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ALEXANDER ANDRASON
THE PANCHRONIC YIQOTOL: FUNCTIONALLY CONSISTENT AND COGNITIVELY PLAUSIBLE
THE PANCHRONIC Yiqtol: Functionally Consistent and Cognitively Plausible

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1. INTRODUCTION
The topic of this paper is a verbal construction often found in Biblical Hebrew (BH) and usually referred to as “long” yiqtol\(^2\) (1).

(1) Isa 40:1

\(\text{נְחַדְּקָא} \text{ נְחַדְּקָא} \text{ עָמָי} \text{ אֲלָתְרִיכְּכָם}:
\)

Comfort, O comfort my people, says your God.

From a radical—and most frequently adopted—synchronic perspective, the formation corresponds to a highly heterogeneous, from a functional perspective, phenomenon providing a broad range of uses that are related to the concepts of aspect, taxis, tense, mood and pragmatic text type. It almost appears as a semantically random category that may be employed to express unrelated and, in some cases, contradictory meanings.\(^4\) On the other hand, the recently emerged panchronic methodology affirms that it should always be possible to embrace all synchronically incompatible or heterogeneous values of a construction and explain it as a homogenous manifestation of a functional trajectory. Put

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1 This article is a result of the research project carried out by me in cooperation with Prof. Christo Van der Merwe in the Department of Ancient Studies (University of Stellenbosch) in 2010. I would like to thank Prof. Van der Merwe for his comments on my linguistic ideas, and especially for his encouragement and inspiration in researching Biblical Hebrew. I would also like to thank two anonymous reviewers and the editor for their comments on a previous version of this paper. Finally, I am grateful to some of my students at the University of Stellenbosch for their highly valuable feedback.

2 As opposed to the short yiqtol labeled “jussive.” In this paper, the term yiqtol will be employed to refer to the “long” yiqtol.


4 The details of the functional load of the yiqtol will be introduced in section 2.2.
differently, the gram— that from the synchronic perspective is an amalgam of accidental functions which cannot be reduced to one clear and unique aspectual, temporal, taxis, modal and text value— may be understood as a single phenomenon, a prototypical homogeneous diachrony (i.e. path)— a realization of one linguistic input. Furthermore, as maintained by cognitive linguistics, since the grammar is a conceptualization of the speaker’s experience, this input— the initial expression, from which a grammatical category emerges— is expected to be semantically transparent and cognitively plausible.

In accordance with these two principles, the apparently chaotic BH yiqtol should be reducible to a single consistent phenomenon that originated in a lexical transparent input. This source should moreover cognitively motivate all the values of the gram. In particular, the yiqtol morphology must somehow reflect a grammatical conceptualization of the aspectual, temporal, taxis, modal and textual ideas which it expresses. In other words, the shape of the construction should be related to all its functions.

This article aims at providing the solutions to the two previously mentioned problems: it intends to describe the BH yiqtol as a functionally consistent, rational and single phenomenon pointing at the same time to its cognitively plausible foundation.

The first part of the paper will familiarize the reader with the traditional views on the BH yiqtol (2.1) as well as with its semantic potential (2.2). In the second part, we will describe the gram applying the panchronic methodology. To begin with, in section 3.2, the notions of panchrony and functional paths will be introduced and explained. After that, we shall proceed to the analysis of the gram, first in its synchronic (3.2.1), then diachronic (3.2.2) and comparative (3.2.3) panchronic versions. Finally, in the third part of the article, the main results of the research will be recapitulated and a panchronically holistic and cognitively plausible picture of the formation proposed.

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5 In general, the term “verbal gram” approximates the notion of verbal grammatical constructions and is frequently employed to refer to formations that reflect any phase of the prototypical grammaticalization path, from lexical periphrastic inputs (peripheral grams) to central synthetic categories (core grams). During the grammaticalization process, grams “travel” from the periphery to the centre of the verbal system acquiring and combining meanings that correspond to various typologically universal semantic domains like taxis, aspect, tense and mood. Thus, the traditional concepts of taxis, aspect, tense and mood are used to characterize the functional content of grams. Consequently, a category which, in a given language, is labeled “present tense” may choose its real meaning from various functional fields and provide several temporal, aspectual and modal values. For more details see Dahl (2000:7).
2. FUNCTIONS OF THE YIQTOL

2.1. GRAMMATICAL TRADITION

The *yiqtol*, together with the *qatal*, *weqatal*, and *wayyiqtol*, forms the nucleus of the Biblical Hebrew verbal system (Waltke & O’Connor 1990:479–480, Merwe, Naudé & Kroeze 1999:141–149 and Putnam 2006:44). The construction, depending on the employed methodology, has been classified as a tense, an aspect, a taxis (relative tense), a mood and a pragmatic text type. According to the temporal approach, represented by medieval Jewish scholars such as Japeth ha-Levi, Savid Qimhi, Elijah Levita and by Christian grammarians from the 17th and 18th centuries such as Buxtorf and Bayly, and later reflected in several grammar books from the 19th and 20th century, e.g. in Gesenius (1909:111) and Weingreen (1939:56–57), the *yiqtol* equaled a future or a present-future tense (McFall 1982:12–21). The aspextual school profoundly criticized the identification of the gram with an explicit deictic temporal sphere and proposed an alternative description in terms of aspectuality; consequently, the form supposedly equaled the imperfective (Ewald 1870:349 and 1879:1–3, Driver 1881:5 and 32–34 and Davidson 1902:64) or the non-perfective aspect (Waltke & O’Connor 1990:496 and 502). Yet other scholars, like Joüon (1923:291, 301–307), combining the temporal and aspectual views, defined the *yiqtol* as an imperfective past and a present-future tense. Proponents of the philosophical framework (Michel 1960:98, 110 and 127 and Kustár 1972:45) based their model on the alleged bipolar opposition between the *yiqtol* and the *qatal*, and claimed that the former one expresses an action as related to and depending on other events. The *yiqtol* form gains the exact meaning only in connection with other events, and thus contrary to the independent and accidental *qatal*, it denotes dependent activities (Michel 1960:98, 110 and 127). According to the diachronic-comparative approach—dominated by the aspectual view of the BH verbal system—the *yiqtol* matches an imperfective aspect (Brockelmann 1908–1913/1966:504, Huehnergard 1988:22, Rainey 1986:4 and 1996:221, Bubenik 1998:41–56 and Lipiński 2001:345–346), a durative aspect (Fensham 1978:13), an atelic gram (Gray 1934:90–95) and an active, temporarily neutral, aorist (Hughes 1970:12–13). Another member of the diachronic framework, Kuryłowicz (1972:80–82) classifies the gram as a simultaneous (non-anterior) taxis category. In the same way, the syntactic method, even though it stresses the importance of the relationship between linguistic units (order of words and phrases) and not the morphology itself, sees in the *yiqtol* principally an aspectual expression (Andersen 1974:100), which

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6 The model proposed by Waltke & O’Connor (1990:480–563) is in fact aspectual, diachronic and syntactical.
is accompanied, however, by some significant temporal implications (Silverman 1973:168 and Goldfajn 1998:32 and 139, cf. also Endo 1996:319–324). For instance, in Peckham’s view (1997:146–147), the construction, depending on a particular syntactic position, expresses either durative-habitual events or present progressive activities. Van der Merwe, Naudé & Koetzé (1999:143–144 and 146–149) stress the universal interwovenness of the aspect and tense categories and likewise allege that “[i]mperfect forms refer, broadly speaking, to incomplete events that often could be translated with the present or future tense” (1999:70). A similar view is proposed by Lambdin (2001:91, 107–108 and 162–165) who defines the yiqtol as a syntactically and textually based expression of the imperfective aspect (in the past) and of the present-future tense (in the non-past). A different position is maintained by scholars who argue from text linguistics point of view; in general terms, the proponents of the text linguistic approach emphasize the role of the yiqtol in different text types (Longacre 1992:177–180, Winther-Nielsen 1995:28 and 56, Hornkohl 2003:77 and del Barco 2003:21–22) claiming that all aspectual and temporal properties of the gram are secondary and non-inherent to its morphological shape (Talstra 1997:101, cf. also Endo 1996:232). For example, Niccacci (1990:168) analyzes the gram both as a discursive and as a narrative category: the yiqtol in the discourse usually denotes events of the foreground (first plane) that may be either anticipated or of the grade zero; in the narration, however, it regularly expresses the background information. Founded on Weinrich’s (1964:18 and 30) discourse theory, Schneider (1982:208), Talstra (1997:85–89 and 101) and Baayen (1997:255) developed the syntactic and textual model to the extreme point and openly rejected the idea that the BH verbal forms, and thus the yiqtol, could include any aspectual, temporal, or taxis value on its own independently from their pragmatic use. Less radical modern linguistic schools employ an eclectic approach unifying the pragmatic and text views with more traditional, aspectual-taxis-temporal models. For instance, according to Gentry (1998:39), the yiqtol equals a non-sequential imperfective category, while in Putnam’s (2006:44–45 and 47–49) opinion, the gram is a syntactically and textually determined expression of the present-future, the imperfective past and the modality. Quite differently, Joosten (1992:12–14 and 2002:66–67, 69–70) alleges that the yiqtol should be defined not as the imperfective aspect or as a

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7 In terms of this framework, verbal formations are a combination of their own meaning (aspectual, temporal, taxis, modal) and of their syntactical functions.

8 This means that aspect, tense, taxis and mood are not important notions anymore; in their place one finds the concepts of narration and discourse, of information type (foreground or background) and of linguistic perspective (zero, recovered or anticipated).
present-future tense, but rather as a primary modal category. In his model, the main function of the formation corresponds to the root and epistemic modality (command, necessity and probability) and to a closely related value of prediction (futurity). Other functions, such as iterativity and durativity, are contextually conditioned and derive from the modal foundation and nature of the gram. Finally, the grammaticalization based model (Cook 2002:241, 246–251 and 2006:33–35), identifies the *yiqtol*—that allegedly expresses past imperfective and present-future events—with a universal progressive category.

This concise—and by no means comprehensive⁹—overview of different theories and their proposals of how to describe the *yiqtol* clearly demonstrates that linguists are far from reaching an agreement on the definition of the gram. The formation has been defined as a future or present-future; a durative, imperfective, or non-perfective aspect; a simultaneous or prospective taxis; a root and epistemic mood; a textual category (a discursive expression of the foreground and a narrative background gram); a syntactic category (a non-sequential imperfective); a progressive diachrony; or a combination of some temporal, aspectual, taxis, modal, syntactical and text functions. This vast number of models and their profound diversity and dissimilarity indicate that each school understands the formation in a distinct way. However, are all these views incompatible? Before answering this question and proposing a new unifying interpretation of the BH *yiqtol* founded in the panchronic methodology, let us first—in accordance with the principles of panchrony—present the values and uses of the construction.¹⁰

### 2.2. Taxonomy of the Functions of the Yiqtol

From the functional perspective, the *yiqtol* is a highly complex formation: it displays uses that correspond to the concepts of tense, aspect, taxis, mood and text type. In the present paragraph we will describe all meanings which the gram may provide, dividing them into three main blocs: indicative, modal and textual. Firstly the indicative *yiqtol* will be presented, then we will analyze its modal counterpart, and finally the textual properties of the gram will be described.

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¹⁰ In conformity with the panchronic approach, the taxonomy of functions should be as neutral as possible, and thus make reference to all major semantic categories as aspect, taxis, tense, mood and text value.
**Indicative Yiqtol**

As far as the temporal value is concerned, the *yiqtol* can refer to all three spheres of the universal time: past, present and future. With the present temporal reference, the gram indicates both continuative-progressive (2.a) and frequentative-habitual actions (2.b). This means that the formation expresses a wide range of present activities, both actual-particular (progressive) and persistent-general (simple). Similarly, in the future time context, the construction denotes any prospective event, either imperfective-durative (2.c), or punctual-unique (2.d and 2.e) which in some cases allows a perfective (but not perfect) interpretation. Consequently, the future *yiqtol* must be understood as aspectually neutral. Finally, in the past temporal environment, the prefix conjugation most frequently expresses frequentative-habitual events (2.f) even though in some infrequent cases it may also provide continuative-progressive and actual-particular readings (2.g). Furthermore, in multiple examples, the past *yiqtol* functions as a broad imperfective past with no particular iterative (frequentative) sense (2.h). In significantly less frequent cases, appearing together with the particle $š$ “then,” the gram indicates simple past events without overtly communicating any imperfective nuances (2.i). Additionally, accompanied by the lexeme $בּרָנִשׁ “before,” the formation presents past events as prospective and posterior to the main action (2.j). Finally, it should be noted that the future events conveyed by the *yiqtol* may also be introduced from the past perspective (2.k).

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11 The following presentation of the values displayed by the *yiqtol* should not lead to an atomic perception of the gram. The construction is not an amalgam of separated and independent “sub-*yiqtol*” which are clearly distinct each from another. It should be noted that in various examples, the temporal, aspectual, taxis, modal and text functions coincide and in others more than one interpretation is possible. The cases presented here are intended to demonstrate that the formation is compatible with determined universal verbal domains (see also section 4: Conclusion).

12 To illustrate this, translations in the Polish language (*Biblia Polska 1975*), which distinguishes between the imperfective and perfective future, will be provided.

13 It shall be also observed that the circumstantial progressive-simultaneous value is regularly and explicitly provided by the participle.

14 To illustrate the imperfective value of the *yiqtol*, translations in the Spanish language (*Reina Valera 1960*), which includes an overt imperfective past gram, will be given. Yet again the participle is regularly employed in the instances where the actual-progressive and circumstantial values are to be explicitly provided.

15 This will be illustrated with the Polish translation since this language differentiates between the past perfective and past imperfective grams.
(2)a. Gen 37:15

וכאשזו איש וגו התשא השכרה איש אשה לאמר:

וַיְכַלֶּשׁ.

And a man found him wandering in the fields; the man asked him, “What are you seeking?”

b. Ps 19:2

הַיָּמִים יִשְׁמַר הָאֱלֹהִים בְּנֵי יָדָיו: יִשְׁמַר בְּנֵי אָדָם.

Day to day pours forth speech, and night to night declares knowledge.

c. Gen 29:18

אֲנַאֲדָה יִשְׁמַר לְךָ אֱלֹהִים בְּנֵי יָדָיו.

