AUFSTIEG UND NIEDERGANG 
DER RÖMISCHEN WELT 
(ANRW) 
GESCHICHTE UND KULTUR ROMS 
IM SPIEGEL DER NEUEREN FORSCHUNG 

TEIL II: PRINCIPAT 

BAND 37: 
PHILOSOPHIE, WISSENSCHAFTEN, TECHNIK 

3. TEILBAND: 
WISSENSCHAFTEN 
(MEDIZIN UND BIOLOGIE [FORTS.]) 

HERAUSGEGEBEN 
VON 
WOLFGANG HAASE 

WALTER DE GRUYTER · BERLIN · NEW YORK 1996
Selected Elements of Talmudic Medical Terminology,
with Special Consideration to Graeco-Latin Influences and Sources

by Samuel S. Kottek, Jerusalem

Contents

Introduction .................................................. 2912
I. Greek Influences on Public Health: The Bath-House ........................................ 2915
II. Names of Diseases of Obvious Greek Origin ......................................................... 2918
III. One Typical Though Problematical Case: Askara ...................................................... 2920
IV. Other Diseases and Symptoms ................................................................................. 2922
V. Names of Remedies and Dietary Items ...................................................................... 2926
VI. Varia ............................................................................................................................ 2929
VII. Conclusion ................................................................................................................... 2930

Introduction

A distinction is usually made in traditional Judaism between the Written Law (Torah she-bi-khetav) and the Oral Law (Torah she-be'al-peh). The first term refers to the Pentateuch, the five books written down by Moses, whereas the second one comprises the Talmud, a vast corpus that was compiled during a long period covering some seven centuries (2nd century BCE to 5th century CE). Torah means 'teaching', or 'instruction', and Talmud may be rendered by 'learning', or 'study'. There is obviously a close relationship between both terms, with, however, a slight difference, the Torah being rather perceived as a doctrine and the Talmud like a body of learning.¹

The Oral Law was first crystallized in the text of the Mishnah which was edited toward the end of the second century CE. This basic text was then


¹ We mean to say that the Torah represents the essential law whereas the Talmud is more like the minutes of generations of scholarly studies of the law.
actively studied, commented upon and expanded in Palestine and in Babylonia. The first version is called (somewhat inaccurately) the Jerusalem Talmud, the other — much more developed — the Babylonian Talmud.2

The Talmud is essentially a compilation of rabbinic discussions. These are mainly based on legalistic problems, but the editing was in no way restrictive. Side-line discussions, enlightening examples, experiments or hypotheses are recorded. Ethical or homiletical remarks are not overlooked. The Talmudic sages were curious and eager to learn and discuss anything related to life, therefore medical lore was not strange to them. Several sages showed a particular interest, and acquired a real expertise in such matters, and a special mention of Mar Samuel called the astronomer and/or the physician is here in order.3

Unfortunately, medical — or pharmacological, or hygienic — data are seldom treated systematically. They usually remain vague, even problematic. Descriptions are minimal. There is no chapter in the Talmud devoted in particular to medicine, although it may be remarked that the Tractate Hullin is very rich in anatomical details (on animals) and that in the Tractate Niddah a wealth of gynecological details can be found. Particularly noticeable is the fact that the Rabbis often based or exemplified their discussions on actual case-studies (ma’ase she-baya). However skeletal and imprecise these cases may seem to us, they do provide a precious documentation on this period. This documentation is based on the knowledge of the learned, as well as on popular beliefs, folklore and superstitions. A quite sizeable amount of data is openly of non-Jewish origin. Encounters with opinions of non-Jews are frequently mentioned, such as (Roman) matrons4 (matrona, matronita), Roman soldiers (stratiot = Gr. stratiiotèes)5 or dignitaries (adôn). Much has been written on the alleged discussions between the ultimate editor of the Mishnah, Rabbi Judah the Prince and the Emperor Antoninus — even biological issues were raised. The learned Rabbi was not impervious to Stoic-Platonic views on the specific issue of the foetus’s

2 The Jerusalem Talmud was completed in the fifth, the Babylonian version in the sixth century. Another corpus that will occasionally be cited in our study is the Midrash [also from a root meaning, to study, to investigate]. The Midrash is an exegesis of Scriptures and must also be divided in two. The smaller portion is halakhic (i.e., deals with the law), much of it has been lost. The homiletical part is what is more generally called Midrash; its historical sources are just as ancient as those of the Talmud, but there were constant additions well into the Middle Ages.

3 Mar Samuel (c. 165—c. 257) headed the famous Talmudic Academy of Nehardea in Babylonia. He was trained in Palestine. We do not know where he acquired his vast knowledge in astronomy, calendric science and in medicine. He was convinced that most diseases are caused by noxious effects of the air and the climate, and stressed the foremost importance of cleanliness and a regular mode of life. His medical notes, advice even experiments are numerous. See Fred Rosner’s essay ‘Jewish Medicine in the Talmudic Period’, in this volume (ANRW II, 37,3), pp. 2886–2894, esp. 2885–2887.

4 These “matrons” were usually the wives of Roman dignitaries such as governors or rulers. They are mentioned in both Talmud and Midrash.

5 Stratiiotèes is a term used for professional soldiers in Ptolemaic and Roman Egypt (Liddle & Scott, Greek-English Lexicon). Stratiot is mentioned in the Midrash: Ex. Rabbia 15:22. In other places it is spelled estratiot. Sometimes it clearly designates officers.
animation.\textsuperscript{6} Be this as it may, it is less the acceptance of pagan opinions by the Rabbis that is of importance to us, than the dialogue, the exchange of views recorded in the Talmud, even if these encounters, as some scholars argue, actually never took place. The record is in this case more meaningful than the historical certainty of the meeting.

The language used in the Talmud is the Eastern Aramaic dialect — in the case of the Babylonian version, and the Galilean Aramaic dialect — as regards the "Jerusalem" Talmud. There are however in both redactions whole passages that were recorded in Hebrew, usually for no obvious reason. Clearly, through a period of seven centuries, the spelling and even the exact meaning of words and expressions eventually changed. Even in the Mishnah it happens that technical terms were unclear to the ultimate editor, Rabbi Judah. Much more so, the sages of the Talmud often ask themselves what exactly the real meaning of terms used in the Mishnah is, several opinions\textsuperscript{7} being sometimes confronted.

Technical terms are often - even in modern times - adopted from foreign languages. It would seem logical to surmise that in the Babylonian Talmud most foreign terms were taken from other Aramaic dialects, or from the Akkadian or Persian, whereas in the Jerusalem Talmud they were taken from the Greek (or, to a much lesser extent, from the Latin). Things were however much more complicated and intricate. Babylonian and Palestinian scholars constantly exchanged information, the sages travelled in both directions, and Greek was not foreign to the Babylonian diaspora.\textsuperscript{8}

Another problem related to the origin of technical terms is the dating of Talmudic statements. Here again things are much more problematic than it seems at first sight. Although most statements are authored by a sage whose identity and biography are known, they are frequently ascribed to an earlier scholar,\textsuperscript{9} who may well have not been the first one to hold this opinion. It is therefore very difficult and often impossible to ascertain at which historical period a technical term was introduced in the Talmudic corpus, by whom, and with what original meaning.

Moreover the many generations of manuscripts of the Talmud that preceded the first printed edition of the whole Babylonian Talmud by DANIEL BOMBERG (Venice, 1520–23), allowed many alterations of such terms that


\textsuperscript{7} "Several opinions" — each party often basing its argument on a different reading of the term under discussion.

