

REGULARIZATION IN THE CRYSTALLIZATION OF MODERN HEBREW: THE CASE OF COUNTERFACTUAL CONDITIONALS¹

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ABSTRACT

Regularization is a process of linguistic reduction through the elimination of variants. Regularization processes occur naturally during language acquisition and learning. In social situations where learners comprise a large portion of the language community, regularization can lead to linguistic change. This was the case during the development of Modern Hebrew. Therefore, regularization processes are essential to a fundamental question about the crystallization of Modern Hebrew: to what extent its grammar continues the grammar of the previous layers of Hebrew and to what extent it features novel characteristics of its own.

This paper focuses on the crystallization of counterfactual conditionals in Modern Hebrew. It shows that this process involved no new linguistic phenomena but only a culling of the large inventory of variants. These variants that coexisted during the revival period were all inherited from the preceding stages of Hebrew. A regularization process, which occurred mainly in the Mandate period, eliminated some variants, such as the positive meaning of 'ilmale and the qatal (regular past-tense) form in the main clause (the consequence). The variants that survived the regularization process underwent differentiation, becoming associated with distinct registers or meanings.

1. INTRODUCTION

1.1 Regularization in the Crystallization of Modern Hebrew

Regularization processes involve the reduction of linguistic diversity through the elimination of variants. It occurs naturally in individuals' language in language acquisition and learning. Regularization processes happen in all languages and periods, but there are situations where regularization brings about linguistic changes. These changes can occur in social situations where

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learners comprise a large portion of the language community.² This was the case during the early development of Modern Hebrew (MH).

The Hebrew language is a unique case of a language that stopped being used as a vernacular and did not have native speakers for about 1700 years. During these years, Hebrew was used as a part of diglossia and served mainly as a written language. At the end of the 19th century, an effort began to turn Hebrew into a national language that Jews would use in all areas of life. At first, MH did not have native speakers, and the language community comprised only L2 speakers of Hebrew.³ The unique social situation in which Hebrew was returned to use in all fields of life raises the question of how the linguistic character of MH was shaped.

A fundamental question concerning the crystallization of MH pertains to the development of its syntax, which is the least conscious part of the language: how much of this grammar is inherited from the previous layers of Hebrew, and how much of it is new.⁴ This paper examines this question through the concept of linguistic change through regularization processes in a situation where most speakers are not native. This question is explored here through the lens of a specific case: the regularization of counterfactual conditionals in MH.

The term “regularization,” as used in this paper, does not encompass all the changes that occurred in MH but only the rapid changes that took place in the first decades of its development and shaped its character as we know it

2. V. Ferdinand, S. Kirby and K. Smith, “The Cognitive Roots of Regularization in Language,” *Cognition* 184 (2019), pp. 53–68 and references therein.

3. See e.g., E. Doron, M. Rappaport Hovav, Y. Reshef, M. Taube, “Introduction,” in *Language Contact, Continuity and Change in the Genesis of Modern Hebrew* (ed. E. Doron, M. Rappaport Hovav, Y. Reshef, M. Taube; Amsterdam & Philadelphia: John Benjamins Publishing Company, 2019); Y. Reshef, *Historical Continuity in the Emergence of Modern Hebrew* (Lexington: Maryland, 2020).

4. On these questions, see e.g., L.H. Glinert, “Did Pre-Revival Hebrew Literature Have Its Own Language?” Quotation and Improvization in Mendele Mokher Sefarim,” *Bulletin of the School of Oriental and African Studies*, University of London, Vol. 51, No. 3 (1988), pp. 413–427; E. A. Bar-Asher Siegal, “לשונות ספרות” “עברית והארמית בימי הביניים: עיונים בלשון ובחוכמת הלשון (Medieval Jewish Literary Languages: The Case of the Aramaic of the Zohar), in *Studies in Language and Grammatical Thought*, ed. E. A. Bar-Asher Siegal, D. Ya'akov; Jerusalem: The Academy of the Hebrew Language, 2020), pp. 19–63 and E. A. Bar-Asher Siegal, “The Formation and Cognitive Knowledge of Literary Languages: the Case of Hebrew and Aramaic in Middle Ages” (in this volume); E. Doron, et al, Introduction; Y. Reshef, “From Written to Spoken Usage: The Contribution of Pre-Revival Linguistic Habits to the Formation of the Colloquial Register of Modern Hebrew,” *Linguistic Contact, Continuity and Change in the Genesis of Modern Hebrew*, eds. E. Doron et al., (Amsterdam & Philadelphia: John Benjamins Publishing Company, 2019), pp. 179–199; Y. Reshef, *Historical Continuity*.

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today. This period encompasses the revival period, which began in the 1880s and lasted some 40 years, roughly until 1920, and the Mandate period, which ended with the founding of the state in 1948. The term “contemporary Hebrew” refers to the language of the more recent decades, from around 1950 until today.⁵

The departure point for the regularization of various grammatical forms in MH was the considerable variability that characterized the language of the revival period.⁶ This variability stemmed, *inter alia*, from the unique ways in which knowledge of Hebrew was transmitted throughout the ages, due to which all phases of the language were simultaneously accessible to its users, especially educated writers.⁷ The mechanism presented here shows that the syntax formed in the first decades of MH is based on the syntax of Hebrew in the previous layers. MH’s syntax was developed mainly not through innovations of syntactic structures but rather through a selection from existing options. The regularization process involved the decline or disappearance of certain linguistic characteristics among the inventory of existing phenomena, whether inherited from previous stages or borrowed from the substrate languages and the reinforcement of other characteristics.⁸ In the early stages of MH, this culling process was relatively rapid and complete and took place mainly during the Mandate period.⁹ Some of the variants that “survived” were replaced in later stages, but more slowly and less completely. Once the regularization process was over, any competing forms that remained underwent semantic or register differentiation, as two hegemonic types of Hebrew emerged: institutional (planned) Hebrew and native (unplanned)

5. Morag divides MH into three periods: the revival period, the Mandate period and the state period. (S. Morag, “העברית החדשה בהתגבשותה: לשון באספקלריה של חברה”, *Cathedra* 56, 1990, pp. 70–92). This division is largely based on historical-social parameters, but Reshef demonstrates that there are indeed linguistic differences between these periods (Y. Reshef, *העברית בתקופת המנדט* [Hebrew in the Mandate Period], Jerusalem: The Academy of the Hebrew language, 2016). The regularization processes of syntactic structures are consistent with this division.

6. This, in comparison to languages that were in continuous use as spoken tongues (Y. Reshef, *Hebrew in the Mandate Period*, pp. 40–71 and references therein).

7. C. Rabin, *The Development of the Syntax of Post-Biblical Hebrew* (Studies in Semitic Languages and Linguistics, 29), Leiden, 2000; E. Doron et al., “Introduction,” E. A. Bar-Asher Siegal, “Literary Languages.”