I will serve you seven years for your younger daughter Rachel. (cf. the Polish translation Biblia Polska BP 1975: będę slużył [future imperfective])

d. Ps 41:6

קָמָת יָמָה

When will he die […]? (cf. the Polish translation BP 1975: umrze [future perfective])

e. Amos 9.11

כַּיָּם הַהוֹא אֲנַאֲדָה אֲנַאֲדָה וְדִי הָנִמְלָת

16 This example may also be understood modally (cf. the section on the modal yiqtol below). As noted by Bybee, Perkins & Pagliuca (1994:279–280) there is a universal proximity between modality and futurity. Consequently in various languages, future tenses (even if not derived from original modal expressions) may provide not only temporal information but also various modal connotations. For instance, the Polish perfective future (formally the perfective present) did not originate in any explicit modal locution. Nevertheless, it can be employed with an imperative value Zrobisz to! “Do it! / You will do it” or with a epistemic (possibility) force Zrobisz to? “Would / could you do it?” Furthermore, it shall be observed that the aspectual load of prospective modally colored grams remains the same whether they are interpreted temporally or modally, cf. Polish futures used modally: Będziesz pisać! “You will write! You will be writing! = Write! [imperfective]” Napiėsz! “You will write / You will have written = Write! [perfective]” As demonstrated by Slavic languages, prospective modal categories may still be sensitive for the parameter of aspect, cf. in Polish Mam zamiar czytać tę książkę “I intend / want to read [imperfective] this book” or Mam zamiar przeczytać tę książkę “I intend / want to read [perfective] this book.”
On that day I will raise up the booth of David that is fallen (cf. the Polish translation BP 1975: podniesł [future perfective])

f. Job 1:5

This is what Job always did. (cf. the Spanish translation Reina Valera RV 1960: habló [past imperfective])

g. Jer 36:18

Baruch answered them, “He dictated all these words to me, and I wrote them with ink on the scroll.” (cf. the Spanish translation RV 1960: dictaba [past imperfective])

h. 1 Kgs 6:8

One went up by winding stairs to the middle story... (cf. the Spanish version RV 1960: se subió [past imperfective])

i. Josh 8:30

Then Joshua built on Mount Ebal an altar to the LORD, the God of Israel... (cf. the Polish translation BP 1975: zbudował [past perfective])

j. Gen 37:18

They saw him from a distance, and before he came near to them, they conspired to kill him.

k. 2 Kgs 13:14

Now when Elisha had fallen sick with the illness of which he was to die...

Modal Yiqtol

As a modal category, the gram is compatible with the idea of the possibility (both root and epistemic). Namely, it frequently indicates that the subject is capable of performing an action, which in turn corresponds to the concept of the root possibility (3.a). In other instances, the action is not conditioned by the mental and/or physical ability of the agent itself but depends
on external conditions, thus providing meanings of epistemic possibility and potentiality (3.b). The *yiqtol* can also express permission (3.c) or obligation imposed upon the hearer (3.d) and other persons implied in the activity (3.e). Closely related is the deliberative function, characteristic for the 1st person questions (3.f). Furthermore, the formation denotes the idea of intention-desire (3.g) and provides all ranges of the optative-injunctive values: when the action is directed to the 2nd persons (both singular and plural), the gram functions as an imperative (3.h) or a prohibitive (3.i), while in the case of the 1st and 3rd persons, the construction corresponds respectively to the jussive (3.j) and the cohortative (3.k).17

(3)a. Deut 1:12

איך אני יכול להן מתאהם ומשהם וראיתם:  
But how can I bear the heavy burden of your disputes all by myself?

b. Gen 6:21

וַיִּקָּחֶהָ מִכָּל־מַאֲכָל אָשֶׁר אָכָל (New American Standard Bible NASB) And as for you, take for yourself some of all food which is edible…

c. Gen 2:16

וְנַתָּן לָךְ אֲלֹהֵי הַגּוּן לָעֲבֹדֶתָם לְמָכֵן מִלָּה נְעֵרָה אֵלָה (New American Standard Bible NASB) And the LORD God commanded the man, “You may freely eat of every tree of the garden;

d. Exod 4:15

אַתָּה תִּבָּדֵל אֶשֶּׁר אָמְרָה מִשְׁבוֹתָה (New American Standard Bible NASB) And [I] will teach you what you shall do. (cf. the Spanish translation RV 1960: *lo que hayáis de hacer*; Lit.: “what you have to do”)

e. Neh 8:14

וַיִּגְדִּיקְו בְּתוֹלֵכֶם אֶשֶּׁר צָרֵף לָיָה בְּיִדְרֵימָה אֵלָה (New American Standard Bible NASB) And they found it written in the law, which the LORD had commanded by Moses, that the

17 It should be observed that BH includes in its verbal system explicit and overt imperative, jussive and cohortative grams. Similarly to the approach adopted during the description of the indicative *yiqtol*, in some cases to illustrate modal values of the construction in a clearer way, the English translation will be accompanied by Spanish and Icelandic versions.
people of Israel should live in booths during the festival of the seventh month...

f. 1 Kgs 22:6

shall I go to battle against Ramoth-gilead, or shall I refrain? (cf. also the Spanish version RV 1990: ¿Debo ir […] debo renunciar […]? Lit.: “Do I have to go… do I have to refrain…?”)

g. Gen 24:58

And they called Rebekah, and said to her, “Will you go with this man?” She said, “I will.” (cf. the Spanish translation Nueva Versión Internacional NVI: ¿Quieres irte…? Lit.: “Do you want to go…?)

h. Ps 51:9

Hide your face from my sins, and blot out all my iniquities.

i. 2 Kgs 2:16

He responded, “No, do not send them.”

j. Gen 1:9

And God said, “Let the waters under the sky be gathered together into one place, and let the dry land appear.”

k. Gen 50:21

So have no fear; I myself will provide for you and your little ones. (cf. the Icelandic translation: ég skal annast Lit.: “I will (I promise!) take care of…” which employs the desiderative-cohortative future skal + infinitive)

The modal *yiqtol* is prominent in the present and, especially, future temporal frames. In numerous cases, the future (presumably indicative) *yiqtol* and the modal *yiqtol* coincide, i.e. a single form may be interpreted either as a future tense or as a modal formation. In consequence, the *yiqtol* combining temporal and modal values, frequently functions as a
prototypical modally tinted future (Bybee, Perkins & Pagliuca 1994) (4.a). The modal reading is also admissible with the past time reference (4.b). In these instances, the formation can be understood either as a prospective past future or a modal expression (4.c). Once again, we face the phenomenon of the semantic proximity between the prospectivity and the modality.

(4)a. Exod 20:13

לֹא תָמַ֔ר הַשָּׁלוֹת

You shall not murder. (cf. the Polish version Nie zabijaj [negative imperative] vs. the translation in Biblia Tysiąclecia Nie będąc zabijaly [future imperfective])

b. Deut 1:18

וַיִּלָּקֶ֛כֶנִי בֶּן הָקֹחֶ֖ה אָתָֽנְכִֽים אֲשֶׁר תְּחַשְּׁא֣רְךָ

So I charged you at that time with all the things that you should do.

c. Gen 43:7

וַיֹּ֛אמֶר הַמֵּתֵ֖ם לְעֵ֥בֶר הַיַּֽרְדֵּדֶֽם וְאֵֽדָרְאֶֽהָךְ

Could we in any way know that he would say, “Bring your brother down”? (cf. the Spanish translation in Lambdin 2001: como íbamos a saber [future in the past])

Following the purpose particles לְקָנֵ֝נִי “in order to,” כֶּ֛בֶר “that,” בְּלָ֖כֶת “until, so that,” and רִי “until, so that,” the yiqtol introduces subordinated phrases that express the idea of positive (5.a and 5.b) and negative (5.c) finality. In this use, the gram corresponds to syntactically based moods of Indo-European languages such as subjunctives or conjunctives. The BH long prefix conjugation also appears in real conditional protases and apodoses. In that case, being introduced by the particles דָּן and בִּן “if, when,” it connotes the idea of uncertainty or probability (5.d). Less frequently, the yiqtol may be found with the hypothetical unreal conjunctions הִזֶּ֖ה “if” and רִיָּ֣ל “if not”—in these instances, the gram expresses unreal or counterfactual optative events (5.e). Finally, preceded by the waw, the formation offers multiple volitional and purpose-result readings (5.f).

(5)a. Gen 12:13

אֲמַרְרֵיָ֣א אֲשֶׁר אֶ֔לַּמְּנַ֖ו מֶשֶׁ֔כְּרֵי בְּעֶ֖בֶרָ֑דֶנָו וְאֵֽדֶרְאֶֽהָךְ

18 Compare the modal future translation in English with the non-modal future in Polish.

19 Contrast the modal past in English with the past future in Spanish.
Say you are my sister, so that it may go well with me because of you, and that my life may be spared on your account.

b. Jonah 4:5

וַיָּחָל מָרָכֹר יָם מְרָכֹר מַעְמֵר מַעְמֵר עֲמַעְמֶר וְלָשֵׁשׁ וְלָשֵׁשׁ לָשֵׁשׁ לָשֵׁשׁ: הַתּוֹרָה בְּעָלָה בְּעָלָה כָּל אֲשֶׁר רָכְבָּה מִצְרַיִם בְּבֵית:

Then Jonah went out of the city and sat down east of the city, and made a booth for himself there. He sat under it in the shade, waiting to see what would become of the city.

c. Exod 20:19

וְ֠וְאֵלֶּבֶּרֶךְ שֵׁם אֲליִיָּהוּ שְׁמַעְתָּוָּו: (NASB) …but let not God speak to us, lest we die.

d. Gen 18:28

לֹא אִשְׁמַ֠ת אֶזְכֵּרַת שֵׁם אַרְבָּעָה עַםְּשֵׁהָו

I will not destroy it if I find forty-five there.

e. Gen 17:18

וַיָּשֶׁ֠ר אָבִּרְבּוֹ שֵׁם אָלֵיָּהוּ לֹ֠שֶׁנְשָׁה לְפָּרָּפִּיוָה:

And Abraham said to God, “O that Ishmael might live in your sight!”

f. Jonah 1:6

אֶלֶ֖י הַחֹֽנֶשׁ הַמַּלְךָ֥ו לֹֽא יְךִ֣בְּדֶ֗נָּו:

Perhaps the god will spare us a thought so that we do not perish.

Text Yiqtol

As far as the text properties are concerned, the yiqtol may predominantly be found in the discourse where it forms a part of the direct words spoken by a character. It introduces information of the foreground, both anticipated (6.a) and of the grade zero (6.b). However, still in the discourse, the gram may also denote past background (frequentative-habitual and durative) events that accompany main actions (6.c). Similarly, the yiqtol of subordinated final clauses offers the background commenting value (6.d). Finally, in the narration, the gram always indicates background activities and situations, either anticipated-prospective (6.e) or frequentative-imperfective (6.f).{20} Conversely, it does not introduce principal events of the past narrative story.

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20 This is illustrated by the Spanish form, an explicit imperfective past gram.
Before proposing the panchronic explanation of the *yiqtol*, we shall first summarize the introduced evidence. As far as the indicative *yiqtol* is concerned, the gram is compatible with the three universal temporal spheres (past, present and future). The aspectual character is clearly available only with the past reference where the construction explicitly provides...
frequentative-habitual and durative readings. The continuative-progressive value is significantly less frequent being normally expressed by the participle. In the future and present context, the *yiqtol* is aspectually neutral. In the present time sphere, the gram may indicate all ranges of actions, either progressive (actual and particular) or frequentative-habitual and simple (general), while with the future temporal reference it can denote not only imperfective activities but also punctual events that admit perfective readings. As far as the concept of taxis is involved, the formation expresses the idea of prospectivity and, infrequently in the past and not explicitly in the present-future frame, that of simultaneity. The entire functional load of the indicative *yiqtol* may be tabulated in the following way:

**Table 1: Indicative values of the *yiqtol***

<table>
<thead>
<tr>
<th>Tense</th>
<th>Past Aspect</th>
<th>Present Aspect</th>
<th>Future Aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imperfective</td>
<td>Aspects</td>
<td>Imperfective and perfective</td>
</tr>
<tr>
<td></td>
<td>Durative</td>
<td>neutral</td>
<td>Prospective from the past</td>
</tr>
<tr>
<td></td>
<td>Frequentative-habitual</td>
<td>Continative-progressive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(infrequently)</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Aspect</td>
<td>Imperfective uniquely in the past</td>
<td>Frequentative-habitual</td>
<td>Prospective from the past</td>
</tr>
<tr>
<td></td>
<td>Durative</td>
<td>(infrequently) Continative-progressive</td>
<td></td>
</tr>
<tr>
<td>Taxis</td>
<td>Simultaneity</td>
<td>In any time reference (non-explicit in the present-future and infrequent in the past)</td>
<td>From any temporal sphere</td>
</tr>
</tbody>
</table>

As a modal formation (Table 2), both in principal and subordinated clauses, the *yiqtol* expresses root and epistemic possibility, permission, obligation and deliberation. Furthermore it connotes several volitional concepts such as desire, injunction and prohibition. Still in the optative function, it can also approximate cohortative, imperative and jussive categories. Additionally in dependent phrases, the construction conveys the idea of purpose and of modal prospectivity. Finally, in conditional periods the gramm most commonly provides the real hypothetical sense (less frequently, it introduces unreal or counterfactual conditions).

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21 We have also observed that, because of the semantic proximity between the future and the mood, the modal *yiqtol* and the indicative future *yiqtol* may sometimes overlap.
To end with, the *yiqtol* as a textual category appears both in discourse (most frequently) and narration (less common). In the two text types, it can introduce background information, either anticipated or of the grade zero. Furthermore, in discourse—but never in narration—it may denote the foreground of the linguistic attitude.

### Table 3: Text values of the *yiqtol*

<table>
<thead>
<tr>
<th>Text type</th>
<th>Discourse</th>
<th>Foreground</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Background</td>
</tr>
<tr>
<td>Narrative</td>
<td></td>
<td>Background</td>
</tr>
</tbody>
</table>

### 3. YIQTOL—PANCHRONIC EXPLANATION

#### 3.1 SYNCHRONIC LIMITATIONS

In the previous section we have presented several functions of the *yiqtol*. We have observed that the formation may be interpreted as a tense (past, present, future), an aspect (imperfective or neutral), a taxis (prospective and simultaneous), a mood (besides its evident indicative uses) and—though with distinct properties—as a discursive and narrative gram. The taxonomy of uses of this construction clearly reveals that if we intend to describe the gram from the orthodox synchronic perspective as an exclusively temporal (future or present-future), aspectual (imperfective), or modal category, we face an impossible task. In particular, since the *yiqtol* indicates past, present and future activities, it cannot be defined as a coherent temporal category. It can neither be described in uniquely aspectual terms given that in the present and future time sphere its aspectual marking is strongly doubtful or at least neutralized (cf. also the simple past value...
with some particles). And finally, while in the present-future context, the *yiqtol* conveys a broad range of modal nuances, its use as a durative past is certainly non-modal. In consequence, from the traditional synchronic standpoint, the formation appears as a highly heterogenic and random phenomenon compiling values and functions that not only belong to different semantic domains (time, aspect, taxis, mood and text properties) but that are also directly contradictory: present-future and past, indicative past and modal future, imperfective past and punctual future.

