Seven or Eight Verbal Patterns in Hebrew? From Sibawayh to Judah Hayyūj and Abraham ibn Ezra

# Introduction[[1]](#footnote-2)

The verbal system in Hebrew was established in its systematic structure by Judah Hayyūj in the medieval period. In his dictionary dealing with weak and geminative verbs, Hayyūj laid out the all the Hebrew patterns (*binyānîm*), distinguishing, in accordance with the Arabic grammarians, between heavy and light patterns; and then in turn into the eight patterns. This dictionary is the first scientific Hebrew dictionary based on the principle of the triconsonantal root.[[2]](#footnote-3)

In the introduction to the dictionary, Hayyuj, for the time ever in Hebrew grammar, enumerates eight verbal patterns in Hebrew – the seven presently accepted, and in addition, *pô‛ēl* (פּוֹעֵל).[[3]](#footnote-4) These eight are divided into heavy and light patterns, the heavy being: *pā‛al, pi‛ēl, pô‛ēl,* and *hip‛îl.*  His student, Jonah ibn Janah follows in his footsteps in *Sēp̱er Hā-Riqmâ*, chapter 13.[[4]](#footnote-5) From their discussion of this, they do not see any innovation in using this pattern, and seems natural that the division to patterns in Hebrew would include *pô‛ēl*.

Several questions arise: is Hayyuj’s view accepted among all medieval grammarians? What does he rely on in establishing this eighth pattern? Does the verbal system as it appears in the Scriptures support the existence of this eighth pattern?

It turns out that Hayyuj’s view is not universally accepted by the medieval grammarians. Ibn Ezra has a unique view on the *pô‛ēl* pattern, and there he disputes the existence of this pattern in the standard verbs. This view has been examined by several researchers,[[5]](#footnote-6) though, as I will demonstrate in this article, this examination has yet to show the entirety of ibn Ezra’s view on the matter. Similarly, a satisfactory explanation of this dispute between Hayyūj and ibn Ezra has yet to be given.

These issues, which are foundational to understanding medieval Semitic grammar in the medieval ages, have been little dealt with. As far as I know, not a single study systematically examines the views of various medieval grammarians about the *pô‛ēl* pattern.[[6]](#footnote-7)

The goal of this paper is to fill in a bit of what’s missing in these fields. In this paper, I point to two different views of *pô‛ēl* among medieval grammarians and I explain the different views. I also show that the grammarians were relying on Arabic grammar in establishing Hebrew grammar, and that the *pô‛ēl* pattern was invented by Hayyūj out of a desire to align Hebrew and Arabic grammar.[[7]](#footnote-8) In the second half of the twelfth century, after the institution of Hebrew grammar, ibn Ezra, the most original and critical grammarian of this period,[[8]](#footnote-9) began to view these through a Hebrew lens, and he posited that the eighth pattern doesn’t exist in the standard verbs. In his opinion, the occurrences in Scripture are not a reliable witness to the existence of this pattern, unlike the view of Hayyūj and ibn Janah.[[9]](#footnote-10)­

Before we discuss *pô‛ēl* itself in medieval thought, we will compare the Hebrew verbal system in Hayyūj and his student ibn Janah to the Arabic verbal system as viewed by Sibawayh and his students. This comparison will illuminate Hayyūj’s need to create this pattern.

# Hebrew and Arabic verbal systems in the Middle Ages – General aspects

## The Patterns fa‛ala, fā‛ala, af‛ala as viewed by Sibawayh

The relationships between the different Arabic patterns, and their different roles were a central topic for Arabic grammarians in the Medieval period. In this section, we examine the views of Sibawayh, greatest of the medieval Arabic grammarians, on patterns 2, 3, and 4. Since this is not the primary topic of our article, we examine it briefly only to provide some background. It seems that Sibawayh was the first to see these three patterns as representing one morphological group. In his opinion, these three patterns are similar to quadriconsonantal roots, as he writes:

and these three [*fa‛ala, fā‛ala, af‛ala*] are similar to the quadriconsonantal roots which do not have additions, like *daḥraja*, since their number is like their number, and they are alike in passivity and movement.[[10]](#footnote-11)

As Yavrumyan explains: ‘in the classes of the extended three-radical verbal stems there are two models of different morphemic patterns, but with a uniform syllable structure.’[[11]](#footnote-12)

More simply put:

Past: *daḥraja: fa‛lala = fa‛ala = fā‛ala = ’af‛ala.*

Future: *yudaḥrij: yufa‛lil = yufa‛‛il = yufā‛il = yu’af‛il*.[[12]](#footnote-13)

After Sibawayh lists these patterns and distinguishes at length between the different types of the first four patterns, he discusses the other long patterns. This issue is repeated in Hebrew grammar, as we will see.

