

ON ROOT MODALITY PREDICATES AND THEIR RADICAL CLAUSAL DESIRES*

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ABSTRACT

In Modern Hebrew some root modality predicates which express volition, obligation and need show a phenomenon which is known in the cross-linguistic literature as ‘subject obviation’ – a requirement of predicates such as ‘want’ for disjoint reference between the matrix subject and a pronominal subject of a subordinate clause. This paper approaches the phenomenon from a diachronic perspective and examines the clausal complement requirements of ‘want’ in Classical Hebrew and their developments. In light of the historical data presented, this work suggests understanding the synchronic disjoint reference construction as a coerced clause with the extended meaning of a wish or request for root modal predicates, and proposes that their core complement is non-finite and co-referential and is strongly associated with intent.

1. INTRODUCTION: ‘WANT’ AND (DIS-)JOINT REFERENCE

The desiderative verb לרצות ‘want’ in Modern Hebrew demonstrates a peculiarity among attitude ascription verbs. לרצות can embed both finite clause, formed by the clitic complementizer -ש and future inflected embedded verb,¹ and infinite clauses; however, when the matrix verb’s subject co-refers with the embedded subject (1a)-(1b), the complement clause is obligatorily infinitival (1b). The desiderative רוצה ‘want’, as also the modal צריך ‘need’, which both have root modality interpretations,² are among very few predicates

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1. I here obviate from theoretical and descriptive views of this construction in terms of mood inflection or dependent tense, e.g., I. Landau, “The Scale of Finiteness and the Calculus of Control”, *Natural Language & Linguistic Theory* 22 (4; 2004), and treat the embedded form of the verb as future tense form.

2. Namely non-epistemic modality, i.e., modality which expresses needs, intentions and obligations, rather than knowledge or beliefs. For a further, comprehensive theoretical view of root modality interpretations see A. Rubinstein, *Roots of Modality* (PhD Dissertation; University of Massachusetts, Amherst, 2012), and about

in Modern Hebrew which exhibit systematic infinitive selection with co-referential reading,³ along with predicates such as הייב ‘must’, יכול ‘can’, מעדיף ‘prefer’ and מוכן ‘ready/will’. Co-reference with finite embedded clauses is allowed in Hebrew with most other attitude verbs, such as להבטיח ‘promise’, לחשוב ‘think’, לומר ‘say’ and לדמיין ‘imagine’ (1c).⁴

- (1) a. הגננית₁ רצתה שהיא*_{2/1} תגדל שושנים.
 ‘The gardener wanted her to grow roses.’
 b. הגננית רצתה לגדל שושנים.
 ‘The gardener wanted to grow roses.’
 c. הגננית₁ הבטיחה/חשבה/אמרה/דמינה שהיא_{2/1} תגדל שושנים.
 ‘The gardener promised/thought/said/imagined that she would grow roses.’

This property of לרצות, which is not unique to Modern Hebrew, is also known as *subject obviation* (*obviation* hereafter), that is, the requirement that a pronominal subject of a subordinate clause, typically subjunctive clause, be disjoint in reference from the matrix subject.⁵ The contrast in Russian in (2) illustrates the disjoint reference requirement for the pronoun *on* ‘he’ with the subjunctive clause, marked by *čtoby* ‘that.SUBJ’ and past-inflection of the embedded verb *pocelova* ‘kissed’ (2a); co-reference of the matrix subject and the embedded one can be expressed only with infinitival complements (2b).⁶

- (2) a. *Volodja_i xočet čtoby on*_{i/j} poceloval Nadju.*
 ‘Volodya wants to kiss Nadya.’
 b. *Volodja xočet pocelovat’ Nadju.*
 ‘Volodya wants to kiss Nadya.’

There are, however, languages in which matrix and embedded subjects of desideratives are in free reference, correlatively with morpho-syntactic

constructions and modal interpretations of צריך ‘need’ see E. Doron, “The Modal *carix* ‘need’”, in *The Emergence of Modern Hebrew* (EMODHEBREW) Online (ed. E. Doron; The Hebrew University of Jerusalem, <https://emodhebrew.com>).

3. I. Landau, “The Scale of Finiteness”, p. 859.

4. The sentences in (1) are constructed, * stands for illicit reading.

5. S. Avrutin and M. Babyonyshev, “Obviation in Subjunctive Clauses and AGR: Evidence from Russian”, in *Natural Language and Linguistic Theory* 15 (1997), p. 229.

6. S. Avrutin and M. Babyonyshev, “Obviation in Subjunctive Clauses”, p. 230, ex. 2–3.

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properties of the complementizer,⁷ as in Arabic, illustrated in (3), where the complementizer *ʔan* ‘COMP.SUBJ’ and the embedded verb *yarhala* ‘leave’ is marked for subjunctive mood:⁸

- (3) *ʔarada Zaydun ʔan yarhala*
‘Zayd wants to leave/somebody else to leave.’

