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The case for external sentential negation: Evidence from Jewish Babylonian Aramaic

Abstract: This paper has a twofold goal: (i) In the context of negation in general to provide a clear conceptual distinction between internal and external negation, which is summarized as follows: *Internal negation/ predicate denial*: the negative statement is about the topic of the sentence. It provides new negative information about the topic of the clause. *External negation*: it is a statement about a statement; it provides information about the truth value of the root proposition, i.e., reverses it; (ii) In the context of the Jewish Babylonian Aramaic (=JBA) to present an analysis according to which *lāw* is marked for external negation, while *lā* is the unmarked negator, which usually appears in internal negation. I propose that in various contexts *lāw*, which historically functioned as a complete clause, was reanalyzed as an independent negator and thus grammaticalized as an external negation. The support for this hypothesis comes from historical, syntactic, and functional evidence. Moreover, this paper demonstrates a connection between its two goals: although Jewish Babylonian Aramaic is a historic language, its data still provoke a discussion on negation in a more general way. The following claims have been stated among those who argue that with respect to negation the TL framework is more suitable for natural languages: (i) Standard negations represent predicate denials and (ii) Natural languages do not express external negations without subordination (it is not the case that/it is not true that…) Following our analyses for the data from JBA, it becomes clear that claim (2) is not true. Moreover, paying attention to the environments in which the *lāw* appears in JBA reveals contexts that should be classified as cases of external negation even when it is not marked syntactically, for the distinction which has been made between the two categories is a conceptual one and not a syntactic one. Accordingly, claim (i) is also not accurate, as in other languages, we do find standard negations in such contexts.

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1 Introduction: two concepts of sentential negation[1]

When speaking about the move from the Aristotelian Term Logic (TL) to the Fregean Predicate Calculus Logic (PL), the focus is usually on the following shifts[2]:

a. In TL the statement has a categorical form (containing a subject and a predicate), while in PL it is represented by a function-argument structure;

b. In TL there is a parallel treatment of singular and general statements, while in PL quantifiers are propositional operators, and the formulae contain variables which can be quantified;

c. In PL negation is an external truth-functional propositional/sentential operator, while TL has nothing corresponding to such a connective.

    In contrast, there are two types of negation in the Aristotelian tradition:

    a. Term-negation, in which any term (subject or predicate) can be negated;

    b. Denial, one of the two modes of predication (along with affirmation) that differ in quality.

Arguing for the validity of TL, or, to be more accurate, for the fact that it is the logic reflected in natural languages, often involves a demonstration that actual propositions are constructed in the form of categorical judgments (for a review of the literature, see Bar-Asher 2009: Ch. 1). Thus, several attempts have been made to provide a semantic account that allows both singular and general statements to be of the subject-predicate form (most notably the tradition initiated by Montague [see Montague 1974]). Concerning the differences with regard to negation, it has been argued repeatedly that TL is more suitable for natural languages, claiming that that they do not have external negations (for

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1 The abbreviation to the sources follows the standard abbreviations which appear in *The SBL Handbook of Style* (Alexander 1999: 79–80). The interlinear glosses are according to the Leipzig Glossing Rules, with the addition of the following abbreviations: GN – geographical name; PN – proper name; RQM – Rhetorical question marker; *d-* in JBA is a subordination marker, i.e., it appears at the beginning of all types of embedded clauses (see Bar-Asher Siegal 2013b: 221). For the sake of simplicity, in this paper it is always glossed with "REL"

2 For a summary of the central differences between TL and PL, see Horn (2001: 463–465).

similar claims see, among others, Geach 1972: 74–76; Sgall et al. 1973: 92; Katz 1977; Givón 1978, Givón 1984: 326; Barwise and Perry 1983: 139; Payne 1985: 198–199; for a review of the literature, see Horn 2001: 463–473).

   With respect to negation, it is possible to identify two types of arguments to support the claim that TL better suits natural languages. The first states that PL cannot account for the differences between term-negation and predicate denial (Horn 2001; see also Klima 1964 for a syntactic perspective on this matter). Take, for example, the following three sentences:

(1)   a. *The man is happy*.
      b. *The man is not happy* (predicate denial).
      c. *The man is unhappy* (term negation).[3]

Since, for Frege, negation always "indicate(s) the falsity of the thought" (1919: 131), sentences (1b) and (1c) should be, therefore, equivalent semantically. Sentence (1c), though, is stronger semantically than (1b) (Horn 2001: 468). While (1c) entails (1b), the entailment in the opposite direction does not hold, as there are situations in which (1b) is true but (1c) is false, and it is possible to state: "although the man is not happy, he is definitely not unhappy".

   The second argument for TL concerns sentential negation (1b). It has been claimed in various ways that, "[i]n natural language, negation is not a mechanism for forming compound propositions. Logicians treat negation as a propositional connective even though it does not connect propositions, but in constructing artificial languages one is free to do what one wants... in [natural language] negative elements do not behave like the connectives 'and' and 'or' but like adverbs" (Katz 1977: 238). The main observation that supports this claim deals with the location of the negator in standard negation, i.e., in the negation of declarative verbal main clauses (among others, Miestamo 2005). Since Jespersen's influential work (1917), it has been noticed repeatedly that standard negations, like tense, are assigned, crosslinguistically, a fixed position with respect to the predicate (the finite verb in verbal constructions). Unlike interrogatives, for example, which operate on propositions, standard negators are not assigned to sentential-initial position and are never marked primarily by sentential intonation contours (Geach 1972: 75; Horn 2001: 472–473).[4]

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3 As is common in the literature, I am using the prefix *un-* as a morpheme to mark term negation. Horn (2002) demonstrates the various constrains on the formation of lexical items with this prefix, and the various principles that predict the meaning of such words.
4 While Geach (1972) relies mostly on evidence from English, Horn (2001) is based on a long history of typological literature, which began with the work of Jespersen (1917).

This is, however, not a decisive argument against the adequacy of PL for natural languages.[5] Russell (1905) has already observed that categorical statements are translated into PL representations with more than one basic predication. This observation has a significant ramification in the context of negation, since the surface negator may appear in different locations at the logical representation.

Russell noted that the sentence "the King of France is not bald" may have two different semantic representations (2a)–(2b) with different truth conditions:

(2)　a.　$\exists x\ [Kx \wedge \forall y\ [Ky \leftrightarrow y{=}x] \wedge \neg Bx]$
　　　b.　$\neg \exists x\ [Kx \wedge \forall y\ [Ky \leftrightarrow y{=}x] \wedge Bx]$

While (2a) has a narrow scope negation and states that there is a unique French king who is not bald, which is obviously false, (2b) has a wide scope negation and states that it is not the case that there is a unique king who is bald, which is true. Accordingly, if the default reading is of a narrow scope negation, this may explain why standard negation is regularly associated syntactically with the main predicate. (This is, for example, Burton-Roberts' approach [1989; 1997], which suggests that, semantically, negation takes a narrow scope and due to pragmatic reasons it may shift into a wide scope reading, with a presupposition cancelling; Carston [1998], on the other hand, takes the opposite direction and argues that negation takes a wide scope semantically and only due to pragmatic motivations may it have a narrow scope with a preservation of the presupposition. For a review of the literature concerning this matter, see Moeschler 2010.)

Consequently, the location of the negators does not seem to be a decisive argument for one system over the other, as it does not provide enough contrast between the two logical systems. The advantages of one theory over the other are not apparent enough if predicate denial of TL can be translated into narrow scope negation in PL. Thus, it will be more productive if the notion of predicate denial provides, at some theoretical level, something that negation as a connective cannot. In this paper I will argue that for this purpose negation in TL should be considered in light of the pragmatic interpretation of TL, i.e., where the Aristotelian notion of predication as an *aboutness* relation is taken as providing new information about the topic of the proposition (Section 6 will elaborate more about the various interpretations of TL). Accordingly, predication

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5 Cf. Bernini and Ramat (1996: 37–40), and Pollock (1989), among others, *for* an alternative explanations why sentential negation appears at the vicinity of the verb.

in TL is an increase of information about the topic; hence it can be either of positive information (affirmation) or of negative information (denial).

This paper aims at shedding some light on this issue from a language that, as I will claim, distinguishes formally between external and internal negations. I would like to demonstrate that although it is a historic language, its data still provoke a discussion of the relevant phenomena in a more general way. Thus, I will make the case for the existence of two types of negations in Jewish Babylonian Aramaic [=JBA], arguing that in addition to the regular predicate denial expressed by the negator *lā*, a "regular" non-connective negator, JBA also has the negator *lāw*, which functions as a sentential connective. The functional distribution of the two negators, I will argue, demonstrates the differences between them and may shed some light on the essential differences between the two types of negation. Accordingly, this paper has a twofold goal:

(i) In the context of negation in general – to provide a clear distinction between internal and external negation, according to which in the former there is an addition of a negative knowledge about the topic, while the latter is a statement about the falsity of a positive statement.

(ii) In the context of the JBA – to present an analysis according to which *lāw* is marked for external negation, while *lā* is the unmarked negator, which usually appears in internal negation. This analysis relies on the historical origin of the two negators, their syntactic positions, and their functional distribution.

The structure of the paper is as follows: after introducing the relevant dialect of Aramaic and the corpus which was used for this study (Section 2) and presenting the origin of the two negators found in JBA (Section 3), I will make the case for the existence of the two types of negation in this dialect (Section 4), and consequently will show their functional distribution (Section 5). This discussion will be concluded with a proposal about the historical process in which the formal expression for the external negation emerged in JBA. I will then review previous relevant discussions on the distinction between the internal and external negations (Section 6) and how they contribute to our understanding of the distinction between them in general and of the data from JBA in particular (Section 7). In this context I will argue that we should consider predicate denial in light of the pragmatic interpretation of TL, and thus the reason for introducing this topic with its background in the distinctions between the two systems of logic will become clearer. The paper concludes with a section (Section 8) on possible ramifications of our observations to previous discussions concerning multiple types of negation.

In light of the twofold goal of this paper, readers whose main interest is the conceptual distinction between internal and external negation, can rely on

the summary of Section 5 and move directly from here to Section 6, which is the natural continuation of the introduction concerning the two logical systems.

2 Jewish Babylonian Aramaic and the corpus used for this study

Aramaic is a member of the Semitic language family. Within that larger family Aramaic belongs to the Northwest Semitic subfamily. According to the standard periodization introduced by Fitzmyer (1979), the history of Aramaic is divided into five phases:
– Old Aramaic (925–700 B.C.E.)
– Official Aramaic (700–200 B.C.E.)
– Middle Aramaic (200 B.C.E.–200 C.E.)
– Late Aramaic (200–700 C.E.)
– Modern/Neo-Aramaic (700 C.E.–)

A good deal of material composed by the Jews of Babylonia from the third century onwards has been preserved; the dialect spoken and written during this period is known as *Jewish Babylonian Aramaic* (=JBA). Thus, within the scheme of the periodization of Aramaic, JBA belongs to the Late Aramaic phase. Within the traditional framework, the last two periods are characterized by an opposition between an eastern and western dialect group. For the Late Aramaic period, JBA, Syriac, and Mandaic are usually classified as Eastern Aramaic; each of these dialects was spoken by a different ethnic group, Jews, Christians, and Mandaeans respectively.