## The Hebrew verbal system in Judah Hayyūj and Jonah ibn Janah – Two divisions

In the introduction to ‘*Verbs with Weak Letters’ (ḥurūf al-līn)* Hayyūj enumerates four patterns in the Hebrew verbal system, *pā‛al, pi‛ēl, pô‛ēl, hip‛îl*:

And I have divided the verbs to light and heavy, and I have called by the name ‘light’ those which come through the pattern *pā‛altî*, for it is the lightest of the patterns; and by the name ‘heavy’ those which come from without the pattern *pā‛altî*, like *hip‛altî*, or *pi‛altî*, or *po‛altî*¸ or other patterns.[[13]](#footnote-14)

It’s seemingly strange that Hayyūj that only mentioned these four – *pā‛al* as a light pattern, *hip‛îl, pi‛ēl,* and *pô‛ēl* as heavy patterns – explicitly, and the other only by implication. In all relating to the passive patterns, *hup‛al* and *pu‛al*, Hayyuj’s foundational principle is that they are included in the active patterns *hip‛îl* and *pi‛ēl* and he did not consider it correct to enumerate them separately,[[14]](#footnote-15) but the question remains regarding *nip‛al* and *hitpa‛ēl.* Furthermore, a thorough examination of his works show that Hayyūj considers neither *nip‛al* nor *hitpa‛ēl* a ‘heavy’ pattern.[[15]](#footnote-16) These four patterns alone, in Hayyuj’s scheme, are described as ‘light’ patterns or ‘heavy’ patterns. The question, accordingly, is what about *nip‛al* and *hitpa‛ēl*.

This issue we find in Jonah ibn Janah’s*, Kitāb al-Luma‛* in more explicitly. In the thirteenth chapter, dedicated entirely to the Hebrew verbal system, Janah dedicates the first and the main part to the four patterns – *qal, hip‛îl, pô‛ēl, pi‛ēl,* which in turn are classified in two divisions.

Afterwards ibn Janah dedicates some pages to the patterns *nip‛al*, *hitpa‛ēl*, *hup‛al*, and *pu‛al.* These are given the title: *wa-mimmā yalḥaq al-fiʿl min al-abniya li'l-maʿnā fa-hiya al-infiʿāl wa'l-iftiʿāl wa-mā lam yusamma fāʿiluhu* – ‘and the patterns *added to the verb, for adding meaning*,[[16]](#footnote-17) they are: *nip‛al, hitpa‛ēl,* and that of which its agent has not been mentioned’ (i.e.  *hup‛al* and *pu‛al*).[[17]](#footnote-18) In other words, the basic verbal patterns are the first four patterns, the rest are built of the first four.[[18]](#footnote-19) Ibn Janah goes on to clarify that the *nip‛al* pattern is a variant of the light pattern,[[19]](#footnote-20) though he is not certain whether *hitpa‛ēl* belongs to the light pattern or *pi‛ēl*.[[20]](#footnote-21)

Judah Hayyūj and his disciple consider the four aforementioned patterns as the foundational patterns in the Hebrew language. These are, as we have enumerated, *pā‛al* as a light pattern, *hip‛îl, pi‛ēl,* and *pô‛ēl* as the heavy patterns.

After we examined the Hebrew verbal system as reflected in the views of Hayyūj and his disciple, we return to the central question of the article: what does Hayyūj rely on when attempting to establish the fourth pattern, *pô‛ēl*, in the strong verbs?

The number of occurrences of this pattern in the standard verbs in Scripture is next to none. Only two verbs appear in the works of medieval grammarians which are clearly part of *pô‛ēl.*

1. אֲשֶׁר אִם־צָדַקְתִּי, לֹא אֶעֱנֶה; **לִמְשֹׁפְטִי** אֶתְחַנָּן (Job 9:15).
2. וְאֶת-הַנְּעָרִים **יוֹדַעְתִּי** אֶל-מְקוֹם פְּלֹנִי אַלְמוֹנִי (1 Sam. 21:3).[[21]](#footnote-22)

Here are the words of Joseph Kimhi in *Sēp̱er Ha-Zikkaron* on the form *limšōp̱ṭî*, and the grammatical explanation which follows it.