A great variety of studies has attended to the obviation effects, and proposed synchronic accounts, most of which associate obviation with tense dependency of the embedded clause or properties of the complementizer.⁹

In this work, I wish to approach to the disjoint reference effect in Modern Hebrew from a diachronic view, by the examination of the subordination properties of desideratives in classical stages of Hebrew – Biblical Hebrew and Mishnaic Hebrew. Methodologically, I examine the syntactic properties – complementizers, finiteness, tense and (dis-)joint reference – of the complements of the verb לרצות ‘want’, as key representative of desideratives, and its lexical equivalents in Biblical Hebrew, in which לרצות is not yet a desiderative verb. This perspective sheds light on (dis-)continuation issues of Hebrew, namely, to what extent grammatical properties of Modern Hebrew could be attributed to Mishnaic Hebrew, or rather regarded as re-adaptation of features of Biblical Hebrew. In addition, this work also considers the role of language contact in lexical and grammatical developments of לרצות and its equivalents. From a cross-linguistic point of view, the work suggests that obviation effects are integrated with finiteness properties of subordination universally. In particular, the properties of desideratives in Classical Hebrew, which is the syntactic and lexical foundation of Modern Hebrew, may suggest

7. I. San Martin, “Beyond the Infinitive vs. Subjunctive Rivalry: Surviving Changes in Mood”, in *Coreference, Modality, and Focus: Studies on the Syntax–Semantics Interface* (eds. L. Eguren and O. Fernández-Soriano, in *Linguistik Aktuell/Linguistics Today* 111; Amsterdam/Philadelphia: John Benjamins, 2007), p. 188, DOI: <https://doi.org/10.1075/la.111>, inter alia; M. Haspelmath, “‘Want’ Complement Subjects”, in *The World Atlas of Language Structures Online* (eds. M. S. Dryer and M. Haspelmath; Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), Available online at <http://wals.info/chapter/124>, Accessed on 2021-08-11; Edit Doron (p.c.).

8. I. San Martin, “Beyond the Infinitive vs. Subjunctive Rivalry”, p. 174, ex. 6.

9. I. Landau, “The Scale of Finiteness” for Hebrew; S. Avrutin and M. Babyonyshev, “Obviation in Subjunctive Clauses” for Russian, and for overview of studies cross-linguistically see J. Quer, “Subjunctives”, in *The Blackwell Companion to Syntax* (eds. M. Everaert and H. van Riemsdijk; Oxford: Blackwell Publishing, 2006), 4; P. Portner, *Mood* (Oxford: Oxford University Press, 2018).

that root modality in its core, basic syntactic manifestation is co-referential and non-finite.¹⁰

2. DESIRE AND CO-REFERENCE IN CLASSICAL HEBREW

2.1 Biblical Hebrew

In Biblical Hebrew, the most frequent verbs which express desire and volition, which can be translated as ‘want’ and select clausal complements are of the roots *b-q-š* and *ḥ-p-š*.¹¹ When it selects non-clausal complements, particularly NP direct objects, *b-q-š* is interpreted as ‘seek’.¹² The verb *ḥ-p-š* may be interpreted also as ‘keep’ or ‘take care’.¹³ Co-reference is attested for *b-q-š* in all its occurrences with an infinitival clause as its sole complement,¹⁴ and this applies also to the verb *ḥ-p-š*. Though originated in Biblical Hebrew, the verbal root *r-š-y* at this stage means ‘be pleased with, favorable to, accept favorably (mostly of sacrificing), be appeased’.¹⁵ It is only later, in Mishnaic Hebrew, that *r-š-y* begins to express desire and intent.

10. From the theoretical perspective of universal grammar, the non-finiteness of root modality constructions relates to the work of V. Hacquard, “Modality”, in *Semantics: An International Handbook of Natural Language Meaning* (eds. C. Maienborn, K. von Stechow and P. Portner; Berlin: Mouton de Gruyter, 2011), according to which root modality is interpreted below the category of tense.

11. Based on A. N. Nozomi, עיון סמאנטי בפועלי הרציה במקרא (Semantic study of desire verbs in Biblical Hebrew; MA thesis, the Hebrew University of Jerusalem, 1991). As comprehensively studied by Nozomi, a variety of modal verbs in Biblical Hebrew express different shades of the notion of desire, but most of them are not equivalently translatable as ‘want’, for example *ʔ-b-y*, which expresses more of a consent, and appears almost exclusively in the scope of negation (and as noted to me by Einat H. Keren, other cases are conditionals). Crucially, most of them do not select a clausal complement.

12. A. N. Nozomi, *Semantic Study*.

13. L. Ginat, “בירורי מקראות בספר תהלים: הפך = שינון, שמירה, שקידה על...” (Inquiries in Book of Psalms), *Shma'atin* 113 (1993).

14. E. Rubinstein, “‘Causation’ and ‘Volition’ as Semantic Components of the Verb: A Study of the Biblical Verb בקש”, in *Israel Oriental Studies* 6 (1976), 125; A. N. Nozomi, *Semantic Study*. According to these studies, in one occurrence of *b-q-š* (Isa 1:12) in which the verb can be interpreted as ‘request’, attached to a prepositional phrase which denotes the addressee/recipient of the request and an infinitival clause, the subject of the infinitive may be interpreted in co-reference with the addressee and not the matrix subject referent. However, other interpretations for the construction have been proposed. According to A. N. Nozomi, *Semantic Study*, in one additional occurrence (Dan 1:8) in which *b-q-š* can be interpreted as ‘request’ rather than as ‘want’, the clausal complement is finite, and its subject can be interpreted in co-reference with the requestor in the main clause.

15. A. N. Nozomi, *Semantic Study*, G. B.-A; Sarfatti, העברית בראי הסמנטיקה (Semantic Aspects of Hebrew; Jerusalem: The Academy of the Hebrew Language, 2001), pp. 102–103, according to Rashi’s commentary to Gen 33:10 and Lev 19: 5; L. Koehler and W. Baumgartner, *The Hebrew and Aramaic Lexicon of the Old Testament* (Leiden: Brill, 2017).

