MEDIEVAL JEWISH GREEK LEXICOGRAPHY:
THE *'ARUKH* OF NATHAN BEN JEHIEL*

ABSTRACT: The present study is dedicated to the Talmudic Lexicon *'Arukh* compiled by Nathan ben Jehiel (Rome 1035–1110). In addition to the contribution of the *'Arukh* to rabbinic studies, it also includes a dictionary which lists words from the classical languages in rabbinic sources and explains their meaning in Hebrew. The present study will focus on the *'Arukh*'s contribution to the following areas of Greek-Jewish medieval studies: a) the assembling of Greek and Latin words found in rabbinic literature and their definition; b) references to the Aquila version and other late Greek biblical translations; c) evidence that Greek was known and spoken by Jews during the Middle Ages. Particular attention will be given to the Byzantine lexicographers who enlighten the *'Arukh*'s interpretations.

KEY WORDS: Greek Bible translations, Greek Lexicography, Medieval Byzantine Greek, Rabbinic Greek, Rabbinical Hebrew lexicography.

RESUMEN: El presente artículo está dedicado al léxico talmúdico *'Arukh*, compilado por Nathan ben Jehiel (Roma 1035-1110). Además de la contribución del *'Arukh* a los estudios rabínicos, incluye también un dic-

cionario de términos griegos y latinos registrados en la literatura rabínica y explica su interpretación de los mismos en hebreo. El presente estudio se centrará en las aportaciones del *'Arukh* en las siguientes áreas de los estudios judeo-griegos medievales: a) recopilación de términos griegos y latinos presentes en la literatura rabínica y su interpretación; b) referencias a la versión de Áquila y otras traducciones griegas tardías de la Biblia; c) evidencias del conocimiento y empleo del griego por los judíos en época medieval. El estudio presta una especial atención a los lexicógrafos bizantinos que iluminan las interpretaciones del *'Arukh*.

PALABRAS CLAVE: griego bizantino medieval, griego rabínico, lexicografía griega, lexicografía hebrea rabínica, traducciones griegas de la Biblia.

During the Roman and Byzantine periods many Greek and Latin words made their way into spoken and written Hebrew and Aramaic. Study and interpretation of these loan words began in Talmudic literature with the common term for identity being לשון יווני, 'Greek language'. At times the rabbinic scholars even employed a Greek term to explain a biblical Hebrew word. For example, the phrase *allon* ('oak-tree') *bakhuth* (Gen. 35: 8) was interpreted thus in rabbinic literature:

> Rabbi Shemuel said: «This is Greek language in which *allon* [ἄλλος] is 'another', indicating that while he (Jacob) was mourning for Deborah, tidings reached him that his mother had died» (GenR 81, 5).

This process of study and interpretation of Greek and Latin words was continued by scholars in the Geonic period: Rav Hai David Gaon, Hananel ben Hushi'el, Nathan ben Jehiel (the author of the *'Arukh),* and others.

Nathan ben Jehiel (1035-1110), born in Rome, was the son of the *Rosh ha-Yeshivah* and very erudite in rabbinical literature. He visited Sicily where he encountered a Greek-Jewish community. When he returned to Rome in 1070 after his father's death, he was appointed *Rosh ha-Yeshivah*, and it was probably during this period that he compiled his lexicon, the *'Arukh*.

The lexicon consists of a concordance, a compilation from glossaries by various authors, a hermeneutic book of *targumim*, Talmudic texts, and *midrashim*. It also includes a dictionary which lists words from the classical languages in rabbinic sources and explains their meaning in Hebrew. The *'Arukh* contains definitions as well as glosses with equivalents from contemporary European languages, primarily Italian. The *'Arukh* was written over several periods of time and its material collected from a variety of sources.

Due to his being well versed in rabbinical literature, Nathan ben Jehiel quotes from a lengthy list of authorities in a masterful way. He is thus a significant source of information about previously unknown rabbinical materials such as *Pesikta de-Rav Kahana* and *Pesikta Rabbati*, as well as for valuable variants of known sources.

Nathan ben Jehiel's contribution to medieval Jewish culture lies in several fields: the Hebrew language, as well as Aramaic; rabbinic literature; historical events; biographical information about scholars; the Romance languages, and more. The present study will focus on the *'Arukh*'s contribution to the following areas of Greek-Jewish studies: a) the assembling of Greek and Latin words found in rabbinic literature and their definition; b) references to the Aquila version and other late Greek biblical translations; c) evidence that Greek was known and spoken by Jews during the Middle Ages. I shall conclude with a general overview of the *'Arukh*'s diffusion in Europe and its influence in modern rabbinical scholarship.

The main contribution of Nathan ben Jehiel to Jewish-Greek and Latin studies lies in assembling and defining, in alphabetical order, the Greek and Latin vocabulary used in rabbinic literature and supplying these words with definitions. The lexicon is divided into chapters, each containing a group of letters (b', bb, bg, etc.), with each chapter concluding with a *piyyut* (liturgical poem). A detailed list of sources arranged in chronological order follows each lemma, followed by an explanation and by identification of the word in Greek or Latin, *e. g.*: פלגס [πάλλαξ] (Par 1, 3): "The meaning of the word in the Greek language is a boy whose age is between childhood and adulthood".

To identify Greek words, Nathan ben Jehiel uses the word *yevani* (Greek), sometimes also having recourse to *romi*, referring to the Byzantine Roman Empire: ἀντίδικος, θέατρον, μητρόπολις, and others. In some cases he also translates the word into *la'az*, that is, into the local languages used in the Jewish communities such as Italian, other Romance languages, or medieval Greek.

Nathan ben Jehiel was a famous scholar, maintaining close ties with Jewish scholars throughout Western Europe. He quotes numerous scholars[1] from whose works he accumulated his information. First are his teachers: his father, Rabbenu Jehiel ben Abraham, and others such as Mazliah ben Elijah, a pupil of Hai Gaon, Moses ha-Darshan (Narbonne), Moses Khalfo of Bari,

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[1]   For an exhaustive list of names and sources see Kohut, *Aruch Completum*, Introduction, pp. x-xvii.

Moses of Pavia, Rabbenu Gershom ben Judah Me'or ha-Golah, Rabbenu Hananel ben Hushi'el, and many others.

To the list of Jewish scholars quoted in the *'Arukh* we should add the "anonymous judge, a philosopher and *gramatiko*"[2], and the expression "the wise men of the nations" (חכמי אומות, gentiles who assisted in the preparation of the dictionary. The quotations show that Nathan was probably acquainted with Christian scholars and may probably have been instructed by them in classical glossaries and lexica written during the Byzantine period. The *lemmata* in the classical medieval lexica (Hesychius, Suda, Zonaras' Lexicon [Ps. Zonaras], *Etymologicum Magnum*, etc.) are usually arranged in alphabetical order, followed by a concordance of quotations which includes classical and biblical authors, a word definition and sometimes also its etymology, as well as bibliographical and encyclopedic references.

There are many traces of this literature in the *'Arukh*'s definitions. However, it should be emphasized that I cannot give a specific identification of the glossary or the lexicographical work used by Nathan ben Jehiel. Nevertheless, it is clear that he was clearly acquainted with these medieval glossaries and lexicographical works and was influenced by them in the preparation of the *'Arukh*.