And there are found from this form, in the standard verbs, a few words, like *limšōp̱ᵉṭî ’etḥannān*, we cannot judge it to be in any other pattern, for were it in *qal*, it would be *lᵉšōp̱ṭî*, and if it were from *pi‛ēl,* it would be *limšappᵉṭî*, like *limgaddᵉlî*, and if from *hip‛îl*, it would be *lᵉmašpîṭî*, like *magdîlî*, thusly it was said that *mᵉšōp̱ᵉṭî* is of the model of *mᵉkônᵉnî*, *‘mᵉrômᵉmî mišša‛ărê māwet’* (Ps. 9:14)…

Kimhi, as we see, explains the form *mᵉšōp̱ṭî* as representing the form *pô‛ēl*, and thusly the form which doesn’t fit the rest of the patterns is explained. The verb *yôda‛tî* is similarly explained, as a first person past tense verb in the *pô‛ēl* pattern.[[22]](#footnote-23) Kimhi emphasizes that ‘few words are found from this form’, in other words, we do not have much to attest to its existence.

And here the central question returns: are a handful of occurrences in Scripture adequate to establish such a broad and meaningful pattern in the verbal system? Moreover, as we shall see below, Ibn Ezra, two centuries after Hayyūj, correctly argues that there is no clear and sufficient evidence from the Bible to claim that there is a verb structure *pô*‛*el*.

In this article I would like to speculate that the primary and central motive that influenced Hayyūj in establishing the form was the comparison to Arabic. I will clarify: on the existence of *pā‛al, pi‛ēl,* and *hip‛îl* in Hebrew there is no question, that parallelism to Arabic is obvious: *pā‛al* is the light pattern and parallel to *fa‛ala/fa‛ila*/*fa‛ula*, the *pi‛ēl* with gemination is parallel to *fa‛‛ala*, *hip‛îl* is parallel to *af‛ala*;[[23]](#footnote-24) is it possible to find a parallel to the Arabic *fā‛ala*? Hayyūj’s mission to find this parallel wasn’t unique, both he and ibn Janah failed to set up the Hebrew verbal system perfectly parallel to Arabic. The number of patterns in Arabic is greater than their number in Hebrew. But the four first patterns in the Arabic verbal system – the light pattern, and the unitary system of the three first heavy patterns, in Sibawayh’s view, they wanted to establish as a parallel form. The need, therefore, to create a parallel for *fā‛ala*, drove the creation of the eighth form.[[24]](#footnote-25) Hayyūj simply applied the ā > ô pattern here too, creating *pô‛ēl*.[[25]](#footnote-26) Delgado, in his article, claims that the first to compare *fā‛ala* with *pô‛ēl* is ibn Barun. I am not disputing this. Ibn Barun clearly and openly compares them, and Hayyūj doesn’t explicitly compare them; what I am suggesting, rather, is that the desire to create a parallel order stems from Arabic. In other words, in the specific case of *pô‛ēl,* as well as many other instances in Hebrew grammar in general, Hayyūj had Arabic on the brain.[[26]](#footnote-27)

We shall now look at *pō‛ēl* in the early grammarians.

# The *pô‛ēl* pattern

## Hayyūj and ibn Janah

Judah Hayyūj is the first, it seems, of the medieval grammarians to mention *pô‛ēl* as a pattern of its own.[[27]](#footnote-28) The primary quote from Hayyūj on this matter is the one we brought above:

And I have divided the verbs to light and heavy, and I have called by the name ‘light’ those which come through the pattern *pā‛altî*, for it is the lightest of the patterns; and by the name ‘heavy’ those which come from without the pattern *pā‛altî*, like *hip‛altî*, or *pi‛altî*, or *pô‛altî*¸ or other patterns.

Ibn Janah similarly distinguished in his chapter on verbs (*Riqmâ*, chapter 17) between the heavy and light verbs:

But the additive triconsonantal verb is that whose pattern is not the like the light pattern, for instance: *hip‛îl*, *pô‛ēl, and pi‛ēl*… and each of these species is called ‘heavy’ as R. Judah explained in *Sēper ’Otiyyôt Hassēter* (*Riqmâ*, p. 163).

In another place he defines the pattern *pô‛ēl* as an ‘extended' (*mazīd*) verb because of the added *wāw* therein.[[28]](#footnote-29)

From Hayyuj’s words a clear division arises between the standard verbs and the geminate verbs on the one hand and the hollow verbs on the other. In his opinion, the pattern *pô‛ēl* exists both in the standard verbs and the geminate verbs, but not in the hollow verbs; the occurrences that place it in the hollow verbs are interpreted by him as a quadriconsonantal pattern of the metre *pi‛lēl*. As he writes in his introduction to the hollow verbs:

There are those with a duplicated *lāmed* of these weak *‛ayin* verbs, and the *‛ayin* *hapoal* in them is a quiescent *wāw*. On occasion to differentiate in meaning. Such was said in *qām, hēqîm* – *lᵉ’ôyēb yᵉqômēm* (Mic. 2:8) … as for *yᵉsōbᵉbūhā ‛al ḥômōtêhā* (Ps. 55:11), it is not of one those since it is *yᵉpô‛ēl* from *wᵉsābab bêt ’ēl* (1 Sam. 7:16) and not *yᵉpa‛lēl,* the first bet is the *‛ayin* of the verb … and such *mᵉšômēm* and *’eštômēm* – *mᵉpô‛ēl* and *etpô‛ēl,* for they are from *šᵉmāmâ…[[29]](#footnote-30)*

In other words, the geminate verbs are like the standard verbs. *Sôbēb* represents the pattern *pô‛ēl,* on the other hand, in the non-standard verbs it is a root form, like *yᵉqômēm*, and the model is *yᵉpa‛lēl*, where the *lāmed* is doubled;[[30]](#footnote-31) the model *pi‛lēl* is the quadriconsonantal double, similar to *pilpēl*, where the first and the third radicals of the verb are reduplicated, like the verb *ṭilṭēl*. In these two cases Hebrew makes this duplication for the sake of semantic diversity:

And it may occur that the *‛ayin* of the verb is duplicated differently, I believe that this duplication is to separate the meanings. As I shall explain: *wayyāṭilû ’et hakkēlîm* (Jonah 1:5) – *hinnēh H’ mᵉṭalṭelkā ṭalṭēlâ,* (Isa. 22:17); *’im mippānay lō’ tāḥîlû* (Jer. 5:22), *wattitḥalḥal hammalkâ mᵉ’ōd* (Esth. 4:4)…[[31]](#footnote-32)

## Ibn Ezra

Ibn Ezra has a different method as regards everything having to do with *pô‛ēl,* a view which combines with his view on the hollow verbs, as we will see in the future. In *Ṣaḥût* (p. 123–4) he explicitly disputes the existence of *pô‛ēl* in the strong verbs:[[32]](#footnote-33)

And I do not admit, at all, that there is a heavy pattern and it is *pô‛ēl.* And the future *’ăpô‛ēl, yᵉpô‛ēl, nᵉpô‛ēl, tᵉpô‛ēl.* For the proof that all the grammarians have brought is not complete, and it is that they found ‘*limšōp̱ṭî ’etḥannān*’, ‘*wᵉ’et hannᵉ’ārîm yôda‛tî’*, and how could it be for there to be a pattern in the language and they will not find thousands of its ilk … and for *yôda‛tî* which is a loan word … we will make an entire pattern? And the word *limšōp̱ṭî* is also not a proof, for the matter shall not be established by one witness!

In other words, we don’t make a pattern for rare occurrences. In order to establish a categorical class, like a form in the verbal patterns, we should find thousands like it. For these unique forms ibn Ezra proffers alternative explanations.[[33]](#footnote-34) As we said above, the primary source of Hayyūj and his disciple was not the occurrences in the bible, but rather the Arabic verbal system, which served as their lodestar. It is very unclear whether ibn Ezra was aware of the comparison that Hayyūj and ibn Janah made to the Arabic verbal system, and in its footsteps *pô‛ēl* was created, as we conjecture; but it is certainly clear he did not accept it. In order to fully understand his view on the pattern *pô‛ēl,* we need to examine his view on everything having to do with the hollow verbs, which he dubs the ‘twos’.

As is known, ibn Ezra accepts the principle of the triconsonantal root. His clear words on Hayyuj’s great innovation are known:

Know, that the early ones would say, the root *yāṣar* is *ṢR* alone, and the root of *šāb* *ŠB* alone, and we will find like that in most of the early *piyyû*‏*ṭim* … this was the opinion of R. Judah ben Quraysh and R. Menahem Saruq, and only R. Adonim Halevi awakened slightly from this mistaken slumber, for the aforementioned [Saruq and Halevi], a deep sleep from the Lord was fallen upon them, and the Lord opened the eyes of R. Judah b. R. David, called Hayyuj, to recognize the passive letters, and how they are added and missing and replaced (*Sāpâ Bᵉrûrâ* 25:2).[[34]](#footnote-35)

But, as Goldenberg and Eldar write, Hayyūj’s greatest innovation was not establishing that there are no roots with less than three consonants, rather it was the innovative establishment of *al-sākin al-layyin,* a termwhich is not found in Arabic and Hayyūj invented it and applied it to Hebrew. In Hayyūj’s opinion, Hebrew could mark by way of a defective vowel, that is, without a difference as read, what Arabic marks with *the long and full vowel*. This is how the verb *qām* for example, as a triconsonantal root (*QWM*), since the kamatz in this case contains a more abstract segment which is treated like a *matres lectionis*; and the same method is found in Arabic (*qāma* in this case). Thusly the hollow verbs belong to the triconsonantal roots, according to Hayyūj.[[35]](#footnote-36)