This study is based on a sample of a thousand appearances of the negators, five hundred of each, chosen randomly from the Babylonian Talmud. The Babylonian Talmud is the largest corpus written in JBA, and it is a collection of diverse materials, including legal discussions, folklore, and biblical exegesis. Although the Babylonian Talmud developed orally over the course of several hundred years, it achieved its final shape only around the seventh century and no manuscript predating the twelfth century has survived. For most of the texts there is more than one manuscript and the manuscripts often diverge in linguistically significant ways, and there is considerable debate as to their relative value (Kutscher 1962; Friedman 1996; Morgenstern 2011; Bar-Asher Siegal 2013a).

The Academy of the Hebrew Language has chosen a principal manuscript for each tractate of the Babylonian Talmud on the basis of various philological

considerations (Wajsberg 1981–1983), and the sample of the thousand sentences used for this study was collected from this database. Therefore, the citations in this paper are according to these principle manuscripts as they appear in Ma'agarim (http://hebrew-treasures.huji.ac.il/) Since the relative value of these manuscripts is debated, I have checked all the manuscripts for each example cited in this paper. As demonstrated in the appendix, it is striking that in the vast majority of the examples all of the manuscripts have the same negator.[6]

3 The negators *lā* and *lāw* in JBA

Schlesinger (1928: 143–153) claims concerning the negators *lā* and *lāw* in JBA that *lāw* appears only before non-verbal phrases. This analysis can be understood in one of two ways: (i) *lāw* is a term-negator[7]; (ii) there is a syntactic rule that *lāw* cannot appear before a verb. The evidence from JBA demonstrates that both alternatives are indefensible.

   lāw is not a term-negator, as the following example can demonstrate:

(3)   *R. Ḥiyya   name   lāw   lmigmar   qā=bāʿe*
      PN   also   NEG   study.INF   DUR=need
      'PN also did not need to study.'
      (*B. Qam.* 99b)

In this case *lāw* does not negate the following phrase, *lmigmar* 'to study', as this sentence does not intend to express that the 'PN needed to not-study.' This negation rather means that 'it is not true that PN needed to study.'

   Thus, Schlesinger's observation can only be taken as a syntactic restriction on what follows the negator *lāw*, regardless of its function. This distribution, however, does not hold too, as the distribution of these negators is not determined by the category of the following phrase, as both appear before all lexical categories:

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6 Only rarely does one find the form *lā* in one manuscript where all other manuscripts have *lāw*. It is never the case that where all manuscripts have *lā*, one manuscript differs and has *lāw*. It is therefore reasonable to assume that cases where *lā* appears instead of *lāw* are the result of a lack of such a distinction in the language of the transmitters of the texts, or that they reflect the fact that *lā* is the unmarked form (see Section 5 below).

7 This seems to be the opinion of Sokoloff (2002: 615), who already recognizes that *lāw* appears before verbs as well. He therefore defines the function of *lāw* as a "negation of a following word or phrase." He probably had in mind that this is a term negator, since this is the only sense in which negation can scope over a single word.

(4) Verbs:
    a. *'nā lā[8] 'mari   l-āk*
       I   NEG say.PST.1.SG to-2.M.SG
       'I didn't tell you.'
       (*Giṭ*. 56b)
    b. *lāw   'mari   l-āk*
       NEG   say.PST.1.SG   to-2.M.SG
       'Didn't I tell you that...'
       (*Mo'ed Qaṭ*. 18b)

(5) Nouns:
    a. *kul   dayyān d-mitqre   l-din   lā*
       every judge   REL-call.PTCP.PASS.M.SG to-law.suit NEG
       šm-eh   dayyān
       name-POSS.3.M.SG judge
       'A judge that is brought to a lawsuit is not called a judge (lit., his name is not judge.)'
       (*B. Bat*. 58a)
    b. *kul   dayyānād-lā   dā'en   ki   hā'e*
       every judge REL-NEG judge.PTCP.3.M.SG as   DEM.M.SG
       dinā lāw dayyānā hu
       law NEG judge   COP.3.M.SG
       'A judge, who does not rule according to this rule, is not a judge.'
       (*B. Meṣi'a* 36b)

(6) Adjectives:
    a. *mišḥā npiš   psed-eh   'bal ḥamrā d-lā*
       oil   numerous.M.SG loss-POSS.3.M.SG but wine   REL-NEG
       npiš   psed-eh
       numerous.M.SG loss-POSS.3.M.SG
       'Oil has excessive loss, but wine that doesn't have excessive loss...'
       (*Mo'ed Qaṭ*. 12a)
    b. *'aṭṭu hāhu   gabrā lāw yehūdā'-e hu*
       RQM DEM.M.SG man   NEG Jewish-PL COP.3.M.SG
       'Is this one [i.e., am I] not a Jewish man?'
       (*'Abod. Zar*. 76b)

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8 Not all manuscripts have a negative clause here; however, the negator *lā appears* in all of the manuscripts that have a negative clause (see Appendix).

Although Schlesinger's observation is not always accurate, it must be admitted that for the most part the claim that *lāw* appears only before non-verbal phrases is true; this tendency is therefore in need of explanation. Section 5 demonstrates a different distribution for these negators and consequently a different explanation is provided in Section 7 for their distribution.

4 Historical background for the existence of two negators

The form *lāw* is the result of enclitization of the 3rd masculine singular independent pronoun *hu* to the other negator, *lā*: *lā + hu* [not + it]> *lāw*.[9] The combination *lā hu* is a complete sentence and could negate an entire statement, carrying the basic meaning: 'It is not the case.' This function is still found in replies to questions:

(7)   *'mar*   *l-eh*   *'it*   *l-āk*   *nikse*   *b-qapputqāyā*,
      say.PST.3.M.SG   to-3.M.SG   exist   to-2.M.SG   property   in-GN
      'mar   *l-eh*   *lā-w*
      say.PST.3.M.SG   to-3.M.SG   NEG-3.M.SG
      'He said to him, "Do you have property in GN?" He replied, "No."'
      (*Ber.* 56b)

There are rare examples with a 3rd feminine singular pronoun (*hi*: *lā + hi* [not + it]> *lāy*), and this is expected since the gender of complete statements is interchangeable between masculine and feminine (Bar-Asher Siegal 2013b: 57–59):

(8)   *māy*   *'āmart...*   *dilmā...*   *lā-y*[10]
      what   say.PTCP.2.M.SG   perhaps   NEG-3.F.SG
      'What would you say, perhaps... it is not so!'
      (*Tem.* 8b)

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9 Syriac (see Section 2 concerning the relationship between Syriac and JBA) has a similar negator, and Joosten (1992) and Pat-El (2006) propose different analyses for its distribution. None of them, however, seems to fit the distribution of *lāw* in JBA. According to Pat-El (2006), *lāw* in Syriac appears only in cleft sentences. If her analysis is correct, then JBA represents a further development of the use of this negator in the history of Eastern Aramaic.

10 This form is extremely rare in JBA, and it is therefore not surprising that it does not appear in some of the manuscripts (see appendix). Moreover, see below in Table 1, in this environment both negators are expected.

Similarly, in the context of cleft sentences, the negator *lāw* should still be analyzed, even synchronically, as containing the two historical morphemes. This analysis is due to the fact that the structure of a regular cleft sentence is:

(9)   PHRASE   *hu*   *d-*   CLAUSE
             COP.3.M.SG   REL

As in the following examples:

(10)   a. *hā'e*   *hu*   *d-bā'e*   *'aqirā*
           DEM.M.SG   COP.3.M.SG   require.PTCP.3.M.SG   uprooting
           'It is this that requires uprooting.' (lit., 'This is that which requires uprooting')
           (*Pesaḥ.* 73b)
     b. *milltā*   *yattirtā*   *hu*   *d-'bad*
           word s uperfluous.F.SG   COP.3.M.SG   REL-do.PST.3.M.SG
           'It is a superfluous thing that he has done.'
           (*Mo'ed Qaṭ.* 21a)
     c. *lnaṭore*   *tarbiṣ-eh*   *hu*   *d-'bad*
           protect.INF   courtyard-POSS.3.M.SG   COP.3.M.SG   REL-do.PST.3.M.SG
           'It is in order to protect his courtyard that he did it.'
           (*'Erub.* 90a)

Thus, it is likely that the following cleft construction, with the negator in the initial position, should be analyzed as containing the negator *lā* and the copulative pronoun *hu*:

(11)   *lā-w*   *d-mbarrek*   *'l-eh*
         NEG-3.M.SG   REL-bless.PTCP.3.M.SG   on-3.M.G
         w-šāte   *l-eh*
         and-drink.PTCP.3.M.SG   to-3.M.SG
         lā   *d-mbarrek*   *'l-eh*   *w-mānaḥ*   *l-eh*
         no   REL-bless.PTCP.3.M.SG   on-3.M.G   and-leave.PTCP.3.M.SG   to-3.M.SG
         'Is this not the case where he recites a blessing upon it and drinks it? No, [this is the case] when he recites a blessing upon it and leaves it.'
         (*Ber.* 52a)

In other words, the negation is the main predicate, and the encliticized *hu* is either the subject or the agreement marker appearing with the predicate, the clause being its referent. (The choice between these descriptions depends on the

syntactic analysis one adopts for cleft sentences in JBA and is irrelevant for the current discussion.)

Synchronically, however, *lāw* appears in JBA also as a negator within a clause, and not only in cleft sentences. Hypothetically one could argue that all appearances of *lāw* should be analyzed as cleft sentences, since *lāw* usually (but not always) takes the sentence-initial position. There are, though, several reasons to reject this hypothesis. First, *lāw* also appears without the subordinating conjunction *d-*. In light of our previous observations regarding the cleft sentences in JBA (for a detailed analysis see Bar-Asher Siegal 2013b: 224–226; see also Goldenberg 1998: 117), since cleft sentences not involving *lāw* almost always have *d-*, so we might expect *d-* also with the *lāw* cases if they were indeed cleft sentences. Therefore, the lack of *d-* in this case supports the claim that the sentences with the negator *lāw* are not cleft sentences. Second, what follows *lāw* is not necessarily a sentence, and hence it is not an asyndetic cleft sentence. This is illustrated by a common phrase in JBA where the adverb *hāke* 'such' follows the negator *lāw*. Note the following example:

(12) *hā   lāw   hāke*
     DEM.F.SG   NEG   so
     '[In fact] it is not so.'
     (among others, *Menaḥ.* 55b)

Finally, *lāw* in cleft sentences most often appears in a very specific construction. In the following example, the elements that constitute this construction are in bold:

(13) **lāw   d**-*lā*   *qnu*   *minn-eh*
     NEG   REL-NEG   acquire.possession.PST.3.M.PL   from-3.M.SG
     lā   d-*qnu*   *minn-eh*
     NEG   REL-aquire.possession.PST.3.M.PL   from-3.M.SG
     'Isn't it the case where it was not purchased from him? No, it was purchased from him.'
     (*B. Bat.* 151b)

This construction, (which could be illustrated by Example (11) as well,) is a rhetorical device that raises a possible state of affairs, whose occurrence is then denied. While *lāw* before cleft sentences almost always appears in this construction, *lāw* that is not followed by the subordinating particle can also appear in other environments, as will be demonstrated below.