It is thus not surprising that all attempts to reduce the *yiqtol* to one well-defined and unambiguous semantic-functional verbal domain (i.e. to one taxis, one aspect, one tense, or one mood) have failed and will always lead to oversimplifications. When, in order to classify the *yiqtol* as a single phenomenon, scholars intend to equal it with a simultaneous taxis, an imperfective aspect or a non-past (present-future) tense, they must introduce further examples where the gram does not offer the expected values. For example, the aspectual model must accept an almost aspect-free (and thus, purely temporal) meaning of the *yiqtol* in the non-past context while the tense based approach cannot explain the use of the gram for past activities. Put differently, when grammarians describe the *yiqtol* as a semantically homogeneous category, they are obligated to simplify its actual behavior laying emphasis on some functions and classifying others as “irregular” or “non-prototypical.” This means that they usually select one label, which, fitting into the adopted framework, covers only some uses of the gram. Later on, they face a problem of how to relate remaining functions of the gram to its postulated main property and, in particular, how to connect and explain those that have nothing to do with it. Most frequently, linguists limit themselves to an enumeration of such “unorthodox” uses, noticing their “unsuitable” character. As a result, all synchronic models, taken separately,

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22 Bybee & Dahl (1989:83) correctly observe that in various languages the perfective and imperfective aspects contrast meaningfully only in the past temporal sphere. However, there are numerous languages where the aspactical difference may also be found in the present-future time frame (e.g. in Slavic, Dahl 2000:17). Furthermore, grams of the imperfective path are not restricted to the past time sphere but frequently occur in the present and future, interacting with simple (perfective or aspactually neutral) present and future formations, e.g. in Spanish where the simple future *trabajaré* “I will work” contrasts with the progressive (an initial stage on the imperfective path) *estaré trabajando* “I will be working.” Given this, the *yiqtol* cannot be reduced to the notion of imperfective aspect.

23 For instance, in the chapter on the *yiqtol* Joüon (1923:303) first presents all regular cases (*cas usuels*) which confirm his temporal and aspectual interpretation of the category. However, afterwards he claims that “on trouve des yiqtol sans aucun aspect itératif ou duratif, et donc avec la valeur de qatal” (ibid.)—he simply enumerated these
are ineffective; they do not succeed in providing a consistent explanation of the *yiqtol* as a functionally homogenous phenomenon without, at the same time, committing the fault of overgeneralization.

On the other hand, it should be emphasized that the prefix conjugation is not just an accidental amalgam of *any* functions but, on the contrary, possesses a well established set of time-aspect-taxis-mood and textual uses which are actualized in a particular context. It is not a coincidence that the *yiqtol* can express what it actually expresses and nothing else. In consequence, it must be possible to understand it as a functionally coherent and homogenous gram that accounts for all functions displayed by the gram, whether temporal, aspectual, taxis, modal, or textual. As we will see, this is feasible if one applies the panchronic model based upon the theory of functional paths. In other words, the semantic and functional homogeneity of the *yiqtol* may be preserved if we employ the panchronic methodology. Let us now introduce in detail the theory of paths and then the concept of panchrony.

### 3.2. PANCHRONY AND PATH THEORY

**Panchronic Methodology**

The diachronic and synchronic approaches usually refer either to the analysis of historical development of a given grammatical item (diachrony) or to the description of its contemporary behavior (synchrony). However, in this article, we employ the universal diachrony (path) of a given construction in order to study and explain the contemporary data. In other words, the diachronic approach provides an explanation for forms that are all viewed as contemporaneous——this is what we will refer to as “panchrony.”²⁴ Any gram develops according to some strictly irregular meanings without accounting for their explanation. Similarly at the end of the analysis of the *yiqtol*, Van der Merwe, Naudé & Kroeze (2000:149) introduce so called “problem cases.” Even though they state that it “may be theoretically possible to explain these exceptions in terms of a sophisticated aspect theory” (Van der Merwe, Naudé & Kroeze 1999:144), the explanation is never provided for didactic reasons. Finally, Waltke & O’Connor (1990:513–514) note unexpected meanings of the *yiqtol* (in their terminology “non-perfective”) with some particles (for instance, with *š*); in an attempt to justify these cases they quote solutions proposed by David Qimţi, Rabinovitz and Broekelmann without reaching any solid conclusion. As will be explained, these supposedly problematic functions are neither irregular nor unorthodox.

²⁴ The idea of interrelation and compatibility between synchrony and diachrony is not new but constitutes one of major conclusions of the grammaticalization theory: since grammars are always emergent but never present, the opposition between the diachronic and synchronic views disappears (Hopper 1987:142), and historical processes (in this case, grammaticalization laws) constitute
determined rules codified in functional paths; particularly, it acquires new values that correspond to subsequent stages on a given trajectory. Thus, meanings that are synchronically provided by a gram reflect such well ordered unidirectional and successive diachronic stages. Consequently, it should be possible to match all functions offered by a gram with phases determined for a particular path; we should be able to order and represent synchronic values of a formation as a linear progression. Conversely, a gram cannot convey meanings that are incompatible with the diachronic path that it follows. This signifies that every grammatical formation at a given moment is a synchronic manifestation of a diachronic development that is consistent with predetermined universal paths.

Due to its global perspective, the panchronic method enables us to embrace all synchronically incompatible or highly heterogeneous functions of a construction and explain them as a homogenous manifestation of a given diachronic path. Put differently, the gram which from the synchronic perspective is an amalgam of random functions that cannot be reduced to one clear and unique aspectual, temporal, taxis, or modal value, may be understood as a prototypical homogeneous diachrony (a path) and thus, as a realization of a single linguistic input.

However, the concept of panchrony presented in this paper is not limited to the “panchronic perspective” as proposed by Heine, Claudi & Hünnemeyer (1991b:248–259). It is “an entire methodology” which does not equal a deduction of the diachrony from the synchrony—it rather explains the synchrony in diachronic terms. The main properties of the explanation for synchronically perceived and employed objects. Neither the term “panchrony” is new—it has been used in linguistics for last hundred years but with a different meaning. For instance, de Saussure (1916:134–135) and Hjelmslev (1928) employed it to refer to linguistic rules which are unconstrained by time. Finally, the notion and idea of panchrony itself as a computation of diachrony and synchrony was first formulated by Heine, Claudi & Hünnemeyer (1991b:248–259).

Certainly, such a view does not explain conditions that determine different uses of given grammatical constructions. However, it does explain why the construction displays various and sometimes highly diverse, almost opposite, meanings.

The deduction of the diachrony from the synchrony corresponds only to one part of our panchronic method, viz. to the synchronic panchrony.

In light of this fact we employ the term panchrony: it is a combination of diachrony and synchrony but not a reduction or deduction of the former to the latter. In actuality, in order to avoid confusion with the panchrony understood as a deduction of the diachrony from the synchrony; another label would be more suitable, for instance “holochrony.” However, since the author has been employing the term “panchrony” in this broad sense (as presented in this article) in various previously published papers, we will maintain this nomenclature.
panchronic method may be summarized as follows: first, it is aimed at analyzing entities, traditionally understood in the inert static manner, providing their synchronically valid definition in terms of dynamic paths (its chief purpose is thus not to explain diachronic and/or grammaticalization related processes but to improve the synchronic description of languages); second, it presents the grammar as a constant manifestation and realization of cognitive processes and foundations; and third, it consists of three necessary steps (empirical data collection, panchronic hypothesis and verification) which require three different sub-types of panchronic analysis (synchronic panchrony, diachronic panchrony and comparative panchrony).  

In order to formulate a panchronic definition of a verbal formation, one must begin with documenting all synchronically displayed meanings ($m_a, m_b, m_c, \ldots m_z$) pointing out their aspectual, taxis, temporal, modal, textual and pragmatic readings and implications. As stated above, a gram which from the synchronic perspective is a disordered and heterogeneous mixture of supposedly random and unrelated functions can be viewed as a prototypical homogeneous diachronic trajectory and thus, as a manifestation of a single linguistic input. This signifies that the synchronically based taxonomy of uses of a gram may be ordered into a linear representation which matches one of the universal paths. Consequently, the synchronic state of the language is pictured as a regular diachronic progression: the previously documented values $m_a, m_b, m_c, \ldots m_z$ are systematized into an ordered series $m_1, m_2, m_3, \ldots m_n$ which matches a prototypical trajectory as posited by the path and grammaticalization theories. In that way, values of the gram—as incongruent as they were—become a consistent and homogenous phenomenon, a regular functional trajectory. Since the working proposal, i.e., the theorized paths, has been determined interpreting synchronic data, this part of the panchronic analysis is labeled “synchronic panchrony” (SP).  

However, the synchronic evidence is not always conclusive. For instance, several orderings may be possible or recorded uses are too scarce to enable us to identify the gram.

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28 It should be observed that even though our notion of panchrony approximates that of dynamization of typology (it is certainly based upon it, cf. footnote 30 below), it does not equal it. The dynamization of typology mainly corresponds to the diachronic interpretation of synchronic universals (Croft 2003:235 and Greenberg 1978:75) while the panchrony interprets concrete synchronic states as concrete diachronic (possibly universal) processes. Moreover, we refer to panchrony as a particular approach which is built on three steps of analysis.  

29 The indexation of the meanings $m$ as $m_a, m_b, m_c, \ldots m_n$ does not refer to any specific order but reflects a mere inventory of all available uses offered by the gram.
with a precise trajectory. Furthermore, in the situation where two or more paths have been detected, a following question arises: are the linear representations related or, on the contrary, are they independent? In the former case, we are dealing with a bifurcation of an originally single diachrony (the path reflects a single cognitive input), while in the latter, one witnesses a merger of two, or more, initially independent trajectories. Finally, synchronic data, due to various analogical and morphological processes, may sometimes be misleading. In consequence, it is necessary that the synchronically based proposal always be confronted with diachronic and comparative data; in other words, diachronic and comparative types of panchrony must constantly accompany their synchronic variant. The synchronically based panchronic hypothesis is insufficient.

Diachronic panchrony (DP) presupposes that diverse values of a gram displayed at different historical periods (i.e., during its evolution “in the same language”), represent a regular functional progress as posited by the grammaticalization and path theories. This means that values provided at earlier stages of the development—especially those included in the original lexical periphrasis from which the formation with its entire path has arisen—and uses recorded at historically later epochs should correspond to, respectively, less and more advanced stages of the trajectory determined by means of the panchronically synchronic method. Furthermore, in accordance with the principle of the cognitive plausibility (see below in section Path Theory), the formation must have originated in a semantically transparent input which motivates a given path and consequently all meanings displayed by the gram. Since the lexicon and the core grammar are indissoluble segments of the same evolutionary continuum, both the origin and the later development of a gram must be consistent with a previously proposed trajectory.

Likewise, applying the comparative panchrony (CP), meanings provided by genetically related constructions (i.e., in languages belonging to the same family) shall be understood as reflecting consecutive stages on the same evolutionary functional track. Thus, it is obligatory that all functions displayed by genetically related grams in cognate languages be reducible to the same, previously detected, path and, in particular, to the identical input expression; more specifically, the values of the homologue constructions should be consistent with those included in the trajectory established on the panchronically synchronic ground. This assumption does not however mean that cognate formations must be functionally identical. It states that a gram \( g_h \) from a language \( h \), as well as its homologues \( g_1 \ldots g_n \) in other languages \( h_1 \ldots h_n \) from the family \( j \) should be panchronically compatible: they are expected to correspond to manifestations of the same path(s) and to derive from a common cognitively plausible input \( i \) determined previously on the diachronic ground.
If and only if the diachronic and comparative panchronic methods corroborate the thesis deduced from the synchronic panchronic approach, and thus if all of three panchronic types match and point out to the same path-diachrony, one may affirm that the gram is a manifestation of a given functional trajectory. Such a type of verification might be called “strong panchronic definition” given the fact that it is supported by all the sub-categories of panchrony. In that manner we could differentiate this method from the panchrony understood as inferring diachrony from synchrony which is not the case in the present article. The entire argumentation and reasoning may be formalized in the following way:

\[(\text{Def.1}) \quad \text{SP}(g) = \text{DP}(g) = \text{CP}(g) \Rightarrow g = p_a\]

where $g$ is a gram; SP, DP and CP are respectively synchronic, diachronic and comparative types of panchrony; and $p_a$ is a given path belonging to the $P$ set of (possibly universal) paths.

As a result of the use of the panchronic method, we obtain a new synchronically valid classification of a gram in terms of dynamic processes: a gram $g$ is a certain path $p_a$ or a sum of path $p_a$ and $p_b\ldots p_x$ in a determined phase of advancement.\(^{30}\)

\(^{30}\) The panchronic method is partially based upon the view presented by Croft (2003:272) who analyzes the possibility of deducing the diachrony from the synchrony. He observes that when a language does not offer diachronic data (i.e., there are no evidences available that could testify its evolution), the historical development must be derived from synchronic stages. In those cases, “one can use the historical-comparative method, informed by typological universals of language, to reconstruct processes of language change” (Croft 2003:272). This methodology has its origin in the universality of the functional paths which presupposes that the evolution of formations that from the synchronic perspective seem to be functionally similar, should also be equally similar, so that “[o]ne can compare language states [...] and [...] rank them in a sequence representing gradual linguistic change.” Such an approach, labeled by Croft “dynamization of the typology,” therefore states that different languages may reflect different stages of one typologically identical process. Likewise, the method may be employed in the analysis of a determined synchronic stage of a single language—in that way the linguist “uses the language-internal variation and knowledge of directionality of change [...] in order to extrapolate historical language processes” (Croft 2003:272).