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‘Want’ in Biblical Hebrew is part of a group of modal predicates which select as their clausal complement only one out of two types of Infinitive Constructs (IC), i.e., non-finite clauses with verbal forms which allow the attachment of pronominal clitics.¹⁶ Both types share a single verbal form, also called *gerund*, but they alternate with respect to their grammatical function and the presence of a subject in the construction.¹⁷ In order to configure the clausal complement requirements of ‘want’ in Biblical Hebrew, I describe here in further detail the classification of infinitive constructs in Biblical Hebrew according to Doron’s study.

‘Want’ selects a subtype of infinitive constructs which is termed by Doron *PRO-inf*. It has a null pronominal anaphor subject (PRO), typically controlled by another determiner phrase in the linguistic context, and allows object clitics. *PRO-inf* clauses do not have temporal specification, i.e., no tense functional category, yet they do have aspectual/modal specification and hence are complements of modal verbs, e.g. ‘want’, ‘be able’ (Deut 7:22), ‘intend’ (Exod 2:14), or ‘plan’ (Deut 19:19), ‘refuse’ (Num. 20:21), ‘give up’ (1Sam 27:1), ‘order’ (2Sam 17:14), ‘prevent’ (Num 22:16), and also aspectual verbs, such as ‘begin’ (Judg 20:39), ‘repeat’ (1Sam 15:35), ‘stop’ (1Sam 23:13), ‘finish’ (Lev 16:20).¹⁸ Example (4) demonstrates the *PRO-inf* as a complement of the modal predicate ‘be able’ with null pronominal anaphor (2MS) and object clitic.¹⁹

(4) לֹא תוּכַל כְּלֹתָם מִהֶרָּ. (4)

‘You will be unable to destroy them at once.’ (Deut 7:22)

In their distribution as adjuncts, *PRO-inf* clauses function as purpose clauses, which denote the outcome of an agent's intentions.²⁰ This function is demonstrated in (5).²¹

16. E. Doron, “The Infinitive in Biblical Hebrew”, in *Linguistic Studies on Biblical Hebrew* (ed. R. D. Holmstedt; Leiden: Brill, 2021), p. 152. DOI: https://doi.org/10.1163/9789004448858_009.

17. E. Doron, “The Biblical Sources of Modern Hebrew Syntax”, in *Linguistic Contact, Continuity and Change in the Genesis of Modern Hebrew* (eds. E. Doron, M. Rappaport Hovav, Y. Reshef, and M. Taube (eds.); Amsterdam: John Benjamins, 2019), pp. 239–240.

18. E. Doron, “The Infinitive in Biblical Hebrew”, p. 153.

19. E. Doron, “The Infinitive in Biblical Hebrew”, p. 162, ex. 47, my bolds. Verses from the Bible are copied hereafter from <https://www.sefaria.org.il/texts>.

20. E. Doron, “The Infinitive in Biblical Hebrew”, pp. 154–156.

21. E. Doron, “The Infinitive in Biblical Hebrew”, pp. 145–146, ex. 5, bolds follow the original example.

- (5) וְהָיְתָה הַקֶּשֶׁת בְּעָנָן וּרְאִיתֶיהָ לְזָכֹר בְּרִית עוֹלָם בֵּין אֱלֹהִים וּבֵין כָּל־נֶפֶשׁ חַיָּה.
'The rainbow shall be in the cloud, and I will look on it **to remember** the everlasting covenant between God and every living creature.' (Gen 9:16)

The second subtype of infinitive clauses, *Poss-inf*, has an overt subject with possessive case. As argued by Doron, this construction is temporal, and hence includes specification of the functional category of tense, but not a finite one, and it allows subject but not object clitics. It is distinguished from finite clauses, with a finite tense, in which both subject and object clitics are allowed. Example (6) demonstrates *Poss-inf* clause which functions as a temporal adverbial, with a subject clitic and a non-clitic object – אֶת־צִיּוֹן.²²

- (6) עַל נְהָרוֹת בָּבֶל נָשָׂם יִשְׁבְּנוּ גַם־בְּכִינּוּ בְּזָכְרֵנוּ אֶת־צִיּוֹן.
'By the rivers of Babylon, there we sat down and wept when we remembered Zion.' (Ps 137:1)

Poss-inf clauses differ from *PRO-inf* clauses with respect to their function as complements and are selected by different types of verbs. *Poss-inf* clauses are propositional, and are hence selected by propositional attitude verbs, such as 'know' (Gen 19:35, Jer 15:15), 'remember' (Jer 2:2, 18:20), 'hear' (1Sam 14:27), 'see' (Isa 52:8).²³ These propositional verbs can be classified as factive predicates, i.e., verbs which presuppose the truth of their complement,²⁴ and assertives, which express "an affirmative opinion regarding the truth value of the complement proposition,"²⁵ and together, only propositional verbs of which their propositional content is true in the actual world.

These classes of verbs, but not the predicates which select *PRO-inf* as their complement clauses, can also take finite clausal complements, subordinated by the complementizers **כִּי**, **אֲשֶׁר** 'that', and in late Biblical Hebrew also the

22. E. Doron, "The Infinitive in Biblical Hebrew," p. 145, ex. 4, my bolds.

23. E. Doron, "The Infinitive in Biblical Hebrew," p. 156.

24. P. Portner, *Mood*, p. 72.

25. E. van Gelderen, "Main and Embedded Clausal Asymmetry in the History of English: Changes in Assertive and non-Assertive Complements," in *Linguistic Variation* 19 (2019): p. 122, DOI: <https://doi.org/10.1075/lv.15019.gel.van>, citing J. Hooper, "On Assertive Predicates," in *Syntax and Semantics* (ed. J. Kimball; New York: Academic Press, 1975), 2: p. 95.