As we realize that *lāw* is not the predicate in a cleft sentence, but the negator of a simple clause (without any subordination), it should be analyzed as a single morpheme, and not as if it still consists of a negator with an enclitic pronoun. The reason for this is that when *lāw* appears with other predicates they have their own pronominal subject (or agreement marker). Thus:

(14) a. *lāw   gazlān-e   ninhu*
          NEG   thief-PL   COP.3.M.PL
          'They are not thieves.'
          (*B. Qam.* 79b)
     b. *lāw   'oraḥ   'arʾā   hu*
          NEG   way.of   land   COP.3.M.SG
          'It is not proper behavior.'
          (*Ber.* 62b)

It is thus reasonable to claim that historically *lāw* was a contraction of two morphemes and constituted a complete clause, negating another clause. Although this function was still operating in JBA, in addition to this function, JBA also demonstrates a diachronic development, in which *lāw* became a single morpheme, functioning as a simple negator. The claim of this paper is that despite the morphological merger of two morphemes into one, the function of *lāw* remained as a negator that takes scope over an entire clause.

5 Differences between *lā* and *lāw*

In spite of the fact that *lā* and *lāw* may at first appear to be free variants, one can identify some syntactic differences between the two. The negator *lā* always appears next to the verb, or next to the main predicate in verbless sentences (such predicates can be nouns, adjectives and prepositional phrases, see Bar-Asher Siegal 2013b: 97–98), while *lāw* is usually separated from the verb.[11] Note the following examples:

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[11] The verb with *lāw* is usually situated in the sentence-final position when the negator *lāw* appears earlier in the sentence. However, since word order was not thoroughly studied in JBA at this stage of the research, it is impossible to motivate the location of the verb in sentences negated with *lāw*.

(15) a. *ʾihu lā   ṭāʿin*
         he   NEG make.a.claim.PTCP.3.M.SG
         'He does not make a claim'
         (*B. Bat.* 28b)

    b. *lā   sāmk-inan   a-nissa*
         NEG rely.PTCP.1.PL upon-miracle
         'We do not rely on miracles'
         (*Pesaḥ* 64b)

    c. *lā   ʾmar   k-rab yehuda*
         NEG say.3.M.SG like-PN
         'PN$_1$ did not say what PN$_2$ said?'
         (*Pesaḥ.* 43a)

(16) a. *lāw   ʿakbrā gnab*
         NEG mouse steal.PST.3.M.SG
         'The mouse did not steal'
         (*ʿAr.* 30a)

    b. *lāw   ʾl-eh   qā=sāmk-inan*
         NEG upon-3.M.SG DUR=rely.PTCP-1.PL
         'we do not rely upon it'
         (*Yebam.* 25a)

    c. *ʿad   ha'idnā lāw k-ṣalm-o   ʾolid*
         until now   NEG like-image.POSS.3.M.SG beget.PST.3.M.SG
         'until now he had not begotten in his image'
         (*ʿErub.* 18b)

In the following two sentences, compare the location of the adverb *šappir* 'appropriately':

(17) a. *lā   miʿʿrib   šappir*
         NEG mix.PTCP.PASS.3.M.SG appropriately
         'It is not mixed up appropriately.'
         (*Šabb.* 156a)

    b. *šmuel lāw šappir   qā=mšanne   l-eh*
         PN   NEG appropriately DUR=reply.PTCP.3.M.SG to-3.M.SG
         'PN was not answering him appropriately.'
         (*B. Meṣiʿa* 56a)

Already from these data one can see that *lā*, as other negators in standard negations, is assigned a fixed position with respect to the predicate, i.e., it

always precedes it. In contrast to this, *lāw* in most cases does not appear next to the verb, it rather tends to appear either in the sentence-initial position or immediately after it. This fact may also explain the tendency observed by Schlesinger (1928), mentioned earlier (Section 3), regarding the fact that *lāw* does not appear before verbs.

This observation brings us back to our initial discussion. As noted above (Section 1), for Horn (2001), among others, the fact that standard negations, like tense, are assigned, crosslinguistically, a fixed position with respect to the predicate and that it is not systematically assigned the sentence-initial position supports the idea that, unlike question markers, negation is not an operator applied to the fully formed proposition (cf. Klima 1964). As demonstrated here, in JBA this is true only for *lā*, but not for *lāw*, as *lāw* is not restricted to the vicinity of the verb but is positioned early in the clause (initial or second position). Thus, the distribution in JBA already suggests that *lāw* does function as a propositional operator. Moreover, it is possible to identify contexts in which *lāw* is often used. Accordingly, *lā* is unmarked and *lāw* is marked for the following four functions[12]:

I. Negative rhetorical questions:

(18) a. *lāw   b-hā   qā=mippalgi*
      NEG in-DEM.F.SG DUR=dispute.PTCP.3.M.PL
      'Aren't they disputing this?!'
      (*B. Meṣiʿa* 27b)

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12 There is also a rare fifth function: nominal sentences with infinitive clause as either the subject or the predicate of the sentence (see Bar-Asher Siegal 2013b: 236–244):

(i)   *lāw   miṣwah   lʾahdore*
     NEG   commandment   return.INF
     'It is not mandatory to return.'
     (*Menaḥ.* 23a)

(ii)   *lāw   ʾoraḤ   ʾarʿā lmeqam   hākā*
     NEG   way.of land   stand.INF here
     'It is not proper to stand here.'
     (*B. Meṣiʾa* 86b)

I did not include this group of rare examples in the discussion, since the choice of the negator seems to be related to the forms of the elements in the sentence and not to the function of the construction. It is likely that similarly to the examples that were discussed in Section 3, *lāw* in this group of examples consists of two morphemes: *lā* and the enclitic copula *hu*. Accordingly, it is possible to suggest that, similar to Syriac, in sentences with a noun as the predicate, the copula does not encliticize to the predicate but to the negator (see Joosten 1992; Pat-El 2006).

b. *w-lāw   ḥamrā hu*
and-NEG wine   COP.3.M.SG
'Isn't it a wine?!'
(*Yoma* 76b)

II. In the protasis of conditional counterfactual sentences[13]:

(19) *ʾi   lāw   ʾat   bahad-an lā   hwa*
COND NEG you   with-1.PL NEG be.PST.3.M.SG
sāleq   l-an   dinā
raise.PTCP.3.M.SG to-1.PL judgment
'Had you not been with us, our judgment would not have been conclusive.'
(*Sanh.* 30a)

III. To negate a sentence that had been affirmed earlier:

(20) a. *d-mar   sābar   k-karmelit   dāmy-ā*
REL-master think.PTCP.3.M.SG like-*karmelit* similar-F.SG
w-mar   sābar   lāw   k-karmelit   dāmy-ā
and-master think.PTCP.3.M.SG NEG like-*karmelit* similar-F.SG
'As the one thought it is like a *karmelit*; and the other thought it is not like a *karmelit*.'
(*Šabb.* 3b)
b. *mikklāl   d-šappir   ʾbad   ʾa-d-rabbā...*
therefore REL-appropriately do.PST.3.M.SG on-REL-big
mikklāl   d-lāw   šappir ʾbad
therefore REL-NEG well   do.PST.3.M.SG
'... therefore he did well. On the contrary... therefore, he did not do well.'
(*B. Bat.* 133b)

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13 It must be noted, however, that in the contexts of the protasis of conditional counterfactual sentences, *lāw* appears also in cleft sentences (Bar-Asher Siegal 2013b: 222):

(i)   *ʾi   lāw   d-ḥmit-eh   l-ḥbib-i*
COND NEG REL-see.PST.1.SG-3M.SG to-paternal.uncle-POSS.1.SG
'had I not seen my uncle...'
(*Yebam.* 102a)

Overall, there is a complementary distribution: when the clause is verbless (mostly with existential clauses, but also with clauses with a nominal predicate) only *lāw* appears; when the clause has a finite verb the subordinating particle *d-*, which appears in the cleft sentences, follows the *lāw*. Thus, it is possible that in this context *lāw* is used in asyndetic cleft sentences. (See below, for the significance of this observation.)

IV. To reject a contextual presupposition:

(21) a. *hā*   *d-rabbi zreqa* *lāw* *b-peruš*   *itmar*
      DEM.F.SG of-PN   NEG in-explicitness say.PST.PASS.3.F.SG
      'ellā mikklālā itmar
      but   indirectly say.PST.PASS.3.F.SG
      'The [opinion of] PN was not said explicitly but indirectly.'
      (*Ber.* 11b)
    b. *lāw 'akbrā gnab*   *'ellā ḥorā gnab*
      NEG mouse steal.PST.3.M.SG but   hole steal.PST.3.M.SG
      'It is not the case that the mouse stole, the hole stole.'
      (*'Ar.* 30a)

As stated earlier, *lā* is the unmarked negator while *lāw* is marked for the various functions described above. Speaking about semantic markedness, I have in mind Jakobson's (1971 [1932]) use of the term, that the difference between marked and unmarked in semantic terms is not between A and non-A, but between A and indifference between A and non-A. (For example, comparing *osël* 'donkey' in Russian with *oslíca* 'female donkey', the latter indicates female gender, whereas the former lacks any specification for gender.) Applying this distinction to the negators in JBA, *lāw* is marked only for the functions that were described and cannot appear in any other contexts. *lā*, in contrast, is unmarked in this regard, and can appear in all contexts of negative clauses. The claim is that all of the five hundred occurrences of *lāw* in our sample of sentences fall into the categories mentioned in Sections 4 and 5, without exceptions. On the other hand, occasionally one finds *lā* in similar contexts, as described in Table 1.

Beyond that, *lā* appears in all other uses where the environment of the negation is unmarked for any specific function. In such environments, which do not fall under the function described in Sections 4 and 5, *lāw* never appears. As we shall see in Section 7, it is common in other languages that if there is a marked way for negation it will be only for the external negation. While the unmarked negator usually indicates internal negation, it may cover external negations as well.