\textsuperscript{8} There are however, at least relatively to the number of words used, many more terms of Greek origin in the Palestinian (i.e., Jerusalem) Talmud than in the Babylonian version. On the other hand, there are a number of terms of Greek origin that appear only in the Babylonian Talmud.

\textsuperscript{9} "To an earlier scholar", usually the teacher, or the head of the Academy. In several instances four or five names of former authorities holding the same opinion are mentioned.
were strange and unintelligible to most of the copyists.\textsuperscript{10} It even happened that the Talmudic text was corrected in order to be consistent with much later commentaries, which could eventually cause serious damage to the reliability of the text. It occurred not infrequently that the Rabbis based their discussions of the Mishnah on two discordant versions of the text.

These are but a selection of the many problems that arise when dealing with Talmudic medical terminology. Moreover, the writer of these lines is not a trained philologist, but a historian of medicine — who has however taken some advice from experts in Hebrew/Aramaic philology. Neither is he a classicist nor a specialist of ancient medicine, but he has consulted such specialists and benefited from their remarks. The sources that cannot be overlooked in such a research, besides the Aramaic and Chaldean dictionaries (J. \textsc{Levy}, M. \textsc{Jastrow}, et al.), are mainly \textsc{Samuel Krauss}, Griechische u. Lateinische Lehnwörter in Talmud, Midrasch u. Targum, mit Bemerkungen von \textsc{Immanuel Löw}, Berlin (1899) — a work that has been criticized\textsuperscript{11} but remains very stimulating, and the classical work of \textsc{Julius Preuss}, Biblisch-talmudische Medizin. Beiträge zur Geschichte der Heilkunde und der Kultur überhaupt, Berlin (1911) — still cited in any paper or work dealing with Talmudic medicine.

\textsc{Stephen Newmyer}, speaking as a distinguished classicist, correctly stressed that the adoption of a foreign technical term only indicates a certain familiarity with foreign lore. It does not bring evidence to the fact that the theoretical knowledge or science related to this term was adopted by the Talmudic sages.

\textbf{I. Greek Influences on Public Health: The Bath-House}

The Hebrew term \textit{merhaẓ} (from \textit{rahaẓ} = to wash), or \textit{bêt merhaẓ} (= house of bathing) is used frequently in both Mishnah and Talmud. An equivalent of

\textsuperscript{10} We do not intend to explain in detail the changes and alterations that have taken place. It is also beyond our expertise to forward in each case the exact linguistic transformations that took place when Greek or Latin terms were adopted — or in later transcriptions. Our aim is to point out relationships between cultures and languages, not to explain them in detail.

\textsuperscript{11} The remarks of \textsc{Immanuel Löw} are of major importance. Moreover, later philologists tried harder than \textsc{Krauss} to find semitic sources for some terms, where the Greek origin was less obvious. On the actual value of what \textsc{Krauss} called a \textit{Lehnwort}, see \textsc{Stephen Newmyer}'s essay in this volume, p. 2900 with note 14. Other lexicographic sources still useful, though critically used by later authors, are \textsc{Buxtorf}'s Lexicon Chaldaicum (Basle 1640), the Arukh Completum (ed. A. Kohut, Vienna 1878—1892) and its Addimenta, and J. \textsc{Fürst}'s Glossarium Graeco-Hebraicum (Strassburg 1890). Among modern researchers who have touched on medical terminology, we only mention \textsc{D. Sperber}, Essays on Greek and Latin in the Mishna, Talmud and Midrashic Literature (Jerusalem, 1982). See also note 110, below. References to \textsc{Preuss}' work should be checked in the English translation. See \textsc{J. Preuss}' Biblical and Talmudic Medicine, trans. and ed. by \textsc{Fred Rosen}, New York: Sanehedrin Press (1978).
Greek origin is Βέ βάνε — here βάνε is a contraction of the Greek balaneion (or the Latin balneum). The bath-keeper is called balān, or banai (from Gr. balaneýs). This was one of the professions considered by Talmudic sages as problematic, due to the frequent contact with women. Thus a balān was not eligible to the administrative board of the town. Among the employees of the bath-house, the most frequently mentioned is the olier (Gr. ολεάριος, Lat. olearius). In Graeco-Roman antiquity, an olearius was a dealer, or a manufacturer of oil. The Talmudists apparently used this term to designate the man who was in charge of anything related to the use of oil in the bath.

“A bath without an oil rub is compared to the pouring of water on a barrel instead of pouring it inside”
— taught the expert rabbi-physician Samuel. The olier brings oil to the bath, he is the one who anoints with oil. He is also the employee who brings the women's towels (balre — a contraction of Lat. balnearia) to the bath-house, even on the Sabbath day. The olearii were instructed to wear these big-sized towels, which covered their head and most of their body, as a garment. In this way they would not be culpable of carrying them on the Sabbath day. The olearii also took in charge the clothes of the bathers. These clothes could be stored in special cabinets called “the windows of the olierin”, which could be closed with a key and/or with a seal. These ‘windows’ were probably recesses in the walls of the bath-house. It is recorded that once Rabbi Yoḥanan went to the bath and left his phylacteries and his shirt with the olier. This shirt is termed apikarsin, also used for underwear, for a night gown and ... a bathing garment. It may be

12 Βέ βάνε: see b. Berakhot fol. 60 a. We do not intend to list here all the places in Talmud and Midrash where these terms appear. This work has been done by Krauss and Preuss and need not be repeated here. Regarding the recognized excellence of the Greeks and Romans in bathing facilities, we shall briefly cite a Talmudic passage [b. Shabbat fol. 33 b]: Rabbi Judah once exclaimed, ‘How nice are the achievements of this nation (Rome): they built markets, bridges, bath-houses.’ Rabbi Yossie said nothing. Rabbi Shimon b. Yoḥai answered: ‘Whatever they built they accomplished only for their own sake. The markets were provided with harlots, the bath-houses were used for their own enjoyment, the bridges were exploited to collect taxes’. This statement was reported to the Roman authorities, and Rabbi Shimon had to run away for his life and spent twelve years hiding in a cave.
13 See m. Derekh Erez Zuta 10. A balān will never be eligible to the dignity of King or High-Priest (b. Kiddushin fol. 82 a).
14 See b. Shabbat fol. 41 a.
15 Balnearia was rather seldom used for bathing utensils. Such a use can be found in Apuleius (Metamorph. III, 12).
16 The Greek term oleários was not in use in classical Greek. It appears however with the meaning of ‘keeper of the clothes at the bath’ in Epiphanius (#403 C.E), Patrologia Graeca I 445 B. As regards the big-sized towels worn as garments, see b. Shabbat fol. 147 b.
17 See Tosefta Tohorot VIII:8. The so-called Tosefta is a collection of statements that for some reason were not included in the final editing of the Mishnah. The Tosefta is particularly rich in medical or para-medical data. See Tosephta (based on the Erfurt and Vienna codices), by M. S. Zuckermandel, Jerusalem: Wahrman Books (1970).
related to the Greek epikârson — a striped garment.\textsuperscript{18} Several kinds of towels were used, most of them linguistically related to Greek and/or Latin. The Hebrew mappa\textsuperscript{19} may be related to the Latin homonym, a napkin. Mitpahat is also a napkin, whereas mitpahat sefög is a towel that has absorbing properties. Another kind was the sabanita, which could also be worn as a garment in order to bring it to the bath-house on the Sabbath day. It was however smaller than the aluntit, and was attached under the armpits. Sabanita\textsuperscript{20} is related, most probably, to the Greek sabanon, and/or the Latin sabanum (a towel, or bath wrap).