Finally, it should be observed that a similar study—labeled grammaticalization approach—has been employed to describe Semitic languages by Cook (2002 and 2006) (and also by Andersen 2000). There are however important differences between Cook’s model and the author’s. First, Cook uses the universal paths as an explanation for diachronic process but not as an explanation of synchronic data; in other words, the grammaticalization rules are primarily employed to explain the evolution of Hebrew forms. Even though he provides a diachronic typological explanation for the range of uses of the BH
**Path Theory**

The theory of diachronic paths—the very core of the panchronic framework—is based upon the grammaticalization approach. It determines a universal functional development of various verbal grams from their birth as peripheral lexical and most frequently analytical expressions, through the transformation into central synthetic verbal categories,\(^{31}\) and finally to their inevitable decline, loss and/or recycling (Dahl 2000:11–15, Hopper & Traugott 2003:99–129). Thus, the path model establishes that lexical and semantically transparent periphrases may progressively be grammaticalized and become incorporated into the verbal paradigm, and then, reaching at one point their grammatical apogee, they can acquire a status of central tenses, aspects or moods. After that, the construction undergoes further evolution referred to as “post-apogee” whereby its functional load is gradually deteriorated: the set of its uses and functions becomes steadily more limited and, in particular, the formation loses its original prototypical meaning. Finally, the increasing corrosion of the gram leads to its entire loss or to a recycling for new grammatical purposes (Hopper & Traugott 2003:154–159, 172–174). This functional growth of lexical expressions and their gradual transformation into items with a clearly marked grammatical load and function like taxis, aspects, tenses and moods, are rigorously predetermined and

verb forms, he still understands BH grams as static products of determined diachronic trajectories. He does not explain meanings of the BH verbal constructions as equally valid synchronic manifestation of consecutive diachronic stages nor does he define synchronic grams as dynamic processes “paths”—he extrapolates one “dominant” static value which can be contextually modified. Second (as a result of the previously mentioned static interpretation), he reduces formations to one label, one function which corresponds to one stage on a given grammaticalization track, i.e. following the traditional approach in order to classify a verbal formation, he looks for a single static definition such as a tense or an aspect. For instance, he identifies the yiqtol with the imperfective aspect as opposed to the perfective aspect qatal (Cook 2002:269). However various studies (e.g. Dahl 2000) in recent times have shown that the semantic potential of a gram at a given point in time is typically an amalgam of the meanings up to that particular moment in time (cf. the concept of retention in Bybee, Perkins & Pagliuca 1994:15–19, 149, 255), e.g. the French passé composé provides values that correspond to initial (possessive resultative proper, resultative perfect and future perfect: *Dans 5 minutes je l’ai terminé* “I will have it done [lit. I have done] in 5 minutes”), intermediate (experiential and indefinite perfect, as well as perfective past) and advanced stages of the anterior path (remote and narrative past: *En 52 av JC César a gagné la bataille d’Alésia* “In 52 BCE Caesar won [lit. has won] the battle of Alésia”). And third, Cook does not posit cognitively plausible and semantically transparent inputs for paths which BH formations followed.

\(^{31}\) It should be observed that a given gram can become a core category without turning into a synthetic formation.
unidirectional following strictly established universal laws. In general terms, scholars assume at least four major trajectories that lead to the creation of aspectual, temporal and modal categories (Dahl 2000:14–15 and Bybee, Perkins & Pagliuca 1994:105, 174–175, 240–241, 279–280): 1) toward the perfective and past; 2) toward the imperfective and present; 3) toward modal expressions; and 4) toward the future.\textsuperscript{32} For the sake of the present article two of them are relevant,\textsuperscript{33} namely the imperfective path and the modal path, more specifically the ability type. Additionally, the future path will be mentioned since it is universally related to the modal development.\textsuperscript{34}

It is widely accepted that imperfective grams originate in lexical periphrases that display either a frequentative or a continuative meaning (Bybee, Perkins & Pagliuca 1994:125–175). At the next evolutional stage, the frequentative leads into the habitual, and the continuative generates the progressive. After that, both trajectories may converge into a broad imperfective aspect. It should be noted that the frequentative-habitual as well as the continuative-progressive sub-paths may begin in iterative expressions which frequently originate in reduplicative patterns.\textsuperscript{35} Consequently, Bybee, Perkins &
Pagliuca (1994:170–172) relate the two sub-paths asserting that they originate in iterative value: a) iterative > continuative > progressive and b) iterative > frequentative > habitual. Subsequently, the imperfective develops into a present simple tense with no imperfective aspectual value at all—this means that present tenses come from old imperfective constructions which have lost their prototypical values such as (actualization, progressivity, iterativity, habituality and durativity). At a later phase, when even the present temporal domain of the old imperfective has been invaded by younger imperfective grams, the formation can be additionally limited to non-present and non-indicative meanings, most frequently to the future or some subjunctive and modal values (Haspelmath 1998:41–45). Thus, old presents evolve into the future tense because of the reduction of their original semantic field that previously included all kinds of non-past events (including the future ones). When new presents appear, the prototypical use of the old gram as a present is abandoned and the construction preserves only the functions that correspond to the non-invaded domain, i.e., the future and the subjunctive. The imperfective paths may be exemplified in the following figure

**Figure 1: Imperfective Path**

As far as the modal development is concerned all modal paths share the following properties (to this shared development we will refer as “modal path,” cf. also the general cline of modality in Fischer 2007:181–182): The verbal core modality originates in modal expressions that are agent oriented, and that connote the ideas of physical and mental ability, obligation, desire and intention (Bybee, Perkins & Pagliuca 1994: 206–241).

Cases the progressive does not originate in iterative reduplicative expressions. It rather derives from locative formations which express the very actuality and uninterruptness of an event (Bertinetto, Ebert & de Groot 2000:540). For instance, it may originate in postural verbal constructions (e.g. verbs with the meaning of sitting or similar), in prepositional formations (be at/in/with doing something), **hold** constructions (built on verbs with the possessive meaning) and **busy** constructions, as for example in Dutch **hij is bezig te** (cf. Ebert 2000:607).

Of course, this does not mean that the two tracks must derive from the same input expression in a particular language.

The conversion of the aspectual gram into a tense frequently occurs due to the development of new explicit imperfective formations. This phenomenon is labeled “layering” in the literature (Hopper & Traugott 2003:125). The old grams, whose domain is invaded or, metaphorically speaking, eaten from inside by new more transparent expressions, are referred to as “doughnut grams” (Dahl 2000:10–12).
Subsequently, the modal value spreads to speaker-hearer oriented (e.g., imperative, prohibitive, or optative) and epistemic uses. Furthermore, once the construction acquires an intentional nuance, it can also develop into a modally colored future tense. At the end, modal expressions may be generalized in subordinate clauses where equaling to a subjunctive, they will survive for a longer time even after they have disappeared in principal and in independent phrases. At the beginning, such subordinate modal grams are harmonic with their introductory predicates and tend to be employed with verbs such as want, desire or order. However, later, they spread to environments with non-harmonic introductory predicates which do not necessitate a modal reading (Bybee, Perkins & Pagliuca 1994:217–218).

There are at least four main properly modal trajectories that derive from four different lexical inputs: ability path, obligation path, desiderative path and intentional path (Bybee, Perkins & Pagliuca 1994:240). Among them only one is relevant to our study. This trajectory has its roots in semantically transparent expressions of mental or physical ability. Consistently with the above described general modal progress, the value of ability gradually develops into the meaning of root possibility, and later into the meaning of epistemic possibility (and, related to it, expressions of potentiality). Original ability locutions, once the root possibility value is acquired, can also expand into expressions of permission and/or prohibition. Furthermore, the formation may additionally engender an intentional-desiderative reading. Epistemic and/or intentional functions subsequently motivate the use of the gram as a modally marked future, triggering additionally a gradually more extensive application of the formation in conditional protases, in concessive contexts, and in other subjunctive modal situations. Finally, jussive-optative connotation (arisen from permission-prohibition values) together with the future value may give rise to imperative uses. Thus, in general terms, we may conclude that the modal ability path corresponds to a development in three—closely related—semantic spheres: in the epistemic-probability-subjunctive domain, in the intentional-future domain, and in the permission-jussive-imperative domain. The modal ability path may be summarized in the following way:

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38 This means that the modal path is closely related to the future trajectory.
Besides resulting from the properly modal paths, modal subjunctive grams may, as stated above, derive from old indicative constructions that have been reduced to subordinated uses (Bybee, Perkins & Pagliuca 1994:230–236). This development is in fact a part of a wider process—labeled here “modalization by contamination” or “contaminated modality”—whereby indicative expressions because of their employment in an explicitly (semantically and syntactically) modal context are gradually identified with this environment and finally assimilate its meaning as their own (this concept corresponds to “conventionalization of implicature” in Bybee, Perkins & Pagliuca 1994:25–26, and 296 as well as to “context-induced reinterpretation” as proposed by Heine, Claudi & Hünnefeld 1991b:71–72, but is narrowed to the rise of modal formations).

Also, the majority of future tenses originate in modal expressions (Bybee, Perkins & Pagliuca 1994:265–266). All

39 The imperative value is not included in the ability path as posited by Bybee, Perkins & Pagliuca (1994: 191–194, 240 and 266). However, due to the fact that modal and simple futures (of distinct origins) are frequently employed with imperative force (210–212, 273–274), as well as to the fact that the meanings of permission or prohibition and jussive (see below in footnote 40) functions are closely related to the imperative force, the imperative value should be incorporated in the evolutionary scenario of ability constructions.

Bybee, Perkins & Pagliuca (1994) do not explicitly establish a separate jussive-optative stage on the ability path. They only posit a development from root possibility into permission (cf. English You may go now) and its negative variant, prohibition (English No, you may not do it), cf. Bybee, Perkins & Pagliuca (1994:191–194). On the other hand, they observe that permission and prohibition are related to the optative, cohortative and imperative modal expressions, forming a group of speaker-oriented modalities (Bybee, Perkins & Pagliuca 1994:179). As already mentioned, such speaker oriented modalities regularly develop from agent oriented modalities (such as ability). It should also be noted that prototypical ability modalities frequently acquire optative and jussive values. For instance, the English expression with the verb may is employed in optative sentences such as May you live long! May God help you! (cf. also May this be his epitaph in Pence & Emery 1963:161, May we all meet again in Bybee, Perkins & Pagliuca 1994:321 and May the gods destroy him in Palmer 2001:109). Therefore, it seems reasonable to include the optative (jussive and desiderative) meaning in the evolutionary scenario of ability expressions.
modally based futures are divided into four groups that correspond to four semantic ages of the futurity and that reflect previously introduced types of the modal expressions (agent oriented modality, root modality, epistemic-future modality and syntactical subjunctive modality). The initial phase is exemplified by futures which express agent oriented meanings of ability, obligation, desire and intension. The second type mirrors the next stage and is illustrated by futures with the meaning of root possibility. The third group is represented by prominently temporal futures with some shades of the epistemic value (future proper tense), and finally the last set includes futures that are limited to subordinate clauses. From this concise theoretical introduction one may deduce that the central function of the future gram is the intention or the prediction, and thus, that the future tense is less exclusively a temporal category, but more “resembling agent-oriented and epistemic modality, with important temporal implications” (Bybee, Perkins and Pagliuca 1994:280). This means that the modal color frequently accompanies future grams during their entire grammatical life, even at stages where it has been grammaticalized as a central expression of futurity.

Finally, both the panchronic approach and the path theory presuppose that all grammatical constructions (taxis, aspect, tense, mood, or textual form) have their roots in lexical semantically transparent expressions which moreover must be cognitively justified. In other words, the input periphrases are to be functionally consistent with the meanings offered by the grams at any stage of the development and, in particular, they should motivate them—any value of the formation should be easily derivable from the initial expression. This assumption makes reference to the universal principle of the cognitive basis of natural languages whereby the grammar is the literal or metaphorical conceptualization of personal experience to be communicated (Croft & Cruse 2004:1–3, cf. also Heine & Kuteva 2007:58 and 348).

To illustrate this phenomenon, let us analyze the synthetic future tense in Spanish, e.g. cantaré “I will sing.” This future gram is nowadays most frequently employed to denote future events (7.a and 7.b). However, in some highly limited instances it does not provide the temporal implications but rather a modal reading of epistemic possibility (7.c). As far as its morphological characteristics are concerned, the gram is derived by adding determined endings (for the 1st and 2nd person they surface as -é and -ás) to the infinitive form. Such marking is certainly not a cognitively obvious way to express the futurity—there is nothing in the morpheme -é or -ás that universally imposes a future reading. However, the cognitive

\[40\] See, for instance, the development of prepositions from body parts (Rubin 2005:46–48 and Stolz & Stolz 2001:1544)
justification of the Romance synthetic future may be recovered if we analyze its Latin source, i.e., the periphrasis composed by the infinitive and the verb *habeō* “have” which conveyed the modal meaning of obligation “I have to do something” (7.d and 7.e). During the history of the Spanish language, the original periphrasis was grammaticalized as a synthetic gram and the semantically transparent inflected verb turned into a suffixed morpheme, *é* (< *habeō*) in the 1st sg. and *ás* (< *habēs*) in the 2nd sg. (Hopper & Traugott 2003:52–55). The Latin input expression is cognitively plausible because it clearly motivates all temporal (future) and modal (epistemic possibility) values of the Modern Spanish gram—these values correspond to highly advanced stages of the obligation modal trajectory which directly and universally derives from the Latin construction. Put differently, the periphrasis constitutes a cognitively well based origin of the future path and thus of the creation of the future gram (cf. future paths in Bybee, Perkins & Pagliuca 1994:258–264).

(7)a. Mañana *cantaré*
   I will sing tomorrow

b. Mañana *sabrás* la respuesta
   Tomorrow, you will know the answer

c. Tu *sabrás*
   You may know / You probably know

d. Canté *habeō*
   I have to sing

e. Sapēre *habēs*
   You have to know

Let us now apply the panchronic methodology and the paths’ theory to the very object of our paper—the quest for a functionally homogenous and cognitively plausible description of the BH *yiqtol*.

### 3.3. **Panchronic Interpretation of the Yiqtol**

Since, as indicated in section 3.1, the panchronic methodology consists of three main types (steps), the evidence provided by all of them must be coherent. This means that the identification of the *yiqtol* with a given particular functional path based on the analysis of its synchronically displayed meanings (which corresponds to the synchronic panchrony) should be consistent with the conclusion reached by employing the diachronic and

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41 The modal obligation path depicts how lexical expressions of obligation develop into properly modal categories and subsequently into future tenses (Bybee, Perkins & Pagliuca 1994:240, 259–264).
comparative panchrony. In the first case, values provided at earlier stages of the development, especially those included in the original lexical input, as well as the uses recorded at historically later époques should correspond to respectively less and more advanced stages of the trajectory determined by means of the panchronically synchronic method. In the later case, the functions displayed by genetically related grams in other Semitic languages should be reducible to the same, previously detected, functional path. Consequently, in the next paragraphs, we will analyze the BH yiqtol making reference to the three panchronic types: in section 3.2.1 the synchronic data, already introduced in 2.2, will be interpreted as a manifestation of a given universal trajectory. After that, the “working” proposal (derived from the synchronic evidence) will be contrasted with diachronic (3.2.2) and comparative (3.2.3) data.

3.3.1. Synchronic Panchrony

In this section employing the panchronic methodology we shall identify the different values of the yiqtol, displayed synchronically at the biblical period, with stages on a given universal functional trajectory. First we shall search for an explanation of the indicative yiqtol, grouped together with its textual variant, and then the meanings of the modal yiqtol will be analyzed.