The claim that I would like to advance is that despite the morphological merger of two morphemes into one, the function of *lāw* remained as a negator that takes scope over an entire clause, i.e., that it functions as an external negator. Accordingly, I propose the following grammaticalization of *lāw* as an

Table 1: The distribution of *lāw and lā*.

	lāw	*lā*	
Negative replies	+	+	
Cleft sentences	+	−	
Negative rhetorical questions	+	+	<=in different constructions[1]
Protasis of conditional sentences with the conditional conjunction *ʾi*[2]	Only counterfactual	Only factual	
To negate a sentence that had been affirmed earlier	+	+	
To reject a contextual presupposition	+	Rarely	

Notes: [1]*lā* appears only with the rhetorical question marker *mi*, whose mandatory syntactic position is before the main predicate (Bar-Asher Siegal 2013b: 187–189). *lāw* appears in bares-rhetorical question, or in those where the topic of the rhetorical question is marked with *ʾattu*. Thus, when the rhetorical question is marked at the vicinity of predicate, the negator *lā*, which is also located only in this vicinity, must appear, as for example in the very common sentence:

(i)   *mi   lā   tnān*
        RQM   NEG   study.PST.1.PL
        'Didn't we study?!'
        (among others, *B. Bat.* 49b)

[2]For other conditional conjunctions to express counterfactual conditional sentences see Bar-Asher Siegal (2013: 223–224). Some of these conjunctions derived from a merger of some elements with *lāw*.

external negator: it is reasonable to suggest that in various contexts *lāw*, which at first functioned as a complete clause, was reanalyzed as an independent negator and thus grammaticalized as an external negation. It is possible to illustrate this development with the case of apodosis clauses in counterfactual conditional clauses. As noted earlier (n. 12), in this environment we still encounter cleft clauses:

(22)   *ʾi   lāw   d-ḥmit-eh   l-ḥbib-i*
        COND NEG REL-see.PST.1.SG-3M.SG to-paternal.uncle-POSS.1.SG
        'If it weren't the case that I had seen my uncle...'
        (*Yebam.* 102a)

Without the subordinating particle *d-*, it is possible either to analyze lāw as a complete clause, and to consider sentences similar to (23) asyndetic cleft sentences, or to regard the *lāw* as an external negator in a simple sentence:

(23) *'i   lāw 'at   bahad-an lā   hwa*
     COND NEG you with-1.PL NEG be.PST.3.M.SG
     sāleq   l-an   dinā
     raise.PTCP.3.M.SG to-1.PL judgment
     'Had you not been with us, our judgment would not have been conclusive.'
     (*Sanh.* 30a)

In order to explain how such a grammaticalization occurred, it is necessary to conceptualize external negation as a distinct category. Otherwise, there would have been no reason for restrictions on the uses of *lāw* as a negator to emerge, and *lāw* could have been used in all the environments in which the unmarked negator *lā* appears. The purpose of the rest of this paper is, therefore, to elaborate on the nature of this distinguished conceptual category.

The following points summarize what has been observed regarding the negator *lāw* in JBA:

1. It is originally a contraction of two morphemes [*lā* + *hu* > *lāw*] which constituted a complete clause, negating another clause. This function was still operating in JBA, in negative replies to questions and in cleft sentences.
2. JBA demonstrates a diachronic development in which *lāw* became a single morpheme, functioning as a simple negator.
3. There is a syntactic difference between the two negators: *lā*, as is true with other negators in standard negations crosslinguistically, is assigned a fixed position with respect to the predicate, i.e., it always precedes it. *lāw* in most cases does not appear next to the verb, and tends to appear either in the sentence-initial position or immediately after it.
4. *lāw* as a negator is marked for the following environments: Negative rhetorical questions, protasis of conditional sentences, to negate a sentence that had been affirmed earlier and to reject a contextual presupposition.

Below I will claim that despite the morphological merger of two morphemes into one, the function of *lāw* remained as an external negator that takes scope over an entire clause. So far, I have only demonstrated that if we assume that *lāw* is an external negator and *lā* is an internal one, then 1) the syntactic differences between them, the position in the sentence, can be explained; and 2) this might be relevant to the origin of *lāw* as a derivative of an independent clause negating other clauses. In order to justify the claim that these are indeed the functions of the two negators, it is necessary to delve further into the differences between external negation and predicate denial/ internal negation (I will be using these terms interchangeably). Therefore, I will now elaborate on the distinction between the two types of negation. Consequently, in Section 7, I will argue

that external negation is expected in all the contexts where the negator *lāw* appears in JBA.

6 Defining the differences between external and internal negations

As noted in Section 1, it has been argued repeatedly in the literature that with respect to negation, TL is more suitable for natural languages, since, allegedly, they do not have external negations. The main observation that supports this claim is the location of the negator in standard negation. Accordingly the fact that standard negations, like tense, are assigned, crosslinguistically, a fixed position with respect to the predicate (the finite verb in verbal constructions), and are not assigned to sentential-initial position and are never marked primarily by sentential intonation contours indicates that negation does not operate on propositions. However, following Russell's observation that sentential negation can take either a narrow scope or a wide scope, it became clear that the location of the negators cannot be a decisive argument for one system over the other, as it does not provide enough contrast between the two logical systems.

Moreover, (24) summarizes the two claims that are commonly assumed among those who argue that the TL framework is more suitable for natural languages:

(24)   I. Standard negations represent predicate denials.
     II. Natural languages do not express external negations without subordination ('it is not the case that'/'it is not true that...')

However, without a clear way to distinguish between internal and external negation, it is difficult to accept or reject these claims. The goal of this section is, therefore, to propose a clear conceptual distinction between the two. Once we will have such a distinction, it will be possible to examine the validity of the claims stated in (24).

The notion of predicate denial originates from the tradition of TL; it is therefore advisable to discuss negation in this tradition in light of the larger context of predication, which was presented briefly in the introduction to this paper. In TL, propositions are always categorical, since predication in its essence is to say something (predicate) about something (subject). In the contemporary linguistic literature (among others, Reinhart 1981; Gundel 1985 and Lambrecht 1994), the *aboutness* relationship is regularly described with

pragmatic connotations involving aspects of information structure.[14] Moreover, in the history of linguistics, starting with Becker (1841), the pragmatic interpretation of the syntactic predication suffered from some major problems and consequently these theoretical shortcomings initiated the field of pragmatics as a subdiscipline of linguistics. Linguists realized that identification of *subjecthood* with *aboutness* suffers from lack of support in the linguistic data, since very often it is unclear in what sense the sentences are about their grammatical subjects, most notably in cases of dummy subjects. Consequently notions like "logical subject" and later "psychological subject" (Gabelentz 1869; Paul 1886) were developed to preserve the notion of *aboutness* with relation to predication.[15] (For the history of what is known as the "twofold subject-predicate conception" see Elffers-van Ketel 1991.) However, this in fact only created a separation between the grammatical level of the predication and the psychological or logical sphere. Later, by inventing other dichotomies such as Theme-Rheme (Prague school) and Topic-Comment (Sapir), linguists were finally able to separate two different levels of analysis, leaving the *aboutness* relation to pragmatics within the area of information structure.

If we return to discuss negation, having these pragmatic notions in mind allows us to have a better understanding of the distinctions between *affirmation* and *denial* and, as we shall see, how these concepts were related in the literature to the concept of topic. Let us, therefore, take one of the standard definitions for topic:

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14 This pragmatic description does not reflect Aristotle's own concepts, as depicted throughout the *Organon*, since for him predication is not simply a linguistic phenomenon. For Aristotle, the notion of predication, which he portrays in *On Interpretation*, is directly connected with the ontology which appears in the first part of the *Organon* (in *Categories*), and therefore it cannot depend on the context of the expression or on other pragmatic considerations. Whether "x is F" is a question that depends on facts, and it cannot be changed according to the knowledge of the interlocutors. For Aristotle, a predicate is the *katêgoroumenon* – the thing which is being said – a category. There are types of predications according to the type of the category (quality, quantity, relation etc.,) and the number of types of predicates is the number of types of qualities that there are.

In the history of logic, however, the categorical nature of TL took another turn. With the development of set theory by Cantor in the late nineteenth century, categorical judgments were translated to arguments about relations between sets or between sets and their members, hence the common practice of representing Aristotelian logic with Venn diagrams.

15 The term "logical subject" has also been used in a different way, to indicate the agent or initiator of the action or the experiencer in psych predications, regardless of aboutness considerations.

(25) A referent is interpreted as the topic of a proposition if in a given discourse the proposition is construed as being about this referent, i.e., as expressing information which is relevant to and increases the addressee's knowledge of this referent.
(Lambrecht 1994: 131)[16]

According to this definition of topichood, the topic is defined in terms of the information and is related to the "old information," while the predicate/comment is the "new information/knowledge." The notion of predicate denial can be understood similarly. As has been noted by Sgall et al. (1973); Payne (1985); and Miestamo (2005), sentential negation (as opposed to term negation) has a "performative paraphrase", i.e., a sentence of the form "X is not Y" can be paraphrased by something similar to (26):

(26) *I say of X that it is not true that Y* where *X* contains the contextually bound elements, i.e., the old information, and Y contains the contextually free elements, i.e., the new information
(Miestamo 2005: 5.)

Thus, considering the relationship between the topic and comment in terms of information, naturally the increase in information about the topic can be either of positive information (affirmation), for example when it is a statement about the possession of certain quality; or of negative information (denial), for example when it states about the lack of that quality. Considering the truth values of the sentence, in affirmation the sentence is true if the entity denoted by the topic is a member of the set that has that quality and in denial if it is a member of the set that lacks that quality. In both cases the truth value of the sentence depends on membership in a certain set, but in each it is a different set (these are in fact complement sets, in a bivalent logical system). A similar idea is nicely put in the framework of Situation Semantics, where negations describe situations in the same way that positive statements do:

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16 The citation of Lambrecht here is merely as a starting point for the discussion. Bar-Asher (2009: 203–205) criticizes Lambrecht, in that for Lambrecht there is a contrast between the unpredictable (focus) and the predictable (topic), and the latter is defined by the contrast with the former and not independently. The *aboutness* notion of topicality with the concept of increase of information in fact presents the *aboutness* as *givenness*, and it has been repeatedly demonstrated in the literature that it is hard to provide a clear criterion for topichood based on the notion of *givenness* only (among others, Reinhart 1981).

(27) "A dog is not barking", this can describe any factual situation in which some dog is not barking at the location referred to
(Barwise and Perry 1983: 138).[17]

The distinction between affirmation and denial, accordingly, is perceived in different terms than truth values; this stands in contradistinction to the way negation is introduced in the framework of PL. From this perspective, negation is not merely an operator that reverses the truth value of the proposition. Having the discourse in mind, denials provide a different type of information, the negative type.

Turning now to external negation, I would like to provide a clear definition to this type of negation, which is clearly distinct from internal negation/predicate denial. Thinking in pragmatic terms, the discussion regarding whether negation in natural languages functions as external negation becomes a different question. Accordingly, one should ask whether a sentence of the type similar to (28a) provides the same information that the sentence of the type of (28b) does:

(28) a. X is not Y.
    b. It is not the case/ it is not true that X is Y.

Intuitively, the answer is in the negative. While (28a) is about the entity X and it provides the information that X fails to possess the quality Y, (28b) is about the statement "X is Y" and indicates that it is false. Using Geach's words regarding external negation, "the negation of a statement is a statement that that statement is false, and is thus a statement *about* the original statement (1972: 76)." Can this distinction be captured beyond this intuitive sense, or, in other words, can it have also some semantic ramifications? In order to answer this question we turn now to a survey of various discussions concerning possible distinctions between the two types of negation.