8. On linguistic phenomena that characterized Hebrew during the revival period but vanished in later stages, see Y. Reshef, *Hebrew in the Mandate Period*, pp. 72–103.

9. Y. Reshef, *Hebrew in the Mandate Period*, pp. 72–103.

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their usage in previous layers of Hebrew.¹⁶

This paper will describe and analyze the use of counterfactual conditionals during the revival period and the regularization of their use in MH. Previous studies have examined counterfactual conditionals in the pre-modern stages of Hebrew.¹⁷ Their use in MH has been mainly discussed from a prescriptive viewpoint,¹⁸ alongside synchronic descriptions of their use in contemporary Hebrew.¹⁹ However, no study has provided a synchronic description of their use in the revival period or a diachronic description of their regularization in MH. This paper will do so while showing the relation to overall regularization processes in MH. In a previous article, I examined negative counterfactual conditionals based on other corpora.²⁰ In this article, I will focus on the positive counterfactual conditionals. The previous article's conclusions will be incorporated here.

Data for this study was sourced from two main corpora. The description of counterfactual conditionals in the revival period is based on a corpus of texts dating from 1882 to 1914, available on the website of the Hebrew Academy's Historical Dictionary Project.²¹ This corpus, comprising academic texts by

16. M. Bar-Ziv Levy, "על תהליכי ההסדרה בהתגבשות העברית החדשה: מילות התנאי הבטל השליליות כמקרה בוחן" (Regularization in the Crystallization of Modern Hebrew: The Case of Negative Counterfactual Conditionals), *Lěšonenu* 83 (2021), pp. 182–202.

17. See e.g., **Biblical Hebrew**: J. C. Beckman, "Conditional Clause: Biblical Hebrew," in G. Khan et al. (eds.), *Encyclopedia of Hebrew Language and Linguistics (EHLI)*, I, 2013, pp. 545–548; **Rabbinic Hebrew**: M. Azar, "Conditional Clause: Rabbinic Hebrew," *EHLI*, I, 2013, pp. 548–550; M. Perez Fernandez, *An Introductory Grammar of Rabbinic Hebrew*, (Leiden: Brill, 1997). **Medieval Hebrew**: M. Goshen-Gottstein, *Syntax and Vocabulary of Mediaeval Hebrew, As Influenced by Arabic*, (Jerusalem: Ben-Zvi Institute, 2006); C. Rabin, *Syntax of Post-Biblical Hebrew. Maskilic and Hasidic Hebrew*: L. Kahn, *The Verbal System in Late Enlightenment Hebrew (Studies in Semitic Languages, 55)*, Leiden, 2009; L. Kahn, *A Grammar of the Eastern European Hasidic Hebrew tale (Studies in Semitic Languages, 77)*, Leiden, 2015.

18. On 'ilmale see Z. Ben-Haim, "כיצד נשתמש במילת אלמלא (אלמלי)" (How should we use 'ilmale), *Lěšonenu* 18, 1 (1952–3), pp. 27–30, 60; Y. Avineri, *יד הלשון* (The Hand of the Tongue), Tel-Aviv: Izreel, 1964, p. 34; I. Perets, *מדריך לשון בענייני לשון* (Guide to the Hebrew Language), Tel-Aviv: Joseph Sreberk Publishing House, 1965, p. 233–235; A. Bendavid and H. Shay, *מדריך לשון ולטלוויזיה* (Language Guide for Radio and Television), (Jerusalem: Israel Broadcasting Authority, 1974), p. 143. On 'im in counterfactual conditionals see e.g., A. Bendavid and H. Shay, *Language guide*, p. 143; D. Harband, *Kicur Šulhan 'Arux*, p. 18 (note).

19. M. Ben-Asher, *Syntax of Modern Hebrew*; L.H. Glinert, "The Hypothetical Conditional," L. H. Glinert, *The Grammar of Modern Hebrew*; T. Bar, *Conditional Sentences*; T. Bar, "Conditional Clause: Modern Hebrew," *EHLI*, I, 2013, pp. 550–553.

20. M. Bar-Ziv Levy, "Negative Counterfactual Conditionals."

21. <https://maagarim.hebrew-academy.org.il/Pages/PMain.aspx>.

seven different authors, yielded 148 positive counterfactual conditionals sentences.²² Data for the period between the revival and contemporary periods, during which the regularization process took place, is sourced from the *Haaretz* newspaper corpus. It consists of issues of the *Haaretz* daily from 1920–1960. The issues, from the first three months of round years (1920, 1930, etc.), yielded 868 examples of counterfactual conditionals.²³ The description of the situation in contemporary Hebrew is based on previous studies,²⁴ as well as on hundreds of examples of counterfactual conditional sentences collected from literary, cinematic, and television texts and from the Internet, dating from 1960 until the present day. A systematic sample test was conducted in the *Maariv* newspaper from the first ten days of January 1980 and 1990.

The first part of the paper describes the use of counterfactual conditionals during the revival period and traces its sources in the preceding layers of Hebrew. The second part of the paper describes the regularization of their use in MH, analyzing the circumstances in which this process took place and the factors that affected it. The third part of the paper summarizes the characteristics of the regularization process and examines it as an example of the overall regularization process of grammatical constructions in MH.

2. COUNTERFACTUAL CONDITIONALS IN THE REVIVAL PERIOD

The revival period was characterized by considerable variability (compared to the more limited and uniform situation today), reflecting the breadth and diversity of the material inherited from the previous stages of Hebrew. The section below examines whether counterfactual conditionals during the revival period reflect their use in Classical or Medieval Hebrew and whether revival period literature reflects any new uses.

22. The academic language of the revival period is much closer to contemporary Hebrew than the literary language of that time. However, it too contains linguistic phenomena that were later discarded (Y. Reshef, *Hebrew in the Mandate Period*, pp. 72–103).

23. Web.nli.org.il/sites/jpress/hebrew/pages/default.aspx.

24. M. Ben-Asher, *Syntax of Modern Hebrew*; L.H. Glinert, “The Hypothetical Conditional,” L. H. Glinert, *The Grammar of Modern Hebrew*; T. Bar, *Conditional Sentences*; T. Bar, “Conditional Clause.”