During his stay in Sicily Nathan ben Jehiel certainly came into contact with the Jewish-Greek community, the "Romaniotes", and was exposed to their language and biblical Greek translations, and after his return to Rome he remained in contact with them. In his word definitions Nathan ben Jehiel makes use of quotations from the Aquila revision which is not known from other sources. He also quotes the Jewish versions of the Septuagint and of late Jewish biblical translations into Greek in Hebrew characters, which he termed "*la'azim*". Sometime the definitions or translations of Nathan ben Jehiel into Byzantine Greek provide important information on medieval Greek, and we may assume that this documentation is representative of the spoken language of the Jews.

Despite the title *'Arukh* ('edited' in modern Hebrew), the work was never revised or edited by its compiler; it presents the various authors and literary sources in their original texts. The chaotic character of some of the articles, which may repeat a word or give different explanations of the same *lemma*, gives this lexicon a unique flavor.

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[2] *Gramatiko* is a term for a man who knows classical languages. For the use of *gramatikin language* in the *'Arukh,* cf. infra, V, 8; KOHUT, *Aruch Completum*, Introduction, pp. ix–x.

Let us now examine in detail some of Nathan ben Jehiel's definitions in the *'Arukh* related to Jewish-Greek studies.

I. Classical and Hellenistic Greek[3]

One of the objectives of the *'Arukh* was interpretation of Greek and Latin words quoted in rabbinical works written during the early centuries of the Common Era. These words are well known from the Classical and *Koine* Greek vocabulary and they maintained their basic meaning until the Middle Ages. The following are representative examples of such entries.

1. אננקי ἀνάγκη (GenR 12,13): "The meaning of the word is necessity" (literal translation: 'pressure', חדק).
2. אסטולי στήλη: "When David sent Joab against Aram-Naharaim, they made their אסטליו [στήλη], 'stone pillars' [on which was written] (GenR 74, 15). And there are other books in which it is written אפיסטולי [ἐπιστολή] and this the principal and in the *la'az* language 'letters' are called ἐπιστολή".
3. זמית ζωμός (TB Ber. 36a): "The meaning of the word is soup and in Greek soup is called *zomin*".
4. מטר μήτρα (GenR 48, 2): "The meaning of the word in the Roman[4] (*i. e.* Greek) language is womb".
5. מילנן μέλαν (GenR 1, 4): "That is to say ink".

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[3] One of the main problems for a study of the entries in the *'Arukh*'s *lemmas* and their identification with Greek and Latin words is the variety found in the numerous manuscripts and printed editions. For this study I chose those word identifications made by scholars throughout the centuries which have meaning in the rabbinical context. The list of the *'Arukh* entries in the article was chosen from the Pesaro edition (1517). A few of them were noted from manuscripts and later publications and published in Kohut's critical edition. These entries are marked by the letter (K), and all of them were known previously in the Lublin (1883) edition of the *'Arukh*. I maintain the transcription of the Pesaro or Kohut editions for the *lemma* in Hebrew characters, although it sometimes reveals a Hebrew morphological ending, *i. e.*, זמית for ζωμός. The Greek or Latin word shows the identification with classical languages. In the text of the *Arukh's* definition, the cursive letters indicate the Hebrew characters of the word, while what is between square parentheses is its identification in classical languages. For example: "In Greek *patira* [πατήρ] is father". Translations of the Hebrew definitions of Nathan ben Jehiel are mine. For the translations of the rabbinic sources, see bibliography. The examples are presented in the Hebrew alphabetic order of the *'Arukh*.

[4] "Roman" for Greek language. See introduction.

6. פרמא (K) πάρμη (LamR 3, 4): "A kind of shield and shelter" (Latin *parma*).
7. פטרושלינון πετροσέλινον (TJ Sheb. 38c): "The meaning in Greek and Roman (Byzantine / Latin) is *karpas* [καρπός]".

II.   LATIN

Nathan ben Jehiel also quotes original Latin words which were adopted into the Greek *Koine* language and belong to the rabbinic Greek vocabulary. The *'Arukh* also documents the late Latin vocabulary.

1. אוקיא (K) οὐγκία (GenR 17, 7): "The meaning of the word in Greek and Roman (Latin) is a weight which is worth two *shekalim hakodesh* or eight drachmas" (Lat. *uncia*).
2. בבר *vivar* (Shab 13, 5): "The meaning of the word is the orchard and the pool for fish and the place for the birds is called *vivar*" (Lat. *vivarium*).
3. דילטור *delator* (TB Sanh. 43b): "The meaning of the word is gossip in Roman (Latin) and in *la'az*" (It.).
4. דסקופלן *disciplina*[5]: "'He knows my good manners and my *disciplina*' (*Yelamdenu*, end of Vayikra)[6]. The meaning is 'my Torah and my *musar*' and in *la'az* this is *disciplina*". In biblical Hebrew *musar*[7] means physical punishment for bad behavior. For example, see Prov. 22: 15: אִוֶּלֶת, קְשׁוּרָה בְלֶב־נָעַר; שֵׁבֶט מוּסָר, יַרְחִיקֶנָּה מִמֶּנּוּ ("Folly is bound up in the heart of a child, but the rod of discipline will drive it far from him"). *Disciplina* in monastic Latin was also physical punishment[8] by the *virga* (rod), which was also called *disciplina*. This example suggests that Nathan ben Jehiel was in direct contact with monks or other Christian scholars and consulted them when he compiled his dictionary.
5. וי(י)לון βῆλον (Kel. 24, 13, TB, BB 67b): "The meaning of the word וילון (*vilon*) is a *curtain*" (Lat. *velum*).

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[5] See also CUOMO, «Le glosse vulgari dell'*'Arukh*», pp. 381-83.

[6] I could not identify this source.

[7] For the interpretation of the biblical word *musar*, see L. KOEHLER-W. BAUMGARTNER, *The Hebrew and Aramaic Lexicon of the Old Testament*, translated and edited by M. E. Richardson, Leiden 1994, *s. v. musar*.

[8] For the meaning of *disciplina* in Christian Latin, see: DU CANGE, Latin, *s. v. disciplina*; L. F. STELTEN, *Dictionary of Ecclesiastical Latin*, Peabody, MA 2003, *s. v. disciplina*.

6.   קמפון κάμπον (Kel 23, 2): "The meaning of the word is field" (Lat. *campus*).

III.   Greek and Latin terms translated into Italian

Nathan sometimes glosses Greek and Latin terms using the early Italian vocabulary. The Italian word, too, is denominated *la'az*. L. Cuomo dedicated a special study to the early Italian vocabulary in the *'Arukh*[9] and its significant contribution to the study of Italian dialects.

1.   אגריון ἄγριος אמרון (GenR. 77, 3): "'and this is like a king who has a dog *agrion* ἄγριος and a lion *imeron* ἥμερος', and *imeron* is *domesticated* and in *la'az* (It.) it is *domestico*". See VI, 1.

2.   אמיתא μίνθα (TB, Shab. 128a) [and] מיניתא: "and it is in the *mem* (מ) letter section and its meaning in *la'az* (It.) is *menta*"[10].