We should return first to Russell's observation regarding the narrow and wide scope of negation, and as we have seen in (2), if the negation is external and the king of France does not exist, the entire sentence represented by (2b) is true; however, if it is internal, then the entire sentence represented by (2a) is false.

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17 For Barwise and Perry (1983: 138), external negations "preclude certain types of situations." This claim, I believe, is too strong, and it seems to be the result of the fact that they considered only a sentence with an indefinite subject, and with an external negation, it is read as a negation of a generic statement.

(2)   a. $\exists x[Kx \wedge \forall y[Ky \leftrightarrow y{=}x] \wedge \neg Bx]$
      b. $\neg \exists x[Kx \wedge \forall y[Ky \leftrightarrow y{=}x] \wedge Bx]$

As noted in Section 1, linguists and philosophers have repeatedly noted that the more natural reading of standard negation is in fact the internal one.

     Russell's analysis relies on his approach to definite descriptions, according to which a sentence such as "the King of France is bald", expressed today, is false. In contrast to Russell's analysis and following Frege, there is a long tradition of philosophers and linguists who claim that there is a presupposition of the existence of the topic of the sentence (most notably Strawson 1950 and Strawson 1964.) According to this tradition, this sentence lacks a truth value, as there is a presupposition failure: it presupposes that the King of France exists.

     In contrast to Frege and Strawson, it has been observed that in different environments the sentence "The King of France is bald" may not involve a presupposition failure, as is, for example, the case when it is embedded in the following sentence: "It is not the case that the King of France is bald", and in fact, expressed nowadays, this sentence is true. Already in 1937 Bochvar (Bochvar and Bergmann 1981) proposed two negative operators in a multivalued logic, with the following truth table, where N denotes the neuter, neither-T-nor-F (Table 2):

Table 2: Bochvar's truth table for the two negative operators.

P	Internal negation $\neg P$	External negation $\rightharpoondown P$
T	F	F
F	T	T
N	N	T

According to Bochvar, when a clause embedded within a sentence whose matrix clause says, "it is not true that" does not have the truth value T (it has either F or N), then the entire sentence has the truth value T. Smiley (1960), observes the broader significance of this for the notion of presupposition:

(29)   The idea of presupposition has been introduced in roughly the following sense: one sentence A presupposes another, B, if the truth of B is a necessary condition for A to be either true or false. If being false is identified with having truth value *F*, we can express the idea by the following definition:

A presupposes B $=_{df}$ A ⊢ B and ~A ⊢ B.

> An immediate consequence of the definition is that every presupposition of
> A is a presupposition of ~A. This fact makes it appropriate to apply the
> epithets "internal" and "external" to negation as expressed by the signs
> "~" and "—" respectively... For someone who uses the first to deny a
> proposition belonging to some theory, myth, etc., is committed to the
> theory's ontology to just the same extent as if he upheld the original
> proposition – he as it were makes his denial within the theory. In contrast
> someone who wishes not so much to contradict a particular assertion as to
> reject the ontology behind it must use the second mode of negation. For
> example, in "the King of France (viz. the Comte de Paris) is not bald" the
> negation is internal; in "it is not true that the King of France is bald
> (because there is no such person)" it is external (Smiley 1960: 131–132).

Accordingly, the claim that presuppositions project under negation (among
others, Nelson 1946; van Fraassen 1968; Keenan 1971; Gazdar 1979) is true
only in the case of an internal negation and not that of an external negation.
Being "a statement *about* the original statement" allows the external negation to
avoid inheriting the presuppositions of the original statement.

    Similarly, Kissin (1969) and Bergmann (1977) observe that when the predicate
fails to apply naturally to its subject, affirmative and denial sentences sound
equally unnatural, while a sentence with an external negation is felicitous[18]:

(30)   a. # *The theory of relativity is interested in classical music.*
      b. # *The theory of relativity is not interested in classical music.*
      c. *It is not the case that the theory of relativity is interested in classical music.*

Returning to the difference between predicate denial and external negation, as
noted in Section 1, previously when it has been argued in the literature that
in natural languages standard negation is always internal, it was based merely
on the syntactic position of the negator. I would like to consider this question
with a clearer conceptual difference between internal and external negation: in
the former there is an addition of negative knowledge about the topic, while the
latter is "a statement *about* the original statement." Accordingly, predicate
denials are irrelevant when the topic fails to exist or the predicate fails to
apply naturally to the subject. More generally, presuppositions are left

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18 The examples are based on those found in Bergmann (1977: 65). For some problems with
Bergmann's observations see Atlas (1981:126–127) and Horn (2001: 423).

untouched by such a negation. In contrast, external negations are statements about statements. They may state more broadly that a statement fails to be true either because it is false, or because there is a presupposition failure; or, as we will elaborate below, for other contextual reasons. In fact, we may take it one step further. As is known, sentences can be structured with a topic-comment structure in which there is an increase in knowledge concerning one element of the sentence (categorical). There are, however, other options as well: when, for example, the entire statement is new (thetic, à la Kuroda 1972 and Kuroda 1990,) or, and this is significant for our purposes, when nothing besides the negation is new. Lack of a topic may affect the presupposition of existence, if we agree with Atlas' *Strawson-Grice Condition* that presuppositions are associated with topichood:

(31)   The Strawson–Grice Condition:

   The existence of a reference of an NP is presupposed in making a statement ONLY IF the NP is a Topic NP (where 'NP' is a metavariable ranging over proper names and simplex definite descriptions – not, e.g., ⌜the F of the G⌝.) (Atlas 2004: 345, see also Atlas 1988 and Atlas 1991)

According to what has been proposed so far, the observation regarding the presupposition might be related to negation as well. Predicate denial, where presuppositions project, is expected with categorical statements; but where existence is not presupposed, as is the case with noncategorical statements, an external negation is expected to appear. This is depicted in Table 3, which indicates a correlation between the presupposition of existence and the expected type of negation[19]:

Table 3: The relationship between topicality presupposition and the type of negation.

	Presupposition of existence	Negation
Topic (categorical statement)	+	Predicate denial
No-topic (either all new information or all old information)	–	External negation

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19 In fact, it has been demonstrated in the past that some languages have a marked negation for thetic judgments (for a summary see Horn 2001: 510–515). In Modern Hebrew, for example, existential clauses, which are typical thetic judgments (in Bertano-Marty's original terms), have the unique negator ʾ*en*, which is located in sentence initial position, and not the standard preverbal negator *lo*. See also Veselinova's (2013) crosslinguistic study concerning negative existentials. See also Croft (1991) for the historical processes that motivate unique negative existentials. According to the current proposal, these are different type of negations, and indeed Hebrew does not fit Croft's negative-existential cycle.

We must be careful, though, when explaining the correlation between external negation and the lack of the projection of presupposition under external negation. The claim is as follows: when there is no topic there are two corollaries: (i) there is no presupposition of existence; (ii) the negation is most likely an external one. This statement neither claims that in all cases of external negation there is no topic (the King of France can still be the topic of a sentence like "It is not the case that the King of France is bald"), nor that if there is a topic, there must be a presupposition of its existence.[20] It mostly points to the fact that predicate denial by its very nature provides negative information about its topic. Hence, if this is not the case, it is very likely that the negative statements are merely an indication about the truth value of the relevant statement. For our purposes, then, it is important to note that while predicate denial provides negative information about an entity, external negation is *about* a statement. Such a negation concerns only the truth value of the sentence and it neither provides information about one of its entities nor concerns the process of its verification. (32) summarizes the difference between internal and external negations:

(32) Internal negation/ predicate denial: the negative statement is about the topic of the sentence. It provides new negative information about the topic of the clause.

    External negation: It is a statement about a statement, it provides information about the truth value of the root proposition, i.e., reverses it.

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20 Fodor (1979) demonstrates contexts such as (ii) in which unlike in (i) failure of the existential presupposition of the topic results in falsity:

(i)   The King of France is bald.
(ii) The King of France is standing next to me.

The falsity of (ii), as opposed to sentences such as (i), in which failure of the existential presupposition of the topic leads to a truth-value gap, is related to verification. It can be easily determined in the case of (ii) that in a given context the king of France is not standing next to me. Von Fintel (2004: 334–335) proposes a different definition for the aboutness relation according to which the King of France is not the topic in (ii). According to this definition aboutness is not a discourse-based analysis, in which the topic is the entity around which the information is given, but the topic is the entity that a sentence could be verified/falsified by looking at it and at its intrinsic properties. This notion of topichood can be traced already in Strawson (1964), according to whom in assertions speakers first provide the subjects-topics of the assertion with regards to which the assertion should be evaluated, and to Reinhart's (1981: 80) definition for topic. See Bar-Asher (2009: 208–211) for a development of this notion of topichood.

As noted earlier in (24), it is commonly assumed among those who argue that with respect to negation the TL framework is more suitable for natural languages that standard negations represent predicate denials and that natural languages do not express external negations without subordination. Having now (32) as a definition of the two concepts of negation, in the following section I shall examine first the validity of these two assumptions.

7 External negation in JBA

As we established a better understanding of the differences between external negations and predicate denials, we may now move on to explore whether the contexts in which the negator *lāw* appears in JBA are indeed contexts where an external negation is expected. According to what has been established in the previous section, I will demonstrate that *lāw* appears only when either the issue of the truth condition of the statement is at stake, or when the only new information is the negation of the entire statement, i.e., that the root proposition is already given. Since it is an assessment of a conceptual distinction between two types of negation in defined contexts, it is possible to illustrate our claims with English sentences in equivalent environments.

When considering the contexts in which *lāw* appears in JBA without an embedded clause, as surveyed earlier in Section 5, they can be divided into two groups. The first group consists of negative rhetorical questions (above Section 5, group I) and the protasis of conditional counterfactual sentences (Section 5, group II). In this group the appearance of this negator should not be explained in pragmatic terms, but it is in fact only understood if it is considered the logical operator that reverses the truth value of its clause. In order to clarify this claim, let us begin with negative rhetorical sentences.

As noted by Sadock (1971, 1974), a negative rhetorical question in English (and in fact in many other languages) is semantically equivalent to an assertion of the opposite polarity of what is apparently asked. Take, for example, the following context in which the speaker knows that (i) the addressee already had one coffee that morning; and (ii) that she is not supposed to drink more than one per morning, and thus he asks the following rhetorical question:

(33)   *Didn't you already have a coffee this morning?!*

While the speaker knows that she had a coffee, he asked about the occurrence of the event that did not take place (not drinking coffee). This rhetorical device utilizes a shift in the truth value of the sentence as a whole. This use of an

external negation in such a context is to be expected, as it concerns the truth value of the sentence. In this context, there is no new information at all, and more specifically, unlike in predicate denial, no new knowledge is provided about the topic of the clause. It tells neither that she drank coffee nor that she did not; this information is already provided in the context. Thus, following the definitions of (32) these are not contexts of internal negation. Considering *lāw* as an external negator is, however, suitable in such a context, as this rhetorical device relies on the linguistic ability to reverse the truth value of a clause. (See also Han 2002 for a proposal suggesting that rhetorical questions have a wide scope negation in LF.)[21]

Similar is the case of the protasis of counterfactual conditional sentences. Such conditionals are construed in a way that the protasis is false in reality, and it assumes that this is already given in the common ground of the discourse. The apodosis describes how the world *would have been* if the protasis had occurred.