2.1 Counterfactual Conditionals Markers in the Revival Period

During the Revival period, there was a variety of conditional markers in counterfactual conditionals. In positive sentences, the main use was of designated conditional markers: *lu* and *'ilu* and also *'ilmale* in a positive meaning (“if”), and the general conditional marker *'im* was rare. Three markers were used in negative sentences: *lule*, *'ilule*, and *'ilmale* in a negative meaning (“if not”).²⁵ In the revival period, *lule*, *'ilule* and *'ilmale* are always negative when preceding a noun phrase, but when preceding a clause, they differ in their meaning: *lule* and *'ilule* are consistently negative, whereas *'ilmale* can have a negative sense (“if not,” as in Example 1) but also a positive one (“if” as in Example 2); the second of these options is the more common one.²⁶

1. ומי יודע עד מתי ארכה מחלוקת זו, אלמלא בא מלאך המות ועשה שלום בינינו.

“Who knows how long the dispute would have lasted had the Angel of Death not come and made peace between us.”²⁷
2. אלמלי אנו היינו באים לנזוף, אפשר שהיתה יוצאת, במקום נזיפה שחצנית, שאגה זעומה על העוררן של אותה הסביבה החשוכה...!

“Had we come to rebuke, perhaps instead of an arrogant rebuke, a furious roar would have erupted over the blindness of the dark surroundings...!”²⁸

The two opposite meanings of *'ilmale* often create ambiguity, but the context can help infer the meaning, and so can the spelling. During this period, the negative markers were spelled both with a final *aleph* (אלמלא, אלולא, לולא) and with a final *yod* (אלמלי, אלולי, לולי). The spelling of *lule* and *'ilule* is unrelated to their polarity, for they are always negative, but the spelling of *'ilmale* is closely correlated with its polarity. When spelled with a *yod* (as in example 2), it is nearly always positive, and when spelled with an *aleph* (as in example 1), it is nearly always negative.²⁹

25. *lo* comes after *lu* or *'ilu* rarely.

26. Since *'ilmale* in the revival period had a positive meaning alongside the negative one, in rare instances it was used as an optative marker in monoclausal constructions (without a consequent).

27. A. Z. H. Ginsberg, כתבים בלים (Ktavim Balim), 1890, p. 86.

28. Y. H. Brenner, לבירור העניין (Leverur Ha'inyan), 1911, p. 15.

29. M. Bar-Ziv Levy, “Negative Counterfactual Conditionals,” pp. 189–190.

The most common positive markers in the revival period were the designated counterfactual conditional markers: *lu* was the most common, and after it, *'ilu*. The neutral conditional marker *'im* is the third most common in the corpus, but it occurs only in the writing of one writer – Ahad Ha'am – out of the seven writers in the corpus. *'ilmale* in its positive meaning occurs only in 7% of the cases (11 times), but it appears in texts of four different writers.

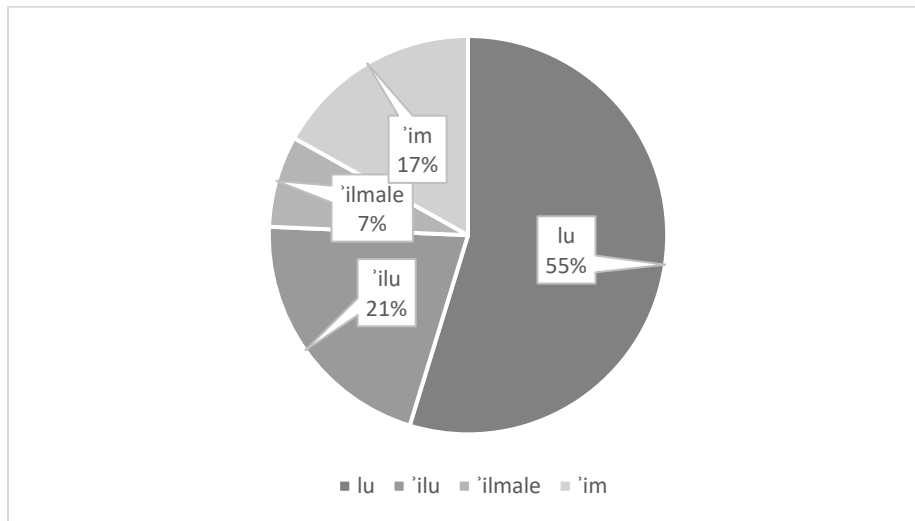


Chart 1: The positive counterfactual markers in the revival period

Revival-period Hebrew inherited all counterfactual conditional markers from the preceding stages of the language: Biblical Hebrew uses the marker *lu* (and *lule*), and the markers *'ilu*,³⁰ and *'ilmale* (and *'ilule*), emerged in Rabbinic Hebrew. In Biblical Hebrew, *'im* is used as a conditional marker only in factual and concessive conditionals.³¹ In the Interim period between the Rabbinic period and the revival era, during which Hebrew was used solely as a literary language, the use of *'im* in counterfactual conditionals is common.³²

How did *'ilmale* come to have two opposite meanings in the revival period? Apparently, all three markers – *lule*, *'ilmale*, and *'ilule* – were originally negative. This assumption is supported by the fact that, according

30. *'ilu* appears twice in late biblical Hebrew.

31. J. C. Beckman, "Conditional Clause: Biblical Hebrew," p. 546.

32. C. Rabin, *Syntax of Post-Biblical Hebrew*, pp 179–180; L. Kahn, *Hasidic Hebrew*, p. 307; L. Kahn, *Late Enlightenment Hebrew*, p. 100.

to most etymological analyses, all three contain the negative element *lo*.³³ Furthermore, when preceding a noun phrase, all three are always negative, in all stages of Hebrew that feature them, and the same is true for *lule* and *'ilule* followed by a clause.³⁴ The only exception is *'ilmale*, which in Rabbinic-Babylonian Hebrew is nearly always positive when followed by a clause.³⁵ This development is generally explained in diachronic terms: the marker was originally negative in all syntactic environments, but a semantic shift produced a positive meaning in pre-clausal positions only.³⁶ In the Medieval period, various writers reverted to the (original) negative meaning of *'ilmale*.³⁷ As a result, in the modern Hebrew literature of the pre-revival period, the negative sense was prevalent again, alongside the positive one.³⁸

The orthographic situation likewise has its roots in the previous layers of Hebrew. In Classical Hebrew, the spelling of the markers alternated between *aleph* and *yod* regardless of their meaning.³⁹ The spelling with *aleph* is

33. *Lule* is generally analyzed as the counterfactual conditional marker *lu* + the negative marker *lo*, and *'ilule* as the conditional marker *'i + lu + lo* (M.Z. Segal, [פרק מתורת הפסוק] “בניית פסוקי התנאי בעברית המקראית והמשנית” [Conditional Clauses in Biblical and Tannaitic Hebrew], *Lěšonenu* 4, pp. 205–207; E. A. Bar-Asher Siegal, “ההיסטוריה של המילים 'אילולי' ו'אלמלי' – חלק א דיאכרוניה לשונית” [The History of the Forms 'ilule and 'ilmale – Part I: Linguistic Diachrony], *Lěšonenu* 81 [2019], p. 6). *Ilmale* has been associated with several different etymological analyses involving *lo* (e.g., M.Z. Segal, “Conditional Clauses,” p. 207; Z. Ben-Haim, “How Should We Use 'ilmale,” p. 30 [note]; M. Azar, תחביר לשון המשנה [The Syntax of Mishnaic Hebrew, Jerusalem: The Academy of the Hebrew Language/University of Haifa, 1995], p. 153; M. Perez Fernandez, *Grammar of Rabbinic Hebrew*, p. 213; E. A. Bar-Asher Siegal, “'ilule and 'ilmale – Part I,” pp. 6–7).