Ibn Ezra theoretically agrees with this term. Such, for example, the verb *’eṣṣāq*as in *’eṣṣāq mayim* (Isa. 44:3) contains three consonants, and the missing radical is swallowed up by the doubling of the *ṣ* that takes over, but in cases where it pops up as a long vowel preceding where it would be (where an ’*ālep*, *yôd*, or *wāw* is added), ibn Ezra disagrees with Hayyūj and claims that we shouldn’t see a consonant here. Therefore, ibn Ezra doesn’t see a triconsonantal root in *qām* and its ilk.

And R. Šmuel Hanagid z”l said that the truth of *qām* and its ilk are two visible letters and an invisible passive letter, this is primary, and my opinion is very close to his. (*Ṣaḥot,* p. 120)

[In the matter of the forms] *qômēm, sôbēb, kônēn lammišpāṭ kis’ô;* and a great grammarian said that they are by the model *pô‛ēl* and it is another heavy pattern, and he did not say anything … since if there is a word *qām* from three letters, then *qômēm* is in the model *pa‛lēl*, for the resting *wāw* is replacing the *‛ayin* of the verb according to the opinion of all the grammarians that were before me and after ben Saruq, and foremost R. Judah of blessed memory; and if according to my opinion that they are to we cannot put them in the *pô‛ēl* model*,* which is one of the triconsonantal roots.

According to ibn Ezra, the forms *qômēm,* *kônēn,* and their ilk do not represent a *pô‛ēl* pattern. He attacks the ‘great grammarian’ who said that they do, from all possible angles. If the hollow verbs are triconsontal and the *‛ayin* of the verb is indeed a *wāw* – which is, is he says, ‘the opinion of all the grammarians that were before me and after ben Saruq, and foremost R. Judah’, the form *kônēn* must be *pa‛lēl,* because the *wāw* belongs to the root and is not an addition; and if there are no hollow verbs and the root is biconsontantal *QM*, as ibn Ezra indeed believes, it would be absurd to place the form *kônēn* in the triconsontal *pô‛ēl* pattern. In other words, ibn Ezra disagrees with Hayyuj, and rejects the idea that hollow verbs belong to the *pô‛ēl* pattern. Ibn Ezra has another solution for the forms of *kônēn.*

And you should know that these duplicates [the hollow verbs according to Ibn Ezra -MK] it would be inconceivable that they will be found by way of the heavy patterns with *dᵉgᵉšîm*, for they have no middle letter that would receive a dagesh, in my opinion; and according to the grammarians, it is gone and will never receive a dagesh, and therefore, the Hebrews have placed in its stead a duplication of the last letter, like *qômēm, sôbēb, kônēn lammišpāṭ kis’ô.* (*Ṣaḥût*, p. 122–3)[[36]](#footnote-37)

Ibn Ezra raises here a possible attack, by both his view and Hayyuj’s view of the hollow verbs. In his view, this class is of the ‘duplicates, that is, it is biconsonantal. In the *qāl* pattern two consonants are present, but in *pî‛ēl* there is no possibility to place a dagesh in the *‛ayin* of the verb since it does not exist. Therefore, the last letter is duplicated. And even by Hayyuj’s view, which holds that this class of verbs is triconsonantal, the hollow verbs, these letters cannot receive a dagesh when they come in *pî‛ēl* (the heavy form with dagesh). The duplication of the *lāmed* of the verb is the morphological and phonetic alternative to the duplicative dagesh which should have been on the *‛ayin*.

Like his predecessors, Ibn Ezra also differentiates between the classes for verbs as far as pattern is concerned. The duplication of the *lāmed* of the verb is a morphological solution intended for the biconsonantal class (the hollow verbs).[[37]](#footnote-38) In theory, the geminate verbs which have three consonants do not require this solution, and should act like the standard verbs (with swallowing up the *‛ayin* of the verb in some cases),[[38]](#footnote-39) but it happens that the geminate verbs mix with the biconsonantals, and behave like them:

And this pattern which is the biconsonantal verbs alone, will mix with the geminate verbs, *yᵉsōbᵉbû* is said instead of *yāsōbbû,* and this is like *yᵉkônᵉnû.* (*Ṣaḥût*, p. 165)