(34) *Had the teacher not come, they would have gone home.*

The negation in this context indicates that if (34) is true, then the root proposition (the proposition without the negation) of the protasis is true; for in (34) we know that the teacher has *in fact* come. Using the terminology of possible world semantics (following Lewis 1973), such a sentence states that there is at least one possible world where *they have gone home* and is closer to our world more than any other world, aside from the fact that in this world the truth value of the proposition *the teacher has come* is the reverse of the one in the actual world. Thus, as was the case in rhetorical questions, the role of the negation is indeed to reverse the truth value of the clause. Thus this function is expected if *lāw* in JBA is an external negator, as these are statements about the truth value of another statement. Unlike in predicate denial, in which there is an increase in knowledge of negative information about the topic of the protasis clause, in the protasis of counterfactual conditional sentences, no knowledge is added at the level of the clause. The fact that the root proposition is true is given; the only additional information is what would have happened if it were false. Thus, it is playing on the linguistic ability to reverse the truth value of the proposition, which, as defined in (32), is the function of the external negation.

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21 It has been debated in the literature whether rhetorical questions are questions that turn into negative statements at some point of the derivation when they are used to assert the opposite polarity of what is apparently asked, or whether they remain interrogatives either with no answer, or are regular question with contextual restrictions on the answers they allow. For a summary of the literature, see Caponigro and Sprouse (2007). *Prima facie*, the data here support the direction that assumes a shift in the truth value of the sentence as a whole at some point of the semantic derivation.

The second group includes the set of sentences in which the use of the external negator *lāw* is explained in light of the pragmatic understanding of when such a negation is expected. Taken as "a statement about a statement", external negation is expected when it states the falsity of the information that all the participants in the discourse share. In this category are included the uses of *lāw* in negating a sentence that has been affirmed earlier in the context (III) and in rejecting contextual presuppositions (IV). While predicate denials provide new negative information about an entity, i.e., the topic, when the information of the entire clause is already given in the context, the purpose of the negation is different. In such contexts the negation simply indicates that the root proposition is not true. In fact, in English as well such a negation is usually indicated by an external negation, with the addition of the negator *no* positioned prior to the clause (imagine a conversation between A and B):

(35) A: *John came to the movie.*
       B: *No, he didn't.*

This is a case of the so-called *Verum Focus*. This term, coined by Höhle (1992), refers to a focus which can be rephrased as *it is true that* in response to a claim with the opposite polarity. In this case, since the negation is the focus, it can be expressed by intonation alone:

(36) A: *John came to the movie.*
       B: *John did NOT come to the movie.*

This last observation is significant for the broader discussion concerning the two types of negation. According to the definitions in (32), the main difference between predicate denial and external negation is that predicate denial provides negative information about the topic, while external negation asserts that a statement is false. We may return now to the claims mentioned in (24), which have been made by those who argue that with respect to negation the TL framework is more suitable for natural languages. The data from JBA taught us that it is not true that natural languages do not express external negations without subordination (24II). Moreover, paying attention to the environments in which *lāw* appears in JBA reveals contexts that should be classified as cases of external negation even when it is not marked syntactically, for the distinction that has been made between the two categories is a conceptual one and not a syntactic one. Accordingly, the claim that standard negations represent predicate denials (24I) is also not accurate, as in other languages we do find standard negations in contexts of external negations. In fact, as noted in Section 5, even in JBA in some of these contexts the unmarked negator *lā* appears occasionally.

Finally, I would like to address a question, raised by some of the reviewers of this papers, and also by various scholars who attended its oral presentations, that although the notion of external negation explains the examples of rhetorical questions (I) and the protasis of counterfactual conditional sentences (II), many of the examples that fall under categories (III)–(IV) can be explained if we assume that *lāw* is a focus marker. All of those who suggested this explanation offered it as an alternative theory, i.e., that both theories: the external-negation explanation and the focus marker explanation are consistent with the data. I would still like to offer various reasons for the advantages of the external negation theory.

First, according to the focus-marker explanation, the negator *lāw* at times takes the widest scope (the entire proposition) and at times the narrowest scope (the focal element). Thus, without even using the Principle of Ockham's Razor, it seems preferable to assume that a negator has always the same scope than to assume that in two environments it takes the widest scope (the entire proposition) and in two other environments the narrowest scope (a single phrase). Thus, according to the focus explanation, the negator *lāw* is ambiguous in this respect. In contrast, according to the external negation explanation, *lāw* takes always the same scope: the entire proposition.

Second, as demonstrated in Section 4, historically speaking, the origin of *lāw* is a complete sentence that functions as an external negator. Therefore, the shift to external negator in the same clause can be easily motivated. It is unclear what would be the equivalent explanation for the focus-marker theory, as it must explain how an independent sentence became a focus marker.

So far, I have only provided theoretical advantages for the external-negation approach over the focus-marker approach. I will turn now to demonstrate more specific problems with the latter. Speaking about focus, we should distinguish between various types of foci, more specifically between *new information focus* and *contrastive focus*. The former indicates which part of the sentence provides the new information, while the latter indicates information that is contrary to the discourse presuppositions. Focus, in this context negates the alternatives; in fact negation of alternatives may appear even without contradicting presuppositions. Let us take the sentence *JOHN didn't go to the party* in which *John* is the focus, and illustrate different contexts where it can be expressed:

(37) A: *Do you know who among the kids didn't go to the party?*
      B: *I don't know about all of them, all I know is that JOHN didn't go to the party.*

This is the case of a *new information focus*, as it is known that "some kids didn't go to the party", all that is new in B's answer is the identity of a person who didn't go. It is not contrastive, as it is possible that other did not go as well.

(38) A. *I heard that everyone went to the party.*
      B. *Well, JOHN didn't go to the party. [It was Mike and Rebecca who went].*

In this example the focus implies that while John didn't go, Mike and Rebecca did. Following Rooth (1985, 1992) the focus introduces a set of alternatives that contrasts with the ordinary semantic meaning of a sentence. Thus, when considering our example, the following holds:

(39) The ordinary semantic meaning of *John didn't go to the party* is:
      ~{go to the party <John>}
      The relevant alternatives for the relevant sentence are:
      ~{go to the party <John>, go to the party <Mike>, go to the party <Rebecca>}

By focusing on John in (38), the speaker indicates that the ordinary semantic meaning is true while every alternative among the set of alternative is false. In (38) the focus also indicates that every alternative among the set of alternative is false, but in addition, this also contradicts a previous statement (*everyone went to the party*).

Returning to the function of *lāw*, if it were a focus marker, we could have expected its appearances in all types of focuses (37–38). In fact, all of its occurrences in focus, are of the type presented in (38), i.e., when it contradicts a previous stated or presupposed statement. In these environments, the negation is external (it says about a previous statement that it is false, and the only new information is the reverse of the truth value of the sentence), therefore it seems to support the external-negation approach. It is difficult to find in our corpus examples where one can demonstrate that *lāw* does not appear in contexts similar to (37). However, following Strawson's (1964) principle of the Presumption of Ignorance by the speaker about the addressee, every statement has something new, hence, in all negative statements, where the information provided by the negative predicate is new, *lāw* was expected, which is not the case. Even with nominal predicate, if the statement does not contradicts previous statement, only *lā* appears as in the following example:

(40) ʾal *qiqql-e*   *d-mātā-mḤassya* *tib-u*   *w-lā*
      on   garbage.dump-PL of-GN$_1$ dwell.IMP-M.PL and-NEG
      ʾal *ʾappadn-e*   *d-pum-bedītā*
      on   mansion-PL of-GN$_2$
      'Dwell on the garbage dumps of GN$_1$ and not in the mansions of GN$_s$.'
      (*Ker*. 6a)

The location where it is not advisable to dwell ('the mansions of GN$_2$') is the *new information focus*, nevertheless it is not indicated with *lāw*. Although *lā* is the unmarked negator, the fact that being a *new information focus* is never sufficient for using the negator *lāw*, is an indication that *lāw* is not a focus marker. Thus, besides the theoretical advantages for the external-negation approach over the focus-marker explanation that were mentioned earlier, it seems to be the case that assuming that *lāw* is a focus marker cannot explain its distribution, and accordingly only the external negation explanation is consistent with the restriction to certain types of negation.

8 Ramifications to other discussions on negation

Following these conclusions, I would like to note briefly the possible ramifications of the current discussion to other relevant discussions in the literature concerning multiple types of negation.

8.1 Ambiguist vs. monoguist approaches to negation

The fact that the two types of negation are encoded differently in one language can support the claim that the two types of negation are significantly lexically different and are not different only in matters of scope. Similarly to Bochvar (Bochvar and Bergmann 1981), who proposes that one should distinguish between two logical operators (and therefore the two distinguished notations), we can speak about two negators with two different contents, without a necessary commitment to a multivalued logic: the internal one is part of a predicate denial and provides a negative information about an entity; the other, the external negator, is about a statement, and it indicates its truth value. Accordingly, and in a fashion similar to Horn (1985), it is possible to suggest that in a language without such a formal distinction, the content of the single negator is ambiguous in this regard (for an overview of the ambiguist approach, monoguist, and neo-ambiguist position, see Horn 1985, in addition to Burton-Roberts 1989, 1997; Carston 1998; Moeschler 2010).

Since we propose support for the ambiguist approach, we should consider the main arguments against such an approach (for a review see Gazdar 1979: 66 and Horn 1985: 126–128). The main line of argument relies on Grice's (1978: 119) Modified Occam's Razor Principle: "Senses are not to be multiplied beyond necessity". Accordingly, the burden of proof is clearly on the ambiguist to demonstrate the necessity in having two logical operators. While this is a

reasonable request for an introduction of a new operator to a logical system, linguists of natural languages have a weaker burden. They only need to demonstrate that languages make such a distinction. Indeed, Gazdar's (1979: 65–66) main argument against the ambiguist approach is that no language has two types of negation that one marks internal negation and the other external negation. In light of this, the current paper meets this burden and makes the case for the existence of such a distinction in one language. Moreover, with (32) defining the distinction between the two types of negation, it is possible that other languages also demonstrate these two types of negators to a lesser degree when they have a marked negation for thetic judgments (see above, Note. 20). Similarly, as noted above (Example 35), Verum Focus, which is a subtype of external negation, is marked in many languages as well.