34. For certain exceptions, see E. A. Bar-Asher Siegal, “'ilule and 'ilmale – Part II,” §3.1.

35. M.Z. Segal, “Conditional Clauses,” p. 208; Y. Breuer, (“על הלשון העברית של האמוראים בתלמוד הבבלי” On the Hebrew Dialect of the Amoraim in the Babylonian Talmud), *Language Studies* 2–3 (1987). p. 103. See E. A. Bar-Asher Siegal, “'ilule and 'ilmale – Part II,” §3.1, for a discussion of some exceptions.

36. For these explanations see Z. Ben-Haim, “How Should We Use 'ilmale,” Y. Breuer, “On the Hebrew Dialect of the Amoraim,” E. A. Bar-Asher Siegal, “'ilule and 'ilmale – Part I.” The negative-to-positive semantic shift of Rabbinic Hebrew did not affect *'ilule* (E. A. Bar-Asher Siegal, “'ilule and 'ilmale – Part I,” and see explanation therein).

37. According to Bar-Asher Siegal, this can be attributed to purism or to a remerging of *'ilmale* and *'ilule* due to their phonetic and semantic similarity (E. A. Bar-Asher Siegal, “'ilule and 'ilmale – Part I,” pp. 14–15).

38. In that period, the usage of *'ilmale* varied among genres and among writers. Kahn writes that, in the Maskilic Hebrew of the second half of the 19th century, *'ilmale* was negative (L. Kahn, *Late Enlightenment Hebrew*, p. 100), but newspapers of that period yield some examples of positive *'ilmale*. In the Hassidic literature, *'ilmale* is generally negative, and positive instances are rare (L. Kahn, *Hasidic Hebrew*, p. 309).

39. *Lule* in the Bible, always negative, is usually spelled with a yod but is also found with an aleph (Y. Breuer, העברית בתלמוד הבבלי לפי כתבי היד של מסכת פסחים [The Hebrew in the Babylonian Talmud According to the Manuscripts of Tractate Pesahim; Jerusalem: The Hebrew University Magnes Press, 2002, p. 53]. *'ilule* and *'ilmale* appear with both *aleph* and *yod* in Rabbinic Hebrew, regardless of their meaning (M.Z. Segal, “Conditional clauses,” p. 236; Z. Ben-Haim, “How Should We Use 'ilmale;” Y. Breuer, “On the Hebrew

etymological and mirrors the spelling of the negative marker *lo*. The spelling with *yod* results from a process of dissimilation between the vowel *u* in *lu* and the vowel *o* in *lo*, which transformed the last vowel into *e*. This dissimilation, in turn, triggered the change in spelling, causing the *aleph* to be replaced with *yod*, which is more usual following a consonant vocalized with *tzere*.⁴⁰ The correlation between positive *'ilmale* and the spelling with *yod* was a conscious decision made in the Medieval period. Since the ambiguous polarity of *'ilmale* posed a problem for readers of Hebrew, Rabbeinu Tam, of the 12th century, suggested that positive *'ilmale* is spelled with *yod* and negative *'ilmale* with *aleph*. Editors and proofreaders later applied this convention to earlier texts, thus creating the impression that this correlation between the spelling and the meaning had always existed.⁴¹

2.2 Counterfactual conditionals verbal forms in the revival period

Conditional sentences consist of a clause expressing the condition (antecedent), usually introduced by a conditional marker, and a clause expressing the consequence (consequent). Revival-period Hebrew had three main sequences of verbal forms in counterfactual conditional, all of them comprising a past-tense antecedent and a past-tense consequent:

a. *Haya-haya*: Compound past, consisting of the verb *haya* (past tense of *be*) followed by a present participle form (*qotel*), in both the antecedent and the consequent

3. אילו היו כל היהודים מקבלים תורת טולסטוי...היתה תורה זו נעשית ליהדות
If all Jews had accepted the Tolstoy doctrine...this doctrine would have become Judaism⁴²

Dialect of the Amoraim,” p. 129). In the Judean Desert Scrolls, *'ilule* (spelled איללי) is generally written with a final *yod* (U. Mor, כוכבא בר כוכבא, למרד בר כוכבא הגדול בין המרד הגדול ליהודה בין המרד הגדול ליהודה (Judean Hebrew: The Language of the Hebrew Documents from Judea Between the First and the Second Revolts; Jerusalem: The Academy of the Hebrew Language, 2015), p. 60, n. 163).

40. M.Z. Segal, “Conditional Clauses,” p. 205–206.

41. M.Z. Segal, “Conditional Clauses,” p. 236; Z. Ben-Haim, “How Should We Use *'ilmale*,” p. 27. Bar-Asher Siegal contends that this kind of proofing began only in the recent generations. (E. A. Bar-Asher Siegal, “*'ilule* and *'ilmale* – Part II,” pp. 14–16).

42. Y. H. Brenner, *Leverur Ha'inyan*, p. 15.

example, there are a few cases of *lu* and positive *'ilmale* with verbs in the *yiqtol* form in both the antecedent and the consequent (example 8).⁴⁷

8. אך הקופנות הזאת הנהיגה בספרותנו... שמוש באורינטליסמים, אשר לו יתורגם אחד מהם. בדיוק לשפה אירופית יעורר געל ובחילה מאין כמהם.