The future conjugation of the root SBB in *qal*, in its original form is with doubling of the *bêt*, *yāsōbbû*, and such appears fifteen times in the scriptures. The verb *yᵉsôbᵉbû* (two occurrences: Ps. 59:7, 15) is a mixture of the biconsonantals and the geminate verbs (*yᵉsôbᵉbû* [*SBB*] = *yᵉkônᵉnû* [*KNN*]). But there is not complete overlap. The similarity between the classes, according to ibn Ezra, exists only in the past and future tenses, but in the present progressive the difference will be expressed:

And the difference between them is in the present, for from SBB it will be said *sôbēb,* and from the duplicate *mᵉkônēn* with the addition of a mem. (ibid. p. 165)

The model *mᵉpô‛ēl* according to ibn Ezra, occurs only in the biconsonantal roots, that is, what linguists consider to be the hollow verbs. In the geminate roots, the present will be of the model *pô‛ēl,* similar on the occurrences in scripture.

To summarize, we see that ibn Ezra based his theories about the verbal system, and most especially *pô‛ēl,* on the occurrences in scripture. Accordingly, there is no foundation for the existence of the pattern *pô‛ēl* in the standard forms. The only cases found in the standard forms can easily be interpreted otherwise.

# Conclusions

In this article we dealt with the fundamental difference between Hayyūj, the father of scientific Hebrew grammar, and R. Abraham ibn Ezra. The former built the Hebrew verbal system similarly to Arabic, on the corresponding forms to the four first patterns in Arabic. The latter built the verbal system from within, based on the evidence and occurrences thereof within the scripture, without resort to comparison to Arabic.

It is interesting to note that in *Sāpâ Bᵉrûrâh* (p. 40), after disputing Hayyuj’s view of *pô‛ēl*, ibn Ezra criticizes his predecessors on the comparison that they made between the quadriconsonantal verbs, like *kirsēm,* and the model *pa‛lēl*:

And they erred in everything when they weighed the quadriconsonantal roots on the model *pô‛ēl* , they said that *kirsēm* is on the model *pa‛lēl*, and how can it be that a quadriconsonantal word has the model of a triconsonantal word?

As we have seen in the article, the comparison between the model *pa‛lēl* and the quadriconsonantal roots sands at the very foundation of Sibawayh’s Arabic grammar, which categorizes the 2nd, 3rd, and 4th roots in one morphological division, identical by syllables and similar to the model *pa‛lēl*. This view Hayyūj and ibn Janah copied from Sibawayh, and they compared Hebrew to the Arabic verbal system, as we’ve mentioned.

This dispute we have described has not passed over modern linguistics. This too is divided as to the existence of the pattern *pô‛ēl*, in the standard verbs, in Hebrew. The claims which deny its existence are exceedingly similar to ibn Ezra’s claims as described above.

## Afterword

In this article we bear witness to a recurrent process in the history of cultures. In the tenth and eleventh centuries the science of Hebrew linguistics, and especially grammar, followed the Arabic path. This was, rightfully so, the lodestar for a new and innovating science of linguistics. At the stage the copy was similar to the original, as much as possible. This is why Hayyūj and his disciple after him created the pattern *pô‛ēl*, as the parallel model to *fā‛ala*, one of the four basic forms. Several generations later, in the twelfth century, when Hebrew grammar already stood on its own legs, ibn Ezra revaluated the issue using the data in Hebrew itself, and from this repository he did not find evidence proving its existence.[[39]](#footnote-40) In other words, Hayyūj and ibn Janah are similar to someone restoring an ancient sculpture, only partially finished (Hebrew grammar), in accordance with another statue, more completely finished (Arabic grammar). Even if the original foundation stones were missing (scripture and the holy texts) the sculpture can be restored. Ibn Ezra is like a sculptor building a new sculpture (Hebrew morphology) using the materials he found (Scripture) for its construction. The old sculpture (Arabic morphology) is an example alone, and only to understand the general lines and ideas, but there is certainly no restoration here.[[40]](#footnote-41)