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clitic -ו.²⁶

PRO-inf, which has less structure, allows the amalgamation of the preposition ל- 'to' into the syllabic structure of the verb, which results in the lack of spirantization of the middle root consonant (7a), and which is different from the form of Poss-inf (7b).²⁷

- (7) a. PRO-inf b. Poss-inf
 לְשַׁפֹּט שַׁפֹּט
 li=špōt *šāpōt*
 (Exod 18:13) (Ruth 1:1)

Having described Doron's classification of the two types of infinitive constructs in Biblical Hebrew and their grammatical distinctions, I now return to 'want' in Biblical Hebrew to conclude its syntactic requirements for clausal complements: it selects only a non-temporal complement, i.e., PRO-inf, a construction in which only co-reference of the matrix and embedded subject is attested. This type of non-finite clauses in Biblical Hebrew is shared with other modal and aspectual verbs and also functions as purpose adjuncts. Only factive and assertive propositional verbs can select the temporal Poss-inf and also finite clauses, which open with the complementizers כִּי, אֲשֶׁר or -שׁ 'that'.

2.2 Mishnaic Hebrew

Verbs that express desire are *b-q-š*, which already expresses volition in Biblical Hebrew, and the verb derived from the root *r-š-y*,²⁸ which shifts its meaning in Biblical Hebrew from 'be pleased' to express intention and will, possibly under the influence of Aramaic, as it shares the meaning with its Aramaic cognate root *r-š-y* which expresses desire.²⁹

26. P. Joüon, *A Grammar of Biblical Hebrew* (Translated and revised by T. Muraoka; Rome: Pontifical Institute, 1991), 2; S. E. Fassberg, מְבוֹא לְתַחְבִּיר לְשׁוֹן הַמִּקְרָא (An Introduction to the Syntax of Biblical Hebrew; Jerusalem: Bialik Institute, 2019).

27. E. Doron, "The Infinitive in Biblical Hebrew," pp. 159–160, ex. 40–41, bolds following the examples in the origin.

28. S. Sharvit, פְּרָקִי מִחֶקֶר בְּלִשׁוֹן חֻמְמִים (Studies in Mishnaic Hebrew; Jerusalem: Bialik Institute, 2008).

29. M. Jastrow, *A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic literature* (New York: Pardes Publishing House, 1950); A. Hurvitz, בֵּין לְשׁוֹן לְלִשׁוֹן: לְתוֹלְדוֹת לְשׁוֹן הַמִּקְרָא בִּימֵי בֵּית שֵׁנִי (The Transition Period in Biblical Hebrew: A Study in Post-Exilic Hebrew and its Implications for the Dating of Psalms; Jerusalem: Bialik Institute, 1972), pp. 73–74 and references therein; G. B.-A; Sarfatti, *Semantic Aspects of Hebrew*, pp. 102–103.

Both verbs select two types of complement clauses:³⁰ the first is an infinitival clause; the second is a clausal complement of the form – clitic subordinator -ש 'that' and the embedded verb in the Prefix-conjugation יקטול *yiqtol* form (henceforth שיקטול clauses), which according to Bar-Asher Siegal (2014) is a finite form that denotes perfective future.³¹

With an infinitive complement, both *r-š-y* and *b-q-š* are interpreted as 'want' and 'intend'.³² With שיקטול as its sole complement, *r-š-y* can be interpreted as 'intend',³³ whereas *b-q-š* is interpreted as 'request' rather than 'want', and the indirect object is optionally expressed.³⁴

The selection of a finite clausal complement for modal predicates, which opens with the clitic subordinator -ש, is possibly influenced by Aramaic, given that dependent clauses of all types in Jewish Babylonian Aramaic can begin with its equivalent-ܘ,³⁵ and, crucially, modal predicates such as *b-š-y* 'want, need'.³⁶

As for the infinitive complement, Mishnaic Hebrew gave up the Biblical Hebrew infinitive construct and innovated an infinitive,³⁷ a clausal category which differs from the Biblical non-finite clauses in terms of distribution and

30. The data regarding the complement's selection and requirements of the modal predicates *b-q-š* and *r-š-y* in Mishnaic Hebrew is based on S. Sharvit, *Studies in Mishnaic Hebrew*, unless mentioned otherwise.

31. E. A. Bar-Asher Siegal, "Towards a Reconsideration of the Tense-Aspect-Mood System of Tannaitic Hebrew," in *Studies in Mishnaic Hebrew and Related Fields Proceedings of the Yale Symposium on Mishnaic Hebrew* (eds. E. A. Bar-Asher Siegal and A. J. Koller; New Haven/Jerusalem: The Hebrew Language Academy Press, 2018), other approaches mentioned and discussed therein.

32. According to S. Sharvit, *Studies in Mishnaic Hebrew*, p. 281, with reference to H. Yalon, פרקי לשון (Studies of the Hebrew Language; Jerusalem: Bialik Institute, 1971), pp. 448–449, In addition to the volitional modal meaning, *b-q-š* with an infinitival clause is also used as an aspectual predicate, denoting an event which is about to happen – an interpretation which is attested also with inanimate subjects. This extended meaning of *b-q-š* in Mishnaic Hebrew may be due to language contact with Aramaic, and the distribution and meaning of the Aramaic verb *b-š-y*.

