

Defining Jewish Medicine

Transfer of Medical Knowledge
in Premodern Jewish Cultures and Traditions

Edited by Lennart Lehmhaus

2021

Harrassowitz Verlag · Wiesbaden

Die Reihe „Episteme in Bewegung“ umfasst wissenschaftliche Forschungen mit einem systematischen oder historischen Schwerpunkt in der europäischen und nicht-europäischen Vormoderne. Sie fördert transdisziplinäre Beiträge, die sich mit Fragen der Genese und Dynamik von Wissensbeständen befassen, und trägt dadurch zur Etablierung vormoderner Wissensforschung als einer eigenständigen Forschungsperspektive bei. Publiziert werden Beiträge, die im Umkreis des an der Freien Universität Berlin angesiedelten Sonderforschungsbereichs 980 „Episteme in Bewegung. Wissenstransfer von der Alten Welt bis in die Frühe Neuzeit“ entstanden sind.

Herausgeberbeirat:

Anne Eusterschulte (FU Berlin)
Kristiane Hasselmann (FU Berlin)
Andrew James Johnston (FU Berlin)
Jochem Kahl (FU Berlin)

Klaus Krüger (FU Berlin)
Christoph Marksches (HU Berlin)
Tilo Renz (FU Berlin)
Wilhelm Schmidt-Biggemann (FU Berlin)

Gefördert durch die Deutsche Forschungsgemeinschaft (DFG) –
Projektnummer 191249397 – SFB 980.

Abbildung auf dem Umschlag:

Anatomical diagram explained with a diagram of a house; from Ma'aseh Tobiyah
(*The Work of Tobias*, in Hebrew), by Tobias Cohen; Venice: ‚Stamp Bragadina‘, 1708.
Wellcome Library, London (L0021883).



Dies ist ein Open-Access-Titel, der unter den Bedingungen der CC BY-NC-ND 4.0-Lizenz veröffentlicht wird. Diese erlaubt die nicht-kommerzielle Nutzung, Verbreitung und Vervielfältigung in allen Medien, sofern keine Veränderungen vorgenommen werden und der/die ursprüngliche(n) Autor(en) und die Originalpublikation angegeben werden. Weitere Informationen: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Die Bedingungen der CC-Lizenz gelten nur für das Originalmaterial. Die Verwendung von Material aus anderen Quellen (gekennzeichnet durch eine Quellenangabe) wie Schaubilder, Abbildungen, Fotos und Textauszüge erfordert ggf. weitere Nutzungsgenehmigungen durch den jeweiligen Rechteinhaber.

Der Harrassowitz Verlag behält sich das Recht vor, die Veröffentlichung vor unbefugter Nutzung zu schützen. Anträge auf kommerzielle Verwertung, Verwendung von Teilen der Veröffentlichung und/oder Übersetzungen sind an den Harrassowitz Verlag zu richten.

Bibliografische Information der Deutschen Nationalbibliothek

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <https://www.dnb.de> abrufbar.

Informationen zum Verlagsprogramm finden Sie unter

<https://www.harrassowitz-verlag.de>

© bei den Autoren

Verlegt durch Otto Harrassowitz GmbH & Co. KG, Wiesbaden 2021

Gedruckt auf alterungsbeständigem Papier.

Druck und Verarbeitung: Memminger MedienCentrum AG

Printed in Germany

ISSN 2365-5666

eISSN 2701-2522

DOI: 10.13173/2365-5666



ISBN 978-3-447-10826-3

eISBN 978-3-447-19606-2

DOI: 10.13173/9783447108263



Contents

Acknowledgments	IX
Part 1: Introduction, History of Scholarship, and Bibliography	
<i>Lennart Lehmhaus</i>	
Defining or Defying Jewish Medicine?—Old Problems and New Questions . . .	3
<i>Lennart Lehmhaus</i>	
The Academic Quest for “Jewish Medicine”—a Survey of the Field	27
<i>Lennart Lehmhaus</i>	
Medical Knowledge in Premodern Jewish Cultures and Traditions: Selected Bibliography	57
Part 2: Ancient Jewish Medical Discourses in Comparative Perspective	
<i>Federico Dal Bo</i>	
A Foetus Shaped Like a Sandal: Birth Anomalies in Talmudic Tractate Niddah	93
<i>Reuven Kiperwasser</i>	
The Cure of Amnesia and <i>Ars Memoria</i> in Rabbinic Texts	119
<i>Kenneth Collins</i>	
The Fever that Nourishes: Early Rabbinic Concepts on the Purpose of Fever . .	143
<i>Aviad Recht</i>	
The Rabbinic Health Regimen: A Greek Genre Adapted by the Sages	157
Part 3: Historicity, Authority and Legitimacy of Medical Knowledge: Tradition, Transfer and Cultural Negotiations	
<i>Samuel Kottek</i>	
The Physician in Bible and Talmud—Between the Lord and the Ailing	179
<i>Tirzah Meacham</i>	
Physicians’ Expertise and Halakha: On Whom Did the Sages Rely?	193

Shulamit Shinnar

The Experiments of Cleopatra: Foreign, Gendered, and Empirical Knowledge
in the Babylonian Talmud 215

Estēe Dvorjetski

Public Health in Jerusalem According to the Talmudic Literature:
Reality or Vision? 245

**Part 4: Jewish Medical Episteme Around the Mediterranean
in the Medieval Period**

Ronit Yoeli-Tlalim

Exploring Eurasian Transmissions of Medical Knowledge—
Cues from the Hebrew *Book of Asaf*. 295

Tamás Vizi

The *Book of Asaf* and Shabatai Donolo's Hebrew Paraphrase
of Hippocrates' *Aphorisms* 313

Y. Tzvi Langermann

Nu'mān al-Isrā'īlī and his Commentary to Abū Sahl al-Masīhī's *Kitāb al-Mi'a*
("Book of the Hundred") 337

Carmen Caballero Navas

The Genesis of Medieval Hebrew Gynaecology: A Preliminary Assessment . . . 349

General Index (Names and Subjects) 375

Notes on Contributors 379

A Foetus Shaped Like a Sandal: Birth Anomalies in Talmudic Tractate Niddah

Federico Dal Bo*

The talmudic tractate Niddah mainly deals with menstruation, as well as with a number of collateral cases, such as abnormal genital discharges, doubtful childbirths, and miscarriages. The assumption that underlies the connection between menstruation and miscarriage is that each of these issues can be formalized as a “discharge”—regardless of what is actually expelled from the woman’s body.

Among these collateral issues, the case of a foetus shaped like a “sandal” is particularly interesting for the semantic difficulty it presents as well as for its juridical importance.

1 Etymology and semantics of the term סנדל / *sandāl*

First of all, the Hebrew term סנדל / *sandāl* is not difficult to interpret, for it is rather obvious. It is clearly modelled on the morphology and semantics of two almost homographic terms: the Greek term σάνδαλον / *sandalon* and the Persian term سندان / *sandal* (that is also reflected in the later Arabic صندل / *ṣandal*); accordingly, the Hebrew term סנדל / *sandāl* designates a very common open type of footwear: a “sandal.”¹ Yet the linguistic *Sitz im Leben* is actually more complex when examined accurately. It is mostly complicated by the unclear, complex transmission of several morphologically related terms—mostly from the Persian and Arabic milieus—that indeed exhibit a quite diverse semantics. Indeed, there are several linguistic formations deriving from a common root, **sandal*, that are disseminated in several Eastern as well as Middle Eastern ancient languages: Sanskrit, Persian, Aramaic, Hebrew, Greek, and Arabic. These different lexemes appear to catalyze around a number of semantically discrete terms that are morphologically very close but that designate four different entities: a type of footwear, a plant, a boat, and a fish.

* A first draft of this paper was delivered, in an abridged form, as a conference paper at the European Association for Jewish Studies congress in Paris in July 2014 and then, in a longer, more elaborated form, as a workshop paper at the “Contemporary Bioethics and the History of the Unborn in Islam” (COBHUNI) at the University of Hamburg in April 2016. I would like to thank Prof. Tal Ilan (Freie Universität Berlin), Prof. Thomas Eich (University of Hamburg), Prof. Tirzah Meacham (University of Toronto), Dr. Doru Constantin Doroftei (University of Hamburg), and Dr. Lennart Lehmhaus (Freie Universität Berlin) as well as the two anonymous reviewers for reading and taking part in the discussion on my paper.

1 See Marcus Jastrow, *A Dictionary of the Targumim, the Talmud Bavli, and Yerushalmi, and the Midrashic Literature* (London: Druglin, 1903), 1004.

A rapid summary of these semantic interferences might be useful in order to appreciate the complexity of the lexical issues. (See the chart in the appendix.)

First, we should clarify that the dependence of the Greek *σάνδαλον/sandalon* on the Persian *سندل* (lit. “sandal”) is commonly accepted in Modern Greek lexicography. Yet the origins of the Persian term *سندل/sandal* are relatively obscure, due to its connections with morphologically similar terms and successive substitutions with the Arabic-based orthographic variant *صندل/sandal*, as it is the case in modern New Persian.² Semantic and morphological confusions were historically further aggravated especially by the necessity of transcribing these terms into different, poorly compatible alphabetical systems, such as the Syrian, the Hebrew, and the Greek. For instance, one should mention the interference with the Middle Persian, almost homographic and phonetically related term *چندل/čandal*, “sandalwood.” This latter term was probably influenced in turn by the Sanskrit *candana* that is used to designate the plant *Santalum Album*, commonly known as “sandalwood.”³ Interestingly enough, the Persian term *چندل/čandal* (“sandalwood”) also penetrated Aramaic-based Middle Iranian orthography with the variant *צנדל/sandāl*.⁴ It might be useful to also briefly treat the dissemination of the Greek term *σάνδαλον/sandalon* in Jewish and Christian religious literature: namely, in the Septuagint and in the Greek patristic literature.

On the one hand, it can be noted that the term *σάνδαλον/sandalon* never occurs in the Septuagint and seems to suffer from the concurrence with its diminutive, the strictly correlated term *σανδάλιον/sandalion*, already occurring in Classical Greek.⁵ The term *σανδάλιον/sandalion* is used four times to render the Hebrew term *נעל/na'al* (in Josh 9:5; Isa 20:2; Jdt 10:4; 16:9); it also appears to suffer from the use of the concurrent Greek term *πέδιλον/pedilon* that twice renders the Hebrew term *רגל/regel* (in Hab 3:5; Od 4:5). This latter use of the term *πέδιλον/pedilon* is clearly related to *πούς/pous* already in Classical Greek⁶ and manifests the “mimetic” intention of overlapping both semantically and morphologically with the Hebrew *רגל/regel* on account of its two fundamental meanings: “foot” and, by metonymy, “footwear.” Intriguingly, the disambiguation of the Hebrew term *נעל/na'al* with “sandal” rather

2 Arthur N. Wollaston, *An English-Persian Dictionary Compiled from the Original Sources* (London: Allen, 1882), 314. The same lexicon also reports the term *نعيلين/ni'ilin* to designate a “sandal.”

3 Manfred Mayrhofer, *Kurzgefasstes Etymologisches Wörterbuch des Alindischen* (Heidelberg: Carl Winter Verlag, 1976), 373. For the complex dissemination of the Sanskrit term *candana* in India and Indonesia, see Robin Dorkin, *Between East and West: The Moluccas and the Traffic in Spices up to the Arrival of Europeans* (Philadelphia: American Philosophical Society, 2003), 23–35.

4 Carl Brockeann, *Lexicon Syriacum* (Berlin: Reuther & Reichard, 1895), 633; Claudia Ciancaglioni, *Iranian Loanwords in Syriac* (Wiesbaden: Ludwig Reichert, 2008), 245, and also Leonid Kogan, “Proto-Semitic Phonetic and Phonology,” in *The Semitic Languages: An International Handbook* (ed. Stefan Weininger; Berlin: De Gruyter, 2011), 64.