It is beyond the scope of the current paper to demonstrate that the distinction we made in (32) between the two types of negations is indeed relevant even for languages which do not distinguish between them formally. Therefore, the evidence that was provided is for a more limited claim: the distinction between internal and external negation, as defined in (32), is valid for at least one language. This is an opening for future studies to examine whether this conceptual distinction is relevant for other languages as well.

8.2 External vs. metalinguistic negation

Horn (1985, 2001: 476–518) argues for a neo-ambiguist position. Accordingly, there are two distinct uses of natural language negation: the regular truth functional operator and in addition a marked use which must be treated not as a truth-functional operator, but rather as a device for objecting to a previous utterance on any grounds whatever. In light of this, external, presupposition-canceling negation is part of the wider phenomenon of metalinguistic negation, as he employs the following definition:

> A device for objecting to a previous utterance on any grounds whatever, including the conventional or conversational implicata it potentially induces, its morphology, its style or register, or its phonetic realization. (Horn 2001: 363)

Thus, it is possible to negate either the truth of a proposition or the assertability of an utterance. Negation, therefore, can be either a descriptive truth-functional operator or a metalinguistic operator that for objecting to a linguistic utterance rather than an abstract proposition respectively.

For Horn, all external negations are metalinguistic. All the classical examples of presupposition-canceling negation are a subtype of metalinguistic

negation since they occur naturally only as responses to utterances by other speakers earlier in the same discourse contexts. According to this approach, a wide array of uses of natural language negation are NON-truth-functional, and entirely nonsemantic.

Contrary to Horn's view, external negations in the current proposal are truth functional. However, it is different from previous proposals for distinctions between internal and external negations in that it does not concentrate on the semantic difference between them (i.e., truth tables), and similarly to Russell (1905), it focuses on their scope. Unlike in Russell's analysis, the two negations are different in content as well: internal negation provides negative information about the topic, while external negations operate on complete statements. If there are semantic differences between the two types of negations, i.e., that in one there is presupposition canceling and in the other, there is not, it is a derivative of the essential difference between them. There is no presupposition canceling when the negation provides negative information about the topic, since the presupposition of existence is related to the topic. When the negation indicates the falsity of a statement, it can be related to the falsity of the presupposition too.

The current analysis of external negation is linked to the data found in JBA, and this is the reason why I argue that external negation is truth functional unlike metalinguistic negation. Considering the environments where *lāw* appears (Section 5), it is very clear that it regularly appears without "objecting to a previous utterance," as is the case in apodosis of counterfactual conditional sentences and in negative rhetorical questions. In these environments, the use of *lāw* is understood only if it is considered as the logical operator that reverses the truth value of its clause. There is no need to object to any previous utterance.

The other environments (negating sentences that have been affirmed earlier, and in rejecting contextual presuppositions) can be considered under Horn's broad definition as cases of metalinguistic negation. This time, however, the Occam's Razor Principle leads us to include all of them under the same category of external negation, as defined in (32). Moreover, none of the examples in the corpus demonstrates a case where *lāw* appears where it is a metalinguistic negation and cannot be interpreted as a truth-functional operator (for example when the corrective sentence entails the negated proposition, or when the objection is about the morphology or the phonetic realization of the original utterance).

It is evident, however, that the current proposal comes with a cost. If indeed the distinction between internal and external negation depicted in this paper is valid crosslinguistically, and in addition, languages have metalinguistic negations as defined by Horn, then in most languages the same form marks all three negation with the right interpretation derived only pragmatically. Indeed, this

cost is not so high, since many of the examples that Horn characterizes as metalinguistic fall under the category of external negation; and metalinguistic negation, according to the current analysis, is preserved to cases in which the corrected sentences do not contradict the negated propositions. Given the nature of the data provided to make the case for the external negation it is beyond the scope of the current discussion to evaluate this theoretical cost, and I intend to discuss this question in a future discussion when crosslinguistic evidence in support for the significance of the distinction made in this paper will be provided.

8.3 Other marked noncanonical negations

It has been observed in the past that languages may have more than a single formal expression for negations, and that the functional difference between them can be rooted in its information structure. For example, Zanuttini (1997: 67) notes that if languages have two negative markers, often one is used as the regular negative marker while the other serves as the presuppositional negative marker. The latter is restricted to contexts in which the root proposition is assumed in the discourse ("entailed by the common ground" [p. 61]). Similarly, Schwenter (2005) describes languages with two variants of negation, with one representing the "unmarked canonical form," and the other the "marked non-canonical form." He argues that the choice between the canonical and noncanonical forms in various languages, and specifically in Brazilian Portuguese, depends on the discourse status of the proposition being negated by a speaker.

As noted earlier, some of the environments in which *lāw* regularly appears are indeed characterized in terms of informational structure (negating a sentence that has been affirmed earlier in the context [III] and in rejecting contextual presuppositions [IV]). The current paper, however, calls for a different explanation for the phenomenon. While Zanuttini's (1997) and Schwenter's (2005) observations focus on the discourse status of the root proposition, the current proposal for JBA is that they do not indicate the informational status of their proposition, but are different with respect to their object[22]: for the one it is an entity and for the other it is a statement. It is true that external negation is more likely to refer to discourse-old information since it is "a statement about a

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22 Cf. Erteschik-Shir (1997) for a different proposal for the distinctions between the various types of negation. It is beyond the scope of the current discussion to explain why I do not follow her approach.

statement", but I argue that only as a result of this is the external negator *lāw* used in negating a sentence that has been affirmed earlier in the context or in rejecting contextual presuppositions. While one could say that *lāw* marks the informative status of the root proposition, for the various reasons that were explained throughout the paper, it seems that this is only a subcategory of a larger phenomenon – which can be characterized as external negation (see also the clarification below).

9 Conclusions

This paper had a twofold goal: In the context of negation in general – to provide a clear conceptual distinction between internal and external negation, and the following summarizes this distinction:

- **Internal negation/predicate denial**: the negative statement is about the topic of the sentence. It provides new negative information about the topic of the clause.
- **External negation**: It is a statement about a statement; it provides information about the truth value of the root proposition, i.e., reverses it.

In the context of the JBA – to present an analysis according to which *lāw* is marked for external negation, while *lā* is the unmarked negator, which usually appears in internal negation. I proposed that in various contexts *lāw*, which historically functioned as a complete clause, was reanalyzed as an independent negator and thus grammaticalized as an external negation. The support for this hypothesis has several components:

a. Historically, *lāw* is a contraction of two morphemes: an enclitization of the 3rd masculine singular independent pronoun *hu* to the other negator, *lā*: *lā + hu* [not + it]> *lāw*. As such, it constituted a complete clause, as it indicated the falsity of another clause.

b. The syntactic distribution in JBA already suggests that *lāw* does function as a propositional operator, since it is not restricted to the vicinity of the verb and positioned early in the clause (initial or second position). Being located at the sentence-initial position supports the idea that, similar to question markers, this type of negation is an operator applied to the fully formed proposition (Section 5).

c. Using our definition for the differences between external and internal negations (Section 6), I have demonstrated that the contexts in which *lāw* appears in JBA can be understood if *lāw* is considered as a statement

concerning the truth value of another statement (Section 7). Thus, it is the logical operator that reverses the truth value of its clause (negative rhetorical questions and the protasis of conditional counterfactual sentences) and it is expected when it refers to another salient statement in the discourse (negation of a sentence that has been affirmed earlier in the context and rejection of contextual presuppositions).

Moreover, this paper demonstrated an interesting connection between its two goals: although JBA is a historic language, its data still provoke a discussion on negation in a more general way. As noted, the following claims have been made among those who argue that with respect to negation the TL framework is more suitable for natural languages:

I.   Standard negations represent predicate denials.

II. Natural languages do not express external negations without subordination (it is not the case that/it is not true that...)

Following our analyses for the data from JBA, it became clear that (II) is not true. Moreover, paying attention to the environments in which *lāw* appears in JBA reveals contexts that should be classified as cases of external negation even when it is not marked syntactically, for the distinction, which has been made between the two categories, is a conceptual one and not a syntactic one. Furthermore, (I) is also not accurate, as in other languages we do find standard negations in such contexts.

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Appendix

Citations of all the sources of JBA and of the various manuscripts of the Babylonian Talmud follow the notation used by Sokoloff (2002: 55–67).

(3)

ר' חייא נמי לאו למיגמר קא בעי	H
ר' חייא נמי לא בעי למילף כלל	V
ר' חייא נמי לאו למיגמר קא בעי	Oxford – Bodl. heb. b. 10 (2833) 29–34, 36
ר' חייא לפנים משורת הדין הוא דעבד	M

(4a)

הא אמרי לך אמ' ליה אנא נמי אמרי לך	- Arras 889
ולא אמרי לך אנא נמי אמרי לך	- M
אנא לא אמרי לך	- V[16]
א"ל האמרי לך א"ל אנא נמי האמרי לך	- V[18]
אמ' ליה אמרי לך אמ' ליה אנא אנא נמי הא אמרי לך	- New York – JTS Rab. 1718.93-100 (compilation)
אמ' ליה אמרי לך אמ' ליה אנא אנא נמי הא אמרי לך	- New York – JTS Rab. 1729.64-67 (compilation)
ל ולא אמרי לך א"ל אנא נמי אמרי" לרא	Muenchen – Bayerische Staatsbibliothek, Cod. hebr. 153 (II,1)

(4b)

לאו אמרי לך	- L
לאו אמרי לך	- M

C -   לאו אמרי לך
Oxford Opp. Add. fol. 23   לא אמרי לך
V -   לאו אמרית לך

(5a)

(369) Oxford Opp. 249 -   כל דיינא (דמיתק) דמתקרי לדין שמיה דיין
Es -   כל דיין דמתקרי לדין לא שמיה דיין
F² -   כל דיין דמיתייקרי לדין לא שמי׳ דיין
H -   כל דיין דמתקרי לדין לא שמיה דיין
M -   כל דיין דמתקרי לדין לא שמי׳ דיין
P¹ -   כל דיין דיתקרי לדין לא שמיה דיין
V²² -   כל דיין דמתקרי לדינא לא שמיה דיין

(5b)

Es - כל דיינא דלא דאין כי האי דינא לאו דיינא הוא ... כל דיינא דלא דאין כי האי
דינא דינא לאו דיינא הוא

F¹ - כל דיינא דלא דאין כי האי דינא לאו דיינא הוא ... כל דיינא דלא דאין כי האי
דינא לאו דיינא הוא

H - כל דיינא דלא דאין כי האי דינא לאו דיינא הוא ... כל דיינא דלא דאין כי האי דינא לאו
דיינא הוא

M - ׳כל דיינ׳ דלא דיין כי האי דינ׳ לאו דיינ׳ הו׳ ... כל דיינ׳ דלא דיין כי האי דינ׳ לאו דיינ׳ הו

V²³ - כל דיינא דלא דיין כי האי דינא לאו דיינא הוא ... כל דיינא דלא דיין כי האי דינא לאו דיינא

Vatican 117 - כל דיינא דלא דאין כי הא דינא לאו דיינא ... כל דיינא דלא דאין כי
האי דינא לאו דיינא הוא