Indicative yiqtol

The values of the indicative yiqtol presented in section 2.2 and summarized in Table 1 can be easily unified and ordered into a linear representation if they are understood as manifestations of subsequent stages of the imperfective path. Namely, the continuative-progressive, frequentative-habitual, durative and imperfective values of the yiqtol wholly mirror the imperfective trajectory as posited in section 3.1. With the present time reference, the development has reached the apogee and the gram can function as a simple temporarily marked present tense. This means that in the present time context, the yiqtol indicates a broad range of present events, either actual ones or general ones; it provides all meanings which are available according to the imperfective track. This profound correspondence between the values of the yiqtol and successive phases of the imperfective path—both in respect to the continuative and frequentative sub-paths—may be illustrated by the following figure.

42 The author is aware of the fact that the Biblical text is not historically homogenous but includes historically different and variously datable parts. However, we will treat the BH evidence as a synchronic whole.

43 In this figure the meanings have been arranged in such a manner that they would graphically correspond to the two sub-paths.
The loss of the aspectual explicitness is even more evident with the future time reference where the gram functions as a general future tense. Yet again, the construction can express any future events, either imperfective or aspectually neutral ones, admitting even punctual and perfective readings. This means that in the non-past environment, the values of the gram reflect the entire scale of the imperfective trajectory—the gram offers uses that correspond to initial, intermediate and highly advanced stages of the development.

On the other hand, the aspectual character, prototypical for imperfective grams, is more apparent and better marked in the past temporal sphere. As explained in section 2.2, the past yiqtol shows an unquestionable imperfective (frequentative-habitual and durative) nature. Less frequent are its continuative and progressive uses, and only exceptionally it can express neutral past simple events. These two peripheral types of the gram (i.e., less common functions) reflect either the original stages of the continuative sub-path or the highly advanced phase of the imperfective trajectory where an imperfective category develops into a temporal gram (tense). Thus, we may

of the imperfective trajectory, and to their subsequent merger as posited in section 3.1 and illustrated in figure 1. The vertical arrows represent a diachronic progression of grams. The horizontal arrows “locate” meanings of the yiqtol on consecutive stages of the imperfective path. Thus, the continuative and progressive values “precede” the general imperfective meaning as well as the simple present function.

The simple past value of the yiqtol may thus be understood as a manifestation of a regular progress whereby an imperfective gram gradually becomes aspectually unmarked. However, as maintained by some scholars, the simple past yiqtol (especially when it is found with the particle JsonIgnore) may in fact derived from another construction, namely from the PS *yaqtul which is preserved in BH wayyiqtol (cf. Waltke & O’Connor 1990:513–154 and 546 and Cook 2002:258–262). Since, there is no agreement in respect to the formal origin of the yiqtol in these concrete examples (i.e., whether the simple past yiqtol comes from the long *yaqtulo or the short *yaqtul, cf. Cook 2002:259) we will treat the simple past yiqtol as morphologically equivalent to the yiqtol employed in the rest of cases (of course, there is a common
state that with the past time reference, contrary to the situation in the present-future frame, the *yiqtol* did not reach its functional apogee but clearly preserves its imperfective properties. However, even though explicitly aspectual, the gram did experience a reduction of its functional domain and only infrequently expresses progressive circumstantial past activities. The equivalence between the values of the past *yiqtol* and subsequent stages of the imperfective evolution can be summarized in the following way:

**Figure 4: Panchronic Interpretation of the *yiqtol* with the Past Time Reference**

It should be noted that the focusing-actual and progressive meanings are closely related to the circumstantial function and simultaneous taxis value provided by various lexical non-verbal sources of the imperfective constructions, especially by adjectives or participles. As far as the *yiqtol* is concerned, these two uses are already weakened. In the present-future context, even though the gram can express simultaneous and circumstantial activities, it functions as a temporally broad and aspectually neutral present-future tense. Thus, it does not convey the idea of circumstances and simultaneity in an explicit way—it is the participle which does so. Furthermore, in the past time environment, the circumstantial and simultaneous meanings may only be found infrequently and the gram, with a greater regularity, denotes frequentative-habitual or general imperfective activities.\(^46\)

The above described difference in properties between the non-past *yiqtol* (highly advanced) and its past homologue agreement that the long *yiqtol* in general derives from the CS *yaqtulu*).\(^45\) The labels given in parentheses inside the squares with the colored background refer to peripheral functions.\(^46\) The circumstantial and progressive nuances are explicitly conveyed by the particle *qotel*. This means that the *qotel* is an example of a “doughnut gram,” i.e., a form which invades a part of the semantic domain previously expressed by an older gram (metaphorically speaking, the old formation is eaten from inside by new more transparent expressions) (Dahl 2000:12). The phenomenon whereby new forms substitute old grams developing in accordance with principles of the same (or a highly similar) path is labeled “layering” (Hopper & Traugott 2003:125).
(functionally more conservative) is typologically a common phenomenon that frequently affects imperfective grams. It has its explanation in the previous existence of grams which correspond to profoundly developed resultative diachronies.\textsuperscript{47} In respect to the Biblical Hebrew language, the verbal system includes an advanced resultative diachrony, namely, the wayyiqtol, and thus, the interaction with this construction is responsible for the different treatment of the yiqtol in the present-future and past time frames. Since the wayyiqtol in most instances expressed values of the perfect or past and was gradually generalized as an explicit anterior-past formation, the yiqtol with the past temporal reference “had to” preserve its aspctual value in order to differentiate from the construction in the context of which it had been developing. Put differently, the past oriented wayyiqtol constrained the yiqtol from a further advance on the imperfective trajectory scale. In the non-past, however, since the wayyiqtol appeared only residually in the present-future sphere, and because there was no other paradigmatic central present-future category, the yiqtol could freely develop, reaching the apogee phases of the path. This behavior of the yiqtol is a firm sign that supports the identification of the gram with the imperfective diachrony.\textsuperscript{48}

\textbf{Text Yiqtol}

A similar dichotomy to that presented above (i.e., between the past and non-past yiqtol) may be observed as far as textual properties are concerned. In particular, the yiqtol of the discourse—pertinent and relevant to the cognitive sphere of the enunciator—can introduce events of the foreground (prospective ones or those belonging to the grade zero) as well as the background information. On the contrary, in the narration—that constitutes a cognitively remote environment—the gram exclusively provides the function of background. Yet again, such a functional split is characteristic for constructions defined as imperfective diachronies. As we have already mentioned, various imperfective grams derive from circumstantial non-verbal expressions. Since these constructions reflect original participles and gerunds (or adjectives) employed in the non-attributive function, they can uniquely comment on principal events introducing additional and background pieces of information (Schneider 1982) (see examples 8.a and 8.b). At a subsequent evolutionary stage, the participles or gerunds are grammaticalized as continuative-progressive periphrases and, especially in the non-past

\textsuperscript{47} I.e., a formation that corresponds to advanced stages of the resultative path.

\textsuperscript{48} Our assumption whereby the yiqtol is an imperfective diachrony agrees with the conclusion reached by Cook (2002:233and 241) in which the yiqtol developed following the imperfective path.
discourse, may denote principal events (8.e). At the same historical moment, however, the progressive formation found in the narrative text does not express actions of the foreground—principal backbone events of the story—but uniquely provides the background information; this function is a direct heritage of their circumstantial origin (8.d and 8.e).

(8)a. He heard his sons **arguing** (Werriner & Griffith 1965:42)

b. **Being** an Army officer, Karen’s father was frequently transferred… (Werriner & Griffith 1965:44)

c. *(talking on the phone)* Right now I **am cooking**. My husband **is watching** TV and the kinds **are playing** in the garden. Listen! The postman **is coming**! He **is carrying** the packet! Oh no! He **is going** to the neighbor.

d. And it came to pass, when Ben-hadad heard this message, as he **was drinking**, he and the kings in the pavilions, that he said unto his servants… (1 Kgs 20:12)

e. And when the sun **was going** down, a deep sleep fell upon Abram (Gen 15:12)

The conversion of the old circumstantial continuative-progressive into a tense of the foreground (first plane) in the discourse, both in the present-future and past time sphere, may be observed in Modern Icelandic (9.a). Nevertheless, in the narration, the Icelandic gram still continues being employed exclusively as a setting the scene or commenting formation (9.b).

(9)a. Hann **var að koma** í gær og **var að segja** að…

He came (lit. was coming) yesterday and said (lit. was saying)…

b. Og Guð sendi engil til Jerúsalem til þess að **eyða** hana, og er hann **var að eyða** hana, leit Drottinn til og hann íðraði hins illa, og sagði við engilinn, er eyðdi fólkinu…

And God sent an angel to Jerusalem to destroy it; but when he was about to destroy it, the LORD took note and relented concerning the calamity; he said to the destroying angel… (1 Chr 21:15) (Compare the Spanish translation RV 1960 which also employs the progressive gram *estaba destruyendo* “was destroying.”)

The dissimilar behavior of the discursive and narrative *yiqtol* is entirely compatible with a similar functional division of the
gram as far as the temporal spheres are concerned (cf. the previously mentioned dichotomy between the past the non-past yiqtol), and strongly supports its interpretation as an imperfective diachrony. Since in the past time frame and in the narrative (cognitively remote spheres), the progress of imperfective expressions is commonly less profound, the gram tends to preserve its original aspeuctual (imperfective) and textual (circumstantial background) character. In contrast, with the non-past temporal reference and in the discourse (cognitively close sphere), imperfective formations progress more rapidly—hence, the construction loses its aspectual load and is converted into a simple tense; it furthermore denotes events of the foreground and thus is able to introduce actions conceived as central and principal.

Modal Yiqtol

In a similar way as we have proceeded with the indicative yiqtol, where different values of the gram have been identified with consecutive stages of a given functional trajectory, it is possible to unify all modal uses of the formation and explain them as manifestations of a modal path. As presented in section 2.2, the yiqtol provides certain values that correspond to more agentive types of modality, such as capability and intention-desire (possibly also deliberation if we understand it as an obligation directed to the 1st person). On the other hand, in permissive, prohibitive, and direct or indirect imperative functions, the semantic potential of the construction reflects the speaker-hearer modality. The gram also denotes the root and epistemic possibility as well as the concept of probability. Furthermore, it can function as a modal future combining temporal and modal implications. In temporal and purpose subordinated clauses, the yiqtol—introduced by determined particles and conjunctions—unites the modal value of the epistemic possibility with the prospective meaning and corresponds to the category referred to in Indo-European languages as subjunctive, a syntactic modality. Finally, in conditional protases, the modal character of the gram is clearly motivated by the hypothetical lexical-syntactical environment in which it appears, and yet again the formation combines the concept of potentiality with that of futurity. All of these uses nearly perfectly match successive phases of the general modal development (i.e., shared by all the concrete modal tracks): from the agent oriented modality to the speaker-hearer modality; from the root possibility to the epistemic possibility and potentiality; from the explicit modality to the modally colored future; and from the independent modality to the syntactically based mood. This consonance between the values

49 It is interesting to note that the value of root possibility is particular to the ability path.
of the *yiqtol* and stages of the universal modal trajectory may be illustrated by the following figure:

**Figure 5: Panchronic Interpretation of the Modal yiqtol.**

It should be observed that the modal *yiqtol* may be found in a clearly modal context (e.g., in conditional phrases), as well as in the environment where the idea of modality is conveyed uniquely by the gram itself. Put differently, the gram can provide modal meanings without depending on other explicitly modal lexemes or on a syntactic situation. For instance, the formation—without being introduced or accompanied by overt modal particles—frequently appears in principal clauses providing modal readings (cf. examples 3.a, 3.c, 3.f, and 3.g-k above). Furthermore, it is highly important that the construction offers values that reflect initial stages of the modal path (agent modality and root possibility) and thus is not limited to functions that correspond to advanced and terminative phases of the trajectory (epistemic possibility and syntactic modality). All of this signifies that the gram must be defined as a properly modal diachrony (ability, obligation, desiderative, or intentional path) and not as an outcome of the modal trajectory of contamination. The *yiqtol* is a modal category due to its proper “virtues” and not because of the contextual contamination imposed by other external elements, and thus cannot be understood as an old indicative imperfective-present reduced to modal uses.

So far, applying the panchronic synchronic methodology, we have showed that all uses of the *yiqtol* may be grouped and explained as two diachronic movements: the imperfective, and the modal path.\(^5^0\) In that way, diverse values of the gram have

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\(^5^0\) It should be noted that Cook was unsuccessful in explaining non-indicative values of the *yiqtol*, asserting that “[t]here is no certain explanation for […] modal functions nor is it certain that a single explanation can account for all of modal meanings (2002:247–248). Thus, he failed to relate modal values of the *yiqtol* to the imperfective
been unified and the formation received a more consistent linear interpretation. Instead of a set of unrelated and in some cases contradictory uses, the gram has been explained as a manifestation of two universal functional trajectories. However, three questions arise: First, is it possible to unify the two diachronic tracks? Evolutionary linguistics claims that if two different functional scenarios (one of them leads toward the formation of a tense while the other toward the creation of a grammatical mood) are detected in the same morphology (in the same gram), the two evolutions either originated in a common identical lexical input or are an example of a superficial morphological merger of two initially (both functionally and structurally) independent lexical inputs. Second, one must determine to which particular modal trajectory this modal yiqtol corresponds, i.e. does the gram reflect the ability, the obligation, the desiderative, or the intentional path? On the ground of the synchronic panchrony, it is difficult to conclude which modal path the gram followed. This is due to the fact that modal paths at advanced stages of the evolution converge and that some modal developments are interrelated or may occur in more than one trajectory. The sole root possibility value—even though prototypical for the ability path—does not seem to be sufficient evidence that the yiqtol reflects this modal evolutionary scenario. And finally third, how is the shape of the formation related to its meaning? From the synchronic perspective, there is nothing in the yiqtol morphology which could universally imply imperfective or modal type values; neither the consonantal structure nor the vocalic elements. Put differently, analyzing synchronically displayed properties of the long prefix conjugation, we are unable to identify its cognitively plausible foundation.

The three questions are evidently related and force on a quest for the very origin of the yiqtol—in particular, for its lexical semantically transparent source that would also cognitively justify all the values detected in the Biblical language. As well as those that are provided in the post-biblical time, i.e., in Rabbinic or Modern Hebrew and in other Semitic languages.

