at night and place his bed on four jugs and sleep under the stars. He should bring four cats and tie them to the four legs of his bed.

He should then bring papyrus reed and throw it there so that the cats will hear [the snake] when it approaches and eat it. (b. Shabb. 110a)

The snake is depicted here as having a very good sense of smell: It pursues the man just like a hound pursues its prey. It is, therefore, enough that the chased man takes his feet off the ground, or jumps over or walks through water, to distract the reptile. This characterization appears to be a rather peculiar understanding of the snake's senses, comparable to Aelian's characterization of the serpent as having very good eyes and hearing. Yet Aelian did not derive this information from observation but from a story, and the same may be true for the talmudic recipe.⁷⁹ The idea that cats eat snakes, which is expressed in the third and last therapy of this recipe, is found in, maybe derived from, a talmudic story that claims that cats are immune to snake venom.⁸⁰

Recipe 5 clearly focuses on the snake in Genesis as well. The condition requires a snake with legs who can "run" after a man: "The one after whom a snake is running: He should run on buckets." An alternative therapy clearly invokes God's curse, which made the snake lower than all the animals of the field, allowing man to trample on its head (Gen. 3:14). The spell turns the field into the courtroom of the biblical God, the judge of the earth: "And if not, say to him [the snake]: 'The host of the judge of the earth is the field!'"⁸¹

⁷⁹ Aelian (*De natura animalium* 6.63 [Scholfield, LCL]) tells the story of the friendship of a young man and a snake in which the snake saves its friend from brigands due to its extraordinary ability to hear and see. Aelian turns the qualities of this snake into a universal quality of all snakes: "Now it seems that the snake has the sharpest sight and the keenest hearing of all creatures."

⁸⁰ b. Pesah. 112b and b. Shabb. 128b.

⁸¹ This alternative therapy is present only in Mss. Vatican 108 and JTS Rab. 501:1–6. But the formulation, especially the appeal to the judge, seems too much in agreement with other late antique spells to be a later addition.

The last two recipes obviously relate to the snake's sexual inclination toward women, derived from the primordial snake's seduction of Eve.

"Problems with Snakes," III

The woman who has seen a snake and does not know whether [the snake] has set its mind on her or not: She should remove her clothes and throw them in front of the snake. If [the snake] wraps itself around the clothes, it has set its mind on [the woman], and if not, it has not set its mind on her.

What is the solution?

Have intercourse in front of [the snake].

And there are those who say that this will only increase [the snake's] passion.⁸² Rather, she should take [pieces] from her hair and nails, throw them in front of [the snake], and say to it: "I am menstruating!"⁸³

The woman who is mounted by a snake: Make her step on and sit on two jugs. Bring fatty meat and throw it on coals. Bring a basin with cress and spiced wine and place it there [underneath the woman] and stir. She should hold tongs made of iron in her hands so that she can catch the snake when it smells [the smell of the essence and comes out of her]. She should catch it and throw it into the fire and burn it.

And if not, it will mount her again. (b. Shabb. 110a)

The first of the above recipes again shows to what extent these texts are the result of a careful study of sources. Thus, people who are aware of the story now recorded in Genesis Rabbah know that intercourse in front of the snake will only make it more lascivious. That story, mentioned above, tells of Adam and Eve's intercourse in front of the snake, which ignited the whole problem. The second therapy basically agrees with Pliny's recipe for repelling snakes: burnt female hair (*Natural History* 28:20). The burnt hair is supported by the woman's cry that she has her period. Interestingly, unlike the demon Ashmedai, who was depicted as having no issues with entertaining sexual relationships with menstruating woman (Chapter 4), the snake is thought to withdraw from a menstruating woman. The therapy in the second recipe suggests fumigation, as is also suggested for gonorrheal issues (no. 36, in appendix). It harkens back to the idea that snakes have a good sense of smell.

⁸² On the sexualization of the term אר see Ishay Rosen-Zvi, *Demonic Desires: "Yetzer Hara" and the Problem of Evil in Late Antiquity*, Divinations: Rereading Late Ancient Religion (Philadelphia: University of Pennsylvania Press, 2011), 102–119.

⁸³ השתוא אנא, an amalgam of Persian and Aramaic (see Shai Secunda, *The Iranian Talmud: Reading the Bavli in Its Sasanian Context*, Divinations: Rereading Late Ancient Religion [Philadelphia: University of Pennsylvania Press, 2014], 39 and 169n43). The terminology appears also in b. Ta'an. 22a and b. Avod. Zar. 18a.