5 Johan Lust, Erik Eynikel and Karin Hauspie, *A Greek-English Lexicon of the Septuagint* (Stuttgart: Deutsche Bibelgesellschaft, 2002), 934, 1055; cf. Henry Liddell and Robert Scott, *A Greek-English Lexicon*, revised by H. S. Jones (Oxford: Clarendon, 1996), 1582.

6 Liddell and Scott, *A Greek-English Lexicon*, 1456–1457.

than with “shoe,” as one would expect in Modern Hebrew,⁷ is reflected also in Arabic and in the Arabic-speaking Syrian milieu, where the term نعال/na‘āl may be used to designate either a “sandal” or a “sole,” when one does not want to recur to the Persian-based term صندل/sandal.⁸ Finally, it should also be mentioned that both the New Testament and New Testament-related literature reflect the same obsolescence of the Greek term σάνδαλον/sandalon in favor of its diminutive: the strictly correlated term σανδάλιον/sandalion, which is used twice (in Mark 6:9; Acts 12:8) and which possibly reflects a Semitic נעל/na‘al.⁹ Not surprisingly, the neutral term σάνδαλον/sandalon also disappeared from Patristic Greek and, obviously under the influence of the New Testament, was substituted by the already mentioned diminutive: the related term σανδάλιον/sandalion.¹⁰ In addition, it should also be noted that Patristic Greek introduced the use of the masculine term σάνδαλος/sandalos, which is unknown to Classical Greek, in order to designate “a boat.”¹¹ Interestingly enough, this latter definition seems to reflect the Persian-Arabic lexeme صندل/sandal that would also designate “a narrow, double-master boat used on the Nile and the Barbary coast.”¹² Finally, it also seems that the Classical Greek term σανδάλιον/sandalion was used to designate a kind of flatfish, apparently identical with another kind of fish—an “ox tongue”—designated either with the neutral term βούγλωσσον/bouglōsson in Classical Greek¹³ or with the masculine term βούγλωσσοσ/bouglōssos in Later Patristic Greek.¹⁴ This further meaning of the term σανδάλιον/sandalion as a kind of a flatfish will be examined below, due to the supplementary linguistic issues that it raises. Provided this assessment of the periphery of the semantic field, it is then possible to return to the Hebrew term in question: סנדל/sandāl. This term exhibits a rich semantics; indeed, it is used sixteen times in talmudic literature in order to designate a fatal birth defect that produces a miscarriage.¹⁵ Despite its apparently transparent origin from its cognate Greek and Persian terms, it is very difficult to determine whether the Hebrew term סנדל/sandāl provides either a literal or a metaphoric description for the foetus’s abnormal morphology. In other words, is the foetus actually shaped like a sandal or does it show a different, more complex morphology? In the latter case, should it also exhibit some similarity with the homonymous footwear or not?

These semantic difficulties depend both on the linguistic and on the semantic history of the term, as already anticipated. On the one hand, the Hebrew term סנדל/sandāl possibly has a Persian origin (صندل/sandal) and designates footwear. On

7 Avraham Even-Shoshan, *Hamilton beḥdash*, vol. 4. (Jerusalem: Kiryat Sefer, 1979), 1691.

8 Louis Costaz, *Dictionnaire Syraïque-Français* (Beirut: Dar el-Machreq, 2002), 128.

9 Lust, Eynikel and Hauspie, *Greek-English Lexicon of the Septuagint*, 1055.

10 G. W. H. Lampe, *A Patristic Greek Lexicon* (Oxford: Clarendon, 1961), 1222.

11 *Ibid.*, 1222.

12 Garland Cannon and Alan S. Kaye, *The Persian Contributions to the English Language: An Historical Dictionary* (Wiesbaden: Harrassowitz, 2011), 126.

13 Liddell and Scott, *Greek-English Lexicon*, 324.

14 Lampe, *Patristic Greek Lexicon*, 301.

15 Julius Preuss, *Biblical and Talmudic Medicine* (trans. Fred Rosner; Lanham: Rowman & Littlefield, 2004), 417–418.

the other hand, the Hebrew term סנדל /*sandāl* might reflect some of the other associated, morphologically closed terms, such as footwear, a plant, a boat, or a fish. Consequently, the Hebrew term סנדל /*sandāl* may also be associated with the Greek term σάνδαλον/*sandalon*, which exhibits a rich semantic field, too; indeed, it designates two realities: a “sandal”¹⁶ and a flatfish,¹⁷ which is also called σάνδαλον/*sandalon* and apparently is identical with another kind of fish called βούγλωσσον/*bouglōsson* “ox-tongue,” which is eventually to be identified with the generic class called σέλαχος/*selachos*.¹⁸ It should further be noted that the latter, neutral Greek term βούγλωσσον/*bouglōsson* is etymologically related to a plant designated by the masculine Greek term βούγλωσσοσ/*bouglōssos*, “bugloss,” probably identifiable with the *Anchusa Italica*.¹⁹ The Hebrew fully reflects this complex semantics in the Greek term through either transcriptions or translations. On the one hand, the Hebrew term סנדל /*sandāl* transcribes the Greek term σάνδαλον/*sandalon*; on the other hand, the Hebrew expression של שר /*šāl šūr* translates literally both the Greek terms βούγλωσσον/*bouglōsson* (as reflected in the Tosefta and in the Gemara) and βούγλωσσοσ/*bouglōssos* (as reflected in some medieval texts on medicinal plants).²⁰ Thus, it is unclear whether the Hebrew expression שר של /*šūr šāl* intends to designate a *fish* or a *plant*, because it does not reflect the gender difference between a neutral (βούγλωσσον/*bouglōsson* = fish) and masculine (βούγλωσσοσ/*bouglōssos* = plant) Greek. The same semantic difficulty will arise again while treating the Hebrew sources from the Babylonian Talmud. There is no need to say that a supplementary meaning of the term βούγλωσσον/*bouglōsson* as a surgical

16 Liddell and Scott, *Greek-English Lexicon*, 1582.

17 Ibid. Cf. also Preuss, *Biblical and Talmudic Medicine*, 418. Interestingly enough, neither the morphologically related Aramaic term סנדלא /*sandāla*’ (or *sandēlā*’) nor its homographic Jewish Palestinian Aramaic term are ever used to designate a flatfish. See Jastrow, *Dictionary*, 1004–1005 and Michael Sokoloff, *A Dictionary of Jewish Palestinian Aramaic of the Byzantine Period* (Ramat Gan: Bar-Ilan University Press, 1992), 383.

18 Liddell and Scott, *Greek-English Lexicon*, 324. The identification of the fish called βούγλωσσοσ/*bouglōssos* with the σέλαχος is established on the basis of later Greek writers who classed the “bugloss” with the species described by Aristotle (Arist. *Fragmenta varia* 280). See Liddell and Scott, *Greek-English Lexicon*, 1589.

19 Liddell and Scott, *Greek-English Lexicon*, 324. See also: Max C. P. Schmidt, *Paulys Realencyclopädie der classischen Altertumswissenschaft* (ed. G. Wissowa, vol 3/1; Stuttgart: Metzler, 1897), 993.

20 In these cases, the Greek term *bouglōssos* is usually rendered with a transliteration that is unable to reflect the neutral or masculine ending of the term: either the variants סנדלוס or סנדלוסא /*būglōssa*’ or *būglōsah* are attested in recent rabbinic medical texts. Interestingly enough, Tobias Kohn’s 18th-century encyclopedic work *Ma’aseh Toviyah* uses the Hebrew terms *būglōsah* and *būr’agah* to designate two different plants from the same genera of the common Borage family (*Boraginaceae*): the Hebrew term *būglōsah* designates, in Judeo-Arabic, *lisā’n šūwwīr yā’bā’n*, “a Japanese ox-tongue,” modernly corresponding to an Asian plant called “purple gromwell” (*Lithospermum erythrorhizon*) from the genus *Lithospermum*, belonging to the Borage family; the Hebrew term *būglōsah* designates, in Judeo-Arabic, *lisā’n šūwwīr*, an “ox-tongue,” modernly corresponding to the Mediterranean plant, known by the common name *massed alkane* (*Hormuzakia aggregate*), also belonging to the Borage family. See Tobja Rofe Cohen, *Ma’aseh Toviyah kolel ha-Arba’ah ‘Olamot* (part 3; Venice: Stamparia Bragadina, 1708), 134.

instrument used as tongue depressor²¹ can obviously be ruled out from the present analysis due to its evident semantic incompatibility. One should also take into account two supplementary issues: on the one hand, the Mishnah frequently has difficulties providing a reliable embryology, possibly due to scarcity of medical data;²² on the other hand, it exhibits a rich semantics to designate an embryo in the several phases of its development. Indeed, rabbinic literature usually distinguishes between six progressive phases in the formation of a “human being”: 1) גולם / *gōlem* or a “formless rolled-up thing” (between 0–1.5 months); 2) שפיר מרקם / *sapīr merūqān* or an “embroidered foetus”; 3) עובר / ‘*ōver* or “[something] carried” or “foetus” (between 1.5–4 months); 4) וולד / *wālād* or “child” (between 4–7 months); 5) וולד של קיימא / *wālād šel qaiyama*’ or “viable child” (between 7–9 months); and 6) בן שכלו חדשיו / *ben šĕ-kālū lō ḥōdāšāyū* or “a son who completed his [nine] months.”²³ In the present case, the Hebrew term וולד / *wālād* will always be rendered as a “childbirth” in order to designate—in its most literal and neutral sense—an offspring that is neither a “foetus” nor necessarily exhibits a “human shape” (צורת אדם / *šūrat ’ādām*). This *neutral* stance is particularly important in order to treat a number of rabbinic texts that deal with the issue of סנדל / *sandāl*. More specifically, it is particularly important not to strictly suggest that וולד / *wālād* shall unequivocally be identified with a “foetus of human shape,” especially because the anomaly of סנדל / *sandāl* appears to put this identification in danger. Besides, this identification is overtly maintained only in two specific passages from Palestinian literature—namely from tractate Niddah both in the Mishnah and in the Tosefta²⁴—and yet is not necessarily valid for any strata of rabbinic literature.²⁵ On the contrary, the Hebrew term עיבור / *ibūr* will always be rendered as “foetus,” in order to designate an embryo that is in the later phase of its development but does not necessarily exhibit a “human shape.” The emphasis on this lexical distinction should also evidence that the term סנדל / *sandāl* does not only exhibit a complex semantics but also applies to several stages of embryonic development; therefore, it might possibly designate a series of similar, when not correlated, medical issues. Aside from this, it should also be noted that there are other languages from the ancient Near East that designate both a sandal and a flatfish with the same common term: see for instance, the Sumerian *e-sir/sir* and the Akkadian *šenu* in ancient Mesopotamian

21 Liddell and Scott, *Greek-English Lexicon*, 324.

22 On this see Federico Dal Bo, *Massekhet Keritot: Text, Translation, and Commentary* (Tübingen: Mohr Siebeck, 2013), 78–79.

23 Joseph Needham and Arthur Hughes, *A History of Embryology* (Cambridge: Cambridge University Press, 2015), 77.

24 Namely: m. Niddah 3:2 and t. Niddah 4:6. More specifically, the assumption that a וולד / *wālād* has to exhibit a “human shape” (צורת אדם / *šūrat ’ādām*) is implicitly maintained in the form of a negative assertion: “the sages say: each one that has no human shape is not a childbirth.” (וחכמים) (אומרים כל שאין בו מצורת אדם אינו וולד). This locus is usually mentioned by commentators in order to reinforce a restrictive definition of וולד / *wālād* in other talmudic passages, as in the case of Rashi on b. Hul. 77b. See also the following discussion.