3.   אנטיגרפין ἀντιγραφή (GenR 77, 6): "The meaning of the word is a letter which was written with a *qulmus* [κάλαμος], a reed pen which is called in *la'az* (It.) *grafio*".

4.   טנדס[11] τέντα (Beraitha deRabbi Eliezer, ch. 41): "The meaning of *tendas* is a *tent* and in *la'az* (It.) it is *tenda*". The word τέντα is from the Latin *tentorium*; it is quoted in a ninth-century papyrus[12] and in Jewish-Greek sources (Isa. 40: 22)[13].

5.   מזרן *mzran*...טפיטא (Kel. 19, 13): "and in *la'az* (It.) is called (the *mzran*) *tappete*"[14].

6.   נפט νάφθα (TB Shab. 12 b; Ned. 11a): "The meaning is 'oil seller' and in *la'az* (It.) *petròlio*"[15].

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[9]   See also D. S. Blondheim, *Notes on the Italian Words in the Aruch Completum*, New York 1933; Cuomo, «Le glosse volgari dell' *'Arukh*», Introduction, vol. 1, 23-30.

[10]   Translation of 'mint' and see into Latin *menta*.

[11]   Perhaps a plural form τέντας, -ες

[12]   S. Daris, *Il lessico latino nel greco d'Egitto*, Barcelona 1991, p. 111.

[13]   S. Sznol, «A Judeo-Greek Translation of *'Haftarat Ve'ethanan'* for the "Consolation Sabbath" (Isaiah 40: 1-26)», *Textus* 20 (2000) 9-32.

[14]   See Latin *tapete*, -*is*, and Greek τάπης, -ητος.

[15]   The origin of *nptu* is from Accadian; see *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, ed. I. J. Gelb *et al.*, 20 vols., Chicago: Oriental Institute, 1956-2006, *s. v. naptu*. In Classical Greek sources: νάφθα (Dsc. 1. 73). According to Chantraine and other

IV. Greek Compounds[16]

Nathan ben Jehiel identified the elements of Greek compounds in the rabbinical literature and defined them. Sometimes these definitions reflect popular etymologies, for instance ἐπίτροπος. This identification of the compounded elements testifies to his knowledge of Greek despite some errors in the definitions. Luisa Cuomo points out that the frequent use of Greek and Latin compounds is one of the characteristics of the medieval ecclesiastical administration and later on of medieval European languages. There are traces of the frequent use of such compounds in later rabbinical literature, perhaps the result of the Greek-Latin environment of the Byzantine Empire.

1. אפיטרופוס ἐπίτροπος (Sheb. 10, 4; TB Ket. 13b): "The meaning of *epitropos* is אב לילדים ('father of the children'). In the Greek language *patira* [πατήρ] is father and *paideia* children [παῖς, παιδός] and so in *la'az* father is *pater*" (Latin *pater*, It. *padre*).

2. יודקי *judex* (GenR. 50, 3): "'Lot was their ארקי יודקי [*ἀρχιούδεξ, 'chief judge'] of the people of Sodom'. The meaning of the word is chief of the Judges and this is a *la'az*". (Latin *judex*, It. *giudice*). Kohut adds to this quotation a *v. l.* קרטיס κριτής. The same source with another version (GenR 50, 3), *ἀρχικριτής, the meaning is "chief of the Judges". The compound *ἀρχιούδεξ is used in rabbinic literature only in Hebrew characters.

3. יינמילין οἰνόμελι (Ter. 11, 1): "The meaning is wine (and) *myly* and the *Gemara* interprets it: Wine, honey and pepper"[17].

4. מטרופולין μητρόπολις: " 'Caesarea, the daughter of Edom, which was a metropolis of kings' (TB Meg. 6a). The meaning is the mother of all villages. Mother in *la'az* is *m(a)tri* (Latin *mater*; It. madre) and *polin* [πόλις], 'city' in the Greek language". Kohut adds in his quotation: "In other mss. we find Roman (language), in the sense of Greek, the language of the (Roman) Byzantine Empire".

5. מליגלה (K) μελίγαλα (TJ, Ha. 57b): "The meaning of the word in the Greek language is pastries made from honey and milk, *meli* [μέλι] in the Greek language is honey and *gala* [γάλα] in the Greek language is milk".

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scholars, the word may have been borrowed from Iranian; see P. Chantraine, *Dictionnaire étymologique de la langue grecque: histoire des mots*, Paris: Klincksieck, 1968, *s. v.* νάφθα.

[16] For a detailed study of the Greek compounds in rabbinic literature, see S. Sznol, «Notas lexicográficas sobre una lista de compuestos griegos en literatura rabínica», *Emerita* 59, 2 (1991) 327-42.

6. קזמוקרטור κοσμοκράτωρ: "'(Abraham) pursued four kings, each a mighty ruler κοσμοκράτωρ' (GenR. 58, 4; PRK, Ki Tisah 5. 24). The meaning of the word in the Greek language is *qozmo* [κόσμος], world, and *krator* [κράτωρ], he who grasps". For a detailed study of this compound see also *infra*, section VI. Greek Lexicography.

7. קקופדטי (K) κακοπαίδευτος (TJ BB. 16b): "The meaning is fools [κακός], people of bad culture or education [παιδεία]". This compound is quoted only in the dictionary of medieval Greek by A. de Somavera, a French Capuchin monk, who published a vernacular Greek lexicon[18].

V. BYZANTINE MEDIEVAL GREEK

The 'Arukh has became a useful source for the study of different periods in the development of medieval Greek. It also offers important documentation on the Greek vocabulary used by the Jews[19]. The following examples of 'Arukh quotations herald a new medieval vocabulary.

1. אונוס ὄνος. Nathan ben Jehiel explains the Aramaic translation of "the priest of Midian" by the word *onos* [ὄνος], donkey (Jerusalem Aramaic translation[20] to Exod. 18: 1), saying: "The translator speaks contemptuously of him, because in the Greek language a donkey is called *onos* [ὄνος] and by others *gaidaron* [γαϊδάριον] and so I have heard from Rabbi Moses Alfasi, of blessed memory, that a donkey is called in the *politiko*[21] [πολιτικό] language *onos* and by others it is called *gaydaron* [γαϊδάριον]". For the use of the word γαϊδούριν[22] in

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[17]   SZNOL, «Notas lexicográficas», p. 335.

[18]   A. DE SOMAVERA, *Tesoro della lingua greca volgare ed italiana,* Sala Bolognese: A. Forni, 1977 (facsimile of the Naples [1806] edition, which is a reprint of the 1709 edition). For details about this dictionary, see R. BROWNING, *Medieval and Modern Greek*, Cambridge: Cambridge University Press, 1983, p. 93.

[19]   R. DALVEN, «Judeo-Greek», *EJ*, vol. 10, cols. 425-26.

[20]   Late Aramaic translation of the Pentateuch.

[21]   Nathan ben Jehiel denominated *politico* the language used by the educated people, the people of the *polis*. Cf. KOHUT, *Aruch Completum*, Introduction ix–x.