The idea that snakes would rape women is also repeated in other works. Plutarch and Aelian both report such incidents and testify to the fact that the rabbinic idea of snakes was not an isolated case.⁸⁴ Aelian located his report, perhaps tellingly, in the land "of the Judeans or Edomites."⁸⁵

Aelian's compilation generally follows the Aristotelian tradition of writing down things "worthy of report, not because extraordinary, but because significant in the philosophical acquisition of knowledge."⁸⁶ Bestiaries have this in common with collections of wonders and miracles, so-called paradoxographies. With approximately eighty known authors of straightforward paradoxographies and many mixed formats, the genre seems to have constituted a "thriving literary field" from Hellenistic times onward.⁸⁷ Although primarily focusing on *thaumata*, wonders, these works were not intended to amaze people but, rather, to collect and systematize what the modern mind would call "noteworthy natural phenomena." Some authors, such as Phlegon of Tralles (second century), also screened the material for medical knowledge or unheard-of afflictions.⁸⁸ Klaus Geus and Colin Guthrie King provide a good example of this condensation of medical knowledge derived from paradoxographical collections that can be traced from Aristotle's *History of Animals* onward:

The marten is about the size of a small Maltesian lap-dog, white and hairy on the underside, and in character nasty like the weasel; even if it becomes domesticated it will still ruin hives, for it loves honey. It is a bird-eater, like the cat. Its sexual organ is bony, as has been said, and the penis of the marten seems to be a remedy for strangury; they administer it in pulverized form. (9.6, 612b10–17)

Compare the following paradoxographical extracts:

It is said that the sexual organ of the marten is not similar to the nature of other animals, but that it is rigid throughout like bone, no matter what state it happens to be in. They say that it is one of the best remedies for strangury, and that it is administered in pulverized form. (Pseudo-Aristotle, *Mir. ausc.* 12)

⁸⁴ Plutarch, *De sollerita animalium* 972E, and Aelian, *De natura animalium* 6.17.

⁸⁵ Aelian, *De natura animalium* 6.17.

- ⁸⁶ Roger French, Ancient Natural History: Histories of Nature, Sciences of Antiquity (London: Routledge, 1994), 14.
- ⁸⁷ See Klaus Geus and Colin Guthrie King, "Paradoxography," in *The Oxford Handbook of Science and Medicine in the Classical World*, ed. Paul T. Keyser and John Scarborough (New York: Oxford University Press, 2018), 438.
- ⁸⁸ See Julia Doroszewska, "Beyond the Limits of the Human Body: Phlegon of Tralles' Medical Curiosities," in *Medicine and Paradoxography in the Ancient World*, ed. George Kazantzidis, Trends in Classics – Supplementary Volumes 81 (Berlin: de Gruyter, 2019).

The sexual organ of the marten [is said] to be bony; it seems to be a remedy for strangury. (Antigonus, *Historiae mirabiles* 108)⁸⁹

The last statement could easily be turned into a systematic recipe (e.g., For strangury: Take the sexual organ of the marten). Philip Thibodeau has observed how authors of agricultural treatises took material from paradoxographies and turned them into practical recipes. As an example, he discusses *bougonia*, the idea that bees could be born from the carcass of an ox. The paradoxographer Antigonus of Carystus (third century BCE) noted that a decomposing ox buried in sand had produced bees in Egypt. This information was turned into a recipe by Democritus in his *Geoponica*: "If any beekeeper loses his hive, he should build a small, airtight wooden house and place a freshly slaughtered ox inside, surrounding it with fragrant herbs; after a few days the flesh will dissolve and turn into bee larvae, then into bees" (15.2.21–36).⁹⁰ Another transformation from paradoxography (also Aelian's) into rabbinic stories and a recipe now collected in the *Syriac Book of Medicines* was discussed in Chapter 1.

The list with seven therapies for conditions caused by snakes is thus best understood in relation to both the rabbinic interpretation of the properties of the biblical snake and paradoxography. The way in which information about the characteristics of snakes was obtained is again reflective of "inquiry into literary character/history" described in the previous chapter. This inquiry created the picture of the snake as an animal with human desires and astonishing sensory capacities. The stories, which, in their present position in the talmudic text, prove the efficacy of the preceding recipe, are in some cases the cause, rather than the result, of these very recipes. In the Talmud and elsewhere in ancient literature, recipes were turned into stories, and stories were turned into recipes.⁹¹

"The one who ..." recipes open a window into how established catalogues of conditions and other "things" were extended and supplemented. In the case of the recipes, the trajectory of this activity is not just immediate but also prognostic: What happened could happen again. What happened to Adam and, especially, Eve, could happen again. This medicine is, therefore, anticipatory and precautionary. Then again, it is also very much text oriented and dependent on basic rhetorical and hermeneutical methods.