After the bath, luke-warm and/or cold water was poured on the bather. This was sometimes done by another attendant, called parkhita\textsuperscript{21} (from the Greek parachytes), who also cleaned the floor of the bath. Some bathers liked to perform after the bath a kind of massage. Some oil was poured on a marble plate called tabla (Latin tabula), or on a leather cover termed qatabolia (Gr. katabolfa) and the bather rolled himself in this oil.\textsuperscript{22} The bathers could also sit and rest on benches made of marble and/or wood, called safselim (close to Latin subsellia).\textsuperscript{23} They had to be cautious not to get too close to the furnace, called gamín (Greek kámmnos).

Particularly noteworthy is the fact that there were apparently two kinds of bathing facilities: the public baths — sometimes called dèmosia (cf. Greek dèmosios, pertaining to the state).\textsuperscript{24} The baths of Tiberias (called dèmosin) were the most famous in Judaea and have been in constant use since antiquity. Private bathing facilities were a rare luxury, for palaces and wealthy villas. They are called privata\textsuperscript{25} — obviously no Hebrew or Aramaic term.

Let us now quit the bath-house and turn to medical lore in the Talmud.

\textsuperscript{18} Epikârson can be found in U. Wilcken, Griechische Ostraka aus Ägypten und Nubien. Ein Beitrag zur antiken Wirtschaftsgeschichte I.2, Leipzig, Berlin (1899), p. 64. This etymology is forwarded by Krauss. J. Levy derives the term from the Syriac. From other Talmudic quotations, it seems to have been a long garment able to cover the whole body.

\textsuperscript{19} Mappa seems to be a term of Semitic origin that was adopted by Latin authors. See Krauss (1899), citing Quintilian, in his introduction, p. XXIX. Mitpahat is a Hebrew term (from tâfâh, to cover).

\textsuperscript{20} In the common editions of the Talmud, the term is misspelled sakimita, illustrating a rather common confusion in manuscript copying between the letters v, b and kh, k.

\textsuperscript{21} Here again, the term is erroneously spelled pravita. In the scholarly edition of the Midrash by J. Theodor (1912), it reads pirikhita, or parkhita (Gen. Rabba 63:8; see vol. I: 687).

\textsuperscript{22} See j. Shavuot VIII:8. Perhaps related to the Greek kataâblema, an outer wrapper (Hippocrates, Peri árthron embolês, 33).

\textsuperscript{23} See Mishnah, Kelîm XXI:10. Subsellium was originally a low bench, but was later used for any kind of seat, even at court or at the Curia (in Celsus VII, 26, 1). For gamín, see Tosefta, Sotah XV:6; Tos. Mîqvaot V:7; j. Shabbat III:4.

\textsuperscript{24} See j. Shavuot VIII:8; also Midrash Eccles. Rabba to V:11; Mishnah, Avodah Zarah I:7 etc. The dèmosin of Tiberias are mentioned in j. Sanhedrin VII:13. The term dèmosios was used in Greek sources as well together with balaneia, to mean baths used by the public (cf. Polybius XXVI, 1, 12).

\textsuperscript{25} Aedificia privata was a Latin expression meaning buildings pertaining to an individual, or isolated from built areas. See Midrash, Gen. Rabba 1:16: "It is the duty of the King to build public and private baths." Some commentaries translate privata by 'lavatories', without convincing reasons.
II. Names of Diseases of Obvious Greek Origin

Several examples will clearly illustrate the acceptance within Talmudic lore of Greek medical terms without noteworthy alterations.

Androginos (gr. ἀνδρόγυνος) is a malformation, not a disease. It is “a creature of a special category”, the sages being unable to decide whether it is male or female. It is, at least theoretically, able to emit semen as well as menstrual blood. Though being a “special” creature, the hermaphrodite is to be considered as a human being and his marriage with a woman is legally valid. The Midrash (Lev. Rabba 14:1) mentions that, according to R. Samuel b. Nahman, man was created androginos. This is then explained as meaning that Adam was created male and female, “with two faces” (Aram. דְּת-פְּרֹזְפֹּן, from Gr. πρόσοψις). The operation was therefore a separation of the female from the male, and the ‘rib’ was in fact the ‘side’ ((IConfiguration)

Bulmos is a contraction of Gr. βούλμιος, meaning literally ox-hunger. The Mishnah states that if someone is stricken with bulimia he may be given to eat even unclean food. Bulimus, adj. bulimosus, were also used in Latin literature; there is no equivalent in the Talmud for the related fames canina. The Midrash uses the term metaphorically to feature unrestrained sexual appetite.

Polipos (Gr. πολύπως, Lat. polypus) is considered in the Mishnah as a case in which a wife has the right to ask to be divorced from her affected husband. There is no definition of polipos in the Mishnah, but the Talmud explains that the main symptom is an offensive smell from the nose or, according to another opinion, from the mouth. One who touches his nose in the morning without having first washed hands will be affected by polipos.

Revmatiqos (or revmatiqon) is only mentioned in the Midrash. It is obviously a transliteration of Gr. rheumatikōs.

“One who does not bother to cover his head will contract rheumatism”.

---

26 See Tosefta, Bikkurim II:7; also Tos., Zavim II:2 and b. Niddah fol. 28 a. See also Rosner’s essay in this volume, pp. 2879–2880.
27 See Mishnah, Yoma VIII:6. These patients were faint from ravenous hunger and were considered as being in real danger, “till their eyes light up again”. See also b. Yoma fol. 83 b; Tosefta, Shabbat VIII:30. Honey, cakes of fruit and sweet food are particularly advocated for such patients (ibid.). For the metaphorical use of bulmos see Midrash, Yalkut Gen. chap. 86. On bulimia vs. fames canina, see Preuss pp. 182–3.
28 See Mishnah, Kethubot VII:10; b. Kethubot fol. 77 a; Tosefta Kethubot VII:11. Polyps are mentioned by Hippocrates and Galen, De symptomatum causis 1,14 (Köhn ed. VII, p. 106) and by the Latin authors Celsus VI, 7, 10; VI, 8, 2 and Pliny, Nat. Hist. XXIV, 146. – See also Rosner’s essay in this volume, pp. 2866–2894, passim. For the quotation dealing with unwashed hands causing polipos, see b. Shabbat fol. 109 a.
29 See Midrash, Lev. Rabba 19:4. The usual editions of the Midrash have deumatiqos, a confusion between the Hebrew letters (כ) d and (ק) r being rather common in the transcription of manuscripts.
Preuss (p. 189) seems to interpret this term in its modern sense of rheumatic disease. *Rheumatikós* in fact meant ‘one who suffers from a flow of humors’ (*rheuma*). Therefore this “rheumatism” was probably a much more prosaic running nose!

Nome (sometimes spelled *nima*), is the Greek *nomē* (Latin *nome*), a spreading ulcer. It is used several times by Pliny in the plural form *nomae*. Advise was given by one Talmudic sage to someone suffering from a *nomē* on his foot not to go on enduring strong pain, but to have his foot amputated. This case seems to feature a gangrenous lesion, though an exact diagnosis is obviously out of question. In Graeco-Latin sources *nomē* had no specificity either and designated any kind of corroding sore.

*Podagra* (Gr. *podagra*) refers clearly and unmistakably to gout. The Bible briefly states that King Asa in his later years, “was diseased in his feet” (I Kings 15–23). According to Talmudic sages, he suffered from *podagra*. One of them provides even some clinical details:

“It is like the pain caused by needles perforating the flesh”.

The adjective *podagros* is also used in the Midrash:

“If the city whose physician is a podagros” (as he will not be able to do house calls).