25 See the following relevant discussion.

literature.²⁶ Although there is no documentation for a direct influence of Old Babylonian terms on Greek terms, in the present case it cannot be excluded that *σάνδαλον/sandalon*, designating both a sandal and a fish, is not a Greek lexical innovation but might reflect a (spontaneous?) linguistic habit in the ancient Near East, possibly on account of morphological similarities between a footwear's sole and a flatfish. If this hypothesis is legitimate, other kinds of cultural influence cannot be ruled out and it can be assumed that Old Babylonian themes might be reflected in more recent Jewish-Greek literature. In order to verify this hypothesis, it is necessary to proceed with a detailed textual analysis of some important occurrences of this term in Jewish literature and to compare them with some of its occurrences in Old Babylonian texts.

2 A Textual analysis of Hebrew sources mentioning a סנדל / *sandāl*

Rabbinic literature employs סנדל / *sandāl* as a *terminus technicus* for a miscarriage, as is evident from the standard expression in the Mishnah: המפלת סנדל / *ha-mappelet sandāl* (m. Ker. 1:3 and m. Nid. 3:4). As the Mishnah uses it, the Hebrew term סנדל / *sandāl* is unproblematic and it is employed without any further explanation in a detailed casuistic of miscarriages. The Tosefta to tractate Niddah, however, disambiguates the term:

And [the rabbis] say that a *sandāl* is similar to *sandāl*, a fish in the sea; Rabbi Shimon ben Gamliel says: [a *sandāl*] is similar to a “tongue of an ox.”
(t. Nid. 4:7)²⁷

וסנדל שאמרו דומה לסנדל דג שבים ר"ש בן
גמליאל אומר דומה ללשון של שור
(ת' נדה ד ז)

It is particularly noteworthy that the Tosefta provides two concurrent explanations for the Hebrew term סנדל / *sandāl*: on the one hand, the Tosefta identifies the סנדל / *sandāl* with an homonymous sea fish called *σάνδαλον/sandalon*, according to the majority of the rabbis; on the other hand, it identifies the סנדל / *sandāl* with a לשון שור / *lāšōn šel šūr*, a “tongue of an ox,” according to the minority opinion of Rabbi Shimon ben Gamliel, a Palestinian Tanna of the first century.²⁸ In so arranging these different opinions, the rabbis assume that there is a contradiction or at least a meaningful difference between these two species of fish. Therefore, if it is correct to assume that the Hebrew expression לשון שור / *lāšōn šel šūr* literally translates the Greek term *βούγλωσσον/bouglōsson*, then the Tosefta maintains that there is a difference between the fishes to which the miscarried foetus is to be compared. The textual material occurring in the Tosefta is also reported in the Gemara to the Babylonian tractate Niddah with some noteworthy differences:

26 Erica Reiner, ed., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 17/2 (Chicago: The Oriental Institute, 1992), 290–292.

27 All primary Jewish sources are quoted from *Bar-Ilan University. The Responsa Project. [Ramat Gan, Israel]: Bar-Ilan University, Version 23, 2018*. All translations are my own.

28 Günter Stemberger, *Introduction to the Talmud and the Midrash* (trans. M. Brockmuehl; Minneapolis, MN: Fortress, 1992), 67.

Our rabbis taught: a *sandāl* is similar to a fish of the sea. At its beginning it is a [normal] childbirth but [then] it is crushed. Rabbi Shimon ben Gamliel says: a *sandāl* is similar to a “tongue of a big ox.” In the name of our rabbis it was testified that a *sandāl* needs to have a human face. Rav Yehudah said in the name of Shmuel: the [common] rule [is that] a *sandāl* needs to have a human face. Rav Ada said in the name of Rav Yosef in the name of Rav Yitshaq: a *sandāl* needs to have a human face even at its back, for instance just like someone who has slapped his fellow and made his face backward.
(b. Niddah 25b)

ות"ר סנדל דומה לדג של ים מתחלתו ולד הוא
אלא שנרצף רשב"ג אומר סנדל דומה ללשון של
שור הגדול משום רבותינו העידו סנדל צריך צורת
פנים א"ר יהודה אמר שמואל הלכה סנדל צריך
צורת פנים א"ר אדא א"ר יוסף א"ר יצחק סנדל
צריך צורת פנים ואפילו מאחוריו משל לאדם
שסטר את חבירו והחזיר פניו לאחוריו
(ב' נדה כה ע"ב)

It is evident that the Bavli agrees with the Tosefta in considering the סנדל / *sandāl* a kind of sea fish to be identified either with the homonymous *σάνδαλον* / *sandalon* or with a *βούγλωσσον* / *bouglōsson*, as Rabban Shimon ben Gamliel maintained. Yet, some important differences may be noted:

1. The Bavli provides a supplementary explanation for this anomaly; it maintains that a foetus shaped like a סנדל / *sandāl* would manifest a mixed morphology, initially normal and then abnormal—that is: the foetus's head and the upper torso would morphologically be normal but the rest of the body (possibly from the lower torso down) would be morphologically abnormal;

2. The reason for this supplementary explanation is implicit and possibly depends on a tiny, yet striking difference between the Mishnah's and the Tosefta's general casuistic of miscarriages:

Whoever miscarries a piece [...] whoever miscarries [something] like a kind of membrane, like a kind of a hair, like a kind of dust, like a kind of red flies, [...] whoever miscarries something like a kind of fishes, locusts, insects, or rodents [...] whoever miscarries a kind like a [domesticated] animal, a beast, or a fowl [...] and the sages say: anything that does not have a human shape is not [considered to be] a childbirth.
(m. Niddah 3:2)

המפלת חתיכה [...] המפלת כמין קליפה כמין
שערה כמין עפר כמין יבחושין אדומים [...]
המפלת כמין דגים חגבים שקצים ורמשים [...]
המפלת מין בהמה חיה ועוף [...] וחכמים
אומרים כל שאין בו מצורת אדם אינו ולד
(מ' נדה ג ב')

Whoever miscarries a piece [...] whoever miscarries [something] like a kind of membrane, like a kind of a hair, like a kind of dust, like a kind of red flies, [...] whoever miscarries a kind like a [domesticated] animal, a beast, or a fowl [...] and the sages say: anything that does not have a human shape is not [considered to be] a childbirth.

(t. Niddah 4:2)

המפלת חתיכה [...] המפלת מין קליפה מין
שעורה מין עפר מין יבחושין אדומים [...] .
המפלת כמין בהמה חיה ועוף [...] ואמרו כל
שאינו בו מצורת אדם אינו ולד
(ת' נדה ד ב)

A comparison of these two Palestinian sources is of particular importance for the treatment of the later strata of rabbinic literature and requires detailed consideration. First of all, aside from other irrelevant differences, it is quite evident that the Mishnah *does* provide the case of a woman miscarrying something “like a kind of fishes” (סנדל / *kě-mîn dāgīm* / כמין דגים), as is also reflected in other Palestinian sources,²⁹ whereas the Tosefta *overtly does not*. This difference in the sources impacts the definition of a סנדל / *sandāl* especially because of the assumption that a legitimate “childbirth” (ולד / *wālād*) has to exhibit “human shape” (צורת אדם / *šūrat ’ādām*), as maintained both in the Tosefta and the Mishnah.³⁰ In other words, the Tosefta maintains both that a “childbirth” has to exhibit a “human shape” (t. Nid. 4:6) and that the סנדל / *sandāl* is a fish (t. Nid. 4:7) but does not explicitly treat the case of a woman miscarrying something “like a kind of fishes” (cf. m. Nid. 3:2); conversely, the Mishnah both maintains that a “childbirth” has to exhibit a “human shape” (m. Nid. 3:2) and treats the case of a woman who “miscarries like a kind of a fish” (m. Nid. 3:2) but does not mention that the סנדל / *sandāl* is a fish (cf. t. Nid. 4:7). This varied constellation of concepts is reflected in the corresponding page from the Babylonian Talmud (b. Nid. 25b) that tries to harmonize them all together. Accordingly, the Bavli accepts the Tosefta’s assumption that the סנדל / *sandāl* is a fish (t. Nid. 4:7) as well as the Mishnah’s and Tosefta’s assumption that a “childbirth” has to exhibit a “human shape” (m. Nid. 3:2 and t. Nid. 4:6); but it also has to face the Mishnah’s indisputable case of a woman miscarrying something “like a kind of fishes” (m. Nid. 3:2) that is discussed at its proper place (b. Nid. 21a). As a result, the Bavli seems to offer a compromise: on the one hand, it accepts the idea that a סנדל / *sandāl* is a fish (t. Nid. 4:7) and yet also elaborates on it; on the other hand, it implicitly accepts the idea that a סנדל / *sandāl* would fall into the major case of a woman miscarrying something “like a kind of fishes” (m. Nid. 3:2) and yet it avoids the conclusion that a סנדל / *sandāl* would not a “childbirth” (ולד / *wālād*) while not exhibiting a “human shape” (צורת אדם / *šūrat ’ādām*) (m. Nid. 3:2), exactly by maintaining that a סנדל / *sandāl* would affect only half of the body of a childbirth (b. Nid. 25b). The Bavli’s complex treatment of the

29 Cf. Sifra, *Tazria’*, *parashah* 1, *perek* 4, and y. Nid. 3:2, 9b.

30 Cf. m. Nid. 3:2 and t. Nid. 4:6. See also footnote n. 25.

tannaitic sources has an important impact on the issue of סנדל / *sandāl* and possible facial anomalies, as will be discussed further below;

3. The Bavli apparently accepts Rabban Shimon ben Gamliel's opinion from the Tosefta that identifies the סנדל / *sandāl* with a "tongue of an ox," לשון של שור / *lāšōn šēl šūr*, but introduces a small, yet possibly important correction: a foetus shaped like a סנדל / *sandāl* shall be identified with a "bigger" variety of the former, a "large tongue of an ox," לשון של שור הגדול / *lāšōn šēl šūr ha-gādōl*. It is evident that the Hebrew expression לשון של שור / *lāšōn šēl šūr* reflects a possible Greek substratum (either the term βούγλωσσον / *bouglōsson* or βούγλωσσοσ / *bouglōssos*) but it is difficult to determine whether the Hebrew expression intends to describe a foetus (metaphorically?) shaped as a "fish" or a "plant," as specified above. Indeed, the mention of a לשון של שור הגדול / *lāšōn šēl šūr ha-gādōl* calls for some supplementary remarks. At first, this Hebrew denomination possibly reflects a Greek expression: probably a hypothetical βούγλωσσον μέγαλον / *bouglōsson megalon* or a historical βούγλωσσον μέγα / *bouglōsson mega*. Indeed, the latter expression is actually documented by modern lexicographers and would designate a κρίσιον / *krission*: that is, a particular plant identifiable with a *Carduus pycnocephalus*.³¹ The identification of the Hebrew לשון של שור הגדול / *lāšōn šēl šūr ha-gādōl* with a plant called after the Greek name βούγλωσσον μέγα / *bouglōsson mega* might suggest, by implication, that the rabbis use the term סנדל / *sandāl* to refer to the homonymous plant called "sandalwood" (چندل / the Persian *čandal* rather than the Persian ساندل / *sandal* or Arabic صندل / *sandal*). Yet it is more likely that these semantic difficulties derive both from a complex linguistic-semantic condition and the conflation of four fundamental meanings of the term **sandal*: footwear, a plant, a boat, and a fish. Therefore, it is not implausible that these lexical uncertainties might have caused some confusion also in the rabbinic treatment of these terms and of the Hebrew term סנדל / *sandāl* itself;

4. It cannot be excluded that Rabban Shimon ben Gamliel did not intend to produce an ontological rather a lexicological distinction between a סנדל / *sandāl* and a לשון של שור / *lāšōn šēl šūr*. Rabban Shimon ben Gamliel was indeed educated in Greek culture and might then have suggested calling the very same fish with the Hebrew name לשון של שור / *lāšōn šēl šūr* rather than with the non-Hebrew name סנדל / *sandāl*. In this case, Rabban Shimon ben Gamliel would here be treating a lexicological issue, i. e., the designation of a specific kind of fish, as the occasion for making a theological-political statement;³² 5. Besides, it is evident that the Hebrew expression לשון של שור / *lāšōn šēl šūr* (also extant in later rabbinic literature as לשון השור / *lāšōn ha-šūr*) is neither understood as the translation of a Greek term nor perceived as idiomatic; rather it simply designates, almost literally, "the tongue of an ox," as reflected also in some later commentaries;

31 Liddell and Scott, *Greek-English Lexicon*, 324, 997. The identification of a βούγλωσσον μέγα / *bouglōsson mega* with a κρίσιον / *krission* is established on the basis of the first-century Greek physician, pharmacologist, and botanist Dioscorides Pedanius (*De Materia Medica* 4, 118).