[22]   For γαϊδούριν, derived from γαϊδάριον, see Kriaras *s. v.* For the development of -ιον > -ιν and debasement with the plural Aramaic and Hebrew ending, see H. B. ROSÉN, «Palestinian κοινή in Rabbinic Illustration», *JSS* 8 (1963) 56-72.

the *Constantinople Pentateuch*[23] see Num. 31: 28; Deut. 5: 14; 22: 3, 4, 10. This is perhaps one of the earliest citations of the word γάϊδαρος It is mentioned in Kriaras' dictionary of medieval Greek, but not in the Patristic dictionaries (Lampe, Sophocles) or the Byzantine Greek Dictionary (*LBG*). The word is commonly used in modern Greek.

2. אספראן ἄσπρος: " 'Two fishes, one *aspron* and one *mauron...*' (GenR 7, 4). The meaning of *aspron* in the Greek language is *white*". The word ἄσπρος with the meaning *white* is characterized by *LSJ* as reflecting a very late usage. The common word for white in classical and Hellenistic Greek is λευκός.

3. בסיליקי βασιλική / *basilica* (AZ 1, 7; TB AZ 16b): "...and the meaning of the word is *palatin* [παλάτιον]". In this lemma Nathan ben Jehiel explains the original meaning of the word βασιλική (*basilica*), which in the Middle Ages took on the meaning of a great church. Here he employs another Latin-Greek word, which was in use in the ancient period and then adopted in rabbinical literature[24].

4. כליל *kalil malka* (TB Ket. 77b): "The meaning is *varda* and there are other people who call it *basilikon* [βασιλικόν]". In the classical period the word βασιλικός was an adjective derived from βασιλεύς (*LSJ*) and in the medieval period it came to mean *an aromatic vegetable or spice*. It is also quoted by Shabbetai Donnolo (Italy 913-82) in *Sefer ha-Merkabot*, סע 19 <13>. For evidence of this new meaning, see Du Cange, *s. v.* βασιλικόν.

5. פוטיא φωτιά (*Yelamdenu* Num. 10, 29): "The meaning of the word φωτιά in Greek is *candle*". The word φωτιά (from classical φῶς) is quoted in Late Greek dictionaries, *e. g.* Du Cange: φωτιά, *focus, ignus*, etc.

6. פרב (K) φορβειά (Shab. 5, 1, Midrash Tehilim 9, 16 <41, 1>): "The meaning of the word in Greek is riddle and is also written פרומביא [φρομβιά]". Φρομβιά is the late form of φορβειά. From this quotation we can assume that Nathan ben Jehiel was aware of different periods or levels of the Greek language.

7. פרקופי προκοπή (GenR 12, 16): "Rabbi Daniel, of blessed memory, said that he asked one judge-philosopher *gramatiko* [γραμματικό]

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[23]   *Pentateuch*, Constantinople: Soncino, 1547 (in Hebrew characters). For its transliteration in the Greek alphabet, see bibliography.
[24]   See Cuomo, «Le glosse volgari dell' *'Arukh*», p. 319.

what is *prokopy* [προκοπή] and he answered that it is *honor* in the language of the *gramatiko* [γραμματικό]". The word προκοπή is defined in the dictionary of classical Greek, *LSJ*, as *progress* or *advance*. In dictionaries of later periods of the Greek language, such as Lampe's dictionary, for example, the word is defined as *position of dignity* (Or. *Mom* 12. 8 in Jer [p. 14.22 M. 13.389 b]). This definition is compatible with the *'Arukh*'s explanation. For *gramatiko*, see next example.

8. תאטר θέατρον (TB AZ. 18b; GenR 67, 3): "...In the *gramatikon* language *theatron* refers to the place where there are people sitting on top and they look at the games between men and wild beasts below. Till today the *coliseum* is called *theatron*, *kirkasioth* (*circus*), and the wine taverns; and in the Greek language *wine* is called *krasy* [κρασί]". Κρασί is the medieval and modern form for the classical οἶνος (*wine*). Benjamin ben Immanuel Mussafia, one of the earliest and important commentators on the *'Arukh*, provides the following explanation for the expression "*gramatikon* language" used by Nathan ben Jehiel: «This is the meaning of the *Baal he-'Arukh* when he said *grematikin* language, since there is a popular Greek language and there is another Greek language, in which wisdom sayings (books) were written, based on grammar rules, which are called *grammatikin...*» This definition is clear evidence that the concept of *diglossia* was already known in the late middle ages.

VI.   Greek Lexicography[25]

An attractive aspect of the *'Arukh* is the traces of Greek medieval lexicography in its word definitions. The following examples must be related to Greek glossaries or lexicographical works with which Nathan ben Jehiel or his advisors were acquainted. The present paragraph includes definitions by Greek lexicographers that are similar to the *'Arukh*'s interpretations. For the abbreviations, see the bibliography.

1. אגראיון ἄγριον (GenR 77. 3): "The meaning of the word is *selvatico*" (It.) Hsch. ἄγριον· ἄμικτον, ἀνήμερον. Sud. 359 ἄγριος· ἄμικτος, ἀνήμερος. λέγεται δὲ καὶ ἐπὶ κακίας ὑπερβολῇ.

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[25]   For the abbreviations, see bibliography.

2. בולמוס βούλιμος = βουλιμία (Yom. 8, 6; TB Yom. 83a): "The meaning of the word is the sick throat of the ox (and) eats very much as an ox, biting, and there are people who call *bolimo* one who eats very much, in *la'az*". Sud. βουλιμιᾷ· ...ἀπὸ τοῦ βου ἐπιρρήματος, ὅπερ ἐπιτάσεώς ἐστι δηλωτικόν, ὡς καὶ ἐν τῷ βούπεινα, ἡ μεγάλη πεῖνα, καὶ βουγάιος καὶ βούγλωσσοι. τινὲς δὲ εἶδος νόσου φασίν, ἐν ᾗ πολλὰ ἐσθίοντες οὐ πληροῦνται In the rabbinic sources the meaning of the word *bulmus* indicates only the *impulse to eat*. The etymological explanation of *bulimia* as *ox hunger* and as an illness appears only in the classical lexicographical works.

3. דפן δάφνη (TB Pes. 56a): "...and in Greek the לאורו (Lat. *laurus*; It. *lauro*) is called δάφνη". CGL: δάφνη, *laurus*. Du Cange: δάφνη, *laurus*.

4. פרוטומי (K) προτομή (ExR 15, 17): "The meaning of the word in the Greek language is a statue of a person to the navel". Hsch. εἰκὼν βασιλική, ἕως τοῦ ὀμφαλοῦ τοῦ σώματος εἶδος.

5. פילוטימיא (K) φιλοτιμία (ExR 30. 24): "The meaning of the word in the Greek language is a gift which is given by the king to everyone, generosity, and honor". Hsch. φιλοτιμία· δωρεά, κενοδοξία, πλοῦτος, μεγαλοφροσύνη. Sud 432 φιλοτιμίας· δωρεᾶς, ἢ πλεονεξίας, ἢ κενοδοξίας.