*Podagra* in Greek was originally a snare that seized the animal by the leg (*pous, ágréō*). A disease of the feet (as that of King Asa) was in those times evocative of *podagra* as we may read in Caelius Aurelianus: *Nam podagra pedum tantummodo dolor est.*

Gout was an incapacitating disease without any effective treatment. There were of course many popular recipes; one of them can be found in the Midrash: cattle dung plastered around the feet. A similar method of treatment was recorded by well-known ancient authors like Aretaeus and Scribonius Largus.

---

30 For Plato, for instance, it is air, combined with *rheumata* (which are produced from phlegm), that bring about disease. See L. *EDELMSTEIN*, Ancient Medicine. Selected Papers of Ludwig Edelstein, ed. by Owsei Temkin and C. Lilian Temkin, Baltimore: Johns Hopkins University Press (1967), p. 115.

31 See b. Avodah Zarah fol. 10 b. An amputation for a case of *nomē* is mentioned in the Jerusalem Talmud ([j. Nazir VII:1].


33 See b. Sotah fol. 10 a, also b. Sanhedrin fol. 48 b.


36 Midrash, Cant. Rabba 2:10. The author who mentioned this ‘treatment’ lived at the end of the third century C.E. He might therefore have read, or heard from Aretaeus (see VIII, 12 [C. Hude ed., p. 167] or Scribonius Largus [Compositiones, 158, 20]). Preuss mentions that popular treatment of gout with warm cow-dung was still in use in his times (see J. *PREUSS* [Engl. trans. 1978], p. 168).
III. One Typical Though Problematical Case: Askara

The disease usually read as askara (but one could as well read iskara, or eskara), is considered by most scholars as being diphtheric croup. The term is mentioned some ten times in the Talmud, and there is an unusually detailed clinical description. Askara is an epidemic disease afflicting particularly children, that is located in the throat and ends up in progressive strangling, the most horrid kind of death one can imagine.

The question that has been warmly debated among lexicographers is, whether the term askara is of Semitic (even Hebraic) origin, or was taken over from the Greek. Both J. Levy and M. Jastrow have derived it from the Hebrew sakbar, which has the meaning of 'to close', 'to stop', or 'to choke'. This would aptly account for the closing up of the throat which marks the end of the disease. Aramaic varieties of sakbar are also used in the Talmud several times, with a similar meaning.

Preuss ascribed to M. Sachs the identification of askara with the Greek eschara. We shall not evoke here the long and complicated philological discussions that lasted for more than half a century. Let us only remark that among the classic authors only one uses the term eschara to designate the lesions of diphtheria: Aretaeus of Cappadocia. The term was used by other authors, including Galen, for a crust that develops on a wound.

Another disease closely related, if not identical to askara is the so-called sirvanke that ends up in choking and obstruction of the airways. Most proba-
bly derived from the Greek synánchē, which is an equivalent of the Latin angina, it designates a special kind of tonsillitis. The Greek term was widely in use, as well as the Latin counterpart, in classical medical literature.  

Aretaeus (On Acute Diseases I, 7–9) uses both terms. Synánchē is the subject treated in chapter 7 and eschara in chapter 9. He moreover differentiates between synánchē and kynánchē, the second term evoking the barking cough of acute laryngitis that may also result in acute obstruction of the airways. For Aretaeus, eschara is described as a particularly severe ulcerative tonsillitis in which the ulcerations are covered by a kind of crust — what was called much later a “false membrane” — characteristic of this disease. The outcome is nearly always death, a most frightening struggle for air preceding the ultimate suffocation. This description is considered as being the first clinical evidence of diphtheria.

Aretaeus lived in Cappadocia sometime around the second century CE. There was then in this province a quite sizeable and active Jewish diaspora. There were close and constant contacts between the Jews of Cappadocia and the communities of Babylonia and Palestine. Although Aretaeus was not one of the widely circulated medical writers in ancient times, his works could have reached the Talmudists through these exchanges. On the other hand, Aretaeus states that this disease (eschara) was particularly frequent in Egypt and in Coele-Syria — which included Palestine. It has thus been seriously considered that Aretaeus could have adopted a term of Semitic origin used in a country where the disease was frequent.

We shall not consider in detail the treatments that were advised for this terrible disease which was obviously in most cases untreatable. Celsus, as we

and Midrash: see b. Sotah fol. 8 b; Ketuvot fol. 30 b; Sanhedrin fol. 37 b; Midrash Nu. Rabba 14:17.

44 See, for instance, Celsus (De Medicina IV, 4). While describing angina, Celsus differentiates between synánchē and parasynánchē, the treatment of both being moderate bleeding (i.e., bloodletting). Caelius Aurelianus (De Acut. Morborum III,1), citing from Soranus, entitles his chapter ‘De Synánchē’.

45 In chapter 7 (C. Huëde ed. pp. 8–9) it is said that synánchē may lead to acute suffocation. In chapter 9 (C. Huëde ed. p. 11) it is stated that when ulcerations develop in the throat and descend toward the gullet, they are covered by an eschara and are therefore thus named.

46 It is stated in the Talmud that Rabbi Aqiba (1–2 cent. CE) and Rabbi Nathan–ha–Babli (middle of 2nd cent. CE) travelled to Cappadocia. On the other hand we are informed that R. Judah of Cappadocia and R. Samuel of Cappadocia settled in Judaea.


48 This has been conjectured by J. Preuss (Engl. trans. 1978), p. 158. He relies however on the opinions of Nöldeke and Löw, according to whom “askara is not a Semitic word”. As regards Löw’s opinion, see note 41 above.
remarked above, advocated moderate bloodletting. This treatment is mentioned in the Talmud, and it is considered urgent enough to be permitted on the Sabbath day. The sage who is credited with this statement is Rabbi Mattiah ben Heresh, who was born in Palestine but migrated to Rome, where he founded a Talmudic Academy, in the second century CE. He could therefore have had easy access to the writings of Soranus, Pliny, perhaps also Galen and Aretaeus.

The case of askara/sirwankē is, as we may now safely argue, a particularly significant one; it shows several possibilities – if not manifest evidence – of links and mutual influences between Graeco-Latin medical sources and Talmudic lore. The question however whether askara was primarily of Semitic or of Greek origin remains unsolved and will most probably be raised again and again by future generations of philologists.

IV. Other Diseases and Symptoms

Arqetha. The relevant question raised in the Mishnah is whether one may eat yōēzer on the Sabbath day. The answer is yes, as people do consume of it even when being in perfect health. The Talmud then asks “What is yōēzer?” – “It is putnaq” (i.e., Menta pulegium). In the Jerusalem Talmud however, yōēzer is identified with polytrichon. A Babylonian scholar further asks “What is yōēzer indicated for? – For arqetha.” There is no description of the disease or symptom, but there are some details on its etiology. Arqetha is due to unbecoming dietetic habits, or to the ingestion of fenugreek or madder on an empty stomach and drinking water thereafter. Krauss, following Mussafia, thought that arqetha could possibly derive from the morbus arcuatus (or arquatus) of the Latin authors, one of the most ancient names given to jaundice.