3.3.2. Diachronic panchrony

In the present paragraph, applying the methodology of diachronic panchrony, we will analyze the functional properties of the homologues of the BH yiqtol at earlier (cf. section Origins below) and later historical periods (cf. section Later Development below). In particular, we will search for the path, i.e. to the posited evolutionary scenario in accordance with which the gram evolved.
source of the *yiqtol which could unify the two kinds of the gram previously identified with the imperfective and modal diachronies; this input expression will subsequently enable us to determine along which modal path the modal *yiqtol has “travelled.” Furthermore, we will show that the lexical input from which the gram emerged is cognitively plausible and motivates the meaning displayed by the formation in Biblical Hebrew. Finally, it will be demonstrated that the posterior evolution of the gram in post-Biblical époques is plainly consistent with our definition of the BH *yiqtol.

Origins
According to the common opinion, the BH *yiqtol derives itself from the Central Semitic (CS) *yaqtulu, preserved as such in Arabic, in Ugaritic, or in the dialect of Amarna (Waltke & O’Connor 1990:496–499). In the Biblical language, in numerous instances, the *yaqtulu merged formally with the *yaqtol—the ancestor of the BH jussive. However, in some cases, the two categories are still differentiated: this occurs, for example, in Qal of the III-he verbs, of the II-weak and reduplicated roots, as well as in the Hiphil stem. As far as the CS *yaqtulu is concerned, its origin is more problematic: according to Kuryłowicz (1973:60), Andersen (2000:24–25), Kienast (2001:338–339) and Lipiński (2001:342) the gram morphologically reflects the *yaqtol (corresponding to the Akkadian *iprus) accompanied by the subordination morpheme *u displayed as such in Old Akkadian (for a alternative view see for instance, Zaborski 2005:13–15)—this complex construction replaced the old *yagattal documented by the Akkadian *iparras and preserved in Ethiopic languages (Lambdin & Huehnergard 1998 and Lipiński 2001:342). This means that from a purely formal perspective, the BH *yiqtol (described in section 2.2 and 3.2.1) is a probable descendent of an expression composed by the *yaqtol (related to the Akkadian *iprus) and the subordinated suffix *u. This morphological origin of the BH formation can be illustrated by a situation witnessed in the oldest recorded Semitic language, Old Babylonian (OB).53

In Old Babylonian, the morpheme *u was employed in depending subordinate clauses, for instance, in relative (10.a),

52 This original source will be noted as *yaqtul + u. Its regular (from the functional viewpoint) successor from which both Akkadian and Central Semitic forms emerged will be referred to as *yaqtul-*u (this formation may be illustrated by the Old Babylonian relative expression *iprus-*u). Finally, the CS morphological (but as will be demonstrated not functional) descendant will be labeled *yaqtulu.

53 Of course, this does not mean that the BH form derives from the Akkadian one. The Old Babylonian examples are used to illustrate that a similar situation should have taken place in the early, unrecorded, history of Central Semitic languages (and thus of Hebrew as well).
temporal (10.b), locative (10.c) and causal ones (10.d). It must be emphasized that the formation was not properly modal but should be defined as a syntactically determined category, a relative or dependent “mood” (see “subordination marker” in Huehnergard 2005:183, “Relativ” in Kienast 2001:269 or “modus relativus” in Von Soden 1952:108). Furthermore, one should note that the construction did not appear in conditional clauses.

(10)a. ššarrāqam šeḥram ša ina eqšiîni nişbatu niduk
   We killed the young thief whom we had seized in our field (Huehnergard 2005:185)

b. mārum šū warki abūšu imūtu ingum
   That son brought suit after his father (had) died (Huehnergard 2005:284)

c. ašar illiku
   Den Ort an den (= wohin) er ging (Kienast 2001:269)

d. kīma ām tašāmu allakakkum
   Since you have bought grain, I will come to you (Huehnergard 2005:285)

The u morpheme could be found not only with the īpruṣ (< Proto-Semitic54 *yaqtul) but also with the īparus (< PS*yaqattal) and other verbal grams. According to diachronic linguistics, in the Central Semitic group (which includes Northwest languages and Arabic), the use of the u suffix with the successor of the *yaqtul was generalized and extended from depending to principal independent clauses. At the same time, the *yaqattal morphology disappeared and was substituted by this “new” *yaqtulu. In consequence, the *yaqtulu—and hence, the BH yiqtol—structurally derives from the agglutinative morphology *yaqtul-u born in the syntactically dependent context (cf. Figure 6). The phenomenon whereby grams originally found in the subordinate environment become independent and spread to principal clauses is not typologically infrequent but, on the contrary, constitutes a well documented evolutionary pattern (Bybee, Perkins & Pagliuca 1994:29655).

**Figure 6: Formal evolution of the BH yagqitol.**

54 For the label “Proto-Semitic” the abbreviation PS will be employed.
55 This development may be illustrated for instance by colloquial Spanish expressions such as Que lo tengas bien claro! “You should keep it well in mind” (lit. “That you have [present subjunctive] that well clear”) or Que no lo sé “I don’t know” (lit. “That I don’t know [simple present indicative]”) where the verb in the main clause includes the explicative particle que “that” retained from subordinated uses.
This logical and typologically plausible development becomes more complicated if one has to take into consideration the functional progression. The PS \( *\text{yaqtul} \) corresponds to a diachrony bifurcated into two distinct trajectories: the resultative path and the modal contaminated path (Andrason 2010a:343 and 2010b:176–179). This split can be detected both in Akkadian (\( \text{iprus} \) vs. \( \text{liprus} \) and \( \text{ayyiprus} \)) and in Arabic (\( \text{lam-yaqtul} \) vs. the jussive \( \text{yaqtil} \)). As far as Biblical Hebrew is concerned, the \( *\text{yaqtul} \) of the resultative path has been preserved in the shape of the \( \text{wayyiqtol} \) while the modal contaminated diachrony appears as the jussive, so called “short” \( \text{yiqtol} \). As mentioned above, according to the Semitic diachronic linguistics, the \( *\text{yaqtulu} \) is the successor of the preterital \( *\text{yaqtul} \) that corresponds to the Akkadian \( \text{iprus} \) and Arabic \( \text{lam-yaqtul} \). Consequently, one is facing a strenuous dilemma: how to explain the semantic transformation of a gram defined in terms of the resultative path into a formation that is an evident manifestation of the imperfective and proper (and not contaminated) modal trajectories (see section 3.2.1).

It should also be noted that, already in Old Babylonian, the values of the descendent of the PS \( *\text{yaqtul} \) reflect highly advanced stages of the resultative development during which the initially resultative expression turns into a past tense (Andrason 2010a:341:343). In consequence, it is extremely difficult to understand the \( *\text{yaqtulu} \) as a regular functional continuance of the \( *\text{yaqtul} \). It is improbable that the resultative, profoundly developed, diachrony \( *\text{yaqtul} \) changed into a gram matching initial and not-advanced phases of the imperfective and modal trajectories (see the circumstantial, progressive and iterative meanings in the case of the \( \text{yiqtol} \) of the imperfective path and agentive modality uses of the modal \( \text{yiqtol} \)). From the Path Theory’s viewpoint, there are no functional tracks which could convert an input with perfect-past values (pick stages of the resultative path) into a circumstantial expression, an imperfective aspect (in particular, its continuative-progressive sub-type), a present-future tense and an agentive modality. This means that we are facing a paradox: it seems quite likely that the BH \( \text{yiqtol} \) morphologically mirrors the \( *\text{yaqtul} \) of the resultative path enlarged by the subordination suffix \( *\text{u}; \) however, the functional evolution corresponding to this structural scenario is impossible.

Someone could suggest a change whereby a resultative diachrony from the subordinated context underwent a modal development by contamination and acquired the imperfective value and then, after its “liberation” from the modal environment, spread to non-modal contexts in principal
clauses. Even though this type of development is typologically
well documented, there is no evidence which would enable us
to accept this hypothesis as valid as far as the origin of the yiqtol
and *yaqtulu is concerned. Firstly, the CS *yaqtulu was not a
modal expression—it was a syntactically determined depending
category and thus, it did not add modal nuances to simple
verbal forms without the suffix *u. In particular, it should be
observed that the gram did not appear in the explicitly modal
context, i.e., in conditional phrases; in Akkadian the
subordinative u is not employed in the hypothetical clauses and
in Arabic it is the jussive yaqtul, and not the yaqtulu, which may
be found in conditional clauses. Secondly, grams that have been
“recycled” from the subordinate position and become
acceptable in main clauses usually remain peripheral (i.e., non-
central). In other words, due to the fact that they reflect old
constructions or highly advanced diachronies, they are limited
to some strictly determined contexts. On the contrary, the BH
yiqtol and the Arabic yaqtulu (two descendents of the *yaqtulu)
are clearly central grams that appear in a great range of
environments and constitute the backbone of the verbal system
in both languages. Thirdly, the BH yiqtol, and yet again the
Arabic yaqtulu (cf. section 3.2.3 below), offer values that
correspond to initial phases of the imperfective and modal
paths. Such “non-advanced” meanings (especially the
circumstantial value which is residual in Hebrew but evident in
Arabic, and the agentive modality uses) are prototypical for
grams that originated in the properly imperfective and modal
trajectories and thus in lexical inputs that are cognitively
plausible to generate such paths. In consequence, the CS
*yaqtulu and its Hebrew or Arabic heirs do not result from a
recycling of other diachronies. These three pieces of evidence
prove that *yaqtulu cannot be explained as an old resultative
diachrony, modally contaminated in subordinate phases and
then, after having gained its syntactical independence,
generalized in principal clauses with the values that correspond
to the imperfective and proper modal trajectories.

How can one thus connect the morphological shape of
the CS *yaqtulu—certainly related with the PS *yaqtul + u—with
its functional character? We think that the entire problem of
the origin of the *yaqtulu can be addressed from a different
angle. All the data provided by the diachronic linguistics are
correct: the morphology *yaqtulu formally reflects the *yaqtul +
u from subordinated phrases, but functionally the gram
continues the lost *yaqattal. Put differently, the innovation
*yaqtulu, successor of the *yaqtul + u, replaced the *yaqattal and
assumed its role. However, contrary to the traditional views
which explains the sense of the *yaqtulu taking as its source the

56 This can be clearly seen in the previously introduced Akkadian
samples (cf. examples 9).
*yaqtul*, we propose an alternative model which defines the *yaqtulu* as a direct functional successor of the *yaqattal* reshaped structurally in accordance to the *yaqtul* + u pattern. In other words, the *yaqtulu* equals the *yaqattal* (it is still the same functional phenomenon) but it has been “re-dressed” and has adopted the appearance of the *yaqtul* from the subordinate clauses.

How did this transformation occur? In our view, one is facing a typical analogical change and the regularization of the paradigm phenomenon due to which a minor morphological item is adjusted to the dominant one (Kuryłowicz 1949, Mariczak 1958, Hopper & Traugott 2003:63–68, 159 and Fischer 2007:123–126). According to Kienast (2001:338), the formal decay of the *yaqattal* occurred when the *yaqattal* G (*yaqattel*), the *yaqitul* D (*yuqattil*) and the *yaqattal* D (*yaqattal*)—from the structural perspective, already profoundly similar in the Proto-Semitic—started to be confused merging in an extreme situation as demonstrated by the Proto-Ethiopian form *yeqättel*. At that point, in order to preserve the distinction between the successors of the *yaqattal* G and D, different languages employed diverse resources. In some of them like Ge’ez, the use of the quantitative metathesis in the D *yaqattal* permitted the derivation of an alternative construction (i.e., *yiqér*ḥ) which was distinct from the G *yqättel*. In this way, the morphological distinction between the old G *yaqattal* and D *yaqattal* was preserved. In languages belonging to the Central Semitic group, however, it was the G *yaqattal* that changed radically assuming the shape of the *yaqtulu*.

It should be noted that the PS *yaqitu* and the geminated PS *yaqattal* were not always marked by their supposed main differentiation trait, i.e., the reduplication (or not) of the second radical, so that in multiple instances the two categories varied uniquely in the quality of the vowel or even in its quantity. To illustrate this phenomenon, let us analyze morphological properties of the Akkadian *iprus* and *iparras* descendents of the PS *yaqitu* and *yaqattal*. In the D stem, the two grams diverge exclusively in the different color of the employed vowel with the second radical: *ippris* (the *iprus*) vs. *ippras* (the *iparras*). Furthermore, the verbs with the weak third radical in some forms of the D stem display the identical shape: 3.pl.ms *umalī* (the *iprus* and the *iparras*). A similar situation may be detected in the S stem: *ulippris* (the *iprus*) vs. *ulippras* (the *iparras*). Additionally, the hollow verbs in the G stem, in various cases, are distinguished only by the quantity of the vowel: 3.sg. *ina'/ina* (the *iprus*) vs. *ina'/ina* (the *iparras*). In the D and S stems, the *iprus* and the *iparras* of this type of root (second weak radical) differ uniquely in the dissimilar color of the employed vowel, and both show the same fluctuation in the use of the single or geminated radical “three” in some persons of the paradigm: in the D 3.sg ukîn 3.pl.ms *ukinnu* (the *ipru*) vs. 3.sg ukīn 3.pl.ms *ukannu* (the *ipra*), and
in the Š 3.sg uššm Šušt (the īprus) vs. 3.pl uššm Šušt (the īparraš). Finally, certain forms of the īprus and the īparraš accompanied by the morpheme n were identical or differed only in the length of the vowel: the D subordinate īprus and īparraš 3.sg umallî, 2.sg,ms tumallî, 3.sg,fm tumallî, 1.sg umallî, 3.pl,ms umallî and 1.pl numallî (some of these examples may also correspond to the simple īprus and īparraš). In consequence, the original distinction between the PS *yaqattal and the *yaqtul, which consisted in the use of the simple or geminated form (cf. the participial origin of the two form in Lipiński 2001:336–339 and Kienast 2001:294–295), was not always maintained. On the contrary, as testified by the Akkadian state of affairs, in multiples cases, the two grams displayed the same consonantal structure57 differing only in the nature of the vocalic elements; in extreme situations, they even the identical shape.

At this point, it should be observed that the formal confusion between the successors of the *yaqattal and the *yaqtul is partially visible in Ethiopic languages which, similarly to Akkadian, preserved the *yaqattal morphology. For instance, in Ge’ez, the descendent of the G *yaqattal and the D yaqul display the same shape yeql. Furthermore, while in the case of transitive verbs, the successors of the *yaqattal and the *yaqtul are differentiated in the G stem—respectively as yeql and yeql—the intransitive predicates employ the identical form yeql for the two grams. This indicates that the structural differentiation between the *yaqattal and the *yaqtul is far from being absolute and that the two formations may formally coincide in some instances.