32 I owe this remark to Prof. Tizrah Meacham (University of Toronto). For a treatment of the relationship between Judaism and Greek culture, see for instance Lee I. Levine, *Judaism and Hellenism in Antiquity: Conflict or Confluence?* (Washington: University of Washington Press, 2012).

6. The Bavli also maintains that the morphology of a foetus shaped like a סנדל / *sandāl* should also be endowed with a human face. It should be noted that this supplementary issue stands in contrast with the previous assumption that a foetus shaped like a סנדל / *sandāl* would “initially” exhibit a normal morphology and then an abnormal one;

7. Finally, the Bavli provides some additional information about this anomaly and the peculiar position of the foetus’s head, i. e., oriented backwards. The Bavli does not provide any medical reason for this but it is plausible that its remarks could be integrated into some anatomical descriptions that are extant in the Palestinian Gemara to tractate Niddah:

“Whoever miscarried a *sandāl* or a placenta” (m. Nid. 3:4). Rabbi Abba in the name of Rab Yehudah [says]: there is no *sandāl* but one which a living [foetus] weighed down and it does not comes out together with the living [foetus] but rather with a dead [foetus].
(y. Niddah 4:4–5, 50d)

המפלת סנדל או שיליאי (מ' נדה ג ד) רבי בא
בשם רב יהודה אין סנדל אלא שרצמו חי ואינו
יוצא עם החי אלא עם המת
(י' נדה ד ד-ה כה נ ע"ד)

Just like the Mishnah, so does the Yerushalmi provide no explanation for the meaning of the Hebrew term סנדל / *sandāl*. Yet, unlike the rest of the textual evidence, the Yerushalmi provides a possible aetiology for this morphological anomaly and maintains that a סנדל / *sandāl* would be the major consequence of a problematic pregnancy involving two foetuses.

3 Traditional and modern rabbinic interpretations of סנדל / *sandāl*

The textual analysis of the major occurrences of the term סנדל / *sandāl* in rabbinic sources manifests complex semantics and some conceptual tensions between potentially divergent interpretations of this anomaly. These conceptual tensions are treated differently in traditional and modern rabbinic interpretations.

On the one hand, traditional rabbinic interpretations—especially those stemming from the French-German milieu, thus culturally and geographically distant from the original Babylonian setting—usually provide a generic definition for the foetal anomaly called סנדל / *sandāl* but do not necessarily conform to the lexical explanation provided both by the Tosefta and the baraita in the Babylonian Gemara to tractate Niddah. For instance, the German authority Rabbenu Gershom ben Yehudah³³ provides a rather generic explanation for the term:

³³ Rabbenu Gershom ben Yehudah of Mainz (960–1028), called also מאור הגולה / *Me'or Hagolah*, was the leading halakic authority for Ashkenazic Jewry. One of his most famous rulings is the prohibition of polygamy and of divorcing a woman against her will. His disciple Rabbi Jacob ben Yaqar (d. 1064) will be the teacher of Rabbi Shlomo ben Yitshaq, better known as Rashi (1040–1105), who refers to him as “the Elder.” See Andreas Lehnardt, “Mainz und seine Tal-

“Whoever miscarried a *sandāl*” (m. Keritot 1:3): a childbirth whose form is corrupted. (Rabbenu Gershom on Keritot, chap. 1) המפלת סנדל (מ' כריתות א ג): ולד שנתקלקלה צורתו (רבינו גרשום מסכת כריתות פרק א)

Rashi,³⁴ who usually conforms to the Bavli’s self-explanatory comments, while reading another talmudic passage, interprets סנדל/*sandāl* as a metaphor for an anomaly but provides very little insight and rather contradicts the above-mentioned passage from tractate Niddah:

Sandāl: a childbirth that has no human face. (Rashi on b. Yebam. 12b) סנדל: ולד שאין לו צורת פנים (רש"י על ב' יבמות יב ע"ב)

A later commentator like Rabbi Ovadiah of Bertinoro³⁵ provides some more detailed explanation with different effects and discusses this term at least in two relevant occasions that I shall treat together:

Sandāl: it is a childbirth whose form is diminished and the expression *sandāl* [means]: hated childbirth.³⁶ So I found that most of its commentaries [maintain] that it is a piece of flesh made in the form of a sandal and normally accompanies childbirth. (Bertinoro on m. Ker. 1:3) סנדל: ולד הוא אלא שנפחתה צורתו ולשון סנדל שנאויו ולד. ככ מצאתי ורבותי פרשו שהיא חתיכת בשר עשויה כצורת סנדל ורגילה לבוא עם ולד (ברטנורא על מ' כריתות י ג)

Sandāl: a piece of flesh made in the likeness of a “tongue of an ox” and since it has the form of a sandal it is called *sandāl*. It normally accompanies childbirth and there is who say: *sandāl* [that is:] hated childbirth.³⁷ (Bertinoro on m. Nid. 3:4) סנדל: חתיכת בשר עשויה כדמות לשון של שור ומפני שיש לה צורת סנדל קורין לה סנדל. והוא רגיל לבא עם ולד וי"מ סנדל שנאויו ולד (ברטנורא על מ' נדה ג ד)

mudgelehrten im Mittelalter,” in *Mainz im Mittelalter* (ed. Mechtild Dreyer; Mainz: Zabern, 2009), 87–102.

34 Rashi is probably the most famous and celebrated commentator on the Bible and the Babylonian Talmud. Scholarship about him is extensive. See, for instance, Esra Shereshevsky, *Rashi, the Man and his World* (Northvale, NJ: J. Aronson), 1996; see also the new bibliography on Rashi commentary in Pinchus Krieger, *Parshan-Data* (Monsey, NY: Krieger, 2005), 41–46.

35 Rabbi Ovadia of Bertinoro, known also as Bartenura (1455–1516), was a famous Italian scholar whose commentary on the entire Mishnah is now included in every Hebrew edition. He also wrote a supercommentary on Rashi’s commentary on Scripture. See, for instance, Bruno Chiesa, “Il supercommentario di Ovadya a Rasi,” in *Ovadiab Yare da Bertinoro e la presenza ebraica in Romagna nel Quattrocento* (ed. G. Busi; Torino: Zamorani, 1989), 35–46; Rabbi Luciano Caro, “Rabbi Ovadyà da Bertinoro e il suo supercommentario a Rashi,” *Hebraica* (1998): 165–168.

36 This is a provisory translation. See the following discussion.

37 This is a provisory translation. See the following discussion.

As far as they manifest a generic consistency, these two explanations of the term סנדל / *sandāl* differ in many aspects and present some lexical difficulties. I will treat each of them separately for clarity's sake:

1. While commenting on tractate Keritot, Bertinoro interprets the Hebrew term סנדל / *sandāl* according to its common literal sense: as a designation for a type of open footwear. Accordingly, he maintains that the miscarried childbirth called סנדל / *sandāl* manifests the same morphology (צורה / *ṣūrah*) of an actual “sandal”;

2. In contrast, while commenting on tractate Niddah, Bertinoro himself does not conform to his own explanation in tractate Keritot but rather tries to harmonize the conflicting talmudic opinions about the term, providing a slightly confusing interpretation. More specifically, he assumes that the term סנדל / *sandāl* is a sort of “metaphor” that describes a miscarried childbirth whose aspect manifests “similarity” (דמות / *dēmūt*) with a—*not better specified*—“tongue of an ox,” possibly here interpreted either in its literal (i.e., the muscular organ present in that specific animal) or metaphorical sense (i.e., the name of a fish from the sea).

3. Aside from these differences in treating סנדל / *sandāl* either literally or metaphorically, in both cases Bertinoro notably provides a supplementary gloss that presents a number of lexical uncertainties: וּלְדִ שְׂנֵאוֹי וְלִדְ / *ś(š)-n-ʿ-w-γ-w-d-l*. This expression is a *hapax* in rabbinic literature, possibly an innovation of Bertinoro himself, and presents a particularly difficult semantics. As such, the possibly corrupted expression וּלְדִ שְׂנֵאוֹי וְלִדְ / *ś(š)-n-ʿ-w-γ-w-d-l* offers three conflicting disambiguations, at least, and can therefore be rendered in three different ways: (i) at first, as “a hated childbirth,” (ii) traditionally, as “a hated and poor [childbirth],” (iii) in modern philological terms, as “a misshaped childbirth.”

i) At first, when considering Bertinoro's wording valid and legitimate, one could vocalize the expression וּלְדִ שְׂנֵאוֹי וְלִדְ / *ś(š)-n-ʿ-w-γ-w-d-l* as follows: *śan'uy/śan'ūt wālād*; therefore, one would render it literally as: “a hated childbirth.” The sense of the expression would still be not particularly clear and might possibly mean that the miscarried childbirth manifests a repugnant morphology—therefore it is “hated,” because it is “loathsome.”

ii) Traditional commentators already acknowledged the problematic nature of the expression וּלְדִ שְׂנֵאוֹי וְלִדְ / *ś(š)-n-ʿ-w-γ-w-d-l* in Bertinoro's commentary. This lexical difficulty was traditionally resolved by emending the contextually legitimate term וּלְדִ / *wālād* “childbirth” with the quite less expected term וְלִדְ / *wē-dal* “and poor” by simple metathesis.³⁸ As a result, the difficult expression וּלְדִ שְׂנֵאוֹי וְלִדְ / *ś(š)-n-ʿ-w-γ-w-l-d* would

38 See Rabbi Yom Tov Lipmann ben Nathan ha-Levi Heller, *Tosfot Yom Tov*, on m. Nid. 3. This emendation has usually impacted on the modern edition (and vocalization) of Bertinoro's commentary on the Mishnah. This emendation is usually provided either directly with the resulting expression וּלְדִ שְׂנֵאוֹי וְלִדְ / *ś(š)-n-ʿ-w-γ-w-l-d* or with a semiphilological correction after Bertinoro's original wording in the pertinent passages, such as: “*ś(š)-n-ʿ-w-γ-w-l-d*: one have to read childbirth (*wālād*).” שְׂנֵאוֹי צָרִיךְ וְלִדְ לְקַרְוֵא וְלִדְ. See Bertinoro on m. Bekh. 8:1, m. Ker. 1:3, and m. Nid. 3:5; cf. again *Tosfot Yom Tov* on m. Nid. 3:5; cf. also *Bi'ur ḥadash* 10:12. Rabbi Yom Tov Lipmann ben Nathan ha-Levi Heller (1579–1654) was a Bohemian talmudist who wrote the aforementioned commentary on the Mishnah called *Tosfot Yom Tov* (1614–1617 and then 1643–1644) that was formally intended as a “supplement” to Bertinoro's commentary. On his

then be emended with the no less unique expression ודל שנאוי /ś-n-ʿ-w-γ-w-d-l/; the latter would then be vocalised as śanʿûi wē-dal and consequently be rendered as “a hated and poor [childbirth].” As far as this emendation does not actually provide a clearer understanding of the text, one should also note that that vocalization śanʿûi wē-dal manifests a sort of phonetic similarity with the reading of sandāl; therefore, it is not implausible that Bertinoro is here simply providing a mnemotechnical tool or a sort of acronym for the term סנדל /sandāl/, although this explanation is hardly convincing.³⁹

iii) Yet, as anticipated, the expression ודל שנאוי /ś(š)-n-ʿ-w-γ-w-d-l/ is quite atypical when not idiosyncratic of Bertinoro. It is then not implausible to suggest that the term שנאוי /ś(š)-n-ʿ-w-γ/ shall be vocalised not as śanʿûi, “hated,” rather as the slightly corrupted form śanʿûi and therefore be corrected—by *lectio difficilior*—with the proper form שנוי /ś-n-w-γ/ to be read finally as śinûi, “changed.” Consequently, the problematic expression ודל שנאוי /ś(š)-n-ʿ-w-γ-w-l-d/ could be emended with the more valid expression שנוי ודל /ś-n-w-γ-w-l-d/, vocalized as śinûi wālād, and rendered as “a changed childbirth,” by implication “a childbirth [whose form has] changed” and finally, by extension, a “misshaped childbirth.”⁴⁰ By means of this textual emendation, Bertinoro’s difficult expression would lexically be harmonized with the rest of the mishnaic passage and would also support the suggestion that the use of the term סנדל /sandāl/, i. e. a “flatfish,” was intended also to be descriptive of a *process of transformation* that the foetus undergoes—just exactly as a sole progressively changes from a “normal” into a “flatfish.”⁴¹ Remarkably,

life and work, see Joseph Davis, *Yom Tov Lipmann Heller: Portrait of a Seventeenth-Century Rabbi* (Oxford: Littman Library, 2004).