49 See b. Yoma fol. 84 a. The fact that R. Mattiah b. Heresh opened an Academy in Rome is attested in b. Sanhedrin fol. 32 b. He is quoted in both the Babylonian and the Jerusalem Talmuds. Several of his decisions are related to medical matters, in which other Sages opposed him (ibid.).
50 Again, our aim is not to contribute to the solution of the philological problem, but to stress the inter-cultural relationships.
51 The point is that a medicine should not be prepared and/or consumed on the Sabbath day, unless there is a danger (even a remote one) to the life of the patient.
52 Polytrichon is considered as being identical with Adiantum capillus Veneris, the so-called maiden-hair – which is rather different from mint. The materia medica was apparently not always parallel in the two Talmudic versions.
53 For more details, see my essay ‘Remarks on Talmudic Medical Terminology’ (1989), pp. 656*–661* (cf. note 110, below). Preuss and Jastrow derive arqetha from arqa – a strap, a shoe-thong. Thence, they opted for fluke-worms (Jastrow) or distomatisis (Preuss). Others have advocated the diagnosis of taeniasis. The dietary particulars mentioned in the Talmud seem difficult to explain in this context.
in Latin medical lore (2nd cent. B.C.E.)\textsuperscript{54}. Among other authors, Celsus and Caelius Aurelianus wrote on \textit{morbus arquatus}, the latter even remarked that the disease (i.e., jaundice) was caused by \textit{antecedenti iugi indigestione}. Moreover, Dioscorides noted that \textit{adiantum} (also called \textit{polytrichum}) is effective against \textit{morbus regius} — another widely used name of jaundice.\textsuperscript{55}

\textit{Delaria}. This term is interpreted by PREUSS (p. 457) as being a transliteration of \textit{delirium}. According to Talmudic lore, unnatural positions in coitus result in diseases or defects of the parents and/or the children conceived in this way. 'Delirium' will affect anyone who has intercourse while being in an unbecoming position.\textsuperscript{56} One of the sages asks 'What is \textit{delaria}?' — which shows that the term was unclear already then. The answer is rather strange: no explanation is given, only its treatment — \textit{dardera} (from the Scriptural Hebrew \textit{dardar} = thistle). This plant is thought by another sage to be the "crocus of thorns".\textsuperscript{57} Some lexicographers suggest another reading for \textit{delaria}, i.e. \textit{daria}, arguing that in the Midrash (Sifre) such a confusion is conspicuous.\textsuperscript{58}

\textit{Helkosis}. This term appears only in the Aramaic commentaries of Scripture (Targum).\textsuperscript{59} JASTROW reads \textit{halkeshish} and proposes a Semitic origin, which is not very convincing. KRAUSS advocated reading \textit{helkosis}. The term usually renders the Hebrew \textit{laburah}, meaning a wound, a sore. KRAUSS's reading seems therefore quite logical. The Greek \textit{helkosis} is the counterpart of the Latin \textit{ulcus}, hence ulcer, ulceration.

\textit{Hydroqan}. This is most probably \textit{hydrôps}, i.e., dropsy. According to the Arukh dictionary, it should be read as \textit{hydragon}. This syndrome is caused, according to a Talmudic authority, by the withholding of bowel movements.\textsuperscript{60} This term is mentioned at least six times in the Babylonian Talmud. It is a transliteration of the Greek \textit{hyderikôn}, which stems from \textit{hyderos} used in

\textsuperscript{54} See JACQUES ANDRÉ, Chronologie des noms latins de trois maladies, Mémoires III, Études de Médecine Romaine, articles réunis et éd. par GUY SABBAD, St. Etienne: Centre J. Palerne (1988). In this case again, I. LÖW opposes the etymology forwarded by KRAUSS.

\textsuperscript{55} See Celsus, De Medicina III, 24; Caelius Aurelianus, Morb. Chronic. III,5. The chapter begins with \textit{De aurigine, sive arquato morbo, quem vulgo morbeorum regium vocant, Graeci ikteron appellant}. As for Dioscorides, see Lib. IV, 134 [\textit{Peri Adiânton}].

\textsuperscript{56} See b. Gittin fol. 70a. In the common edition of the Babylonian Talmud, the term \textit{delaria} appears twice, although according to a 'scholarly' emendation the first time it should be read \textit{alaria}, considered as a deformation of the Greek \textit{elleôs} (JASTROW), i.e., ileus, iliac passion. The Arukh dictionary interprets \textit{alaria} as a yawning cramp, perhaps a laughing fit (then reading \textit{ilaria}, from Gr. \textit{hilaria}). This is a good example of the guess-work involved in such studies.

\textsuperscript{57} Crocus is usually called \textit{karkôm} in Talmudic sources.

\textsuperscript{58} See Sifré, Deut. 1: Kings usually eat light bread in order not to be smitten by \textit{dolaria} — most probably diarrhoea, the Greek \textit{diárhoia} having been distorted into \textit{dararia}, then further deformed (by copyists?) into \textit{dalaria} (or \textit{dolaria}).

\textsuperscript{59} See Targ. Jonathan on Ex. 21:25; Targ. on Psalms 38:6 — with a deformation of \textit{helkosis} into \textit{helbosis} (frequent confusion of two very similar Hebrew letters: see note 20, above).

\textsuperscript{60} See b. Berakhot fol. 25a.
Greek for dropsy. \(^\text{61}\) Another related term is *hydropikos*, once spelled *adripikos*, and several times *hydronikos*. The latter form appears both in the Jerusalem Talmud and in the Midrash. \(^\text{62}\)

Dropsy induces us to mention one of the very rare instances in ancient Jewish sources where the theory of the humors is hinted at. Man is normally evenly balanced — half blood, half water. When he behaves sinfully, either the water gains over the blood and he becomes *hydropikos*, or the blood gains over the water — then he becomes *mezora*. \(^\text{63}\)

_Qolos_ is twice mentioned in the Jerusalem Talmud. \(^\text{64}\) It is generally considered as a contraction of the Greek *kolikós*. There is no clinical description, though it is considered to be a disease that may endanger life. _Qolos_ could also (and more easily) be derived from _kolon_ (Lat. _colon_ or _colum_). This term was sometimes used for abdominal pain (*coli dolor*). \(^\text{65}\)

_Qordiaqos_ has been the subject of much discussion. It is briefly described in the Talmud as a disease that causes temporary mental confusion. This is a typical case of a disease (or symptom) mentioned in the Mishnah \(^\text{66}\) on which Talmudic sages are in doubt as to the exact meaning of the term. They ask 'What is _qordiaqos_?' The first tentative answer is forwarded by the 'specialist' Samuel: 'This is (like) someone being bitten (or seized, or overcome) by new wine from the vat'. Other sages retort 'Then why is it not explicitly stated (in the Mishnah) "One who has been bitten by new wine"?' — The reason (for mentioning this term) is that _qordiaqos_ is the name of a spirit (or demon) — this is Samuel's explanation. The name of the demon was of high importance for the composition of a potent amulet. The Talmud does not rest however with this magical etiology and treatment. Another recipe based on dietary particulars is also advocated. \(^\text{67}\)

\(^\text{61}\) For sources mentioning *hyderikós* and/or *hyderos*, see Galen, _De locis affectis_ VI, 1 (KÖHN VIII, p. 380); Rufus ap. Oribasius IX, 26, 129; Caelius Aurelianus, _Chron. Morb._ III, 8, 97.

\(^\text{62}\) See b. _Berakhot_ fol. 58 b; Midrash Lev. _Rabba_ 15:2 (this is where it is spelled *adripikos*, or *hydripikos*). _Hydros_ (or _hyderikos_) may be found in ancient medical literature (for instance) in Hippocrates, _Aphor._ 6, 25; Pliny, _Nat. Hist._ XX, 1, 3 chap. 8; Aristotle, _Probl._ 871 b 24.

\(^\text{63}\) See Midrash Lev. _Rabba_ 15:2. We intentionally did not translate _mezora_ by "leprous". Any kind of skin disease or eruptive disease could be rendered by this term which lacks specificity altogether. On the humoral doctrine as reflected in the Talmud, see also STEPHEN NEWMYER'S essay in this volume (p. 2901).

\(^\text{64}\) See j. _Shabbat_ XIV 4 (spelled _gilos_ in many editions).