But this imitation has led to the use of Orientalisms in our literature. If any of them were translated precisely into a European language, It would arouse unparalleled disgust and nausea.⁴⁸

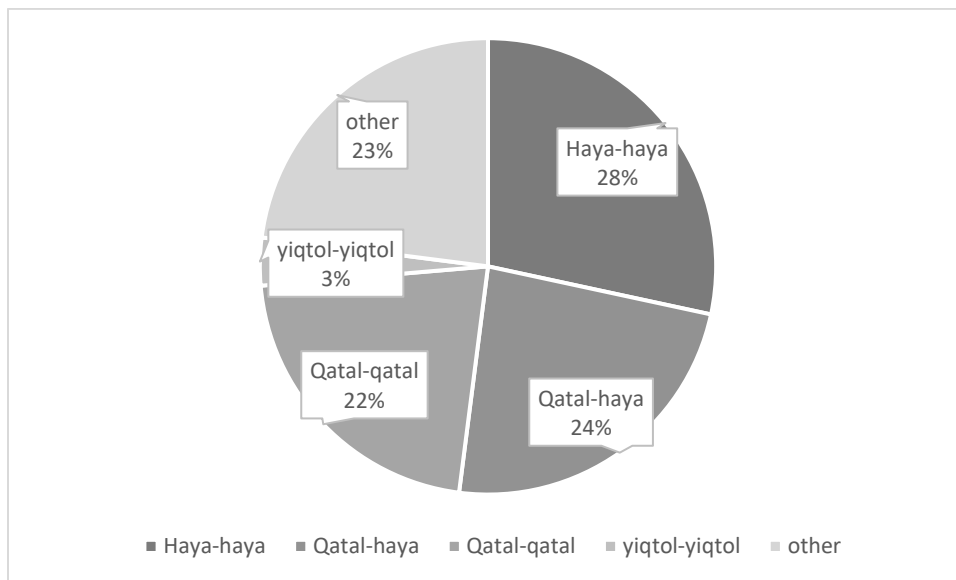


Chart 2: Sequences of verbal forms of counterfactual conditionals in the Revival period

The three most common sequences of verbal forms typically relate to the past and express a counterfactual conditional that has not occurred in the past. In rare cases, they represent a hypothetical condition. In contrast, *yiqtol-yiqtol* represents only hypothetical conditionals.

Revival-period Hebrew inherited all counterfactual conditional markers from the preceding stages of the language, along with their usage: The Biblical markers appear with Biblical sequences of verbal forms and the Rabbinic markers with Rabbinic ones. Biblical Hebrew uses the marker *lu* with *qatal-qatal* to express past counterfactual conditionals. The consequent can be

47. *Lule*, *'ilule* and negative *'ilmale* never co-occur with *yiqtol* forms.

48. J. Klausner, *The Hebrew Language – Live Language*, pp. 70–71

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introduced by *ki* or by *ki*+*'az/'ata*, but these markers are non-obligatory.⁴⁹ The markers *'ilu* and *'ilmale*, and the *haya-haya* and *qatal-haya* sequences, emerged in Rabbinic Hebrew.⁵⁰ In Biblical and Rabbinic Hebrew, the markers also appear with other sequences of verbal forms, such as sentences expressing hypothetical future or present conditionals, employing *qotel* or *yiqtol* forms in both the antecedent and the consequent.⁵¹

Revival-period Hebrew keeps the correlation between the marker and the sequence of verbal forms according to the original layer. Biblical sequences favor biblical markers, and Rabbinic sequences prefer Rabbinic markers. In this period, both *lu* and *'ilu* appear with *qatal-haya*. They differ in their distribution with the other two patterns, however: *'ilu* prefers *haya-haya*, whereas *lu* distinctly favors *qatal-qatal*. The negative markers *lule* and *'ilmale* also preserve the correspondence between the origin of the marker and the forms' sequence: the biblical *lule* occurs more frequently with biblical *qatal-qatal*, whereas the Rabbinic *'ilmale* occurs more regularly with Rabbinic *haya-haya*.⁵²

In Biblical Hebrew, *'im* is used as a conditional marker only in factual and concessive conditionals.⁵³ *'im* is found in counterfactual conditionals in some Babylonian Talmud manuscripts, but it is difficult to know whether it is an original or late use.⁵⁴ In the interim period, during which Hebrew was used solely as a literary language, the use of *'im* in counterfactual conditionals is common.⁵⁵ In this period, the counterfactual conditional was generally expressed using past tense verbs, but sometimes also using other forms, mainly *yiqtol*.⁵⁶ In the modern writings that preceded the revival of spoken

49. Classical Biblical Hebrew used only the marker *ki* in this context; later Biblical Hebrew also used the bare markers *'az* and *'azay*. (D. Talshir, "מעמדה של העברית המקראית המאוחרת בין לשון המקרא ללשון חכמים" [The Autonomic Status of Late Biblical Hebrew], *Language Studies* 2–3 [1987], p. 170).

50. In Rabbinic Hebrew, the consequence is not introduced by *ki*-phrases (D. Talshir, "Late Biblical Hebrew," p. 170).

51. A.B. Davidson, *Hebrew Syntax*, Edinburgh, 1896, p. 180; M.Z. Segal, "Conditional clauses," pp. 206–207; M. Mishor, מערכת הזמנים בלשון התנאים (The Tense System in Tannaitic Hebrew), PhD Dissertation, The Hebrew University of Jerusalem, 1983, pp. 393–394.

52. M. Bar-Ziv Levy, "Negative Counterfactual Conditionals," pp. 186–187.

53. J. C. Beckman, "Conditional Clause: Biblical Hebrew," p. 546.

54. E. A. Bar-Asher Siegal, "'ilule and 'ilmale – Part II," §4.1.

55. C. Rabin, *Syntax of Post-Biblical Hebrew*, pp. 179–180; L. Kahn, *Hasidic Hebrew*, p. 307; L. Kahn, *Late Enlightenment Hebrew*, p. 100.

56. M. Goshen-Gottstein, *Mediaeval Hebrew*, p. 245; C. Rabin, *Syntax of Post-Biblical Hebrew*, pp. 181–182; L. Kahn, *Late Enlightenment Hebrew*, p. 137; L. Kahn, *Hasidic Hebrew*, p. 309–310.

Hebrew, counterfactuals were very diverse. In the Hebrew of the Enlightenment period, the most common pattern is *qatal-qatal*,⁵⁷ whereas in Hassidic literature, it is *haya-haya*.⁵⁸

- | | |
|--------------------------------|-----------------------------|
| 1. 'ilu, positive 'ilmale, 'im | + Haya qotel-haya qotel |
| 2. lu, 'ilu, positive 'ilmale | + Qatal-haya qotel |
| 3. lu | + Qatal-(ki+'az/'ata) qatal |
| 4. lu, positive 'ilmale | + Yiqtol- Yiqtol |

Chart 3: The counterfactual conditionals' constructions in the revival period

In conclusion, during the revival period, the markers and sequences of verbal forms all originate in the previous layers of Hebrew. Furthermore, the correspondence between the origin of the marker and the sequence of verbal forms is preserved. In other words, revival-period Hebrew adheres to the original constructions found in previous texts without breaking them into independent components.

The most common patterns in this period are the Rabbinic *haya-haya* and *qatal-haya*, both of which have compound past forms in the consequent, and the Biblical *qatal-qatal*, which has a simple past-tense form in the consequent, but which, unlike in Biblical Hebrew, must include *ki* in the consequent. Some of the counterfactual conditionals' characteristics in the revival period continue Medieval Hebrew use, including the use of 'im and the distinction between the two meanings of 'ilmale through spelling.⁵⁹

3. THE REGULARIZATION OF COUNTERFACTUALS CONDITIONALS IN THE POST-REVIVAL PERIOD

As seen, Revival-period counterfactuals conditionals were characterized by linguistic diversity that was inherited from previous layers of the language.