39 A supplementary yet possibly negligible difficulty would also be the manifest confusion between the letter śin and the letter samekh, together with the unclear meaning of the expression “hated and poor.”

40 I owe this suggestion to Dr. Doru Constantin Doroftei (University of Hamburg). Unfortunately, I could not substantiate this interesting hypothesis philologically, as I was unable to consult the manuscript MS Paris, Alliance Israelite Universelle III B 173 bis, foll. 1–15, where Bertinoro’s commentary on tractate Keritot is extant in a fragmentary form (see Moise Schwab, *Les Manuscrits et les Incunables Hebreux de la Bibliotheque de l’Alliance Israelite* (Paris: Durlacher, 1904), 74–88 and 270–296). Yet it is notable that the Israeli-based Rabbi Ya’akov Shulevitz has recently commented online on the same passage from tractate Niddah and has spontaneously emended (Bertinoro’s) difficult expression ודל שנאוי /ś(š)-n-ʿ-w-γ-w-l-d/ with ודל שנוי /ś-n-w-γ-w-l-d/; he has specifically commented on it as follows: “the name sandāl does not teach about the shape of the childbirth rather on its substance and a sandal is an abridgment for ‘changed childbirth,’ since its shape has changed in a corrupted way” (*Havruta Niddah*, on m. Nid 3:4, § 152, quoted from: http://www.toratemetfreeware.com/online/f_02375.html?hc_location=ufi#HtmpReportNum0002_LS/, accessed on line: September 19, 2019).

41 I owe this remark to Prof. Dr. Tirzah Meacham (University of Toronto). In a private communication to me, Prof. Meacham has also argued that the Talmud might have used the adjective גדול /gādōl/ in this context especially with the purpose to signalize that “flatfishes” usually undergo morphological changes in their development—specifically, the eyes migrate to be on the same side—so that they ostensibly look “big” (גדול /gādōl/) or bigger. See also several interesting remarks in Tirzah Meacham, “Fetal Death in the Palestinian Talmud. Murder in the Chamber,” in *Death and taxes in the ancient Near East* (ed. Sara E. Orel; Lewiston: Mellen Press, 1992), 145–156.

it is already Maimonides,⁴² possibly Bertinoro's primary source, who tries to provide a harmonizing interpretation of the term סנדל / *sandāl* and gives a long and articulate explanation for the term, on account of his education both as a Talmud scholar and as a physician:

Sometimes from the remainder of the bloods from which a man [i.e., a foetus] is formed will congeal a piece [of flesh] in the likeness of the "tongue of an ox" and [this piece] is wound around a portion of the childbirth and it is called a *sandāl*. A *sandāl* will never be formed but with a childbirth. Yet, if a similar mass is formed without a childbirth, it is not called a *sandāl*. Most fetuses will not have a *sandāl* with them. Sometimes a pregnant woman receives a blow on her belly and the foetus will be damaged and will become like this *sandāl*. Sometimes [the foetus] will keep its facial features and sometimes the childbirth will dry up and change [in form] and the bloods will congeal until it won't keep facial features. (Maimonides, *Mishneh Torah, Sefer Kedushah, 'Issurey Bi'ah* 10:12)

פעמים יקפה משאר הדמים שנוצר מהם האדם חתיכה כמו לשון השור ותהיה כרוכה על מקצת הוולד; והיא הנקראת סנדל. ולעולם לא ייעשה סנדל זה, אלא עם ולד; אבל חתיכה שנוצרה לבדה בלא ולד, אינה נקראת סנדל. ורוב העוברים, לא יהיה עימהם סנדל. ופעמים יכה המעוברת דבר על בטנה, וייפסד העובר וייעשה כסנדל זה; ופעמים יישאר בו היכר פנים, ופעמים ייבש הוולד וישתנה ויקפאו עליו הדמים עד שלא יישאר בו היכר פנים רמב"ם משנה תורה, ספר קדושה, הלכות איסורי (ביאה, פרק י הלכה יב)

As compared with Rashi's self-evident explanation and Bertinoro's inconsistency, Maimonides tries to harmonize the Talmud's different opinions on the Hebrew term סנדל / *sandāl* and also provides a list of possible causes for it, physiological as well as traumatic. Despite his efforts, Maimonides too fails to supply a comprehensive "theory" on this fatal syndrome and his coherent description is only tentative.

On the other hand, some modern commentators are not satisfied with a generic definition of the term סנדל / *sandāl* and rather prefer to harmonize the conflicting opinions on this anomaly, probably referring to Maimonides's explanation and its lexical choices. For instance, while commenting on tractate Niddah of the Bavli, the ear-

42 The famous Rabbi Mosheh ben Maimon, or Musa Ibn Maymun, known as Rambam or Maimonides (1135–1204), was one of the great figures of medieval Judaism for his contributions to Jewish law and Jewish philosophy. He commented on the entire Mishnah and also wrote the famous comprehensive code *Mishneh Torah*, as well as several medical works, now available in English: Fred Rosner, *Maimonides' Medical Writings*, 7 vols. (Haifa: Maimonides Institute, 1984–94). See also: Josè Faur, "Maimonides' Discovery of a Saboraitic Version of Tractate Niddah", *Tarbiz* 55,4 (1995): 721–728. [In Hebrew].

ly nineteenth-century Polish rabbi Israel Lipschitz⁴³ implicitly relies on the aetiology reported in tractate Niddah of the Yerushalmi and explains the expression as follows:

“Whoever miscarried a *sandāl*” (m. Ker. 1:3): it is a long piece of wounded flesh, sometimes wrapped around the child-birth, and this piece [of flesh] itself was a childbirth, only that it was mashed in his mother’s belly, pressed by his brother. (Rabbi Israel Lipschitz, *Tiferet Israel*, tractate Keritot, chap. 1)

המפלת סנדל (מ' כריתות א ג) הוא כעין
חתיכת בשר ארוך וכרוך לפעמים סביב להולד וגם
החתיכה ההיא ולד היה רק שנתמעך בבטן אמו
מדדחקו אחיו
(תפארת ישראל, יכון מסכת כריתות פרק א)

The most comprehensive interpretation for this phenomenon is provided by the later eighteenth-century Italian rabbi David Pardo,⁴⁴ who comments on the Tosefta to tractate Niddah and provides a systematic analysis for the anomaly called סנדל / *sandāl* by referring to most of the relevant sources considered here. Following Maimonides’s assumptions, Rabbi Pardo states that the Hebrew term סנדל / *sandāl* does not really designate a single syndrome, but rather a collection of possible anomalies that may occur quite apart one from the other, depending on specific developments during pregnancy:

Yes, indeed it is so as it is explained by the rabbis above referring to a mere piece [of flesh] without blood and [according to] Rashbag while referring to the *sandāl* which is formed in the beginning [i.e., in its upper body] as an childbirth and then [it is similar to] a “tongue of an ox” and wrapped around the [normal] child-birth—therefore the meaning is that,

הא"נ דיסבור כרבנן דלעיל בחתיכה בעלמא בלא
דם ורשב"ג איירי בסנדל הנוצר מתחלה עם הולד
וזהו הדומה ללשון השור וכרוכה על מקצת הולד
ומשמע שזה נעשה כשמתעברת תאומים ואחד
מהם נקפה ונעשה סנדל וזה מוכרח שיבא כרוך
על הולד [...] ורבותינו אמרו דסנדל אם בא לבדו
צריך צורת פנים שאז אמרין שהוא הולד שנרצף
אבל אם אין לו צורת פנים לא חיישין

43 Rabbi Israel Lipschitz, alias Israel ben Gedaliah Lipschutz (1782–1860), was a prominent Polish rabbi active in Danzig. He wrote the well-known commentary on the Mishnah titled *Tiferet Israel*. See Shalom b. Rosenbaum, *Forgotten Manuscripts of the Lipschutz Family*. *Da'at* 61 (1972): 97–112; André Neher, “Cabale, science et philosophie dans le commentaire sur la Mishna de Tiferet Israel,” in *Ale Shefer: Studies in the Literature of Jewish Thought: Presented to Rabbi Dr. Alexandre Safran* (ed. Moshe Hallamish; Ramat Gan: Bar-Ilan University Press, 1990), 127–132.

44 Rabbi David Pardo (1718–1790) was an outstanding Italian scholar whose commentary on the Tosefta, titled *Haside David*, and his commentary on the halakic midrash *Sifre*, titled *Sifre devei Rav*, are considered classics of late rabbinic thought (“Aḥaronim”). See Stemberger, *Introduction to the Talmud and Midrash*, 162; Zvi Zohar, “Sephardic Jurisprudence in the Recent Half-Millennium,” in *Sephardic and Mizrahi Jewry: From the Golden Age of Spain to Modern Times* (ed. Zvi Zohar; New York: New York University Press, 2005), 167–196.

when she begets twins, one of them is congealed and turned into a *sandāl* [...] and our rabbis said that a *sandāl*, if it comes alone, requires facial features, and they say about it that it is a childbirth that is crushed but if it does not have facial features, they do not consider him a childbirth but rather maintain that she miscarried a piece [of flesh] [...] and even more so⁴⁵ if he is wrapped on a [normal] childbirth and similar to a “tongue of an ox” that is the *sandāl* [of which] Rashbag [speaks] but without blood, [the rabbis] do not consider him [a *sandāl*] unless he has facial features [...] but if he is without facial features, they consider him a mere piece [of flesh] [...]