33. Similarly to the interpretation *x-š-b* with שיקטול, as studied by V. Saydon, חליפות ותמורות לשוניות בשדה, ההשיבה (Semantic, Pragmatic and Syntactic Shifts in Hebrew Thinking Verbs: Historical Study; The Academy of the Hebrew Language, 2019).

34. S. Sharvit, *Studies in Mishnaic Hebrew*, p. 295, mentions that *b-q-š* in the meaning of 'request', i.e., with an infinitive clause and an (optionally) expressed indirect object is not attested for Mishnaic Hebrew and refers to the occurrence of *b-q-š* in Biblical Hebrew (Isa 1:12), see footnote 14. This is different from the distribution of *b-q-š* in Modern Hebrew, in which *b-q-š* 'request' can take infinitival complement + indirect object, a construction in which both subject and object control (i.e., co-reference with the embedded subject) are possible.

35. E. A. Bar-Asher Siegal, *Introduction to the Grammar of Jewish Babylonian Aramaic* (Münster: Ugarit-Verlag, 2013), p. 221.

36. E. A. Bar-Asher Siegal, *Introduction to the Grammar of Jewish Babylonian Aramaic*, pp. 216, 237.

37. E. Doron, "The Biblical Sources," p. 243.

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form. Distribution-wise, temporal adjuncts which were expressed by Poss-inf in the Bible are expressed by event nominals,³⁸ of which many forms were innovated in Mishnaic Hebrew.³⁹ Morpho-syntactically, the Mishnaic Hebrew infinitive does not have the same form as the Biblical Hebrew infinitive constructs discussed above, but is rather based on the יקטול form,⁴⁰ as demonstrated in (8).⁴¹ Moreover, the preposition ל- 'to' is reinterpreted as an obligatory part of the Mishnaic Hebrew infinitive and has been grammaticalized and reanalyzed as the tense-value of the inflectional head of the infinitival clause.⁴² Hence, the Mishnaic Hebrew infinitive features a higher degree of finiteness with respect to PRO-inf. Mishnaic Hebrew infinitival clauses are also assimilated to finite clauses in that they can be embedded under the complementizer ש- 'that', obligatorily for negated infinitives, as illustrated in (9) with the modal verb לנהוג 'be accustomed'.⁴³

- (8) root *n-t-n*
 Biblical Hebrew IC with *lə- lā-tēt*
 Mishnaic Hebrew inf. *li-yten*
 both: ‘to give’

- (9) מקום שנהגו **שלא להשכיר** אין משכירין.
 ‘Where it is not customary to lease [the trees together with the field], they are not leased.’ (*b. B. Meṣi’a* 103b)

According to Doron (2019),⁴⁴ Mishnaic Hebrew replaced the PRO-inf with an infinitive probably due to contact with Aramaic, which in general brought Mishnaic Hebrew to give up the aspectual system which characterized Biblical Hebrew.⁴⁵ It therefore introduced a modal category to clauses, which, in the case of the PRO-inf constructions – turned them into infinitives, as

38. E. Doron, “The Biblical Sources”, p. 243.

39. M. Bar-Asher, תורת הצורות של לשון המשנה (A Morphology of Mishnaic Hebrew; Jerusalem: Bialik Institute & the Academy of the Hebrew Language, 2015).

40. B. Avirbach, “Infinitive: Mishnaic Hebrew,” in *Encyclopedia of Hebrew Language and Linguistics* (ed. G. Khan; Leiden: Brill, 2013).

41. E. Doron, “The Biblical Sources,” p. 243, ex. 45.

42. E. Doron, “The Biblical Sources,” p. 243.

43. E. Doron, “The Biblical Sources,” p. 244, ex. 47, bolds follows the example in the origin, Hebrew text copied from <https://www.sefaria.org.il/texts>.

44. E. Doron, “The Biblical Sources,” p. 244.

45. E. Doron, “The Biblical Sources,” p. 244, according to E. A. Bar-Asher Siegal, *Introduction to the Grammar of Jewish Babylonian Aramaic*.

illustrated in (10),⁴⁶ where the infinitive clause is selected as a complement of the modal predicate רצה ‘want’. This is a case where a lexical preposition is reanalyzed as a functional modal category.⁴⁷

- (10) אם רצה ליתן לתוכו מים או יין יתן (10)
 ‘If one, however, **desires to pour** water or wine into it, he may do so.’
 (b. *Roš Haš.* 32b)

Both infinitival clauses and שיקטול clauses in Mishnaic Hebrew are complements of modal predicates.⁴⁸ Co-reference of the matrix and the embedded subject are obligatory with infinitivals, whereas disjoint reference is attested almost in all the occurrences of שיקטול clauses as complements of modal predicates, though Sharvit (2008) mentions an occurrence of co-reference with שיקטול, crucially – with the verb *r-š-y* (11).⁴⁹

- (11) הרוצה שיתן ולא יתנו אחרים. (11)
 ‘One who wants to give but that others not give,’ (m. *’Abot* 2:13)

Infinitival clauses and שיקטול clauses in Mishnaic Hebrew function not only as complements of aspectual and modal predicates, but also as purpose clauses: verbs of motion in the matrix clause express the intended action with an infinitival construction (12a); שיקטול clauses (12b), sometimes preceded by the particles כדי ‘in order’ or בשביל ‘for the sake of’ (12c), are used in cases where the matrix clause does not contain a verb of motion, and in order to disambiguate the subject of the clause.⁵⁰

- (12) a. ספק שהוא בא להרוג ספק שהוא בא לגנוב

46. Adopted from E. Doron, “The Biblical Sources,” p. 243, ex. 44, bolds in the original example, Hebrew text copied from <https://www.sefaria.org.il/texts>.