1. I give my heartfelt thanks to Prof. Moshe Bar Asher, Prof. Hagai Ben Shammai, Prof. Norman Stillman, Prof. Geoffrey Khan and Dr Almog Kasher for reviewing this article and their valued corrections. Many of their contributions are in this article. [↑](#footnote-ref-2)
2. On Hayyūj, see, for example, A. Dotan, ‘Comparative Linguistics in the Middle Ages: An Examination of a Topic in Judah Hayyūj’s Thought’, *Te’uda* 9 (1995), pp. 117–8 (in Hebrew); I. Eldar, ‘Ḥayyūj's Grammatical Analysis’, Lĕšonénu 54 (1991), pp. 161–9 (in Hebrew); and especially N. Basal, ‘The Grammatical Theory Of Rabbi Judah Hayyuj’, (in Hebrew) (Ph.D thesis, Bar-Ilan University, Ramat Gan, 1992). See also N. Basal, ‘Remnants of Tahbir in “Kitab al-Nataf” of R. Judah Hayyūj as Arabic–Jewish Cultural Exchange’ in Y. Tobi, (ed) *Ben ‛Ever La-‛Arav:* *Contacts between Arabic Literature and Jewish Literature in the Middle Ages and Modern Times* (in Hebrew) (Tel Aviv: Afikim, 1999); idem, ‘From the Earliest Buds of Sephardi Biblical Exegesis. Fragments of the Commentary of 1 Samuel by Judah Hayyūj’, *Pe‘amim* 68 (1996), p. 68 (in Hebrew). [↑](#footnote-ref-3)
3. See A. Watad and D. Sivan, *Three Treatises on Hebrew Grammar by R. Judah Hayyūj: A New Critical Edition of the Arabic Text with a Modern Hebrew Translation* (in Hebrew) (Beersheba: Ben-Gurion University, 2012), pp. 30–1 (future references to Hayyūj are to this edition). See also ibn Ezra, *Ṣahot*, ed. Lipmann (Furth: Lipmann, 1827), p. 164, who notes that Hayyūj was the first to indicate the existence of *pô‛ēl.* B.K. Waltke and M.P. O’Connor, *Biblical Hebrew Syntax* (Winona Lake, IN: Eisenbrauns, 1990‬), p.‬‬ 359, have, mistakenly, named ‬‬David Kimhi as the first.‬‬‬‬‬‬‬‬‬‬‬‬ [↑](#footnote-ref-4)
4. For a general examination of Hayyūj and his successor ibn Janah, see A. Maman, ‘The Flourishing Era of Jewish Exegesis in Spain: The Linguistic School – Judah Ḥayyuj, Jonah ibn Janaḥ, Moses ibn Chiquitilla and Judah ibn Balʻam’, in Magne Saebø (ed.), *Hebrew Bible/Old Testament* (Göttingen: Vandenhoeck and Ruprecht, 2000), vol. I, pp. 263–70. See also A. Maman, ‘ופחד ורחב לבבך: Rabbi ben David Hayyuj’s Version’, *Lešonenu* 71 (2009), pp. 101–2 (in Hebrew). He proves there that ibn Janah did know of all of Hayyuj’s works. [↑](#footnote-ref-5)
5. Behar examined it and Harlap discussed his view. As we mentioned, ibn Ezra’s view was not explained and I will offer a different explanation for several details. I will discuss these researchers further later in this article. [↑](#footnote-ref-6)
6. Jose Martinez Delgado is one of the only scholars to have addressed the parallels of Hayyuj’s morphology in Arabic, even addressing *pô‛ēl.* See J.M. Delgado, ‘The Arabicization of the Hebrew Morphology in al-Andalus: The Adaptation of the Faʽala Paradigm’, in Monferrer-Sala and Al Jallad (eds), *The Arabic Language Across the Ages* (Wiesbaden: Reichert, 2010), pp. 49–63; idem, Delgado, *El Libro de Ḥayyūŷ* (Granada: Universidad de Granada 2004), pp. 22–30. Basal, ‘Grammatical Theory’, discusses Hayyuj’s view of *pô‛ēl* very briefly. I will refer to the relevant places. Chomsky discusses the various thinkers in his book on Kimhi. See W. Chomsky, *David Kimhi’s Hebrew Grammar (Mikhlol) Systematically Presented and Critically Annotated* (New York: Dropsie College, 1952), pp. 92–93, 105 note 59. See also I. Eldar, *Hebrew Language Study in Medieval Spain* (in Hebrew) (Jerusalem: Academy of the Hebrew Language, 2014) pp. 100, 147–8, and note 19 there. [↑](#footnote-ref-7)
7. Dan Becker has led this, and proved direct influence down to word-by-word copying in several places, of the Arabic grammarians on ibn Janah and even Hayyuj. We will refer to the relevant places. [↑](#footnote-ref-8)