\(^\text{65}\) See Pliny, _Nat. Hist._ XX, 162.


\(^\text{67}\) See b. _Gittin_ fol. 67 b. We mentioned (note 3) that Samuel was an expert in medicine and astronomy. He rather seldom used or advocated magical explanations or treatments. It is not quite clear whether the dietary advice was given by Samuel as well, or by some other unnamed sage.
In the Jerusalem Talmud it is simply stated that qordiaqos is a state of mental confusion. There is no mention of a demon or amulet.68 For Preuss (p. 321) qordiaqos was "undoubtedly" a transliteration of the (morbus) cardiacus of the ancient Latin authors. He mentions that Caelius Aurelianus considered vinolentia to be one of the causes of morbus cardiacus.69 I ventured in a recent paper another hypothesis. The term in question could possibly be derived from the Greek kórdax, kórdakos, a dance described in ancient Greek and Latin literature, related to drunkenness. The name kórdax (Latin cordax) was, according to Lucian (2nd cent.), originally the name of a Satyr. This Dionysiac figure could have been transformed into a demon by the sages.70 We must honestly admit that the problem raised by the qordiaqos of the Mishnah remains open to discussion and research.

Qantropos (or Gantropos) is another psychic disorder, in which case the patient wanders out alone at night. Such a behavior was actually considered by the sages as sheer insanity, but in the case of qantropos it would be seen as a reversible condition.71 This term is a contraction together with a deformation of the Greek kynamí thrópos, "a disease in which a man imagines himself to be a dog" (kynós, from kyón).72 This syndrom was better known under the appel­ lation of lycanthropy (from lýkos = wolf). Most commentators interpreted king Nebuchadnezzar's psychic condition, that — according to the Book of Daniel — extended over seven years of his life but apparently left no sequels, as a case of lycanthropy. This was, however, clearly a legendary tale, its hero having probably been rather Nabonidus than Nebuchadnezzar.73

Zafdina. This disease of the gums and mouth seems to have been familiar to the sages of the Talmud. We are told that two prominent authorities, Rabbi Yoḥanan and Rabbi Judah (the Prince), suffered from this affection — the latter

68 See j. Gittin VII:1; also j. Terumot I:1.
69 See Caelius Aurelianus, Acut. Morb. II, 30. Caelius himself did not seem quite at ease with this syndrome, and his description and pathogeny are rather unclear. Stomach and heart are both related to cardia and each of them plays its part in morbus cardiacus. Jacob Levy has: 'Herzkrankheit oder Melancholie", remaining apparently in doubt. Jastrow has: 'delirium' (but he acknowledges that such a rendering of kardiakos appears in no dictionary).
71 See b. Haggah fol. 3 b. The sages thus considered qantropos as being excluded from the category of shoteh (insane). See also j. Gittin VII:1 where our term is somewhat more accurately spelled qinitropes.
72 See Galen, De succedaneis 3 (Kühn ed. XIX, p. 719). For Galen, it is a kind of melancholy. He writes qui morbo lupino sive canino appellato corripiuntur, februario mense noctu exeunt in omnibus imitantes lupos aut canes [We chose to bring the Latin translation in this case].
73 Preuss (p. 311) thought it was a case of paranoia (?), rather than lycanthropy. A more balanced opinion is that of W. Ebstein, Medizin im Alten Testament, Stuttgart: F Enke (1901), pp. 115—117. For the Biblical source of the story see Daniel 4:29 ff.
even for seven years. There is a very brief description of the symptoms: “If you put anything between your teeth the gums will bleed”. This was enough to lead to a widely accepted diagnosis of scurvy — as a matter of fact, scurvy is called zasadina in modern Hebrew. We tend however to agree with PREUSS (p. 172) on a wider and less specific diagnosis of stomatitis (which of course includes scurvy). This disease is a good example of trans-cultural pseudo-scientific exchanges. It is stated that Rabbi Yoḥanan (2nd cent.) went to “a certain matron”, i.e., a Roman woman of fame, who indicated a treatment for his ailment (zasadina). She made him swear not to reveal the recipe. A later prominent Talmudist, called Abbaye, having heard of three different versions of the remedy, tried all three of them without success. He took therefore advice with an Arab caravan merchant — possibly an itinerant Arab healer — who indicated another formula that proved effective. Rabbi Yoḥanan lived in Palestine, Abbaye in Babylonia. Both took advice from non-Jewish, non-professional healers. This is how popular medical lore was transmitted, knowing no cultural frontiers. Zasadina, sometimes spelled zifdna, could possibly be derived from the Greek sepedon, meaning putrid abscess, related to septikos (Latin septicus).

V. Names of Remedies and Dietary Items

Among the numerous drugs mentioned in the Talmud, not a small number have a Greek origin. We shall only cite a few of them. Several types of remedies were then in use: potions, powders, salves and ointments, plasters and cataplasms. Thus, qilor (or qilorit) is the Talmudic equivalent for kollyrion, an eye salve. Ispelanit was a kind of emplastrum (plaster), related to the Greek...

74 See b. Avodah Zarah fol. 28 a; Yoma fol. 84 a; Baba Mezia fol. 85 a. The passage involving Rabbi Judah is moreover cited in the Midrash several times.
76 This story is told in b. Yoma fol. 84 a, already cited above. More on this story and on zasadina can be found in F. ROSNER’s essay in this volume, see pp. 2877–2878.
77 Sepedon is used several times in the Hippocratic corpus: see Aphor. 3, 16; 3, 21; Epidem. III, 4; V, 4. Septicus is used by Pliny, Nat. Hist. XXX, 30. Galen writes on septica medicamenta, De simp. med. temp. ac fac. VII, 10 (KÖHN ed. XII p. 17). PREUSS mentions that BUXTORF advocated this etymology, but remains in doubt. It may be of interest to add that palaeo-pathological studies have shown a relatively high frequency of alveolar pyorrhea in Hellenistic Greece. See M. D. GRMEK, Les maladies à l’aube de la civilisation occidentale. Recherches sur la réalité pathologique dans le monde grec préhistorique, archaïque et classique, Médecine et sociétés, Paris: Payot (1983), p. 184.
78 Samuel prepared such eye salves that were requested and praised by other sages: see b. Shabbath fol. 108 b. See also j. Avodah Zarah II:2 where it is stated that most sages permitted that a collyrium be applied to the eyes by an approved non-Jewish physician. In the same paragraph it is stated that opium (Gr. ὀπίον) is a dangerous drug. The sages
splenion, more or less equivalent to the Hebrew term retiyah (compress). Melogma (or melugma) is close to the Greek malagma, an emollient plaster, a poultice.

One of the most widely used drugs in antiquity (and through the Middle Ages) was balsamum (balsam), an oily resinous substance used internally and externally. The term afarsemon is perhaps related to opobalsamon (Lat. opobalsamum). It is sometimes spelled apalsemon, which could be a contraction of the Greek/Latin term. A Syriac origin is however in this case probably more convincing.

Aqagia (Gr. akakía) is mentioned as an ingredient in a medicinal preparation, together with aloa (Gr. álóë), an extract of aloes.

Apsinthin (Gr. apsinthion) is obviously absynth, worm-wood. It is an ingredient of a special kind of bitter wine.

Dafné (Gr. dáfnē) is, according to JASTROW, “probably of Semitic origin”. It is a bay-tree used for hedges. We think that it is of Greek origin and designates the laurel-tree (or its fruit).

Helbenah (Aram. helbenitha) is a Biblical Hebraic term. It is related to the Greek chalbâné, Latin galbanum. It is a gum-resin used as an ingredient of the holy frankincense in the Temple, although it had the reputation of having a bad smell. In this case it seems that the Greeks and Romans adopted the Hebrew term.