47. E. Doron, “The Biblical Sources,” p. 244.

48. S. Sharvit, *Studies in Mishnaic Hebrew*.

49. S. Sharvit, *Studies in Mishnaic Hebrew*, pp. 276, 290, my bolds. Sharvit actually mentions two occurrences, but remarks that the second only appears in printed editions, while in the manuscripts an infinitive clause appears instead of שיקטול. The translation for (11) is taken from <https://alhatorah.org/>. The construction in (11), however, is part of the protasis of a conditional-sort sentence. Moreover, as noted to me by Chanan Ariel, the clause denotes a contrast between two entities – the *willer* regarding himself as opposed to others. This seems to me to be a similar case to partial co-reference in Modern Hebrew, as in אני רוצה שאני ואתה נוקיע כל מקרה כזה מתוך המערכת ‘I want me and you to denounce every such case out of the system’ http://fs.knesset.gov.il/20/Committees/20_ptv_392035.doc.

50. C. Stadel, “Purpose Clause: Rabbinic Hebrew,” in *Encyclopedia of Hebrew Language and Linguistics* (ed. G. Khan; Leiden: Brill, 2013), Consulted online on 17 August 2021, http://dx.doi.org.ezproxy.bgu.ac.il/10.1163/2212-4241_ehll_EHLL_COM_00000656, my bolds, and see other types of purpose clause constructions in Mishnaic Hebrew therein.

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- ‘It is doubtful whether he came to steal or to kill.’ (*Mek. KiTiśśa* 1)
- b. בטל רצונך מפני רצונו שיבטל רצון אחרים מפני רצונך.
‘Annul your desire before his desire, that he may annul the desire of others before your desire.’ (*m. ’Abot* 2:4)
- c. חוטפין מצה לתינוקות בשביל שלא ישנו.
‘One hastily hands out Matzah to the infants in order that they should not fall asleep.’ (*t. Pesah.* 10:9)

2.3 Taking Stock – Desiderative Complements in Classical Hebrew

1. Under what is probably an influence of Aramaic, the PRO-inf of Biblical Hebrew, a subtype of non-finite constructs, which serves both as complement clause for modal and aspectual predicates and adjunct purpose clauses, turned into the infinitive construction in Mishnaic Hebrew, a larger clausal category in terms of finiteness.
2. While in Biblical Hebrew finite clauses can only be the complement of factive/assertive propositional attitude verbs, in Mishnaic Hebrew modal verbs, including לרצות ‘want’, can also embed finite clauses, of which the subordinator is the clitic -ש.
3. Co-reference is attested in all the cases of non-finite complements of ‘want’, both in Biblical Hebrew and Mishnaic Hebrew, whereas disjoint reference is attested almost completely for finite complements in Mishnaic Hebrew. Thus, it can be stated that the availability to express one's intent and will regarding a state or action which are a result of the circumstances or of another person's actions in a subordinate clause is a development of Mishnaic Hebrew.⁵¹ The innovation of a finite complement of ‘want’ in Mishnaic Hebrew is seemingly a result of language contact with Aramaic and its distribution of the subordinator -ש.
4. In both Biblical Hebrew and Mishnaic Hebrew, clauses which are selected as complements for modal predicates, and of ‘want’ in particular, function as purpose clauses as well: PRO-inf of Biblical Hebrew serves both as complement of ‘want’ and as purpose adjuncts, and in Mishnaic Hebrew,

51. In Biblical Hebrew, wish or will towards a third person are expressed in root clauses through jussive mood, see B. K. Waltke and M. O'Connor, *An Introduction to Biblical Hebrew Syntax* (Eisenbrauns: Winona Lake, Indiana, 1990), ch. 34.

infinitives and שיקטור clauses alternate in the distribution of ‘want’-complements and purpose adverbials.

3. REVIEW OF OBVIATION EFFECTS IN MODERN HEBREW IN LIGHT OF CLASSICAL HEBREW

The examination of the clausal complements of desideratives in Classical stages of Hebrew suggests a different take on the obviation effect; the exclusive co-referential and non-temporal infinitives in Biblical Hebrew as a primary construction for ‘want’ complement indicates that a finite, disjoint referential construction is a later, extended, development. Synchronically, the finite complement of ‘want’ in Modern Hebrew can be regraded in terms of coercion,⁵² that is, a forced or adjusted interpretation of verb or clause in a way which ‘stretches’ or extends their core specification and which enables their combination. Such a coerced clause can express will or desire for a result state that does not involve the willer exclusively.

I propose that while non-temporal infinitive complements of desideratives in Modern Hebrew express volition and intent towards self and their subjects are agentive to some extent, finite complement expresses more of a wish, or a wishful request which is non-self-directed. The latter type of expression of will is assumed here to be propositional, and therefore the matrix subject is an attitude holder, i.e., an individual to whom propositions are ascribed.⁵³ Put in terms of modal flavors, desideratives are lexically encoded to express root modality, i.e., modal interpretation which expresses obligations (deontic), purposes (teleologic), or wishes (bouletic); however, when they are complemented by finite clauses, they gain also an epistemic flavor, that is, their modal interpretation is also associated with knowledge or beliefs, and

52. Following ideas from K. von Stechow and S. Iatridou, “The Linguistics of Desire,” slides from class given at the *CreteLing 2018 Summer School* (University of Crete, July 16–27, 2018), and references therein. von Stechow and Iatridou give, for example, an attested example in English of *vote*, which denotes an action, used as an attitude ascription verb: “In 2016 America voted that Trump should be President.”