6. פסיפון ψῆφος (*PRK* [Buber] 131b 232): "A small stone and also arithmetic, because it is used in arithmetic". CGL ψῆφος *hic calculus-hoc suffragium computatio*. Sud 84 ψῆφος· ψῆφον καλοῦμεν τὸν λίθον τὸν ἐν τῷ δακτυλίῳ καὶ τῶν χρημάτων τὸν ἀριθμόν. The word פסיפוס [ψῆφος] in rabbinic literature always refers to a stone, a stone pavement, mosaic, or cube. The second quoted meaning of Nathan ben Jehiel, arithmetic, supports the assumption of direct contact between the author and Greek lexicographers.

7. קינטורין κένταυρος (GenR. 23, 6): "The meaning of the word in the Greek and Roman language (Latin) is a kind of people without culture. The poets tell a story that they were half man above and half horse below". Hsch. κενταυρικῶς· ἀγροίκως, ἀγρίως. Sud κενταυρικῶς· ἀγροίκως, ἀκόσμως, ὑβριστικῶς, ὅτι καὶ οἱ κένταυροι ὑβρισταί. The common interpretation of the word *centaur* in rabbinic literature is "people without culture and vulgar personal behavior". The second reference of Nathan ben Jehiel, "poets tell...", is new in rabbinic sources. The passage from GenR 23, 6: "The Generation of Enosh... hitherto they were created in the image [of God] but from them onward Centaur were created", can be interpreted as "half man and half horse" but also as "people of vulgar behavior".

8. קזמוקרטור κοσμοκράτωρ (GenR. 58, 4; *PRK* Ki Tisah 5. 24): "'(Abraham) pursued four kings, each a mighty ruler *kozmokrator* [κοσμο-κράτωρ]'. The meaning of the word in the Greek language is *koszmo* [κόσμος], world, and *krato* [κράτωρ], he who catches, and this is the meaning of the word". CGL: κρατῶ (κρατέω) = *teneo*. Du Cange, s.v. κοσμοκράτωρ: *Satanas, Diabolus, Princeps saeculi, Mundi potens, Munditenens*, Tertulliano, lib 1 de Refurr. Cap. 22, ex Epist 6 ad Ephes. 12. The meaning of the second element of the compound is κράτωρ, 'ruler', derived from the verb κρατέω, 'to be strong, powerful'. A second meaning of the same verb is 'to hold, to seize', a usage that is well documented in Greek dictionaries from all periods (LSJ, Sophocles, Kriaras, Stravopoulos). We can learn from the Du Cange dictionary that there was more than one interpretation for the word κοσμοκράτωρ, especially *Munditenens* in a Tertullianus source. This definition may be an equivalent to the *'Arukh*'s explanation.

VII. Late Greek Biblical Translations

S. J. L. Rapoport[26] and D. S. Blondheim[27] were probably the first scholars who detected evidence of quotations of late medieval Jewish-Greek translations of the Bible in the *'Arukh*. These quotations sometimes were labeled *la'azim* by the author. In his lexicon, Nathan ben Jehiel also includes an exhaustive list of quotations from the Aquila version in rabbinic sources. In some cases the *'Arukh* is the only extant source for those quotations. Nathan ben Jehiel also assigns a place for the explanation of Greek words in the biblical text of Daniel. The *apparatus criticus* appended to this list of *'Arukh* Greek biblical quotations provides parallel and complementary information on the Aquila version and other Jewish Greek translations. For the abbreviations, see the bibliography.

1. איירינון (K) ἀέρινον: " 'There were hangings of white (*hur*), and fine cotton (*karpas*)' (Esther 1: 6), Aquila translated ἀέρινον καρπάσινον (Midrash Esther 2, 7). And the meaning of the word ἀέρινον is a cloth which has an airy color, καρπάσινον, a thin cloth made of linen, ὑακίνθινον, a thing which is blue".

[26] S. J. L. Rapoport, «Toledot R. Natan» (in Hebrew), *Bikkurei ha'Ittim* 10 (1829), p. 28.
[27] D. S. Blondheim, «Échos du judéo hellénisme: étude sur l'influence de la Septante et d'Aquila sur les versions néogrecques des Juifs», *REJ* 78 (1924) 2-3.

ap. crit VTG LXX Version L βύσσινα καὶ καρπάσινα καὶ ὑακίνθινα καὶ κόκκινα... R: **α**᾿ ἀέρινος neut. (Esther 1: 6), and see the Vulgata translation of this verse: *tentoria aerii coloris et carpasini ac hyacinthini, tum Cap. VIII, 15*; see also Field, *Auctarium ad Origenis Hexapla*: חור כרפס   **α**᾿ ἀέρινον καρπάσινον.

2.   אסתניד ἀσθενής[28] (TB BQ 40a): "The meaning of the word is 'I was ill' and from here the question: I am ἀσθενής? That is in Greek language *ill*. 'Behold, your father is sick (Gen. 48: 1) אסתנס [ἀσθενής]', and there are other *la'azim* (biblical translations) ארוסטוס [ἄρρωστος]".
   ap. crit VTG LXX ἐνοχλεῖται.
   α᾿ ἀρρωστεῖ F b; M 57, 344; **σ**᾿ νοσεῖ M 57.
   CP ארושטוש או פטראאש ὁ πατέρας σου ἄρρωστος.

3.   אקסיוס / אקיוס: " '*El Shaddai*' (Gen. 17: 1) ...Aquila translated ואיקנוס אקסיוס [ἄξιος] [ἱκανός], worth and sufficient (GenR 46, 3). And in other *la'azim* (biblical translations) in the Greek language".
   ap. crit. VTG LXX ὁ θεός.
   α᾿ R, Hatch-Redpath, ἱκανός.
   CP Gen. 17: 1 ἱκανός.
   The GenR passage quoted in the *'Arukh* lemma here is the same as in the Theodor-Albeck edition. For the translation of "El Shaddai" (אל שדי) by Aquila with the Greek equivalents ἄξιος, ἱκανός, ἰσχύς in other biblical passages, see R. and Hatch-Redpath[29].

4.   למפדס λαμπάς: "Aquila translated *nebrashtha* נברשתא (Dan. 5, 5) by *lampadas* [λαμπάς] (TJ Yom. 41 a). The meaning of the word is in Greek language and Roman (Latin) *lamp* and *candles*".
   ap. crit. VTG LXX τῆς λαμπάδος; ὁ τοῦ φωτός.
   α᾿ λαμπάδος Yom. 41a (see Field II p. 919 no. 4).

5.   מלג *mlg* (TB Bez. 34a)[30]: "...As is known the word *logo* [λόγος] means *word* אלה הדברים 'These are the words' (Deut. 1,1) ...in the Greek language (i. e. biblical translation) לוגה טוטה[31].

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[28]   Nathan ben Jehiel presents a second definition of the word אסתניס ἀσθενής (TB Tam. 27b); the meaning of the word: a person who has a "bad soul" (literal translation) and cannot look at anything repulsive is called אסתניס ἀσθενής

[29]   For the study of the use of ἱκανός as a translation of *El Shaddai* in modern research, see G. BERTRAM, «Ἱκανός in den griechischen Übersetzung des ATs als Wiedergabe von *schaddaj*», *ZAW* 70 (1958) 20-31; VELTRI, *Eine Tora*, pp. 187, 192.