It shall be noted that the vowel typically employed in the īprus (and thus in the *yaqul) was without doubt the most generalized and the most extended in the entire verbal paradigm. In particular, the vocalic element of the īprus equaled the vowel of the imperative purus (very limited exceptions), the precative īprus and the vetitive ayīprus. Moreover, as indicated by Old Babylonian, in the derived stems N, D and Š, the vowel of the active participle reflected that of the īprus (ippars mupparis-, īparraš mupparis-, nippars mishparis). Also the D and Š perfect īparus employed the vocalic unit characteristic for the

57 It means that the *yaqattal and the *yaqtul either jointly displayed geminated forms or were characterized by the non-gemination. Consequently, the term “the same consonantal structure” makes reference not to the triple-consonantism (or in some instances, to the bi-consonantism) of the verbal roots but to the organization of the consonantal elements in the pattern C₁-C₂-C₃ or C₁-CC₂-C₃, and C₁-C₂ or C₁-CC₂. Thus, in all cases where the *yaqattal and the *yaqtul “dress up” with the same configuration (either the C₁-C₂ / C₁-CC₂ for the weak verbs or C₁-CC₂-C₃ as in the case of D stem), their consonantal structure is said to be identical.
iprus instead of that found in the iparras (D: iptarris iparri and Š: nitapris -navigation).

Finally, the reduplicative morphology was marginal—it was employed as an inflectional and non-derivative recourse uniquely in the G and N iparras, and even then not with all types of roots. Conversely, the simple non-geminated morphology predominated—it appeared in the iprus, the iptaras and the parsaku (and in other non-finite forms) of the G stem, as well as in the whole Š paradigm of strong roots. Finally, in the D stem, the reduplication was a derivative instrument and did not participate in the flexional differentiation between the iprus and the iparras.

The three mentioned phenomena, i.e., the formal similitude between the *yaqtul and the *yaqattal (or in other words, the lack of faultless consonantal differentiation between the two grams), and thus, between their subordinate derivatives *yaqtul-n and *yaqattal-n; the predomination of the vocalism characteristic for the *yaqtul and the supremacy of the non-geminated forms (as for instance, the *yaqtul), caused the “minor” *yaqattal(-n) to be reshaped in accordance with the dominating *yaqtul-n preserving, however, its own functional and semantic properties. In Hebrew, this superficial transformation of the *yaqattal(-n) was possible because the *yaqtul of the resultative diachrony survived in the wayyiqtol (in Arabic it was conserved as the lam-yaqtul) so that the morphology *yaqtul-n could be associated with the old *yaqattal. In consequence, the *yaqattal did not disappear—it is its reduplicated morphological shape that suffered a total decay as a flexional mark. On the contrary, the gram itself—understood as an evolutionary functional phenomenon—“stayed alive” but due to the mentioned analogical processes, it received a new superficial form, the *yaqtulu. In that way, the explanation of the meanings and uses of the CS *yaqtulu ceases to be problematic: one is not facing a re-analysis of the resultative diachrony *yaqtul but a regular continuance of the diachronic paths representative for the *yaqattal (see below).

It must be noted that the BH yiqtol (< CS *yaqtulu) functionally reflects in an almost perfect way the OB iparras (< PS *yaqattal). As recently illustrated (Andrason 2010b:175–186), temporal and aspectual values of the iparras may be explained as regular manifestations of the imperfective path while its modal functions can be analyzed as realizations of the modal ability path. Furthermore, it was demonstrated that the two types of the iparras—a direct heir of the PS *yaqattal morphology—derive from one semantically transparent and cognitively plausible lexical input (Andrason 2010b). In particular, the PS *yaqattal (and thus the OB iparras) had its roots in periphrastic predicative uses of the geminated “imperfective” participle with the iterative/pluralic value, subsequently verbalized with the aid of personal pronouns inflected and incorporated to the root (Kienast 2001:294–295). This old periphrasis constituted the
very source of the imperfective trajectory which, after it generated the habitual meaning, stimulated the formation of the modal ability path. The development was possible due to the inherent properties of the reduplication: the marker, from the typological perspective, is a universal tool of conveying intensive and iterative meanings which may easily set the basis of the imperfective path (Bybee, Perkins & Pagliuca 1994:166–174). Moreover, one should observe that because of a widespread semantic relation between markers of frequentative-habitual activities and expressions of ability like “know how to do” or “be able to do” (Holm 1988:160), at the moment where an iterative-frequentative expression acquires a clear habitual sense, it may also develop a modal function of ability “setting in motion” another universal functional development, an agent oriented modal path (on the relation between habitual and modality see also Boneh & Doron 2010:352–361 who claim that habitual grams are inherently modal). This was exactly what occurred in the history of the *yaqattal: the habitual sense, easily derivable from the PS reduplicated input, constituted the actual origin of the modal ability path and the basis of modal uses (for details of the argumentation see Andrason 2010b:160–192). The two diachronic progresses (i.e., imperfective and modal trajectories) originated thus as one displaying an example of a split diachrony. In consequence, the modal iparras (and *yaqattal) is not a result of advanced stages of the imperfective and future paths, but, on the contrary, has started in an autonomous modal track, whereby the ability meaning stemmed from the habitual sense of the reduplicative morphology (yet again, for details see Andrason 2010b:160–192).

As explained in 3.2.1, the BH yiqtol shows values that can be explained as manifestations of the imperfective and proper (non-contaminated) modal trajectories58—this situation clearly matches the interpretation of the iparras and that of the *yaqattal. The sole difference between the meaning of the Old Babylonian gram and the Hebrew, historically posterior, formation is the fact that the latter, as expected, mirrors slightly more advanced phases of the same trajectories. Namely, the gram loses in its circumstantial and continuative-progressive character. Such a behavior is entirely consistent with our hypothesis—since we are facing realizations of the same diachrony in two related but independent languages at two distinct historical moments, they should correspond to two different phases of the functional development in question. The historically earlier variant of the gram (in Old Babylonian) is expected to reflect more initial stages while the more recent

58 However, we were incapable to determine which particular modal path was pertinent in the case of the yiqtol.
one (in Biblical Hebrew) should mirror more advanced segments of the functional tracks.

Furthermore, since the CS *yaqtulu is a direct functional heir of the PS *yaqattal, the two forms share their lexical input having originated in a reduplicated morphology. In consequence, the values provided by the BH yiqtol—both those understood in terms of the imperfective path and those explained as manifestation of the modal path—become consistent with the lexical input from which the construction emerged. The original periphrasis based on the reduplicated verbal adjective is both semantically transparent and cognitively plausible for the two trajectories and thus for the meanings codified by them. In Biblical Hebrew and in the Central Semitic group in general, this geminated character of the fundamental lexical expression that initiated the functional trajectory has been lost and the formation adopted a new superficial shape *yaqtulu.

Finally, our reconstruction of the origins of the yiqtol leads to the conclusion that its modal variant, being a direct functional descendent of the *yaqattal, should be taken as the realization of the ability path. This final inference is consistent with the semantic potential of the yiqtol which matches the entire ability path as posited in section 3.1 (cf. Figure 2) with the exception of the literal meaning of the physical ability. As explained above in section 3.2.1, the synchronically based panchronic interpretation of the yiqtol does not allow us to determine which particular modal path the gram followed. However, given the evolutionary scenario presented in this part of the article, especially the fact that the yiqtol (from CS *yaqtulu) is a functional descendent of the PS *yaqattal and that *yaqattal is a bifurcated imperfective and modal ability path (built on a reduplicative pattern which is a common source of imperfective paths), we may conclude that also the yiqtol and CS *yaqtulu developed in accordance with those two functional trajectories. This inference shows that our study is not limited to the synchronic panchrony, viz. to deduction of the diachrony from the synchrony. Quite the opposite in the present work, the synchrony is explained as a dynamic diachronic process extrapolated from synchronic, diachronic and comparative data.

Suma sumarum, the functional development of the BH yiqtol is regular: it reflects a universal evolution whereby reduplicated morphology activates the imperfective path, which at the frequentative-habitual stage motivates a deviation and a split into a new ability modal trajectory. In other words, the BH construction simply perpetuates the processes detected in the case of the *yaqattal and iparrus (Andrason 2010b). In that way, the uses of the gram become consistent with its Proto-Semitic input and with the universal laws that govern the evolution of verbal grams.
**Later development**

The functional development of the *yiqtol* in post Biblical periods (both in the Rabbinic and in Modern Hebrew times[^59]), confirms its identification with a split imperfective and modal diachrony. This means that values provided by the gram in historically posterior “descendant” languages of the Biblical Hebrew correspond to more advanced stages on the two trajectories.

In Rabbinic Hebrew, the construction primarily denotes modally colored future events. In main clauses, it expresses volitional, optative and desiderative nuances (11.a), conveys the idea of possibility, probability and potentiality (11.b), as well as provides the meaning of obligation (11.c). Moreover, the gram may appear in dependent clauses indicating prospective and final activities (11.d) (Pérez 1992:191–196). It is also commonly employed in all ranges of subordinated phrases introduced by the particle כ; in most cases, the construction expresses the idea of the logical כ (“in order to”) (11.c) and temporal purpose or finality (כ “until”). Still following the particle כ, the formation is frequently introduced by verbs like יזון כ “I order that,” or רוככ כ “it is necessary that,” by the temporal conjunction לאלרה כ “after” and by the conditional expression כ “under the condition that” (11.f). In all of these depending functions, the *yiqtol* clearly corresponds to the syntactically based modal category of subjunctives. Finally, the gram appears in proper conditional phrases introduced by the particle כ, denoting real hypothetical events. On the other hand, it should be noted that in certain occasions the RH *yiqtol* continues indicating simple non-modal events, preserving thus the indicative present (11.g) and future values. However, in an overwhelming majority of examples, future actions are accompanied by an evident modal tone (Pérez 1992:195 and Segal 1927:153–155).[^60]

(11)a. Ver. 7:3

בשלושא אמר נברך

[^59]: Albeit Modern Hebrew is historically disconnected from Biblical and Rabbinic Hebrew, we will treat it as a linguistic object that systematically reflects more advanced stages of processes which have been identified in these two older languages. In fact, even though some consider Modern Hebrew a creolized language with Slavic and Germanic substrates (Blanc 1968 and Wexler 1991), its validity for the panchronic view remains solid and untouched. In general terms, pidgins, creoles and koinés commonly display a more advanced and more drastic functional development than their superstrate inputs and thus, may be employed to demonstrate the soundness of the explanation proposed for their original linguistic source (Andrason 2009:121–140).

[^60]: The simple future actions are expressed by means of the participle.
Si son tres dice: ¡Bendigamos! (“Let us bless”) (Pérez 1992:194)

b. Sanh. 3:7

¡Qué puedo hacer! (“What can I do?”) (Pérez 1992:194)

c. Menah 11:8

¿Cómo habrá de hacer? (“How should it be done?”) (Pérez 1992:195)

d. ’Abot 1:11

Voy a estudiar la Torah para hacerme rico (“in order to be rich / so that I be rich”) (Pérez 1992:196)

f. Git. 7:5

Aquí tienes tu documento, a condición de que me des (“if you gave me”) doscientos sus (Pérez 1992:196)

g. Meg. 4:7

In Modern Hebrew (MH), the *yiqtol* provides uses that reflect highly advanced phases of the imperfective and modal paths. The gram functions uniquely as the simple future, with both punctual (12.a) and progressive (12.b) readings and as a modally tinted future (12.c). Furthermore, the formation—equaling an imperative—frequently expresses less direct and more polite
orders and commands (12.d). The construction is also commonly employed in hypothetical phrases, both in protases and apodoses, with the meaning of a real future condition (12.e). Finally, the gram appears in subordinated clauses denoting prospective events (12.f) introduced from any deictic temporal sphere, i.e., even if the main action refers to the past (12.g).

(12) a. 明日朝早く起きる
Tomorrow I will get up early (Lyttleton & Wang 2004:210)

b. 제 이름은 릴러
Dan will be working on the program during the year (Coffin & Bolozky 2005:39)

c. 명예에 파회해
Everyone hopes that there will not be a strike (Coffin & Bolozky 2005:39)

d. 화면에서 벗어나
Turn left at the corner (Lyttleton & Wang 2004:210)

e. 만약 셔워를 안 넣으면 빌리린
If there is (will be) a strike, we won’t be able to get home (Coffin & Bolozky 2005:39)

f. 언어가 개발되며
I prefer you to forget about it (Glinert 2005:159)

g. 당신은 왜
Did you want me to stop? (Glinert 2005:159)

In consequence, the properties of the historically posterior variants of the BH יִקְוֵתֹל firmly demonstrate that our definition of the gram in terms of a split imperfective-modal diachrony is valid. The corresponding RB and MH formations match the same functional trails as their BH counterpart, namely the imperfective and modal paths. As expected, in both post-
Biblical languages, functions of the successor of the *yaqtul reflect more advanced phases of the mentioned trajectories.

3.3.3. Comparative Panchrony

If our thesis is correct and the *yaqtul—as well as the *yaqattal—is a split diachrony bifurcated into the imperfective and ability modal trajectories, its homologues in other Semitic languages should necessarily display values that correspond to determined stages of these two functional paths. Put differently, the successors of the *yaqtlu in the Central Semitic group where the *yaqattal acquired the shape of the relative *yaqtul-u are to be explained as manifestations of the two mentioned developments.

Most importantly, the Arabic *yaqtul is entirely consistent with our definition of the CS *yaqtulu and BH *yiqtol in terms of the imperfective and modal ability paths. As expected, the gram provides an entire repertoire of imperfective values: continuity and progressivity (13.a), iterativity-habituality (13.b) and duration (13.c) (Wright 1898:11–16, Haywood & Nahmad 1962:112–113 and Lipiński 2001:345–355). Furthermore, even though the *yaqtul has reached the peak phases of its functional imperfective development, it has not lost the values that reflect the original stages; namely, the construction still denotes the actual uninterruptness of an event (continuative and progressive), offers frequentative or habitual value, and most significantly introduces the idea of circumstantial simultaneity (Kuryłowicz 1972:80–93, Danecki 1994:156 and Kienast 2001:278 and 332). Moreover, as in Biblical Hebrew, in the non-past time frame, the uses of the formation may correspond to highly advanced phases of the imperfective path where a gram is transformed into a simple present and/or future tense with no aspectual nuances at all (Wright 1898:12–13) and Kozłowska 1996:58). This means that with the present (13.d and e) and future (13.f) temporal reference, the formation equals a general tense and expresses any non-past event which may receive both imperfective (13.g) and neutral (13.h) readings. Thus, in the non-past time sphere, the functions of the gram mirror the entire imperfective path—from the circumstantial value to the simple tense, through the meaning of the simultaneous taxis and that of the imperfective aspect. On the contrary, with the past reference, the construction provides a strong aspectual interpretation and explicitly denotes imperfective activities: circumstantial (13.i), continuative-progressive (13.j) and frequentative-habitual (13.k)—hence, it cannot introduce aspectually neutral simple past events. Finally, as far as the modal *yaqtul is concerned—less frequent than its indicative counterpart—its values, especially those of epistemic possibility (13.l and 13.m) and probability (13.n), correspond to later stages of the modal trajectory (Danecki 1994:157). In consequence, the Arabic *yaqtul is functionally consistent with our interpretation of the *yiqtol—in particular, the gram shows
uses that may be explained as realizations of the imperfective and modal path.