53. For a detailed semantic articulation and configuration of the idea of ‘attitude holder’ see von K. von Stechow and I. Heim, *Intensional Semantics: Lecture Note* (spring 2011 edition, MIT), <http://web.mit.edu/fintel/fintel-heim-intensional.pdf> and references therein; K. Moulton, *Natural Selection and the Syntax of Clausal Complementation* (PhD Dissertation; University of Massachusetts, Amherst, 2009).

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not purely desires or intentions.⁵⁴ The alternation in modal flavor *cum* complement clause alternation can be illustrated with the Modern Hebrew attitude ascription לחלום ‘dream’. In my judgment, the verb obligatory reports a desirable fantasy with the infinitive in (13a); when it selects finite clause (13b) it reports an imaginative scenario.⁵⁵

- (13) a. ירון חלם לרקוד הורה.
‘Yaron wished to dance Hora.’
b. ירון חלם שהוא ירקוד הורה.
‘Yaron dreamt that he would dance Hora.’

I suggest that the requirement for future tense in the finite complement clause of desideratives source from the modality, which determines the inherent future orientation.⁵⁶ I therefore propose in light of לרצות ‘want’ constructions in Classical Hebrew that the phenomenon which is regarded as obviation effects attested in Modern Hebrew can be understood rather in terms of a disjoint reference in a coerced finite complement that can be interpreted as an inexplicit wishful request. The core construction which expresses volition is non-finite and co-referential. I will suggest several arguments to support this view.⁵⁷

Etymologically, as shown by Nozomi (1991) and Gilad (2020),⁵⁸ many verbs which express desire originate from verbs which express a physical rather than mental activity or state, such as quest, motion, voice emission, eating and thirst. This may support the proposal that the subject argument of ‘want’ is some sort of an agent with futurate orientation toward a goal rather

54. This idea of ‘mixture’ of modal flavors of attitude ascriptions can be supported by semantic analysis such as in P. Portner and A. Rubinstein, “Desire, Belief, and Semantic Composition: Variation in Mood Selection with Desire Predicates,” *Natural Language Semantics* 28 (2020), pp. 343–393, <https://doi.org/10.1007/s11050-020-09167-7>.

55. Constructed example. Dreams could be considered as epistemic in the sense that their propositional content exists in the worlds which are compatible with one’s imagination and are perceived through the force of imagination.

56. Following E. Doron, “The Infinitive in Biblical Hebrew,” p. 154, footnote 11, regarding purpose clauses in Biblical Hebrew, in reference to S. Wurmbrand, *Infinitives: Restructuring and Clause Structure* (Berlin: Mouton de Gruyter, 2001); S. Wurmbrand, “Tense and Aspect in English Infinitives,” *Linguistic Inquiry* 45 (3; 2014).

57. For a semantic analysis that teases apart lexical features of desire, volition and intention and their grammatical manifestations see T. Grano, “The Logic of Intention Reports,” in *Journal of Semantics* 34 (2017): x, DOI: 10.1093/jos/ffx010.

58. A. N. Nozomi, *Semantic Study*; E. Gilad, “געגוע” (Longing), in *Haaretz* (2020, April 15).

than a pure attitude holder. As purpose clauses denote the outcome of an agent's intentions,⁵⁹ the shared distribution with purpose clause may also suggest agentivity-like properties.

As discussed in section 2.3, the clauses that function as complements of 'want' in Classical Hebrew are also used as purpose adjuncts. This distributional relation applies to Modern Hebrew as well, and can be illustrated with the verb למות 'die', which in non-literal use in colloquial speech can mean 'want'. The following example is a play on words:⁶⁰

(14) מתה להיות אני.
'Dying to be me.'

The sentence in (14) can either denote a single state of will of self-becoming (the infinitive is interpreted as a clausal complement), or two separate events – dying and self-becoming (the infinitive is interpreted as a purpose clause). The linkage between 'want' complements and purpose clauses may support the agentivity of the subject of 'want', since purpose and intentions involve readiness for an action.

Additionally, some Modern Hebrew propositional verbs, such as לחשוב 'think' and לדעת 'know,' denote intention and ability (respectively) when they select an infinitive complement (15).⁶¹

(15) חני חושבת/יודעת לנגן בכינור.
'Channy intends/knows to play the violin.'

Additional support for the view of the interpretation of לרצות with a finite clause as more of a requisitive expression, rather than of a volitional intention of the subject towards self, can come from the observation that לרצות in counterfactual sentences allows co-reference with finite clause, as illustrated in (16).⁶²

59 E. Doron, "The Infinitive in Biblical Hebrew," pp. 154–155, footnote 12.

60. The title of a book by A. Moorjani, מתה להיות אני (Dying to be me, trans. B. Zissu; Tel Aviv-Jaffa: Opus, 2013).

61. As studied by V. Saydon, *Semantic, Pragmatic and Syntactic Shifts*, לחשוב 'think' originates in Biblical Hebrew, in which it is interpreted as 'plan' and selects only infinitives as a clausal complement. Only later on, in Mishnaic Hebrew, *x-š-b* started to embed שיקטול clauses (see footnote 33), and gradually gained doxastic meaning (i.e., such that relates to belief). The sentence in (15) is a constructed example.