[30]   A Talmudic judicial term which indicates the specific profit of a property.

[31]   Pesaro edition טוטה לוגה. Kohut edition טוטה אילוגה and Kohut's transliteration in Greek letters is τοῦτοι οἱ λόγοι. According with P. Bádenas (oral communication), the Pesaro's edition reflects τοῦτα (τὰ) λόγια of the Constantinople Pentateuch reading.

ap. crit. VTG: LXX οὗτοι οἱ λόγοι.

PC אַטוֹטַא טַאָ לוֹיֵיה ἐτοῦτα τὰ λόγια.

6. מצטרא μύστρον: "'Death and life are in the power of the tongue'
(Prov. 18: 21). Aquila translated: מצטרא [*μυστρομαχέριν], a spoon
knife" (LevR 33, 1)[32]. This quotation does not appear in the classical
Greek editions of Aquila. Rahlfs; Hatch-Redpath: θάνατος καὶ ζωὴ ἐν
χειρὶ γλώσσης.

7. פליאה παλαιά: "What is the meaning of 'לבלה נאופים *labbalah niufim*'
(Ezek. 23: 43). The Aquila translation is פליאה פורני [παλαιὰ πόρνη]
(LevR 33, 6)[33]. The meaning of these words is an old woman and
prostitute".

ap. crit. VTG LXX οὐκ ἐν τούτοις μοιχεύουσι.

α' Field, VTG τοῦ κατατρῖψαι μοιχείας.

This translation is not quoted in the traditional Aquila's quotations (R,
VTG). It is quoted only one time by Field in a footnote with the
mention of LevR. For the use of this expression in the *koine* language
see the Dura Europos inscription, cf. Suppl. of *LSJ* ed. 1968, *s. v.*
*παλαιοπόρνη, ἡ Dura[9] 1213 (III AD).

8. פופי (K) πόποι / ΠΙΠΙ: "'A person came before Rabbi Yassa to have
him relieved of his vow. He asked him what you swore. He an-
swered אופופי [ὦ πόποι] Israel, that she should not enter my house'
(TJ Ned. 42c). The meaning in Greek of the word פופי is *idols* and
אופופי [ὦ πόποι] is an idolatrous expression for an oath, and there
were Greeks who said that this is the name of the God of the He-
brews [Ἑβραῖοι]. Moreover, the reason for this mistake is that when
a Greek man looks at the sacred name of God, the Assyrian [letter]
ה (*heh*), is confused with the Π letter and the Greek writing is from
left to right". In the first part of the definition Nathan ben Jehiel ex-
plains the use of the classical and Hellenistic word πόποι whereas in
the second part he clarifies the use of ΠΙΠΙ, the Sacred Name, in
the Jewish-Greek translations. ΠΙΠΙ as the Sacred Name of God is
very common in Aquila, Symmachus, and Theodotion; see, for ex-
ample, Aquila: Exod 12: 42; Num. 16: 5 εβρ et οι λ Num. 22: 22. For
a detailed list of quotations, see R and Hatch-Redpath.

9. פלקט ποικιλτόν: "'I clothed thee with richly woven work' (Ezek.
16: 10), פורפורין [πορφύρα] in color, according to Rabbi Simai, פלקט

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[32] SZNOL, «Notas lexicográficas», p. 333; VELTRI, *Eine Tora*, p. 190.

[33] VELTRI, *Eine Tora*, p. 189.

[ποικιλτόν] according to the Aquila translation (*PRK*, be-Shalah 11, 8)»[34].

ap. crit.: VTG LXX ποικίλα.

Field, R. α᾽ ποικιλτόν Pesikta cap. 11, 8.

10. פסנתר (K) ψαλτήριον (Dan. 3, 6 and 15): "The meaning is a kind of musical instrument which is called in the Greek language *psalterin* [ψαλτήρι]". Du Cange, vol. II, 1778 ψαλτήριον... Ναυλα παρ᾽ Ἑβραίοις ὀνομαζόμενον.

CONCLUSION

We do not know when Nathan ben Jehiel compiled the *'Arukh* nor when it was submitted to scholars and to the Jewish public for the first time. The earliest manuscripts of the *'Arukh* date from thirteenth century[35]. The *editio princeps* of the book was in Rome, ca. 1469-73[36], and the best known is the second printing, Pesaro 1517[37]. The diffusion of the manuscripts and the earliest printings awakened great interest among Jewish scholars. Menahem ben Judah of Lonzano wrote an *addenda* to the *'Arukh* called *ha-Ma'arikh*, published in 1618[38], and later Benjamin ben Immanuel Mussafia, a physician and scholar who was well trained in classical and medieval Greek as well as Latin, composed his supplement of linguistic entries and commentary *Musaf he-'Arukh*, first published in 1655. Mussafia added important information and commentaries concerning the words of Greek or Latin origin and their use in the medieval period[39]. Until the present, both traditional commentaries are appended to every printed edition of the *'Arukh*.

The *'Arukh* has made an exceptional impact on the cultural life of Jews –and also of Christians– in Europe, especially on the Renaissance lexicographers. Sebastian Münster (1489-1552), a German Hebraist, published a dictionary of Aramaic and Hebrew which includes important material from the

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[34]   *Ibid.*, p. 189.

[35]   For a detailed list of the *'Arukh* manuscripts, see KOHUT, *'Arukh Completum*, vol. I, 47-54.

[36]   NATHAN BEN JEHIEL, *Sefer 'Arukh*, Rome, ca. 1469-73.

[37]   NATHAN BEN JEHIEL, *Sefer 'Arukh*, Pesaro: Soncino, 1517.

[38]   Menahem de Lonzano published his additions to the *'Arukh* in his book *Shetei Yadot,* Venice: Bragadin 1618.

[39]   Benjamin Mussafia's most important contributions are in the *'Arukh* entries that supply only a list of sources, while the *Musaf he-'Arukh* explains the full meaning of the word. In other cases he comments upon Nathan ben Jehiel's explanation and adds further information.

'Arukh[40]. In 1609 another eminent German scholar, Johannes Buxtorf (1564-1629), began the compilation of a rabbinic dictionary which includes material from the *'Arukh*'s lexicon[41]. Buxtorf was the first scholar who transliterated the Hebrew script of the Greek words in Greek characters. In 1638 David ben Isaac Cohen de Lara published a glossary and dictionary of rabbinical sources entitled *Ir David*[42]. The author identified each Greek lemma (heading) in rabbinic texts by supplying its Greek or Latin etymology and translated it into Latin and Spanish. David Cohen de Lara made careful use of the *'Arukh*'s vocabulary which he mentions in his introduction, for the composition of his dictionary. He wrote a second monumental lexicographical work, *Keter Kehunnah* or *Lexikon Thalmudico-Rabbinicum*, which was partially printed in Hamburg in 1668. In this lexicon he also quotes the *'Arukh* definitions as well as other lexicographical works.