57. The consequent usually begins with a *ki* phrase (L. Kahn, *Late Enlightenment Hebrew*, p. 93).

58. The consequent generally remains unmarked (L. Kahn, *Hasidic Hebrew*, pp. 309–310).

59. On the important role played by Interim-Period Hebrew in the crystallization of MH see R. Stern, "What Does Modern Hebrew Continue? The Case of the Presentatives הניני and הניני" (in this volume).

During the Mandate period, regularization processes took place, reducing this variety by eliminating variants of both markers and patterns.

3.1 The Regularization of the Counterfactual Conditional Markers

As stated, the four positive counterfactual conditionals markers in the revival period were *lu*, *'ilu*, *'im*, and positive *'ilmale*. In 1950, after the Mandate period, the two common markers were *lu* and *'ilu* (*'ilu* was much more common). The other two markers – *'im* and positive *'ilmale* – were extremely rare in the corpus. But the explanation for the rarity of each is different.

The disappearance of positive *'ilmale* largely took place during the Mandate period.⁶⁰ At the time of the state's founding, clause-initial *'ilmale* was predominantly negative, although occasional instances of the positive marker still occurred. Sporadic instances of positive clause-initial *'ilmale* persisted even in later periods, in texts by revival-generation writers.⁶¹ The pace at which regularization occurred differed from genre to genre, and there are even differences within genres, for instance, between newspapers aimed at different sectors. Despite the differences between genres, and the residual late occurrences, we can say that positive *'ilmale* has effectively disappeared from the language. The fact that contemporary native speakers unschooled in the relevant Hebrew literature are unfamiliar with positive *'ilmale* indicates that it has virtually become extinct.⁶²

Why was the positive meaning of *'ilmale* discarded? As mentioned, the existence of two opposite meanings was a source of confusion already in the Medieval period. It led to the introduction of a rule for differentiating between them in writing. However, with the revival of spoken Hebrew, the confusion emerged again since the two meanings are pronounced identically.⁶³ The potential for confusion led the language authorities to recommend using *'ilmale* in negative contexts only.⁶⁴ This case is an unusual one, in which the authorities rejected a literary form that has its roots in Classical sources. The

60. M. Bar-Ziv Levy, "Negative Counterfactual Conditionals," pp. 193–195.

61. On linguistic features of revival-era Hebrew that persisted for decades in the language of the revival generation, see Y. Reshef, *Historical Continuity*, p. 15.

62. M. Bar-Ziv Levy, "Negative Counterfactual Conditionals," p. 194.

63. Z. Ben-Haim, "How should we use *'ilmale*," p. 27.

64. Z. Ben-Haim, "How should we use *'ilmale*," p. 30; Y. Avineri, *The Hand of the Tongue*, p. 34; I. Perets, *Guide to the Hebrew Language*, p. 234; A. Bendavid and H. Shay, *Language Guide*, p. 143.

language authorities' preference for negative *'ilmale* and their rejection of the positive use, prevalent in the Babylonian Talmud, may have been influenced by pre-revival Hebrew literature, which used positive *'ilmale* but distinctly favored the negative one.⁶⁵ Since *'ilmale* was mostly confined to the written language, the opinion of the language authorities apparently carried some weight. The survival of the negative meaning in MH seems to have been motivated by two additional factors: the etymology (the presence of the element *lo*) and by analogy to *lule* and *'ilule*. The impact of these factors was already evident in written Hebrew of the pre-revival period and grew stronger after the revival of Hebrew as a spoken tongue.

The decline of the positive meaning was accompanied by a decrease of the *yod*-final spelling, and by a growing dominance of the etymological spelling with *aleph*, not only in the case of *'ilmale* but also in the case of *lule* and *'ilule*. This process too occurred in the Mandate period. During the revival period and the Mandate period, Rabbeinu Tam's rule, (i.e., *aleph*-final negative, *yod*-final Positive) was followed very strictly. But in the post-1948 period, this situation changed drastically. *Aleph*-final *'ilmale* continued to denote the negative meaning, but *yod*-final *'ilmale* was more frequently negative as well. In other words, while in the revival period, the spelling with *yod* was a fairly reliable indication of positive meaning, it lost this function in later periods.⁶⁶

Unlike positive *'ilmale*, it seems that *'im* was common in the spoken language in counterfactual conditionals early in MH. Its rarity in the written corpus in 1950 reflects a prescriptive approach that opposes its non-classic use in counterfactual conditionals. Mordechai Ben-Asher wrote in 1972 that all the grammar books he examined do not mention the use of *'im* in counterfactual conditionals, and thus they ignore the common use in Modern Hebrew.⁶⁷ Later standard literature sometimes expressly opposes this use.⁶⁸

65. On the influence of pre-revival Hebrew on the formation of MH see e.g., L. H. Glinert, "למקור העברית, החדשה המדוברת: עיונים בתחביר הסמוי של 'לפי הטף' לדוד ילין" (On the Source of Modern Colloquial Hebrew: The Covert Syntax of Yellin's Primer), *Lěšonénu* 55, (1990) pp. 107–126; Y. Reshef, "From Written to Spoken Usage."

66. M. Bar-Ziv Levy, "Negative Counterfactual Conditionals," pp. 195–196.

67. M. Ben-Asher, *Syntax of Modern Hebrew*, p. 147.

68. See e.g., A. Bendavid and H. Shay, *Language Guide*, p. 143; D. Harband, *Kicur Šulhan 'arux*, p. 18 (note). Nowadays, this approach continues in Hebrew-teaching, as a first or second language. Though *'im* is the most common marker in counterfactual conditionals today, many textbooks do not mention at all the possibility of using it in counterfactual conditionals.

Despite the opposition, the use of *'im* in counterfactual conditionals became very dominant in contemporary Hebrew. In the *Maariv* corpus in 1980, *'im* occurs in 11% of the counterfactual conditionals (8 times), while in 1990, it appears in 30% of the cases (25 times). This process reflects the weakening of the prescriptive approach, which allows colloquial-language characteristics in artistic and written language.⁶⁹

In sum, looking at a written corpus from the Mandate period, it appears that *'im* and positive *'ilmale* were ceased to be used, leaving only two positive counterfactual conditionals markers – *lu* and *'ilu*. But from the perspective of our time, these findings seem puzzling. Positive *'ilmale* is not used today at all, whereas *'im* is very common in counterfactual conditionals. This case highlights the need to be extra careful in research that relies on corpora from the first decades of MH because of the dominance of the prescriptivist approach in this period, which can lead us to erroneous conclusions.⁷⁰ Therefore, external evidence from that period should be sought, as well as later corpora, which can help to shed light on findings from earlier corpora.