(6a)

L -   דמישחא נפיש פסידא אבל חמרא דלא נפיש פסידא
M -   דמישחא נפיש פסידא אבל חמרא דלא נפיש פסידא
C -   דמשחא נפיש פסידיה אבל חמרא דלא נפיש פסידיה
V -   דמישחא נפיש פסידיה אבל חמרא דלא נפיש פסידיה
V¹⁷ - דמישחא נפיש פסידא אבל חמרא דלא נפיש פסידא

(6b)

J -   באטי וההוא גברא לאו יהודאה הוא
M -   באטי בר טובי מר יהודא׳ ואנ׳ לא יהודא׳
P¹ - אטו ההוא גברא לאו יהודאה הוא
St. Petersburg – RNL Evr. II A 293/13 - באטי וההוא גברא לאו יהודאה הוא

(7)

F -   א׳ ליה [אית לכו נכסי בקפודקא אמ׳ לו לאו
M -   א״ל   אית לכי ניכסי בפונדק׳ א״ל אזל

O -   א׳ל   איל לך נכסי בקפוטקיא א׳ל לאו א׳ל

P -   א״ל   איל לך ניכסי בקפדוקיאה א״ל לאו א״ל

Cambridge – T-S F2 (1) 59 - <...>   קפוד <.....>   <> לאו א<...>

Cambridge – T-S NS 329.543 -   אמ׳ ליה אזל אבוך לקפוטקיא אמ׳ ליה לא אמ׳ ליה

(8)

F -   מאי אמרת דיל׳ מוזיל כהן גביה דסבר כהן דכי הוו ליה בכור אחרינא יהיב ניהלי   לאיי

M-   מאי אמרת דילמ׳ מוזיל גבן   לא

V[9] - מאי אמרת דילמ׳ מוזיל כהן גביה וסבר כהן דכי הוה ליה בכור אחרינא יהיב ניהלי׳   לא

V[10] - מאי אמרינן דמוזיל גבן   לאיי

(11)

F -   לאו דמברך עליה ושתי ליה לא דמברך עליה ומנח ליה

M -   לאו דמבר׳ עילויה ושתי ליה לא דמברך עלויה ומנח ליה

O -   לאו דמבריך עליה ושתי ליה לא דמבריך עליה ומנח ליה

P -   לאו דמברך עליה ושתי ליה לא דמברך עליה ומנח ליה

(12)

M -   הא לאו הכי

P[2] -   הא לאו הכי

V[8] -   הא לאו הכי

V[10] -   הא לאו הכי

(13)

H -   לאו דלא קנו מיניה לא דקנו מיניה

Es -   לאו דלא קנו מיניה לא דקנו מיניה

F[2] -   [לאו דלא [קנו] מיניה [לא דקנו מיניה]

M -   לאו דקני מיני׳ לא דקני מיני׳

P[1] -   לאו דלא קנו מיניה לא דקנו מיניה

V[22] -   לאו דלא קני מיני׳ לא דקני מיני׳

(14a)

Es -   לאו גזלני נינהו   ...לאו גזלני נינהו

F[1] -   לאו גזלני נינהו

H -   לאו גזלני נינהו   ...לאו גזלני נינהו

M -   לאו גזלני נינהו

Bazzano – Archivio Storico Comunale Fr. ebr. 14 - לאו גזלן נינהו

(14b)

M - דלא אורח ארעא ... לאו אורח ארעא ... לאו אורח ארעא

O - ולא אורח ארע׳ ... לאו אורח ארעא הוא

P - ולאו אורח ארעא ... לאו אורח הוא

(15a)

H - איהו לא טעין

Oxford Opp. 249 (369) - איהו לא קטעין

F^2 - איהו לא קא טעין

Es - איהו לא טעין

M - איהו לא קטעין

P^1 - איהו לא קא טעין

V^{22} - איהו לא טעין

(15b)

M^1 - לא סמכינן אניסא

E^1 - לא סמכינן אניסא

C - לא סמכינן אניסא

O - לא סמכינן אניסא

V^1 - לא סמכי׳ אניסא

V^{14} - לא סמכינן א<..>

V^{22} - לא סמכי׳ אניסא

(15c)

M^1 - לא אמ׳ כרב יהודה

M - לא אמ׳ כרב יהודה

E^2 - לא אמ׳ כרב יהודה

E^1 - לא אמר כרב יהודה

C - לא אמ׳ כרב יהודה

O - לא אמ׳ כרב יהודה

Lunzer-Sassoon - לא אמ׳ כרב יהוד׳

V^1 - לא אמ׳ כרב יהודה

V^{14} - לא אמ׳ כרב יהודה

V^{17} - לא אמר כרב יהוד׳

(16a)

O^4 - לאו עכברא גנב

L^1 - {למוכר} עכברא גנב

M -   לא עכברא גנב

Vatican 119 - לאו עכברא גנב

V[10] -   לאו עכברא גנב

(16b)

O -   לאו עליה קא סמכינן

M -   דלאו עליה קא סמכינן

V3 -   לא עליה קא סמכינן

Mo[1] -   לאו עליה קא סמכי׳

Moscow – Guenzburg 1017 - לאו עליה סמכינן

(16c)

V[1] -   עד האידנא לאו כצלמו אוליד

M -   דעד השתא לאו בצלמיה אוליד

O -   עד האידנא לא בצלם ואוליד

V -   דעד האידנא לאו כצלמו אוליד

V[15] - לאו בצלמי׳ אוליד

(17a)

M - לא מיערב שפיר

O - לא מיעריב שפיר

V - לא מערב שפיר

(17c)

Es -   ושמואל לא שפיר משני ליה

F[1] - שמואל לאו שפיר קא משני קשיא ליה...

H -   שמואל לאו שפיר קא משני ליה...

M -   ושמו׳ לאו שפי׳ משני לי׳ ...

V[23] -   ושמוא׳ לאו שפיר משני ליה...

Vatican 117 - ושמואל לאו שפיר קא משני דקשי׳ לי׳

(18a)

Es -   לאו בהא קמפלגי

F[1] -   לאו בהא קמיפלגי

H -   לאו בהא קא מפלגי

M -   לאו בהא קמפלגי

V[23] -   לאו בהא קמיפלגי

Vatican 117 - לאו בהא קמי פלגי

(18c)

לאו חמרא הוא — L

ולאו חמרא הוא — M[1]

ולא חמרא הוא — M

לאו חמרא הוא — New York – JTS Rab. 1623/2 (EMC 271

ולאו חמרא הוא — E[1]

לאו חמרא הוא... לא[ו] חמרא הוא — Oxford Opp. Add. fol. 23

...לאו חמרא הוא — Bazzano – Archivio Storico Comunale Fr. ebr. 18

(19a)

א׳ להו אי ח״ו לא גמרנ׳ מכספיתו — M

אי לאו גמירנא כסיפתון — P[1]

(19)

אי לאו את בהדן לא לימרו ליה בדינא — F[2]

אי לאו את בהדן לא הוה סליק לן דינא — He

אי לאו אנת בהדן לא הוה סליק בדינא — K

אי לאו את בהדין לא הוה סליק דינ׳ — M

אי לאו את לא הוה סליק לן דינא — Cambridge – T-S F2 (1) 173

(20a)

דמר סבר ככרמלית דמיא ומר סבר לאו ככרמלי׳ דמיא — M

דמר סבר ככרמלית דמיא ומר סבר לאו ככרמלית דמיא — O

דמר סבר ככרמלית דמיא [ומר סבר] לאו ככרמלית דמיא — V[15]

דמר סבר ככרמלית דמיא ומר סבר לאו ככרמלית — Cambridge – T-S NS 329.192

דמר סבר ככרמלית דמיא ומר סבר לאו ככרמלית דמיא — University of Toronto, MS Friedberg 9–002

(20b)

מכלל דשפיר עבד אדרבה מדקאמ׳ הוציא מכלל דלאו שפיר עבד — Es

מכלל דשפיר עבד אדרבה מדקאמ׳ הוציא מכלל דלאו שפיר עבד — H

מכלל דשפיר עבד אדרבה מדקאמרי הוציא מכלל דלאו שפיר עבד — P[1]

מכלל דשפיר עבד אדרבה מדקאמ׳ הוציא מכל דלאו שפיר עבד — V[22]

Bologna – Archivio di Stato - מכלל דשפיר עביד א?ד?רבה מדקאמרי הוציא
Fr. ebr. 641   מכלל דלאו שפיר עבד

(21a)

F - הא דר׳ זריקא לאו בפירוש איתמר אלא מכללא איתמר
M - הא דר׳ זיריקא לאו בפירוש איתמר אלא מכללא איתמר
O - הא דר׳ זריקא לאו בפירוש איתמר אלא מכללא איתמר
P - הא דר׳ זריקא לאו בפירוש איתמר אלא מכללא איתמר
New York – JTS ENA 2068.9-11 - הא דר׳ זריקא לאו בפי׳ איתמר אלא מכללא איתמר

(21b)

V^{10} - לאו עכברא גנב אלא חורא גנב
L1 - עכברא גנב חורא לא גנב
M - לא עכברא גנב אלא חורא גנב
O^4 - לאו עכברא גנב אל חורא גנב
V^{119} - לאו עכברא גנב אלא חורא גנב

(43)

O^6 - על קיקלי דמתא מחסיה תיבו ולא על אפדני דפום בדיתא
L1 - אקילקי דמתא מחסיא תיבו ולא על אפדני דפומבדיתא
M - אקילקי דמתא מחסיא תיבו ולא על אפדני דפומבדיתי׳
F - אקילקי דמתא מחסיא תיבו ולא אפדני דפומבדיתא
V^9 - אקילקי דמתא מחסיא תיבו ולא אפדני דפומבדיתא
V^{10} - אקילקלי דמתא מחסיא תיבו ולא על אפדני דפומבדיתא

n.10

V^8 - לאו מצוה לאהדורייה
M - לאו מצוה לאהדורי
V10 - לאו מצוה לאהדורי
H - לאו אורח ארעא למיקם הכא
Es - לאו <...> למיקם הכא
F1 - להו אורח ארעא למיקם הכא
M - לאו אורח ארע׳ למיקם הכא
V^{23} - לאו אורח ארעא למיקם הכא
V^{117} - לאו ארעא אורח למיקם הכא

n.11

V^3 - אי לאו דחמיתיה לחביבי
Mo_1 - אי לאו דחמיתי׳ לחביבי
Moscow – Guenzburg 1017 - אי לאו דחמיתיה לחביבי
M^3 - אי לאו דחמיתיה לחביבי

M -   אי לאו דחזיתיה לחביבי

O -   אי לא דחמיתי לחביבי

n.12

H -   מי לא תנן

Oxford Opp. 249 (369) -   מי לא תנן

Es -   מי לא תנן

F2 -   מי לא תנן

M -   מי לא תנן

P^1 -   מי לא תנן

V^{22} -   מי לא תנן