(Rabbi David Pardo, *Haside David*, on the Tosefta to Niddah, § 84, n. 7)

לולד אלא דינו כדלעיל במפלת חתיכה [...] וכ"ש
 אם הוא כרוך על הולד ודומה ללשון השור דהיינו
 סנדל דרשב"ג אבל בלא ולד לא מחמירין אא"כ
 יש לו היכר פנים [...] אבל בלא היכר פנים אמרין
 חתיכה בעלמא היא [...] (ר' דוד פארדו, חסדי דוד על תוספתא נדה, פ"ד ז)

Rabbi David Pardo seems to maintain that the Hebrew term סנדל / *sandāl* designates a potentially morbid syndrome that can develop into four different anomalies, possibly on account of an increasing period of time, either alone or in the presence of a multiple pregnancy. Indeed, Rabbi David Pardo focuses mostly on the central issue at stake: that is, whether a miscarried childbirth has facial features (צורת פנים / *śurat pānīm*) or not. Notably, he does not mention any different period in the casuistic provided in his commentary on the Tosefta. Yet in providing the following summary, I maintain that Pardo's four distinct anomalies would also reflect four different stages of foetal compression, as is evidenced by modern medical observations, and thus would correspond to four increasingly longer periods of time. Besides, the supposition that these four anomalies collectively called סנדל / *sandāl* correspondingly occur in longer periods of compression seems to be implicitly stated in the talmudic prescription to pray that the mother will not deliver a *sandāl* “from the fortieth day to three months” (מארבעים יום) (ועד שלשה חדשים) (b. Ber. 60a): this obviously evidences that the rabbis were aware that this syndrome might manifest in longer periods of time during gestation.

I can accordingly distinguish between four different issues:

1. A deformity of the lower body morphology if the foetus is alone, since, in the case of facial issues, the foetus should not be treated as a סנדל / *sandāl* but rather as a different kind of miscarriage;

⁴⁵ Here Rabbi David Pardo relies on an *a fortiori* argument. On this rhetorical device, see Stemberger, *Introduction to the Talmud and Midrash*, 21.

2. A deformity of the face, if the miscarried twin was pressed by his brother (possibly, for a shorter period of time) before being expelled from his mother's uterus;
3. A more severe deformity resulting in a compressed foetus, if the aborted twin was pressed by his brother (possibly, for a longer period of time) before being miscarried;
4. The most severe deformity, resulting in a formless "piece of flesh," if the aborted twin was pressed by his brother (possibly, for a very long period) before being miscarried. Rabbi David Pardo has probably provided the most coherent and pertinent interpretation of the Hebrew term סנדל / *sandāl* with respect to its difficult treatments both in Jewish sources and their traditional commentaries. He suggests that, whatever literal or metaphorical meaning this term might have had, the Hebrew term סנדל / *sandāl* does not designate a specific single anomaly but rather a number of different issues that modern medicine classifies differently. Following his suggestion, the general use of the Hebrew term סנדל / *sandāl* and its metaphors becomes increasingly clear and can be explained in terms of modern medicine.

4 סנדל / *Sandāl* as an umbrella term for medical issues

My assumption is that the Hebrew term סנדל / *sandāl* does not designate a specific anomaly but rather serves as an umbrella term for a number of different issues: that is, anomalies that were believed either to have a common aetiology or to present the same morphological defects.

The use of a generic term to designate a larger number of medical issues is not uncommon in rabbinic literature and is justified for several reasons, such as false diagnosis, different expectations from medical classifications, and lexical economy. One should also note that medical observations from antiquity until very recent times were limited to the human senses and did not necessarily imply "medical incompetence"—at least when not abruptly contrasted with modern Western medical textbooks. Nevertheless, the system of diagnosis and prognosis implicitly adopted in the Babylonian Talmud was most possibly influenced by medical lore from Babylonia rather than from Greek sources. Thus, the medical system employed by the Babylonian Talmud would have refrained from providing a "case history," as opposed to the practice in Greece.⁴⁶ As a result, the Babylonian Talmud tends to provide anecdotes and commonly fails to provide an accurate, systematic description of symptoms. It is then not implausible to assume that the term סנדל / *sandāl* would hardly describe only a single and very specific pathology rather than a number of different medical issues whose aetiology might be common. Therefore, I assume that the סנדל / *sandāl* is employed as *terminus technicus* in rabbinic literature to designate four different pathologies. Three of them are presumably fatal pathologies—according to modern medicine—and thus usually resulting in a miscarriage, while another one is neither necessarily fatal nor the primary cause of miscarriage. I would like to anticipate that the identification of

⁴⁶ Here I am following Markham J. Geller, *Akkadian Healing Therapies in the Babylonian Talmud*, Berlin: Max Planck Institute for the History of Science, 2004; *Preprint-series* 259: 14–15. Also accessible online: <https://www.mpiwg-berlin.mpg.de/Preprints/P259.PDF>.

the first three pathologies seems quite founded on textual sources, whereas the fourth one is rather less likely:

1. The modern syndrome called *Fetus Papyraceus*: that is, the fatal loss of hydration and body fluids during pregnancy, possibly caused by a mechanical trauma, as Maimonides maintains, and resulting in a compressed tissue of organic origin, sometimes preserving human physiognomy. This syndrome is probably described in the end of the quotation from the Bavli, while referring to a foetus whose head is oriented backwards. In this respect, the Hebrew term סנדל / *sandāl* would designate a flatfish and thus, metaphorically, a foetus that resembles such a flatfish as a result of intrauterine compression;
2. The modern syndrome called *Foetus Compressus*, usually associated with the former, but specifically produced by “superfoetation”: that is, the uncommon pregnancy of two foetuses, which were conceived at two different times as a result of two distinct intercourses and which predate each other.⁴⁷ The Yerushalmi to tractate Niddah explicitly suggests this aetiology, as already remarked. In addition, it should be mentioned that the Babylonian Talmud’s discussion on tractate Niddah is aware of this possible event, suggesting the use of birth control even during pregnancy to avoid such an occurrence.⁴⁸ Just like the previous case, the Hebrew term סנדל / *sandāl* designates a flatfish and thus, metaphorically, a foetus that resembles such a flatfish as a result of intrauterine compression;
3. The modern syndrome called *Sirenomelia* (or mermaid syndrome): a very rare congenital deformity in which the legs are fused together and give the appearance of a mermaid’s tail—i. e., this applies to the references to a deformation of the lower

⁴⁷ “Superfoetation” as the simultaneous occurrence of more than one stage of developing child-births in the same female individual is believed to be relatively common in some species of animals (typically in fishes, rodents, rabbits, farm animals, and marsupials) but is extremely rare in humans, among whom it occurs as a dizygotic twin pregnancy. See Rabbi Edward Reichman, “Is There Life after Life? Superfetation in Rabbinic Literature,” in: *And You Shall Surely Heal* (Edited by J. Wiesen; New York: Yeshiva University Press, 2009), 39–55. The rabbis’ need to treat such a rare issue like “superfoetation” shall then be judged carefully, without ruling out the possibility that this would reflect their ignorance about the physiology of human body. On the one hand, one might presume that ancient medicine, as already remarked, would mostly rely on empirical observation limited to human senses and therefore might have persuaded the rabbis that “superfoetation” might represent an actual risk in humans so that is necessary to take precautions, such as using tampons (see next footnote). On the other hand, one should also keep in mind that the rabbis are not alien to treating “extreme cases” in talmudic discussion, regardless of their actual, theoretical, or radical nature (on the use of ad absurdum cases in talmudic literature, see also Dal Bo, *Massekhet Keritot*, 253); therefore, especially because of its exceptionality, the case of “superfoetation” could then be one of them. In addition, one should also consider that the rabbis manifest the tendency to derive legal cases from the animal realm and apply them to the human world. This overlapping of animal and human world, especially with respect to bodily and medical issues, is not uncommon in rabbinic literature. On this, see Dal Bo, *Massekhet Keritot*, 346–347.

⁴⁸ The use of a “tampon” (מור / *mók*) as a contraceptive method is encouraged in some passages both from rabbinic literature and the Babylonian Talmud (t. Nid. 2:6; b. Ketub. 39a; b. Yebam. 12b; b. Ned. 35b) but is especially encouraged during pregnancy, in order to avoid “superfoetation” exactly in tractate Niddah 45a. On this, see Preuss, *Biblical and Talmudic Medicine*, 387.

body. Julius Preuss already proposed the identification of סנדל / *sandāl* with this syndrome⁴⁹ and it is also supported by the *baraita* quoted in the Bavli that mentions a foetus that is “crushed.”

4. The modern syndrome called cleft lip:⁵⁰ the abnormal formation of mouth and palate resulting in a severe facial anomaly and usually concomitant with an anomaly of another severe pathology, possibly the same “superfoetation” or the intrauterine compression discussed above. Unlike the previous three fatal pathologies, the cleft lip syndrome is neither necessarily fatal nor the primary cause of miscarriage, but rather a morbid condition within a more severe pathology. Accordingly, the term סנדל / *sandāl* would be used quite exceptionally in the present case and would designate the homonymous flatfish *sandāl*, whose mouth—when observed from above—would actually recall the very same mouth defect in a childbirth affected by a cleft lip.⁵¹

As evident, this suggestive interpretation is mostly based on the *morphological similarity* between a flatfish’s mouth and a cleft lip observed from above, but presents two major exegetical difficulties. I will discuss them separately without necessarily ruling out the validity of this hypothesis. First, one should note that a cleft lip affects the development of a more mature foetus that is usually designated with the term עיבור / *‘ibūr*, as mentioned above, and can also impact live foetuses. It is argued that this horrifying deformity was apparently thought to be fatal and babies were allowed to die as nonviable.⁵² Second, there is no real evidence that the term סנדל / *sandāl* explicitly refers to specific mouth anomalies. Yet the rabbinic sources mentioned above are clearly concerned with the issue that the miscarriage presents a “human face” (צורת פנים / *šurat pānīm*), although the frequent comparison to an “ox tongue” (לשון של שור / *lāšōn šel šūr*) strongly suggests that the real issue at stake is the “flatness” of the childbirth rather than the shape of the mouth.

Each of these possible identifications with a modern medical syndrome relies on the Tosefta’s self-explanation of the Hebrew term סנדל / *sandāl* as related to a homonymous sea fish. This assumption implicitly rejects the hypothesis that סנדל / *sandāl* designates a kind of footwear, despite its most transparent etymology. On the contrary, Jewish sources apparently suggest a sort of *lectio difficilior*: a reading of textual evidence that contrasts with some expectations on the basis of the etymology of the term. In other words, although the Hebrew term סנדל / *sandāl* suggests that the corresponding syndrome described the foetus as footwear, Jewish sources tend to understand this term rather as the name of a sea fish and thus designating a foetus shaped like a fish. Yet, Jewish sources and later commentators appear to misunderstand the Hebrew expression לשון של שור / *lāšōn šel šūr* as a designation of a fish, as its Greek etymology (βούγλωσσος / *bouglōsson*) evidences. This failure to understand the gloss of Rabbi Shimon ben Gamliel produces, as noted, some confusion regarding this medical anomaly.

49 Preuss, *Biblical and Talmudic Medicine*, 417–418.

50 William G. Holdsworth, *Cleft Lip and Palate* (New York: Grune & Statton, 1963), 22.

51 Mark Westreich and Steve Segal, “Cleft Lip in the Talmud,” *Annual of Plastic Surgery* 2 (2000): 229–327.

52 *Ibid.*, v.i.

Both this semantic consistency and the implicit rejection of a more familiar interpretation of the Hebrew term סנדל / *sandāl* as a common type of footwear suggest that Jewish sources are not producing a lexical innovation but that they are possibly relying on some ancient themes associated with creation.

5 סנדל / *Sandāl* as the secularization of Mesopotamian scholarly texts

My assumption is that the סנדל / *sandāl* as a *terminus technicus* should not be interpreted either as a Greek or a Hebrew lexical innovation but rather as a secularization (or rationalization) of an older Babylonian tradition, specifically associated with childbirth.