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⁸⁹ Geus and King, "Paradoxography," 435.

⁹⁰ Translated by Philip Thibodeau, "Ancient Agronomy as a Literature of Best Practice," in Keyser and Scarborough, Oxford Handbook of Science and Medicine in the Classical World, 476.

⁹¹ See Thibodeau, "Ancient Agronomy," 476.

CONCLUSION

The recipes collected in the appendix to this chapter are spread throughout the Talmud. They were used by the composers in the most suitable places according to keywords and were placed into the mouths of rabbis or cited anonymously. Interestingly, each recipe is only used once in talmudic commentaries in contrast to many dicta, some of which have been used multiple times. This is again indicative of a highly organized datamanagement system in which already-used excerpts were tagged accordingly. This feature connects with David Weiss Halivni's observation that sayings are usually only attributed to "the master" (Aram. mar) if they had already been used.⁹² Similarly, Athenaeus kept track of the passages he had previously used, either calling attention to the versatility of a particular text's content or referring in an anaphoric manner to other texts by the same author he had already used.93 Julius Africanus was also perfectly capable of referring back to already-used material with terms such as "elsewhere" or "as shown previously."94 Unlike maxims or sayings, which may make different points in different contexts, a recipe makes one and the same point in any given context. It is therefore unnecessary to repeat it. Moreover, it is unlikely that the recipes were subject to school activity, which may be responsible for the reuse of the same maxim in several different contexts. Rather, the composers of the Talmud were the ones to use the treatise associatively in the form of excerpts.

The stereotypical character of many medical recipes in b. Git. 68b–70a is conspicuous, and the passage has long been identified as an independent source. This chapter has investigated the passage in accordance with the suggestions made in the previous chapters and found that the composers of the Babylonian Talmud worked with excerpts from distinct sources, which they associatively mixed and matched. Thus, while I acknowledge that the bulk of the passage is an independent source, a medical treatise, I pointed to the presence of excerpts external to it with which the composers complemented the longer excerpt, either associatively and

⁹² See David Weiss Halivni, *The Formation of the Babylonian Talmud*, trans. Jeffrey L. Rubenstein (Oxford: Oxford University Press, 2013), 46–47.

⁹³ Christian Jacob, "Athenaeus the Librarian," in Braund and Wilkins, *Athenaeus and His* World, 107 and reference at 552n199.

⁹⁴ E.g., fragments F12.2 line 119; F12.11 line 38; F12.12 lines 48–49; F12.14 line 24; see Martin Wallraff, Carlo Scardino, Laura Mecella, and Christophe Guignard, eds., *Iulius Africanus Cesti: The Extant Fragments*, trans. William Adler, Die Griechischen Christlichen Schriftsteller der ersten Jahrhunderte Neue Folge 18 (Berlin: de Gruyter, 2012), xxii and xxiin73.

supplementarily or to maintain the overall impression of an ongoing conversation. To disentangle the different excerpts, I focused on the literary structure of the most frequent recipe type in the Gittin passage, which I called the verb recipe, because the part with the therapy is introduced by a verb (usually "bring"). Based on comparable late antique medical treatises of simple remedies (*euporista*), some of which even use the same literary structure ("For X bring Y ... and if not bring Z"), the verb recipes were shown to belong to the same Jewish Babylonian Aramaic *euporiston*. The collected recipes match the array of conditions mentioned in other treatises fairly well.

The recipes that are somewhat at the fringe of this treatise with structures that are also present in rabbinic dicta, those with individualizing conditions, further reflect the literary education discussed in the previous chapters. Relying heavily on prior sources, they engage with what happened and how it should be cured. By so doing, the recipes simultaneously explore what could happen based on what has happened once in their sources. The sages, like others, used ancient texts, in their case especially the Bible, to predict the medical future. Taking medical recipes as a template, these prognostic conditions enrich and enlarge the possibilities of the curable by inquiring into texts. Again, we see the background of progymnasmatic training, which taught students to inquire into literary and other witnesses.