3.2 The Regularization of the Counterfactual Conditional Verbal Forms

As stated above, in the revival period, there were three main sequences of verbal forms to express counterfactual conditionals. The *qatal-haya* sequence, featuring a simple past form in the antecedent and a compound past form in the consequent, favors all conditional markers. The *haya-haya* sequence originates in the Rabbinic literature and favors the Rabbinic marker *'ilu*, and also *'im*; and *qatal-qatal*, which originates in the Bible appears most often with the Biblical *lu*. In the course of the regularization process, *qatal-qatal* was discarded altogether, leaving two options.

The decline of *qatal-qatal* largely took place during the Mandate period. In the *Haaretz* corpus, it dropped from 13% of the instances in 1920 to less than 1% in 1950.⁷¹

69. See M. Bar-Ziv Levy, (1988–1932) מרצוי למצוי: ייצוג לשון הדיבור בסרטי עלייה בעברית (The Cinematic Representation of Hebrew Speech [1932–1988]), PhD Dissertation, The Hebrew University of Jerusalem, 2017 for other colloquial-Hebrew characteristics which were not represented in formal or artistic texts at the beginning of the state period, and later became dominant in such texts as well.

70. Y. Reshef, *Hebrew in the Mandate Period*, pp. 299–315.

71. Instances of the verb *yaxol* in the simple past, which appear in the consequent to this day, were not counted.

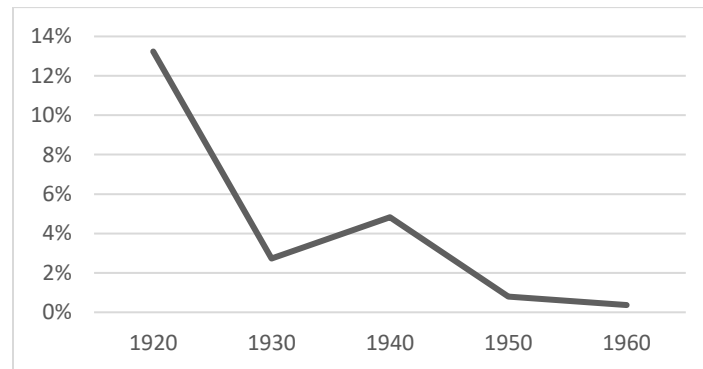


Chart 4: The decline of the *qatal-qatal* sequence of verbal forms

Why was the *qatal-qatal* construction discarded after the revival period? Its disappearance is apparently related to disappearance of the modal marker *ki-*. It is a cross-linguistic feature of conditional sentences, both factual and counterfactual, that the consequent expresses modality.⁷² Modality can be expressed in various ways, including by means of verbs, adjectives, adverbs, etc.⁷³ In contemporary Hebrew, the consequent of a counterfactual conditional sentence is modalized in one of two ways: by means of a compound verb or by means of the modal verb *yaxol* “be able.” Revival-period Hebrew had a third way to express the modality of the consequent: using *ki* (*ʿaz/ʿata*), meaning “indeed, in fact”.⁷⁴

In the revival period, *qatal-qatal* sequences in which the antecedent comes first consistently feature a *ki*-phrase in the consequent, except for consequents with the verb *yaxol* “be able.” During the Mandate period, this rule was almost completely preserved.⁷⁵ The use of *ki* became rare in the post-Mandate period. In 1920 it appears in 19 counterfactual conditional constructions (28%), in

72. A. Kratzer, “Modality,” in *Semantik: Ein internationales Handbuch zeitgenössischer Forschung*, (eds. A. Von Stechow and D. Wunderlich; Berlin: De Gruyter, 1991), pp. 639–650. Modality concerns the speaker's attitude to the proposition expressed by an utterance. For our purpose the important point is the ability to express states of affairs that do not hold in the real world as we know it (N. Boneh, “Mood and Modality: Modern Hebrew,” *EHLL*, II (2013), pp. 693–703 and references therein).

73. N. Boneh, “Mood and Modality: Modern Hebrew.”

74. In the Bible *ki* has a similar modal meaning (“indeed, in fact”) not only in counterfactual conditionals but also in other environments, for example: “But Sarah denied it, saying, ‘I did not laugh,’ for she was afraid. And He said, ‘No, but you did laugh!’” (Gen 18:15). Each means of expressing the modality is sufficient by itself, but they can also be combined.

75. With the negative markers the pattern is not maintained (M. Bar-Ziv Levy, “Negative Counterfactual Conditionals,” p. 191).

Regularization and Crystallization of Modern Hebrew

1950 in 12 constructions (5%) and in 1960 in only 3 constructions (1%). In contemporary Hebrew, when the antecedent precedes the consequent, the latter usually lacks any initial marker, though in rare cases it is introduced by the marker *'az*.⁷⁶

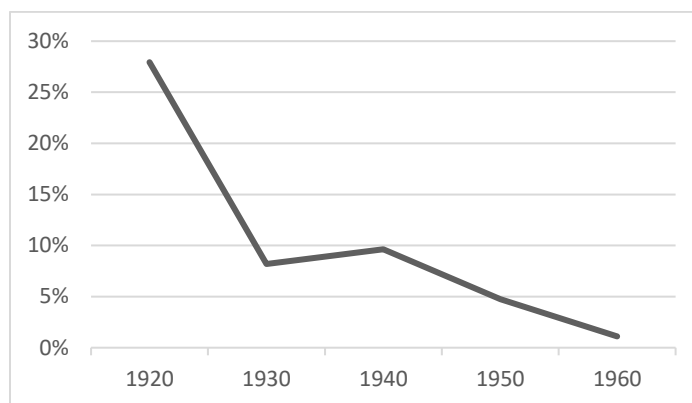


Chart 5: The decline of *ki* ('*az*/*'ata*) in the consequent of counterfactual conditionals

As stated, in the revival period, *ki* was mandatory in *qatal-qatal*, unlike in Biblical Hebrew, where it is optional, and despite the tendency in the revival period to emulate the language of the Bible. In later stages of Hebrew, *ki* lost its modal function and therefore ceased to be used as a means of modalizing the consequent in conditionals. This left only the two other means: the compound past or the modal verb *yaxol*. As a result, the *qatal-qatal* sequence, in which the consequent features a simple past verb, was ruled out, except when that verb is *yaxol*.⁷⁷ The *yiqtol-yiqtol* sequence, which was rare in the revival period, was also ruled out and practically not used in the Mandate period.