This correlation with older Babylonian traditions seems supported by a minor but important lexical correction introduced by the Bavli that quotes from a baraita particularly close to the same text occurring in the Tosefta: identifying the *sandāl* as not a simple שור של לישון / *lāšōn šel šūr* but rather a probably “bigger” one, שור הגדול של לישון / *lāšōn šel šūr ha-gādōl*. It is indeed interesting that it is a *Babylonian* source that corrects a most likely earlier Palestinian source emphasizing the large dimensions of the foetus shaped like a fish. This correction, which is completely misinterpreted by classic rabbinic commentators, might have been introduced on account of some familiarity with ancient scholarly Mesopotamian texts from the second and first millennium BCE that identify the foetus with a fish, regardless of whether it is a regular childbirth or a miscarriage. There are indeed two occurrences, in older Sumerian and Akkadian medical-mythical literature, which support the identification of a foetus with a fish, regardless of whether it is well formed or abnormal:

1. The first identification of a child with a fish is provided by some Sumerian and Akkadian incantations dedicated to a pregnant woman who eats a special “sweet herb” (*ū-lāl*) that is typically eaten by a certain fish called either (in Sumerian) *subur* or (in Akkadian) *purādu*. The identification of this fish with a specific species is of particular importance, especially while treating ancient texts that deal with miscarriages and largely use the image of a “fish” as a metaphor for designating a (either normal or abnormal) childbirth. The authoritative *Assyrian Dictionary of the Oriental Institute of the University of Chicago* (CAD) maintains that a *purādu* shall unequivocally be identified with a “carp.”⁵³ Nevertheless, this identification has not always been exclusive. On the contrary, some scholars in the past had suggested a different identification that would have an important impact on the present treatment of Old Mesopotamian sources together with later rabbinic sources. Namely, Harri Holma and William Radcliffe maintained that a *purādu* could also be identified with a kind of a flatfish that exhibits the same typical “beard” of a carp, such as a “skate” or a “ray.”⁵⁴ The possibility of identifying the *purādu* with a flatfish would be important, especially when ex-

53 Erica Reiner, ed., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 12 (Chicago: The Oriental Institute, 2005), 516.

54 Harri Holma, *Kleine Beiträge zum Assyrischen Lexicon* (Helsinki: Finnischen Literaturgesellschaft, 1912), 96, quoted in William Radcliffe, *Fishing from the Earliest Times* (London: Murray, 1921), 376.

aming some Old Mesopotamian texts that explicitly compare the foetus to a “fish” swimming in uterus. In his detailed investigation *Birth in Babylonia and the Bible*,⁵⁵ Marten Stol proved that a woman eats this “sweet herb” because she wishes to please the very special kind of “fish” living in her belly—that is, the foetus with which she is pregnant, as reported in an Akkadian incantation for a woman in labour:⁵⁶

1. i-na me-e na-a-ki-im	1. From the waters of intercourse,
2. ib-ba-ni e-šé-em-tum	2. bone was created,
3. i-na ši-i-ir [ši]-ir-ha-ni-im	3. from the muscular tissue,
4. ib-ba-ni li-il-li-du-um	4. the baby was created
[...]	[...]
25. [li]-im-ha-as [...]	25. Let him strike [...]
26. ki-ma da-di-[im]	26. Like a <i>dādu</i> -fish
27. šu-sí ra-ma-an-ka	27. bring yourself out

(YBC 4603/YOS 11 86, ll. 1–4 and 25–27)

Interestingly, as Stol remarks, this text does not overtly describe the foetus as a *šubur*, as other texts do, but rather with the Akkadian term *dādum* (literally “darling”) that is also employed for designating a Sumerian-Akkadian female deity of creation as well as for forming some Akkadian proper names.⁵⁷ This Semitic root occurs for instance in the Hebrew term דוד/*dôd*, “friend” or in the Hebrew name דוד/*Dawid*, “David.”⁵⁸ It would then designate something that is particularly “dear” to the speaker. Therefore, the choice of describing a foetus as a *dādum* would well support a tender word-play between a “fish” in his mother’s belly and a “beloved” child.⁵⁹

55 Marten Stol, *Birth in Babylonia and the Bible: Its Mediterranean Setting* (Groningen: Styx, 2000), 9–10.

56 For the (here slightly modified) translation, see *Ibid.*, 11. For the original Akkadian text and the transcription, see Claudia D. Bergmann, *Childbirth as a Metaphor for Crisis: Evidence from the Ancient Near East, the Hebrew Bible, and IQH XI, 1–18* (Leiden: Brill, 2000), 32, on the basis of Jja van Dijk, “Une incantation accompagnant la naissance de l’homme,” *Or* 42 (1973): 502–507; see also Niek Veldhuis, “The Poetry of Magic,” in *Mesopotamian Magic: Textual, Historical, and Interpretative Perspectives* (ed. Tzvi Abusch and Karel van der Toorn; Groningen: Styx, 1999), 36–48.

57 Erica Reiner, ed., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 3 (Chicago: The Oriental Institute, 2004), 20–21. The use of *dādum* as “childbirth” follows the previous major connotations as “love-making” and “object of love.” Interestingly enough the term *dādum* as “child” is a homograph that also designates an “aquatic animal.” It is possible that the author intended to suggest a subtle wordplay between the “child,” who is “beloved” and craves for “sweet herb” like a “fish”—or an “aquatic animal” (*dādum*).

58 For a discussion on the interferences between the Akkadian *dādum* and the Hebrew דוד, see Jaquin Sanmartin-Ascaso, “Dôdh,” in *Theological Dictionary of the Old Testament* (ed. G. Johannes Botterweck and Helmer Ringgren; trans. John T. Willis, G. W. Bromiley and D. E. Green; vol. 3; Grand Rapids, MI: Eerdmans, 1997), 143–156.

59 Stol, *Birth in Babylonia and the Bible*, 11.

2. The second identification of a foetus with a fish is quite consistent with the rich imagery of the uterus filled with amniotic fluid and thus similar to an aquatic environment. More specifically, this identification is provided in a very different context: the collection of the teratological omen series called *Šumma Izbu*. This collection was transcribed (sometimes incompletely), commented on, and translated in the 1970s by Erle Leichty,⁶⁰ and has recently been re-edited in a much more exhaustive way by Nicla De Zorzi.⁶¹ This collection provides a number of birth omens in case of miscarriage both of a child and of an animal, designated with the common Akkadian term *izbu*. Among a long list of horrible child defects, the *Šumma Izbu* reports also the case of a woman delivering a very special child. This is originally reported in an almost laconic line of text that De Zorzi has recently completed thanks to a newly published fragment:⁶²

BE *iz-bu ki-ma* SUḪUR^{ku6} ù [muš *qú-lip-ta₃*] *ba-li-ip uz-za-at* d30 lú *ep-qa* d[ir] If an *izbu* is covered with scales like a *purādu*-carp or a snake, anger of the god Šin: a/the man will be full of *epqu*-lesions⁶³

Interestingly, the Akkadian text employs the Sumerian logogram SUḪUR to designate the very same “fish” that is fond of the “sweet herb,” mentioned in the Sumerian incantation reported above, and corresponding to the Akkadian term *purādu*. At this point it can be useful to resume the small semantic dispute on the meaning of this term. If one accepts the CAD’s identification of the *purādu* with a “carp,” the present comparison between the Old Mesopotamian and rabbinic corpora is not necessarily disqualified but mostly relies on a specific thematic congruence: the assumption that a childbirth can be compared to a fish, regardless of its normal or abnormal nature. In this respect, this thematic congruence could be justified in an anthropological perspective and would reflect the almost spontaneous acknowledgment that fetuses live in the amniotic liquid. On the contrary, if one recovers Holma’s and Radcliffe’s iden-

60 On the rendering of this term, see Erle Leichty, *The Omen Series Šumma Izbu* (Locust Valley, NY: Augustin, 1970), 63. For a lexicographic description, see Erica Reiner, ed., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 7 (Chicago: The Oriental Institute, 2004), 317–318.

61 Nicla De Zorzi, *La Serie Teratomantica Šumma Izbu: Testo, Tradizione, Orizzonti Culturali* (Padova: S.A.R.G.O.N., 2014). See also Nicla De Zorzi, “The Omen Series *Šumma Izbu*: Internal Structure and Hermeneutic Strategies,” *KASKAL. Rivista di Storia, Ambienti, e Culture del Vicino Oriente* 8 (2011): 43–75.

62 For the text, transcription, translation, and commentary, see De Zorzi, *La Serie Teratomantica*, ad loc. Cf. also the previous, fragmentary transcription: “if an anomaly is like a carp and a ...” (BE *iz-bu ki-ma* SUḪUR.KU6 ù [...]) (Leichty, *The Omen Series Šumma Izbu*, 171–172). De Zorzi has integrated this fragmentary source with a Neo-Assyrian and late Babylonian manuscripts as well as with the later Babylonian commentary: Uruk, SBTU 2 38 (= E. von Weiher, *Spätbabylonische Texte aus Uruk 2*), recto ll. 21–22.

63 For the identification of *ep-qa* with “lesions,” see Marten Stol, “Leprosy: New Light from Greek and Babylonian Sources,” *Jaarbericht van het Vooraziatisch-Egyptisch Gezelschap Ex Oriente Lux* 30 (1999): 22–31, and JoAnn A. Scurlock and Brill R. Andersen, *Diagnoses in Assyrian and Babylonian Medicine* (Chicago: Urbana, 2005).

tification of *purādu* with a flatfish (that might still be similar to a carp), it is possible to substantiate the previous analysis also on account of specific philological congruencies.

It is in this light that it might be interesting to take into account a supplementary source that is textually and thematically connected to the former one. There is indeed a well-preserved tablet containing an early Hellenistic “commentary” (*malsūtu*)⁶⁴ on this passage. This text apparently disambiguates the sense of the omen and aligns this incantation with a tentative description of a foetal monstrosity:⁶⁵

BE *iz-bu* GIM SUḪUR.MAŠ₂^{ku6} u₃ MUŠ If an *izbu* is covered in a skin of scales
qu₂-lip-tu₂ sa-bi-ip/uz-za-at d SUEN^{Lu2} like a goatfish or a snake: anger of Sin; the
ep-qa SA₅ man will be afflicted with *epqu*-lesions
 (CCP 3.6.3.B—*Izbu* commentary 17 B,
 lines 21–22)

This later commentary is particularly important. It provides a better understanding of the original Akkadian omen and also offers a relevant comparative perspective about child anomalies in the present context. In particular, the author of this commentary compares the “anomaly” (*izbu*) to a fish—or, more specifically, a mythical “goatfish” (*suburmāšī*)—especially because it resembles some morphological aspects of an aquatic animal: possibly its “skin” that presents “scales” (*quliptu*). In addition, it should be noted that the mention of “scales” apparently resonates with the case of a woman miscarrying something “like a kind of membrane” (קליפה/*qēlipāh*) mentioned both in the Mishnah and in the Tosefta (m. Nid. 3:2 and t. Nid. 4:2), especially on account of the ruling about a woman miscarrying “like a kind of fishes,” both reported in the Mishnah (m. Nid. 3:2) and the corresponding page from the Bavli (b. Nid. 21a). It is not implausible that these congruencies are not coincidental and reflect a thematic if not textual proximity between the corpora.⁶⁶

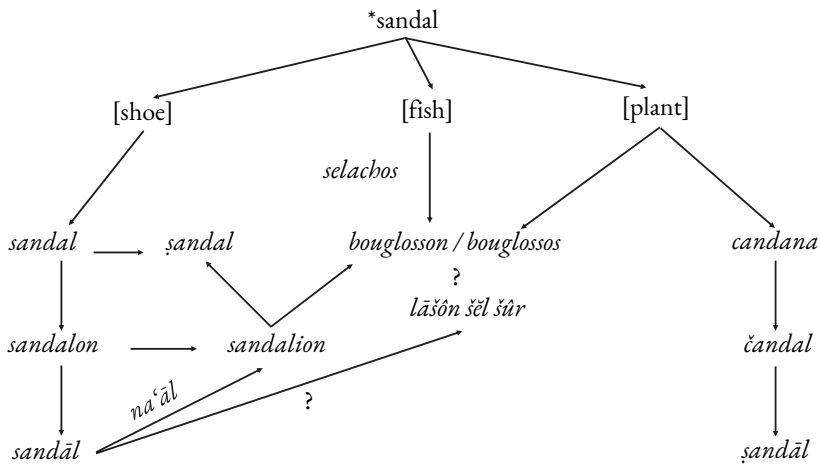
These textual witnesses allow us to maintain that Mesopotamian literature between the second and first millennium BCE sustained the identity between a foetus and a fish, regardless of whether it was well formed or abnormal, and that this identity was maintained both as a poetical and as a mythical-medical truth. On account of this, it would be interesting to reevaluate the choice of strictly identifying the Sumeri-

64 On Mesopotamian scholarly commentaries, cf. Markham J. Geller, *Ancient Babylonian Medicine: Theory and Praxis* (Chichester: Wiley-Blackwell, 2010), especially 141–160. See also Eckart Frahm, *Babylonian and Assyrian Commentaries: Origins of Interpretation* (Münster: Ugarit, 2011).