Kammôn (Gr. kýminon) was—and still is—widely used as a spice for flavoring food. It is also conspicuous in ancient materia medica, particularly in folk-medicine.

Also discuss whether the use of theriac (gr. thériakê)—prepared by non-Jews—is allowed. Theriac is also mentioned in h. Shabbat fol. 109 b and Nedàrim fol. 41 b. This antidote against poisonous bites was widely used throughout Antiquity and the Middle Ages.

Ispelanit is used for the bandage put after circumcision; it may be lifted from the side in order to cleanse a wound (Tosefta, Shabbat V:6).

See b. Succot fol. 40 b; Baba Kamma fol. 102 a (also in Midrash).

See b. Yoma fol. 38 b; Berakhot fol. 43 a (also in Jerusalem T. and in Midrash). It was also used as an aromatic additive to wine: see b. Shabbat fol. 140 a.

See b. Gittin fol. 69 b, amidst a lengthy passage of the Talmud (several pages) very rich in medicinal recipes. Aloe-wood is also mentioned in the Talmud: j. Kethubor VII:3 in fine. Aloe was widely used medicinally.

See b. Avodah Zarah fol. 30 a. In the Jerusalem Talmud and the Midrash, this wine is mentioned under the name psinthiatom (or psinthathon), a transliteration of the Latin absinthatum, i.e., a worm-wood wine.

See b. Baba Bathra fol. 4 a; Moed Qatan fol. 7 a. For JACOB LEVY and I. LÖW, dafné is a transcription from the Greek. See also b. Pesahim fol. 56 a: shikra de-dafné = a drink made of the laurel fruit (bacca lauri).

According to Pliny, the plant grew in Syria (i.e., also in Palestine): see Pliny, Nat. Hist. XII, 121. ZOHARY, however, writes that neither in Israel “nor in any neighboring country is there any plant that produces this resin. The resin has carminative, expectorant and anti-spasmodic properties.” See M. ZOHARY, Plants of the Bible. A Complete Handbook to All the Plants with 200 Full-Color Plates Taken in the Natural Habitat, Cambridge: Cambridge University Press (1982), p. 201.

See Mishnah Terumot X:4; also Mishnah Demai II:1. According to I. LÖW, the Greek term in this case derives from the semitic kammôn.
Onpaqinôn was a special kind of oil, made of unripe olives. It is good for hair and brightens the skin. It is clearly a transliteration of the Greek ὄμφακιον, the Latin equivalent being omphacium, used mainly also for unripe grapes.

In antiquity, special dietary preparations were part of the materia medica. We shall bring a few examples of such formulas.

Asparagus was a wine containing (or made with) cabbage sprouts. One glass of it in the morning on an empty stomach is excellent for the bowels, as well as for the eyes. This is clearly a transcription from the Greek asparagos.

Apiqtfisin (of apiqtfisin) is apparently an emetic wine. It was not used as a remedy, but for those who indulged in overeating and vomited in order to be able to proceed with the banquet. JASTROW relates the word to the Greek ἀποκοτταίζειν - noting that no noun like ἀποκοττάβις is known to have been used in ancient Greek. This term remains open to philological discussion.

Enomelín (or yinomelín) is a transliteration of the Greek οἶνομέλι, a special kind of wine mixed with honey. A detailed formula in Tractate Avodah Zarah adds pepper to the ingredients.

Konditon is another kind of spiced wine (Gr. konditon, Lat. vinum conditum). This term is specific to the Jerusalem Talmud where it appears quite often. According to one source the ingredients of konditon were wine, honey and pepper, just as was the case for enomelín.

Phiale potirin is a rather close transliteration of the Greek φίαλὲ ποτέριον. According to JASTROW, its translation is: a vial of poterion - a special wine spiced with a shrub called Astragalus poterium, which produces a gum that is a species of tragacanth.

---

87 See b. Pesahim fol. 43 a; Shabbat fol. 80 b; Megillah fol. 13 a; Menahot fol. 86 a (i. a.). The Latin omphacium appears in Pliny, Nat. Hist. XII, 130; XIV, 98.
88 See b. Berakhot fol. 51 a; the text adds: “As long as one does not get intoxicated by it!” On this kind of wine, see b. Pesahim fol. 110 b; Kiddushin fol. 70 a; cf. Pliny, Nat. Hist. XIII, 19. See also ROSNER’s essay in this volume, pp. 2872–2873.
89 See b. Shabbat fol. 147 b, also 12 a and 123 b; Succot fol. 40 b; Baba Kamma fol. 102 a. Also in the Midrash. The term is used in the sense of vomiting in Herodotus Medicus (1st cent.), apud Orisiasus V, 27, 9. MUNTNER proposed another etymology: ἀποχετεύο – to draw off (water) by a canal, which is far from being convincing.
90 See b. Avodah Zarah fol. 30 a. See also b. Shabbat fol. 139 b; Mishnah Terumot XI:1. Also in the Jerusalem Talmud. The spelling yinomelín seems to point to a mixture of Hebrew (y(a)jîn = wine) and Greek (ιμέλη = honey) in popular lore.
91 See Pesikta, P. haJodesh 102 b. The Pesikta-de-Rav-Kahana is one of the earliest Midrashim and is of Palestinian origin. See also j. Terumot VIII:3; j. Avodah Zarah II:3; j. Yevamot X:7.
92 See Midrash Gen. Rabbâ 10:8. Such a drink was handed to Titus when he came out of the bath in Rome. Poterion appears several times in Pliny (XXV, 10, 76; XXVII, 12, 97), most probably for a plant providing the tragacanth gum. JACOB LEVY reads dîplê potirin – meaning double dose (lit. a double vial) of wine. Poterion may also be translated as ‘cup’ or ‘glass’. This term appears only in the Midrash and in the Jerusalem Talmud.
Zythos is a sort of barley beer common in Egypt that was also used as a remedy. This is a transliteration from the Greek ζυθός. The detailed formula is given in the Talmud:

“One third barley, one third safflower — *Carthamus tinctorius*, one third salt". 93

Qimolia (also spelled qimonia) is a transliteration of the Greek *kimölía*. It is Cimolian earth, an alkaline clay used for the cleaning of clothes, but also for medical purposes. It is cited in the Mishnah as one of the seven reagents used by the Sages in order to differentiate between a blood stain and a red dye stain. 94

VI. Varia

Among the medical tools mentioned in the Talmud, we may mention a medicine-chest called *narteq*, close to the Greek *nártbex* — which is also the name of a shrub (a kind of Ferula). This chest supposedly contained a number of medicines. 95

Several anatomical terms may be related to Greek models. *Metrin* (Greek *métra*) is the womb (i.e. uterus). This term appears only in the Midrash. It should be remarked that several Hebrew terms were in use for the womb, and there was definitely no need to adopt a Greek term in this case. 96

Qatlit (or

---

93 See b. Pesahim fol. 42 b. Also Shabbat fol. 156 a; Berakhot fol. 38 a; j. Pesahim II:1. *Zythos* is mentioned in Theophrastos and Dioscorides (II, 87). The Latin authors called it *zythum*: see Pliny, *Nat. Hist.* XXII, 164 (also in Columella X, 116). In the Mishnah, Pesahim III:1 it is called “the Egyptian *zýthos*. *Zythos* was considered to be a regulator of the digestive process: to those suffering from constipation it loosens the stool, and to those with diarrhea it stops it. It is however dangerous for a pregnant woman (b. Pesahim fol. 42 b).