The flowering of Jewish studies and rabbinical lexicography in the context of academic studies characterized the nineteenth and early twentieth centuries. Jewish and non-Jewish scholars (Jastrow[43], Levy[44], Dalman[45] and others) who were proficient in rabbinic studies as well as in classics devoted themselves to compiling dictionaries of Talmudic and *Targumim* literature. All of them undertook systematic studies of Nathan ben Jehiel's textual versions and interpretations and quoted him carefully in most of their lexical articles. The publication of a critical edition of the *'Arukh completum* by Alexander Kohut (1878-92)[46] marks a turning point in the research of the *'Arukh* and its languages. Kohut published a new edition of the *'Arukh* based on seven well-known manuscripts. He quoted each lemma with the best readings of the manuscripts, sometimes with notes on the manuscripts reading variations, and added the Greek or Latin etymology of each word, the interpretations of Menahem of

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[40]   *Dictionarium Chaldaicum: non ta[m] ad Chaldaicos interpretes [quam] rabbinoru[m] intelligenda co[m]mentaria necessarium, per Sebastianum Munsteru[m] ex baal Aruch & Chal[diis] Biblijs atque Hebraeoru[m] perushim congestum*, Basilea: J. Fro[benius], 1527.

[41]   J. Buxtorf, *Lexicon Chaldaicum, talmudicum et rabbinicum*, Basilea: Conradum Waldkirch, 1615. His son completed the dictionary in 1639. A revised and annotated edition of this dictionary was published by B. Fisher in Leipzig, 1869-75.

[42]   David Cohen de Lara, עיר דוד, *De convenientia vocabulorum rabbinicorum cum Graecis, et quibusdam aliis linguis Europaeis*, Amsterdam 1638.

[43]   M. Jastrow, *Dictionary of the Targumim, Talmud Bavli, Talmud Yerushalmi and Midrashic Literature*, London and New York: G. P. Putnam, 1886-1903.

[44]   J. Levy, *Chaldäisches Wörterbuch über die Targumim und einen grossen Theil des rabbinischen Schrifthums*, Leipzig: Baumgärtner, 1867-68; rev. ed. by L. Goldschmidt, Berlin 1924.

[45]   G. Dalman, *Aramäisch-neuehebräisches Handwörterbuch zu Targum, Talmud und Midrasch*, Frankfurt am Main: J. Kauffmann, 1901.

[46]   A. Kohut, *'Arukh Completum*, 8 vols., Wien 1878-92.

Lonzano and Benjamin Mussafia, and his own additional commentaries. A major contribution of Kohut's publication was his insight that the vocabulary of ben Jehiel contained not only plain classical or imperial Greek or Latin, but that there were also medieval Greek expressions as well as late Latin terms[47]. Kohut was the first to introduce medieval Greek and Latin tools into the lexical research of the *'Arukh*, including Du Cange's well-known dictionaries of medieval Greek and Latin[48]. Thus did Kohut facilitate subsequent research of late midrashic literature and works of the Geonic period.

Most noteworthy is Kohut's introduction to the *'Arukh Completum* published in the first volume. He presents the reader with an exhaustive study of Nathan ben Jehiel's biography and the sources of the lexicon, as well as a detailed classification of the material and the cultural background of its composition.

This work was followed by a second publication, *Tosefoth he-'Arukh ha-Shalem* (1937), edited by Samuel Krauss (1866-1948) and other well-known scholars[49]. The aim of this publication was to correct Kohut's *Aruch Completum* and update the research studies and bibliography. Krauss' dictionary of Greek and Latin loan words in rabbinic literature[50] deserves to close this list of rabbinic dictionaries with Greek and Latin etymologies published in modern times. In the introduction to the first volume, dedicated to the language of the Greek and Latin loan words[51], Krauss wrote a comprehensive survey of the research history and assigned a special place to the *'Arukh* and its influence on rabbinic lexicography[52]. In this survey, Krauss succeeded in exposing the hidden links between Jewish lexical scholarship and the erudition of European Hebraists from the Middle Ages to modern times. In the second volume, the dictionary proper, Krauss devotes important space to ben Jehiel's manuscript readings

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[47] Other Talmudic lexicographers, e. g., J. Levy, also noted medieval and modern Greek words in the *'Arukh*, but none made a systematic study of these elements as did Kohut in the *'Aruch Completum.*

[48] Charles DU FRESNE DU CANGE, *Glossarium ad scriptores mediae & infimae Graecitatis*, 2 vols., Lyon 1688 (reprint. Paris: H. Welter, 1905); IDEM, *Glossarium mediae et infimae Latinitatis*, 10 vols., Graz 1883-87 (reprint. Graz: Akademische Druck- u. Verlagsanstalt, 1954).

[49] *Additamenta ad Librum Aruch Completum Alexandri Kohut…,* edidit S. KRAUSS, adiuvantibus B. GEIGER, L. GINZBERG, I. LÖW, B. MURMELSTEIN, Wien 1937.

[50] S. KRAUSS, *Griechische und lateinische Lehnwörter im Talmud, Midrasch und Targum; mit Bemerkungen von Immanuel Löw*, 2 vols., Berlin: S. Calvary, 1898-99.

[51] In his introduction he referred to a valuable article on rabbinic lexicography: A. GEIGER, «Zur Geschichte der thalmudischen Lexicographie: Einige unbekannte Vorgänger und Nachvolger des Aruch», *ZDMG* 12 (1858) 142-49.

[52] KRAUSS, *Griechische und lateinische Lehnwörter,* pp. 34-41.

and lexicographical commentaries. Immanel Löw added a list of corrections and notes to the Krauss edition. Löw also gave special attention to the different readings of Nathan ben Jehiel and his definitions of the loan words.

During the second half of the twentieth century Shraga Abramson and Luisa Cuomo were two other prominent scholars who devoted their research to different aspects of the 'Arukh[53]. Abramson's research focused on the rabbinical commentaries of the 'Arukh and the textual data of this literature, while Cuomo devoted her study to the earliest evidence of the Italian language in ben Jehiel's definitions, also making a remarkable contribution to the study of medieval Greek and Latin. Israel Ta-Shma concludes this list with a complementary study dedicated to Italian medieval lexicography and its likely influence on Nathan ben Jehiel's 'Arukh[54].

The most eminent twentieth-century scholars of rabbinic lexicography and textual commentaries (Jacob N. Epstein, Saul Lieberman, Daniel Sperber, and others) assigned a notable place to the 'Arukh's readings and definitions in their research studies.

The contribution of the 'Arukh is not limited to the study of Greek and Latin words in rabbinic texts, but includes all areas of rabbinical studies and research into the cultural life of the Jews in the medieval period. In this presentation, we limited ourselves only to its special contribution to classical studies and to how it illustrates contact between languages. The 'Arukh was also one of the most important testimonies to the dialogue between Jewish and Greek scholars throughout the centuries, despite religious conflicts and different cultural backgrounds. Nearly a thousand years after the 'Arukh was compiled, it remains a unique source for the study of the Greek language which was in use by Jews in the early centuries and the medieval Greek language spoken and written in Jewish communities. In the future, it justifies a new critical edition based on the manuscripts, or at least a selective study of the Greek sources and classical interpretations.