65 For the text, the transcription, the (here slightly modified) translation, and commentary, see Enrique Jiménez, “Commentary on *Izbu* 17 (CCP 3.6.3.B),” *Cuneiform Commentaries Project* (E. Frahm—E. Jiménez—M. Frazer—K. Wagensonner), 2013–2019; accessed September 19, 2019, at <https://ccp.yale.edu/P348643>.

66 The dissemination of the Akkadian term *quliptu* through several languages of the Near East is indisputable, as is easily reflected, for instance, both in Aramaic and Syriac. The Akkadian term mostly refers to reptiles, fishes, and plants, as well as to human skin, especially in a medical context, designating a “flake of skin.” See Erica Reiner, ed., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 13 (Chicago: The Oriental Institute, 1995), 296–298.

an term *subur* and its correlated Akkadian term *purādu* with “a carp” and rather taking into account Holma’s and Radcliffe’s suggestion that a *purādu* could also designate a *flatfish* that is not too dissimilar from a “carp.” In this latter case, one could argue that there are possibly some textual-historical connections between these corpora. As a result, the Hebrew term סנדל / *sandāl* would then represent the secularization or rationalization, even Hellenization, of these previous Old Babylonian themes and their transformation into an abstract juridical-medical concept. This concept would eventually mobilize a number of collateral ritual issues, such as delivering a specific sacrifice in case of miscarriage, especially with respect to the very morphology of the foetus. In this perspective it would then be important to distinguish both juridically and ritually between the miscarriage of an ordinary (normal) foetus, a *sandāl*, or a “piece of flesh.”



Bibliography

Literature

- Bergmann, Claudia D. *Childbirth as a Metaphor for Crisis: Evidence from the Ancient Near East, the Hebrew Bible, and 1QH XI, 1–18*. Leiden: Brill, 2000.
- Brockelmann, Carl. *Lexicon Syriacum*. Berlin: Reuther & Reichard, 1895.
- Cannon, Garland and Alan S. Kaye. *The Persian Contributions to the English Language: An Historical Dictionary*. Wiesbaden: Harrassowitz, 2011.
- Caro, Rabbi Luciano. “Rabbi Ovadyà da Bertinoro e il suo supercommentario a Rashi.” *Hebraica* (1998): 165–168.
- Chiesa, Bruno. “Il supercommentario di Ovadya a Rasi.” In *Ovadiab Yare da Bertinoro e la presenza ebraica in Romagna nel Quattrocento*. Edited by Giulio Busi. Torino: Zamorani, 1989. Pages 35–46.
- Ciancaglini, Claudia. *Iranian Loanwords in Syriac*. Wiesbaden: Ludwig Reichert, 2008.
- Cohen, Tobias (Tuviah). *Ma’aseh Tovayah kolel ba-Arba’ah ‘Olamot*. Venice: Stamparia Bragadina, 1708.

- Costaz, Louis. *Dictionnaire Syraïque-Français*. Beirut: Dar el-Machreq, 2002.
- Dal Bo, Federico. *Masseket Keritot: Text, Translation, and Commentary*. Tübingen: Mohr Siebeck, 2013.
- Davis, Joseph. *Yom Tov Lipmann Heller: Portrait of a Seventeenth-Century Rabbi*. Oxford: Littman Library, 2004.
- De Zorzi, Nicla. "The Omen Series *Šumma Izbu*: Internal Structure and Hermeneutic Strategies," *KASKAL. Rivista di Storia, Ambienti, e Culture del Vicino Oriente* 8 (2011): 43–75.
- . *La Serie Teratomantica Šumma Izbu. Testo, Tradizione, Orizzonti Culturali*. Padova: S.A.R.G.O.N., 2014.
- van Dijk, Jja. "Une incantation accompagnant la naissance de l'homme." *Or* 42 (1973): 502–507.
- Dorkin, Robin. *Between East and West: The Moluccas and the Traffic in Spices up to the Arrival of Europeans*. Philadelphia: American Philosophical Society, 2003.
- Even-Shoshan, Avraham. *Hamilton bebadash*. Vol. 4. Jerusalem: Kiryat Sefer, 1979.
- Faur, Josè. "Maimonides' Discovery of a Saboraitic Version of Tractate Niddah." *Tarbiz* 55/4 (1995): 721–728. [In Hebrew]
- Frahm, Eckart. *Babylonian and Assyrian Commentaries: Origins of Interpretation*. Münster: Ugarit, 2011.
- Geller, Markham J. *Akkadian Healing Therapies in the Babylonian Talmud*. Preprint Series 259. Berlin: Max-Planck Institut für Wissenschaftsgeschichte, 2004. Cited 19 September 2019: <https://www.mpiwg-berlin.mpg.de/Preprints/P259.PDF>
- . *Ancient Babylonian Medicine: Theory and Praxis*. Chichester: Wiley-Blackwell, 2010.
- Holdsworth, William G. *Cleft Lip and Palate*. New York: Grune & Statton, 1963.
- Holma, Harri. *Kleine Beiträge zum Assyrischen Lexicon*. Helsinki: Finnischen Literaturgesellschaft, 1912.
- Jastrow, Marcus. *A Dictionary of the Targumim, the Talmud Bavli, and Yerushalmi, and the Midrashic Literature*. London: Druglin, 1903.
- Kogan, Leonid. "Proto-Semitic Phonetic and Phonology." In *The Semitic Languages: An International Handbook*. Edited by Stefan Weininger. Berlin: De Gruyter, 2011. Pages 54–151.
- Krieger, Pinchus. *Parshan-Data*. Monsey, NY: Krieger, 2005.
- Jiménez, Enrique. "Commentary on Izbu 17 (CCP 3.6.3.B)," *Cuneiform Commentaries Project* (E. Frahm—E. Jiménez—M. Frazer – K. Wagensonner), 2013–2019. Cited 19 September 2019, at <https://ccp.yale.edu/P348643>.
- Lampe, Geoffrey W. H. *A Patristic Greek Lexicon*. Oxford: Clarendon, 1961.
- Lehnardt, Andreas. "Mainz und seine Talmudgelehrten im Mittelalter." In *Mainz im Mittelalter*. Edited by Mechtild Dreyer. Mainz: Zabern, 2009. Pages 87–102.
- Leichty, Erle. *The Omen Series Šumma Izbu*. Locust Valley, NY: Augustin, 1970.
- Levine, Lee I. *Judaism and Hellenism in Antiquity: Conflict or Confluence?* Washington: University of Washington Press, 2012.
- Liddell, Henry and Robert Scott. *A Greek-English Lexicon*. Revised by H. S. Jones. Oxford: Clarendon, 1996.
- Lust, Johan, Erik Eynikel and Karin Hauspie. *A Greek-English Lexicon of the Septuagint*. Stuttgart: Deutsche Bibelgesellschaft, 2002.
- Mayrhofer, Manfred. *Kurzgefasstes Etymologisches Wörterbuch des Altindischen*. Heidelberg: Carl Winter Verlag, 1976.
- Meacham, Tirzah. "Fetal Death in the Palestinian Talmud. Murder in the Chamber." In *Death and taxes in the ancient Near East*. Edited by Sara E. Orel. Lewiston: Mellen, 1992. Pages 145–156.

- Needham, Joseph and Arthur Hughes. *A History of Embryology*. Cambridge: Cambridge University Press, 2015.
- Neher, André. "Cabale, science et philosophie dans le commentaire sur la Mishna de Tiferet Israel." In *À la Shefer: Studies in the Literature of Jewish Thought: Presented to Rabbi Dr. Alexandre Safran*. Edited by Moshe Hallamish. Ramat Gan: Bar-Ilan University Press, 1990. Pages 127–132.
- Orel, Sara E., ed. *Death and taxes in the ancient Near East*. Lewiston: Mellen, 1992.
- Preuss, Julius. *Biblical and Talmudic Medicine*. Translated by Fred Rosner. Lanham: Rowman & Littlefield, 2004.
- Radcliffe, William. *Fishing from the Earliest Times*. London: Murray, 1921.
- Reichman, Edward. "Is There Life after Life? Superfetation in Rabbinic Literature." In *Shalom Rav. And You Shall Surely Heal*. Edited by Jonathan Wiesen. New York: Yeshiva University Press, 2009. Pages 39–55.
- Reiner, Erica, ed., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*. 21 vols. Chicago: The Oriental Institute, 1956–2011.
- Rosenbaum, Shalom B. "Forgotten Manuscripts of the Lipschutz Family." *Da'at* 61 (1972): 97–112. [In Hebrew]
- Rosner, Fred. *Maimonides' Medical Writings*. 7 vols. Haifa: Maimonides Institute, 1984–1994.
- Sanmartin-Ascaso, Jaquin. "Dôdh." In *Theological Dictionary of the Old Testament*. Edited by G. Johannes Botterweck and Helmer Ringgren. Translated by John T. Willis, G. W. Bromiley and D. E. Green. Vol. 3. Grand Rapids, MI: Eerdmans, 1997. Pages 143–156.
- Schmidt, Max C. P. *Paulys Realencyclopädie der classischen Altertumswissenschaft*. Vol. 3/1. Edited by G. Wissowa. Stuttgart: Metzler, 1897.
- Schwab, Moïse. *Les Manuscrits et les Incunables Hebreux de la Bibliotheque de l'Alliance Israelite*. Paris: Durlacher, 1904.
- Scurlock, Joann A. and Brill R. Andersen. *Diagnoses in Assyrian and Babylonian Medicine*. Chicago: Urbana, 2005.
- Shereshevsky, Esra. *Rashi, the Man and His World*. Northvale, NJ: J. Aronson, 1996.
- Sokoloff, Michael. *A Dictionary of Jewish Palestinian Aramaic of the Byzantine Period*. Ramat Gan: Bar-Ilan University Press, 1992.
- Stemberger, Günter. *Introduction to the Talmud and the Midrash*. Translated by M. Brockmuehl. Minneapolis, MN: Fortress, 1992.
- Stol, Marten. "Leprosy: New Light from Greek and Babylonian Sources." *Jahrbuch ex Oriente Lux* 30 (1999): 22–31.
- . *Birth in Babylonia and the Bible: Its Mediterranean Setting*. Groningen: Styx, 2000.
- Veldhuis, Niek. "The Poetry of Magic." In *Mesopotamian Magic: Textual, Historical, and Interpretative Perspectives*. Edited by Tzvi Abusch and Karel van der Toorn. Groningen: Styx, 1999. Pages 36–48.
- Westreich, Mark and Steve Segal. "Cleft Lip in the Talmud." *Annual of Plastic Surgery* 2 (2000): 229–327.
- Wollaston, Arthur N. *An English-Persian Dictionary Compiled from the Original Sources*. London: Allen, 1882.
- Zohar, Zvi. "Sephardic Jurisprudence in the Recent Half-Millennium." In *Sephardic and Mizrabic Jewry: From the Golden Age of Spain to Modern Times*. Edited by Zvi Zohar. New York: New York University Press, 2005. Pages 167–196.