94 See Mishnah Niddah IX:6; also Mishnah Shabbat IX:5. The Talmud briefly explains the term *kimola* (b. Shabbat fol. 90 a) by a proverbial expression: “pull out, stick in” (Hebr. *shelof dôz*) — also used elsewhere in another context — whose meaning is unclear to the lexicographers (and to Preuss, p. 128). We think that it might mean that this alkaline clay may have two opposite properties, allowing the fixation of some substances and the release of others. In j. Shabbat IX:5, it says only “*Kimolias kalía*, i.e. an alkali. On the medicinal use of Cimolian earth, see Strabo X, 5, 1 and Dioscorides V, 176.

95 See j. Berakhot V.2. A story is told of a physician whose *narteq* was stolen; then the thief’s son fell ill and he called the physician for help. The latter answered ‘give me first my chest back, for there are all kinds of drugs in it, and I shall take care of your son’. *Nártbex* as a casket for unguents is mentioned in Lucianus (2nd cent.), *Adversus Indoctum*, 29. A *narthecium* was also mentioned by Latin authors (cf. Martialis XIV, 78).

96 See Midrash, Gen. Rabba 47:2. Sarah had no ovary (lit. ‘root of the womb’, Hebr. *iqar metrin*), therefore she was sterile; then the Lord shaped (Hebr. *galaf*, close to Gr. *gýpho*) this organ for her, and she became pregnant.
We shall close this — somewhat tedious, I confess — list of terms derived from, or at least related to, the Greek, by a Talmudic text that is particularly illustrative to our topic. According to a widely accepted opinion already expressed in the Hippocratic corpus, an eight-month foetus had virtually no chances to survive premature birth. A seven-month foetus had better chances of survival, so they thought. This opinion is echoed in both versions of the Talmud and in the Midrash as well. The question has been reviewed in detail several years ago by A. Wasserstein, we therefore limit our quotation to the relevant passage (j. Yevamot IV:2). Its author is the Palestinian amora Rabbi Abbahu (c. 279—320), the head of the Academy at Caesarea. He learned Greek in order to be able to converse with the authorities and protect his coreligionists. He also taught his daughters Greek — which was opposed by some of his colleagues. “Wherefrom do we know that a seven month child will survive?”, he remarked to some heathen interlocutor. “I will answer in your own way (i.e., your own language): ζήτα ἑπτά ετά οὖκτέ”. This pun, or riddle, based on the Greek alphabet, was obviously aimed at illustrating Rabbi Abbahu’s mastery of the Greek language, notwithstanding the difficulties raised by its interpretation.

VII. Conclusion

To what extent were the Talmudic sages influenced by Graeco-Roman medical culture? To what extent were they familiar with the Greek language? These questions have often been discussed and no clear-cut conclusion emerges from these discussions. Stephen Newmyer mentions in his essay the curse that was pronounced in 65 B.C.E during the siege of Jerusalem, or even earlier,
during the war between the two Hasmonean brothers Aristobulus and Hyrcanus, against whoever would teach Greek to his sons.\textsuperscript{102}

A somewhat artificial distinction is made between the study of the Greek language and that of Greek wisdom. There is even a reference to some kind of Greek education at the time of Simeon ben Gamliel II (c. 150 C.E.), but the story seems more homiletical than historical.\textsuperscript{103}

It is generally admitted that some three thousand loanwords of Graeco-Roman origin can be found in the Talmud(s), pertaining to technology, architecture, commerce, agriculture — and many other domains. Medicine is only one of them. In the sole domain of plants and medicinal drugs, I. Löw has counted sixty-one terms adopted from the Greek.\textsuperscript{104}

The Talmud is a mirror of the Jewish way of life through some seven centuries of history, during which the Jews were under foreign rule, in Palestine as well as in the Babylonian-Persian Diaspora. Although the Talmud was aimed at enhancing the study of Jewish law and tradition and at preserving the culture of the Jewish people from foreign influences, nothing could preclude the adoption of alien lore, particularly in the domain of science and technology. Academic knowledge and folklore were both taken into account. It is not surprising that we find in the Talmud many medical data that are also recorded in Pliny's works.\textsuperscript{105} Although Pliny's works were widely circulated, nothing proves that the Talmudists actually used them. They might have drawn on the same wide range of sources, treated in the same uncritical way. Manifestly, some of the Talmudic sages showed a particular interest in medical matters. Mar Samuel is the most striking example but others, like R. Ḥiyya, Abbayē or R. Hanina, were involved in such matters as well. Several physicians are named, such as Minjome (Benjamin) or Thudos (Theodas?) — the latter might have studied medicine in Hellenistic Alexandria. We have unfortunately no documentation on their medical education.\textsuperscript{106}

"Vocabulary is by itself only a superficial indicator of foreign influence", NEWMYER correctly remarked.\textsuperscript{107} Terminology is no more than one of the possible approaches to the probably unsolvable problem of the origin of Talmudic medical lore. In the same way as the employment of Jewish physicians was

\textsuperscript{102} See b. Sotah fol. 49 b (the basic statement regarding the curse uttered during the siege of Jerusalem is made in the Mishnah). Also b. Baba Kamma fol. 82 b and Menaḥot fol. 64 b.

\textsuperscript{103} It is stated that there were one thousand students in a certain academy (that of Gamliel?), five hundred of whom learned Torah and five hundred learned Greek wisdom — of whom only two survived (i.e., remained faithful to their creed?). See b. Baba Kamma fol. 83 a; Sotah fol. 49 b.

\textsuperscript{104} I. Löw, Die Flora der Juden [Vol. IV]. Wien: Verlag der Kohut-Foundation (1934), pp. 126–128. Other names of plants were simply translations from the Greek [cf. šeshon-tura, from buglosson], see pp. 133–135.

\textsuperscript{105} Such a comparative study between the wide-ranging 'Natural History' of Pliny and the Talmudic corpus (not only on medical data) would no doubt be rewarding and remains to be undertaken.


\textsuperscript{107} See NEWMYER's essay in this volume, note 14 (p. 2900).
repeatedly prohibited by the Christian authorities — showing that the prohibition was not implemented — the recurrent Talmudic ban on the study of Greek language and/or wisdom seems to indicate that there was a strong tendency to neglect the ban.

Last, but not least: Although Newmyer correctly stresses that in the Hebrew creed and Biblical outlook "disease and health are regarded as religious categories", this is less evident in Talmudic lore. The sages of the Talmud were rather pragmatic in their approach to medicine and often not less empirical than Hippocrates was.

Talmudic lore in general — and medical lore in particular — have been too long neglected. Contemporary to the "Rise and Fall of the Roman World" and to the Byzantine period, it developed under political and religious opposition to "Edom", but in no way in complete isolation.

To what extent exactly did these exchanges develop? — This remains open to discussion and to further scholarly investigation.

108 Ibid., p. 2898.
109 Hippocrates himself considered all diseases as divine (and human): see The Sacred Disease XXI 1. 8 (Loeb Class. Libr. II, p. 182).
110 This essay is based on three previous papers. Although there has been added a sizeable amount of new material, some of the data are treated in more detail in my previous studies. See S. Kottek, Remarks on Talmudic medical terminology, Koroth 9 (9-10) (1989), pp. 650*-663*; Id., A renewed investigation of some Talmudic medical terms, Proceedings, 10th World Congress of Jewish Studies [Division D] Vol. I (1990): 45-52 (Hebrew); Id., Sur l'origine греко-латине de certains termes médicaux utilisés dans le Talmud et le Midrash, in: Le Latin Médical — La constitution d'un langage scientifique, Saint Etienne: Centre Jean Palerne (1991), pp. 41-52. The bibliography relevant to this essay may be found in the notes.