During the revival period, conditional markers appeared in the sequences of verbal forms in which they were used in their original layer of the language. This correlation was preserved in 1920 but later blurred.⁷⁸ At the end of the Mandate period, *lu* and *'ilu* appear in the two remained sequences, *qatal-haya*, and *haya-haya*, without a significant difference between them. The three

76. T. Bar, "Conditional Clause," p. 550; M. Ben-Asher, *Syntax of Modern Hebrew*, p. 127.

77. L.H. Glinert, "The Hypothetical Conditional," p. 51.

78. In 1920 *qatal* forms occurred in the consequent of counterfactual conditionals 9 times with *lu* (15%) and not once with *'ilu* (0%). In 1940, *qatal* forms occurred in the consequent once with *lu* (6%), and 7 times with *'ilu* (5%)

negative markers favor *qatal-haya* but also occur, albeit much less frequently, in *haya-haya*.⁷⁹ *'im* appears only in *haya-haya* (and is rare in the corpus).

1. <i>lu, 'ilu, positive 'ilmale, ('im)</i>	+ <i>Haya-qotel haya qotel</i>
2. <i>lu, 'ilu, positive 'ilmale</i>	+ <i>Qatal-haya qotel</i>
3. <i>lu</i>	+ <i>Qatal-(ki+'az/'ata) qatal</i>
4. <i>lu, positive 'ilmale</i>	+ <i>Yiqtol- Yiqtol</i>

Chart 6: Counterfactual Conditionals in the Mandate Period

Nowadays, there is a register differentiation between the two counterfactual conditionals sequences of verbal forms – *qatal-haya* is characteristic of more formal writing. There is probably also a slight semantic difference between the patterns: both can relate to the past, but in the *haya-haya* pattern, the antecedent is not necessarily evaluated in the past relative to speech time. Accordingly, it can describe an option that is still possible, though improbable, and can even be interpreted as a suggestion for future action.

<i>Colloquial Hebrew</i> <i>'im + Haya qotel-haya qotel</i>	<i>High register Hebrew</i> <i>'ilu/ lu, + Qatal -haya qotel</i> <i>'ilu/ lu, + Haya qotel-haya qotel</i>
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Chart 7: Counterfactual Conditionals in Contemporary Hebrew

In sum, the regularization of counterfactual conditionals involved the disappearance of *qatal-qatal* and *yiqtol- yiqtol*. As a result, two sequences of verbal forms remained in contemporary Hebrew, featuring a register and semantic differentiation between them. Unlike in the revival period, the correlation between the marker and the sequence of verb forms is not maintained anymore, and the various components of counterfactual conditionals became independent.

79. This is the situation in my corpus; previous studies yielded similar findings (M. Ben-Asher, *Syntax of Modern Hebrew*, p. 123; T. Bar, *Conditional Sentences*, p. 151).

4. DISCUSSION AND CONCLUSION

This paper describes the formation of grammatical construction in MH through regularization, i.e., a process that did not involve the creation of new linguistic phenomena but only the selection of certain options from a range of revival-era variants. The variants that remained after this process underwent differentiation in terms of their register and meaning.

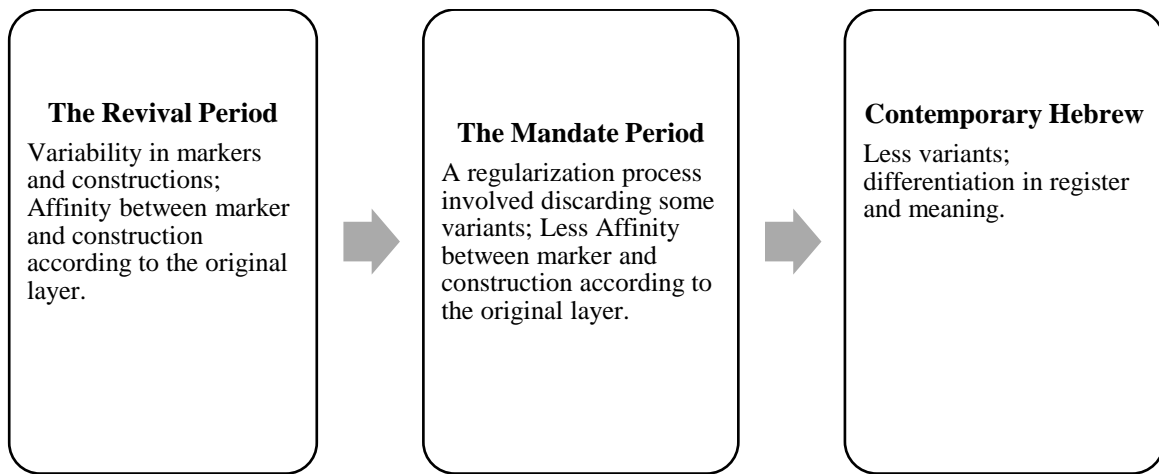


Chart 8: Regularization in the Crystallization of Modern Hebrew

During the revival period, counterfactual conditionals were characterized by variability in markers and constructions compared to today. The numerous variants that coexisted during the revival period originated in earlier stages of Hebrew. Biblical markers appear in the Biblical constructions, whereas Rabbinic markers appear in the Rabbinic constructions. This fact reflects adherence to the Classical sources and perhaps even dependence on them. Other revival-period characteristics reflect Medieval practices, such as the non-classic use of *'im* in counterfactual conditionals and the use of spelling to distinguish between the two meanings of *'ilmale*, which is a Medieval convention but not a Classical one.

The regularization process involved discarding some variants: positive *'ilmale* and the *yod-final* spelling, the *qatal-qatal*, and the *yiqtol-yiqtol* sequences of verbal forms. This has left us with two constructions, both with a compound past form in the consequent but differing in the antecedent structure: one has a compound past in the antecedent (*haya-haya*) and the other a simple past (*qatal-haya*). These two constructions have undergone

differentiation in their register and meaning; *haya -haya* is less formal and can express hypothetical rather than just counterfactual conditional.

The regularization of the counterfactual conditionals largely occurred during the Mandate period, when Hebrew began serving as the main language of everyday life in the Yishuv.⁸⁰ However, some of the phenomena discarded continued to occur in later periods, albeit sporadically, such as positive *'ilmale* and simple past in the consequent. This reflects the polychronic character of written MH. Written texts from the revival period, for example, often included archaic features that were not characteristic of the Hebrew of the time. Similarly, texts written in the first decades after independence could include revival-era features that had already been discarded from the language but persisted sporadically, especially in the language of older writers.

80. B. Harshav, לשון בימי מהפכה: המהפכה היהודית המודרנית ותחיית הלשון העברית (Language in Time of Revolution), Jerusalem: Carmel, 2008; Y. Reshef, *Hebrew in the Mandate Period*.