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[53]   S. ABRAMSON, «On the 'Arukh of R. Natan'» (in Hebrew), *Lešonenu* 36 (1972) 122-42; 37 (1973) 26-42; 38 (1974) 91-117; IDEM, «Rabbi Nathan ben Jehiel's *Sefer he'Arukh*» (in Hebrew), *Sinai* 95 (1984) 27-42; CUOMO, «Le glosse volgari dell'*Arukh*».
[54]   I. TA-SHMA, «Il contesto italiano del *Sefer he-'Arukh* di Rabbi Natan ben Yechi'el da Roma» (in Hebrew), *La Rassegna Mensile di Israel* 7, 1-2 (2001) 21-26.

BIBLIOGRAPHY AND ABBREVIATIONS

I.   Sources

    1.   *Sefer 'Arukh*

Nathan ben Jehiel, *Sefer 'Arukh*, Rome ca. 1469-73.

Nathan ben Jehiel, *Sefer 'Arukh,* Pesaro: Soncino 1517.

Kohut, *Aruch Completum = Aruch Completum sive Lexicon vocabula et res, quae in libris Targumicis, Talmudicis et Midraschicis continentur, explicans auctore Nathane filio Jechielis,* explet, critice illustrat et edit Dr. Alexander Kohut, 8 vols., Wien: Menora, 1878-92.

Additamenta ad Librum Aruch Completum Alexandri Kohut, edidit S. Krauss adiuvantibus B. Geiger, L. Ginzberg, I. Löw, B. Murmelstein, Wien: Alexander Kohut Memorial Foundation, 1937.

    2.   Biblical, Rabbinical and Classical Sources

CGL = *Corpus glossariorum Latinorum*, composuit recensuit edidit G. Goetz, 6 vols., Amsterdam: A. M. Hakkert, 1965.

CP = *Pentateuch*, Constantinople: Soncino, 1547 (in Hebrew characters). For its transliteration into the Greek alphabet, see: D. C. Hesseling, *Les cinq livres de la loi (Le Pentateuque): traduction en néo-grec publiée en caractères hébraïques à Constantinople en 1547, transcrite et accompagnée d'une introduction, d'un glossaire et d'un fac-simile*, Leiden and Leipzig: O. Harrasowitz, 1897.

Field = *Origenis Hexaplorum quae supersunt, sive, veterum interpretum Graecorum in totum vetus Testamentum fragmenta*, edited by F. Field, Oxford: Clarendon Press, 1875.

GenR = *Bereshit Rabba mit kritischem Apparat und Kommentar*, edited by J. Theodor (in Hebrew); second printing with additional corrections by Ch. Albeck, 3 vols., Jerusalem: Wahrman Books, 1965.

GnR, Lev R. (translation) = *Midrash Rabbah*, translated into English with notes, glossary and indices under the editorship of Rabbi H. Freedman and M. Simon, London: Soncino Press, 1939.

Hatch-Redpath = *A Concordance to the Septuagint and other Greek Versions of the Old Testament (including the Apocryphal books)*, edited by E. Hatch and H. A. Redpath; Introductory essay by R. A. Kraft and E. Tov, Grand Rapids, MI: Baker Books, 1998.

Hsch. = *Hesychii Alexandrini lexicon*, recensuit et emendavit Kurt Latte, 2 vols., Copenhagen: E. Munksgaard, 1953–66.

(K) = An entry appearing in the Kohut edition.

PRK = Pesikta de Rav Kahana, translated from Hebrew and Aramaic by W. G. BRAUDE and I. J. KAPSTEIN, Philadelphia: Jewish Publication Society of America, 1975.

R = *An Index to Aquila: Greek-Hebrew, Hebrew-Greek, Latin-Hebrew with the Syriac and Armenian evidence*, edited by J. REIDER, completed and revised by N. TURNER, SVT 12, Leiden: E. J. Brill, 1966.

Rahlfs = *Septuaginta, id est Vetus Testamentum graece iuxta LXX interpretes*, edidit A. RAHLFS, 2 vols. Stuttgart: Vandenhoeck & Ruprecht, 1965⁸ (c. 1935).

Sud. = *Suidae Lexicon*, edidit Ada Adler, 5 vols., Leipzig: Teubner, 1928-38.

TB = *The Babylonian Talmud*, translated into English with notes, glossary and indices under the editorship of Rabbi I. EPSTEIN, 35 vols., London: Soncino Press, 1935.

TJ = *The Jerusalem Talmud*, edition, translation and commentary by H. W. GUGGENHEIMER, 9 vols., Berlin: W. de Gruyter, 2000.

VTG LXX = *Septuaginta, Vetus Testamentum Graecum*, edited by A. RAHLFS ET AL., 13 vols. (Akademie der Wissenschaften in Göttingen), Göttingen: Vandenhoeck & Ruprecht, 1926-93.

II. DICTIONARIES AND RESEARCH STUDIES

CUOMO, «Le glosse volgari dell'*'Arukh*» = Luisa CUOMO, «Le glosse volgari dell'*'Arukh* di R. Nathan Ben Jechj'el da Roma», 2 vols., Ph. D. diss., The Hebrew University of Jerusalem, 1974.

DU CANGE = Charles DU FRESNE, sieur du Cange, *Glossarium ad scriptores mediae et infimae Graecitatis*, Paris: H. Welter, 1905 (reprint of the 1688 edition).

DU CANGE, Latin = Charles DU FRESNE, sieur du Cange, *Glossarium mediae et infimae Latinitatis*, Graz: Akademische Druck- u. Verlagsanstalt, 1954 (reprint of the 1883-87 edition).

EJ = *Encyclopaedia Judaica*, 16 vols., Jerusalem 1971.

KRIARAS = E. T. KRIARAS, *Λεξικὸ τῆς Μεσαιωνικῆς Ἑλληνικῆς Δημώδους Γραμματείας (1100-1669)*, Thessaloniki: Hellenic Research Foundation, 1969 [in progress].

LBG = Lexikon zur byzantinischen Gräzität, edited by E. Trapp, Wien: Österreichischen Akademie der Wissenschaften, 1996.

Lewis, Ch. T.- Short, Ch., *A Latin Dictionary*, Oxford: Clarendon Press, 1922.

LSJ = H. G. Liddell, R. Scott and H. Stuart Jones, *A Greek-English Lexicon*, with a revised supplement edited by P. G. W. Glare and the assistance of A. A. Thompson, Oxford: Clarendon Press, 1996.

Oxford Latin Dictionary, edited by P. G. W. Glare, Oxford: Clarendon Press, 1982.

Sophocles = E. A. Sophocles, *Greek Lexicon of the Roman and Byzantine Periods (from B. C. 146 to A.D. 1100)*, New York: F. Ungar, 1887.

Stavropoulos = D. N. Stavropoulos, *Oxford Greek-English Learner's Dictionary*, Oxford: Oxford University Press, 1988.

Veltri = G. Veltri, *Eine Tora für den König Talmai*, Tübingen: J. C. B. Mohr (P. Siebeck), 1994.

III. Other abbreviations

α'ː Aquila.
It.ː Italian.
σ'ː Symmachus.

Transliteration of the Hebrew alphabet and Hebrew sources names, according the *Encyclopaedia Judaica* rules. Abbreviations for Hebrew Bible, according to the *Chicago Manual of Style*, and for the rabbinic sources, according the "Soncino Talmud List".