62. A constructed example by Edit Doron (p.c.). In my judgment, this example is best in 1SG. לרצות in 1SG in past tense can also embed finite clauses (such constructions are attested in the WWW). Cross-linguistically, volitional and purposive inflected for past/irrealis tense show tendency to develop into avertives, see P.

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(16) הייתי רוצה שאהיה מלכת היופי.
 ‘I wish I were a beauty queen.’

A final argument to support my proposal is that in Modern Hebrew independent clauses introduced by the particle *-ש* followed by a future tense verb express wishes and blessings.⁶³

4. DISCUSSION

I have suggested here to see obviation effects in Modern Hebrew in terms of two different clausal complement selections, inherited from Classical Hebrew. Table 1 summarizes the clausal complement requirements of ‘want’ in Classical Hebrew and Modern Hebrew.

	Clausal Type	Finite	Subjects Co-Reference	Subjects Disjoint Reference
Biblical Hebrew	PRO-inf	-	+	-
Mishnaic Hebrew	infinitive	-	+	-
	שיקטול	+	- (robustly)	+
Modern Hebrew	infinitive	-	+	-
	<i>-ש</i> + future tensed clause	+	- (exceptions: counterfactuals, 1S subjects)	+

Table 1: ‘want’ clausal complements in Classical Hebrew and Modern Hebrew

Caudal and R. Mailhammer, “The Semantic Evolution of the Past Irrealis in non-Pama-Nyungan Languages: Modelling Language Change without Access to Written Records,” Slides for oral presentation, in *Formal Diachronic Semantics* (FoDS) 6 (the Institute for German Language and Literature I – Linguistics at the University of Cologne, 2021, 6–7 September).

http://www.lukasz-jedrzejewski.eu/conferences/FoDS6/Caudal%26Mailhammer_2.pdf. That may support the argument that these exceptions for the disjoint reference restriction in Modern Hebrew involve a wish for an event which is unattainable for the willer by pursuing self-intentions.

63. N. Boneh, “Mood and Modality: Modern Hebrew,” in *Encyclopedia of Hebrew Language and Linguistics* (ed. G. Khan; Leiden: Brill, 2013), Consulted online on 22 April 2019 http://dx.doi.org/10.1163/2212-4241_ehll_EHLL_COM_00000137, a.o. The distribution of *-ש* + future form construction as a complement for modal predicate may expanded from the expression of wishes in subordination to independent clausal wishful utterance under the influence of language contact, such as Yiddish or Judeo-Spanish, see H. Farstey, “Yiddish Influence on Hebrew,” in *Encyclopedia of Hebrew Language and Linguistics* (ed. G. Khan; Leiden: Brill, 2013), Consulted online on 05 March 2019 http://dx.doi.org/10.1163/2212-4241_ehll_EHLL_COM_00000081; O. (R.) Schwarzwald and S. Shlomo, “Modern Hebrew *še-* and Judeo-Spanish *ke-* (que-) in Independent Modal Constructions,” in *Journal of Jewish Languages* 3 (1–2; 2015): pp. 91–103.

The inherited selections may be retained in Modern Hebrew under similar patterns in contact languages such as Russian and Yiddish during the revival period. The present work is descriptive; much more remains to explain and examine from both synchronic and diachronic perspectives, and a comprehensive study of stages of Hebrew is needed regarding issues of (dis-)continuity. A central issue that has remained unclear is the (possibly) single occurrence of co-reference with finite clause in Mishnaic Hebrew.

The very restricted distribution of finite clauses as a propositional complement of attitude ascriptions in Biblical Hebrew, namely, complements of factive/assertive predicates such as ‘know’ or ‘see’ which their propositional content is true in the actual world, and which are subordinated by the complementizers *כי*, *אשר* and *-ש*, seems to expand already in Mishnaic Hebrew to propositional content which does not have to be true for the actual world, including propositions that are compatible with one’s wishes. A further, comprehensive study is needed to reveal the distribution of the complementizers in Modern Hebrew and their diachronic developments, syntactically, semantically and etymologically.⁶⁴

In this work I wish to convince that a diachronic study may shed light on synchronic syntactic constraints, by showing that the co-referential and non-finite clausal complement of ‘want’ in Hebrew precedes diachronically the finite complement with disjoint reference, and therefore obviation in Modern Hebrew can be rephrased as preference of the more basic, radical construction. This work can hopefully contribute to an extended, cross-linguistic study of the emergence of obviation effects or the absence of them and so to discover universal grammatical regularities at the base of complement selection of desideratives.

64. e.g., C. Locatell, “An Alternative to the Coordination-Subordination Dichotomy: The (In)Dependent Syntax of Causal *כי*”, in *Ancient Texts and Modern Readers: Studies in Ancient Hebrew Linguistics and Bible Translation* (eds. G. Kotzé, C. Locatell and J. Messara, *Studia Semitica Neerlandica* 71; Leiden: Brill, 2019). For an illuminating review of complementizers in Modern Hebrew see R. Kuzar, “פסוקיות נומינליזציה” (Nominalized Clauses in Israeli Hebrew). *Balšanut 'ibrit* 36 (1991). *disallows* complementizers other than *-ש*. Other attitude verbs, such as *לומר* ‘say’ allow other subordinators, such as *כי* ‘that’.