(13)a. 

وانت لاما لا تتكلم

And you, why are you not speaking? (Danecki 1994:155)\(^{61}\)

b. 

اته رجل طيب يزورنا بين أونا وآخر

He is a good man—he sometimes visits us (Danecki 1994:155)

c. 

انا احبك ولا احب سواك

I love you, and besides you I do not love anyone (Danecki 1994:155)

d. 

يولد جميع الناس احرارا

All the men are born free (Danecki 1994:156)

e. 

غدا تكون روجي

Tomorrow, you will be my husband

f. 

فانى يحكم بينهم يوم القيمة

But God will judge between them on the day of the resurrection (Wright 1898:18)

g. 

الليل يطاح الرأس

They will cut his head tonight (lit. will be cut) (Danecki 1994:156)

h. 

دهب الي القاهرة غدا

Tomorrow, I will go to Cairo (Kozłowska 1996:58)

جاء زيد يضحرك

Es kam Zaidun, indem er lachte (Kienast 2001:278)

j. 

شاهد اباه يضحي

He looked at his father while he was praying (Danecki 1994:156)

k. 

فقضني فيها أربعين يواماً ... وملاك سخانها

He was in the wilderness forty days...and angels waited on him (Mark 1:13) (cf. the original Greek past imperfective form ἔπαθεν)

\(^{61}\) The examples extracted from Danecki (1994) and Kozłowska (1996) have been translated from Polish by the author of the present article.
The homologues of the BH *yiqtol in other Central Semitic languages are entirely consistent with our interpretation of the Biblical gram. In the Amarna dialect, the *yaqtulu shows the values that match the imperfective path (continuative-progressive, frequentative-habitual, simple-general present; general broad future tense; circumstantial, frequentative-habitual, durative and imperfective past) and, less frequently, those that fit into the modal path (modally colored futurity and prospectivity; logical and temporal finality; conditional phrases and root or epistemic modality) (Rainey 1996:230–234 and Moran 2003:42 and 69). Likewise, in the Ugaritic language, the functions of the *yaqtulu may be grouped into a set that corresponds to the imperfective functional trajectory: aspectually neutral present and (modally colored) future; frequentative-habitual, durative and imperfective past (Verreet 1988:43 and 53, Kienast 2001:312 and Sivan 2001:100–102). The same situation is documented by Punic where the *yaqtulu denotes present and future events and situations, as well as past iterative-habitual, durative and imperfective activities (Friedrich & Röllig 1970:57–58 and Kienast 2001:314).

In consequence, the data provided by other Central Semitic languages are entirely consistent with our proposal and thus with the definition of the *yaqtulu as a split imperfective and modal diachrony: in all the relevant languages, the values of the successors of the CS *yaqtulu reflect stages of the imperfective and modal path.

4. CONCLUSION

This article aimed at presenting a panchronic definition of the BH *yiqtol which would enable us to understand the gram as a functionally consistent and rational category—a single diachronic path. Furthermore, in accordance with a principle of cognitive linguistics, we have searched for a semantically transparent and, the most importantly, cognitively plausible input of the Hebrew formation. Following the rules of the panchronic methodology, we have founded our argumentation on evidences provided by the synchronic (3.2.1), diachronic (3.2.2) and comparative (3.2.3) subtypes of the panchrony (thus, our analysis was not limited to deducing diachrony from synchrony).
Firstly, in section 2.1 we described various uses of the gram which were divided into three main groups: indicative, modal and textual ones. Next, the concept of panchrony was explained and two universal functional trajectories, imperfective and modal ability paths, were presented. After that, applying the synchronic panchronic methodology (3.2.1), we identified the indicative, modal and text values of the *yiqtol with two evolutionary tracks, i.e. with the imperfective path and the proper modal (non-contaminated) path. As far as the *yiqtol of the imperfective path was concerned, we observed that the functional advance of the gram was more profound in the non-past time sphere where the formation functioned as an aspectually neutral tense. On the contrary, with the past time reference, the construction did not reach a similar culmination stage, but, on the contrary, preserved an evident aspectual significance. An analogous functional discrepancy was noticed in the case of the text *yiqtol. In the narration, its functional progress is less rapid—the gram conserves the original circumstantial character and introduces background information. However, in the discourse, the formation advances more “quickly,” and in numerous cases equals a gram of the foreground being able to denote central actions. The two phenomena, i.e., the different treatment of the *yiqtol in the past and non-past, as well as its dissimilar properties in the narration and in the discourse, are entirely compatible with the universal behavior of grams defined in terms of the imperfective diachrony. We also observed that the conservative character of the *yiqtol in the past time sphere had been motivated by the existence of the *wayyiqtol (< PS*-yaqtul)—a construction that follows the resultative path—in whose contexts, the *yiqtol had developed. In respect to the modal *yiqtol, we stated that it could appear in non-explicitly modal (and thus neutral) environments providing values that corresponded to initial phases of the modal trajectory. Consequently, this type of the *yiqtol should be explained as a realization of one of the proper modal paths and not as an example of a modal contamination.

Afterwards, the proposal based on the synchronic evidence was contrasted with diachronic and comparative data. In section 3.2.2, two commonly accepted facts were introduced: the *yiqtol derives from the *yaqtulu which morphologically equals a formation composed by the *yaqtul of the resultative path and the subordination morpheme *u; functionally, the “new” gram substituted the *yaqattal morphology understood as split imperfective and ability modal trajectories. Subsequently, we demonstrated that a functional development from the resultative diachrony *yiqtol into the imperfective and non-contaminated modal diachrony *yaqtulu is typologically impossible. In other words, the *yaqtul + *u could not semantically have transmuted into the *yaqtulu. In consequence, we proposed an alternative explanation which adjusted in a better way to the path theory and which, at the
same time, did not contradict the two mentioned theorems of the Semitic diachronic linguistics. Namely, we postulated that it was not the *yaqtulu (a resultative diachrony + subordination marker) which had acquired values prototypical for the imperfective and proper modal paths, but on the contrary, the old morphology *yaqattal, due to various analogical processes, had adopted a new shape of the *yaqtulu preserving its own semantic properties. This transformation had its roots in three phenomena: the formal similitude between the *yaqtul and the *yaqattal (i.e., a frequent consonantal non-differentiation between the two grams), and thus between their subordinated derivations *yaqtul-u and *yaqattal-u; the predomination of the vocalism characteristic for the *yaqtul; and finally, the supremacy of the non-geminated forms like the *yaqtul. Consequently, the new reconstruction of the origin of the *yaqtulu means that there had never been any semantic or functional relation between the *yaqtul of the resultative path and the *yaqtulu of the imperfective and modal path—the coincidence is purely and exclusively formal or superficial.

Such an explanation of the creation of the *yaqtulu is panchronically credible and entirely consistent with the evolutionary vision of languages—one is facing a rational and typologically frequent phenomenon of analogical and paradigmatic leveling. Furthermore, the proposal enables us to relate the gram with a single lexical input that justifies all values acquired at later stages of the development. Namely, due to the fact that the *yaqtulu is a direct inheritor of the *yaqattal, its very origin has to be the same. We have demonstrated that the *yaqattal derives from a periphrastic expression—based in a predicatively employed reduplicative imperfective participle and inflected personal pronouns—that was verbalized and converted into a conjugation. It was also mentioned that the geminated participle constitutes a universal and typologically frequent instrument in deriving intensive and iterative meanings from which the imperfective path usually emerges. As far as the *yaqattal is concerned, the original imperfective trajectory that sprouted from this lexical input was later bifurcated and gave birth to an independent modal path. This was possible because of the semantic proximity between the habitual and the ability sense which motivates the reinterpretation of habitual expressions as modal and vice versa. Hence, in the moment where an iterative or frequentative formation—in this case, the *yaqattal—acquires the habitual value, it can also develop a modal function of ability, and in that way generate an independent modal trajectory. This fact permitted us to determine that the modal yiqtol should be understood as a realization of the modal path of ability. In consequence, we identified the cognitively plausible and lexically transparent origin of BH yiqtol: the PS reduplicated participles which corresponded to the conceptualization of iterativity, which, due to various universal
evolutionary laws and processes, is compatible with and "predestines" all of the values—indicative, textual, or modal—offered by the BH yiqtol.

Next, it was proved that the posterior evolution of the yiqtol entirely confirmed its identification with the imperfective and modal diachronies: the values provided by the gram in Rabbinic and Modern Hebrew simply reflect highly advanced and peak phases of the two functional developments. In consequence, the diachronic panchrony—both the Proto-Semitic origin and the post-Biblical evolution—corroborates the definition of the BH yiqtol in terms of the split imperfective and ability modal diachrony, originated in a single input.

Finally, in section 3.2.3, we confronted our proposal with the panchronically comparative data and demonstrated that in all languages from the Central Semitic group that included in their grammatical repertoire a successor of the CS *yaqtulu, its values could systematically be understood as manifestations of the two mentioned functional trajectories: either the imperfective or the modal path.

In consequence, all the evidence shows that the BH yiqtol, a successor of the *yaqtulu, is a functionally rational and homogenous phenomenon: all its values can be explained as manifestations of the old diachrony, bifurcated into the imperfective path and the ability modal path. This split trajectory is a direct functional descendent of the PS *yaqattal which is itself emerged from a single lexically transparent input, a reduplicated participle. However, due to several analogical processes, the initial morphology was superficially modified and adopted the shape based on the *yaqtul-u (from PS *yaqtul + u). This means that the *yaqtul + u never acquired values prototypical for the imperfective and proper modal paths. Rather, quite the reverse, it was the *yaqattal that adopted a new shape of the *yaqtulu conserving its own semantic potential. Consequently, the diachrony *yaqattal did not disappear in the Central and Northwest Semitic families—it was just re-dressed in a new form. Such an origin is typologically credible and furthermore, provides a cognitively plausible basis for the two trajectories with which the BH gram has been identified. This complex process may be summarized and illustrated by the following figure:

**Figure 7: Panchronic Model of the BH Yiqtol**

![Panchronic Model of the BH Yiqtol](image-url)
We can thus propose a complete dynamic definition of the *yiqtol*; the gram is an amalgam of values that reflect two diachronic movements, i.e. the imperfective and modal ability paths, originated in a single semantically transparent and cognitively plausible reduplicative input. The two paths—understood as synchronic components of the semantic potential of the *yiqtol*—even though highly advanced (especially the imperfective path in the non-past time frame as well as the modal ability path in general), retain various meanings prototypical to more original and intermediate stages. On the other hand, certain values that correspond to initial stages of the two paths are weakened. As far as the ability modal path is concerned, the value of the physical ability is absent, and in respect to the imperfective path, the continuative-progressive and circumstantial domains are overtly conveyed by the participle *qotel*.

To end with, the panchronic definition of the *yiqtol* enables us to conciliate various schools and approaches that defended a description of the gram in exclusively temporal, aspectual, taxis, modal, or text type terms. Our methodology shows that all these notions are relevant since any universal functional path traverses various semantic and pragmatic domains. This means that since from the panchronic perspective, a verbal formation is defined as a diachronic trajectory, it must be equaled with its own evolution; a gram is always a grams’ development. Hence, it can never be reduced to one function. On the contrary, it embraces a large set of different values: ones correspond to more original stages of the development (values that the gram “let go” and that are contemporarily expressed by new transparent constructions), while others reflect more advanced segments of a given path (values that will become dominant later but have not been generalized yet). In that way, taxis, aspectual, temporal, modal (agent/speaker/hearer, root/epistemic and independent/syn-tactical types), and pragmatic-textual functions are constantly interwoven. This signifies that a gram may symbolically be pictured as a piece of multicolored gum. During its grammatical life, a formation, in accordance with the path framework, gains new meanings that belong to universal verbal domains—each one can be imagined as a different color incorporated in the expanding gum-gram. At an exact historical moment, and in a particular context, one of the possible, previously integrated, values is activated and emphasized; metaphorically, it is taken out from the multicolored sphere. However, as we choose such an exact meaning, imposed by a given environment, and, thus, tug a piece of the gum, other values-colors follow because they are strongly tied to the selected fragment (i.e., the one which we are pulling). This understanding of the construction plainly concords with the panchronic view of a gram in terms of a holistic and homogenous phenomenon, an evolutionary continuum. As explained in section 3.1, the boundaries
between subsequent phases of a given grammatical development are diffused; hence, meanings which reflect such consecutive fuzzy stages should not be understood as atomic, individual and sharply separated items but as objects which cannot be detached from the remaining functional load, i.e., from the gram itself defined as a dynamic evolutionary process (cf. footnote 11).

Consequently, all so far proposed frameworks are to some extent correct because each one of them emphasizes one of possible verbal domains that are crossed by the trajectory with which the *yiqtol has been identified; given that the gram provides taxis, aspectual, temporal, modal and text interpretations, the validity of all these models remains! They should, however, be understood as matching puzzles of a greater picture and different highlights of one and the same phenomenon—they must work together and not exclude each other because they perfectly fit into a complete functional trajectory, a path.

**SUMMARY**

From the synchronic perspective, the BH “long” *yiqtol appears as a functionally highly heterogeneous, almost random, category providing a broad range of uses that are related to the concepts of aspect, taxis, tense, mood and pragmatic text type. On the other hand, according to the panchronic methodology, it should always be possible to embrace all synchronically incompatible values of a construction and explain them as homogenous manifestations of a single functional trajectory, i.e. a path. Furthermore, as maintained by cognitive linguistics, since the grammar is a conceptualization of the speaker’s experience, the expression from which a grammatical category emerges is expected to be semantically transparent and cognitively plausible: the form should justify the meaning. In accordance with these two principles, the author demonstrates that it is possible to reduce the apparently chaotic BH *yiqtol to a functionally consistent phenomenon—a path originated in one lexical transparent input which cognitively motivates all the values of the gram. After an exhaustive examination of synchronic, diachronic and comparative properties of the *yiqtol, the author concludes that all the meanings provided by the formation can be explained as manifestations of a split functional movement, i.e. as the imperfective and modal ability paths which jointly derive from a single lexically transparent and cognitively plausible input, a reduplicated participle as reconstructed for the PS *yaqatal and attested by the Akkadian *iparras. The author shows that the BH construction is a direct functional descendent of the PS *yaqattal; however, having suffered several analogical processes, the original reduplicative morphology was superficially modified to a shape based on the *yaqtul-u from which the BH *yiqtol morphologically derives.
REFERENCES