8. See D. Téné, A. Maman, and J. Barr, ‘Linguistic Literature, Hebrew’, in Encyclopaedia Judaica; Gale Virtual Reference Library, <https://link.galegroup.com/apps/doc/CX2587512561/GVRL?u=barilan&sid=GVRL&xid=838642de>, accessed 20 July 2015 where they divide medieval Hebrew linguistics into four categories: (1) tenth century: early attempts; (2) until the middle of the twelfth century: the creative period; (3) through the mid-thirteenth century: the dissemination period (ibn Ezra’s time) and (4) stasis (until the mid-sixteenth century). [↑](#footnote-ref-9)
9. In a forthcoming article I plan to show that Eliyahu Bahur, apparently following in ibn Ezra’s footsteps, rejects the existence of the eighth structure, even though his view isn’t completely compatible with ibn Ezra’s. [↑](#footnote-ref-10)
10. Ibn Al-Saraj writes similar things in *al-Usûl al-naḥw* 3 [BIBLIOGRAPHIC INFO NEEDED], pp. 114–5.See also D. Becker, *Arabic Sources for Jonah ibn Janah’s Grammar* (in Hebrew) (Tel Aviv: הוצאת אוניברסיטת תל אביב, 1998), p. 197. See also G. Goldenberg, ‘Principles of Semitic Word-Structure’, in G. Goldenberg and S. Raz (eds), *Semitic and Cushitic Studies* (Wiesbaden: Harrasowitz, 1994), pp. 29–39; E. Goldenberg, ‘Studies in the Agron of Rav Sa’adia Gaon’, *Lešonenu* 37 (1973), p. 88 (in Hebrew). [↑](#footnote-ref-11)
11. M. Yavrumyan, ‘Das System der Verbalstämme in der arabischen linguistischen Tradition: Elemente der morphologischen und semantischen Analyse’ (Ph.D thesis, University of Bayreuth, Bayreuth, 2006)*.* [↑](#footnote-ref-12)
12. Sibawayh [information needed] 2, pp. 360–1 discusses how the basic form of the future tense in the *af‘ala* structure is with an ’*ālep*, *yu’af‘il* as opposed to *yuf‘il*. [↑](#footnote-ref-13)
13. Judah Hayyuj, *Kitāb al-'Af 'āl Dhawāt Ḥurūf al-Līn* in M. Jastrow (ed), *The Weak and Geminative Verbs in Hebrew by Abu Zakariyya Yahya ibn Dawud of Fez* (Leiden: Brill, 1897). All citations of Hayyūj are from here. All translations are my own. See Becker, *Arabic Sources*, p. 197 for meaning of ‘light’ and ‘heavy’, and other terms. See also I. Eldar,*’*אבות ותולדות במערכת הבניינים [PLEASE TRANSLATE THIS TITLE] *Lešonenu* 44, 2 (1980), pp. 157–60 (in Hebrew). [↑](#footnote-ref-14)
14. These are the passive verbs, *mā lam yusamma fāʿiluhu* (that of which its agent has not been mentioned). Hayyūj deals with this in the active structures, that is the *pu‛al* structure in the *pi‛ēl* framework, and *hup‛al* in the framework of *hip‛îl*. See Basal, ‘Grammatical Theory’, p. 139, 146, 152. [↑](#footnote-ref-15)
15. *Nip‛al* is *infa‛ala,* and *hitpa‛ēl* is *ifta‛ala.* In several places Hayyūj calls *hitpa‛ēl* ‘heavy’. See Becker, *Arabic Sources*, pp. 201–2 and note 271. [↑](#footnote-ref-16)
16. All emphases my own. See also M. Wilensky (ed), *Sēp̱er Hā-Riqmâ* of Jonah Ibn Jahah. New Expanded Edition by David Tene (in Hebrew) (Jerusalem: Academy of the Hebrew Language, 1964), p. 190 note 4. See also Becker, *Arabic Sources*, pp. 110–1; idem, ‘“The Pāʿūl, the Pōʿēl of which has not been Specified” According to R. Yonah Ben Janāḥ’ *Lešonenu* 56 (1992), pp. 213–21 (in Hebrew). [↑](#footnote-ref-17)
17. I.e., the *pᵉ‛ālîm šellō’ huzkar pô‛ălām* [↑](#footnote-ref-18)
18. Similar things were written by the Karaite grammarian, Yūsuf ibn Nūḥ, who was active in the second half of the tenth century in Jerusalem, slightly earlier than Ḥayyūj. Cf. G. Khan. *The Early Karaite Tradition of Hebrew Grammatical Thought: Including a Critical Edition, Translation and Analysis of the Diqduq of ʾAbū Yaʻqūb Yūsuf Ibn Nūḥ on the Hagiographa*. (Studies in Semitic Languages and Linguistics, Leiden: Brill, 2000), pp. 53–5. [↑](#footnote-ref-19)
19. Marwan ibn Janah, *Kitāb al-Luma*, ed. J. Derenbourg (Paris: F. Vieweg, 1886), p. 162. [↑](#footnote-ref-20)
20. Ibn Janah, *Kitāb al-Luma*, pp.165–6. And ibn Tibbon’s translation in Wilensky (ed), *Sēp̱er Hā-Riqmâ*, p. 189. For explication see ibid., note 8. [↑](#footnote-ref-21)
21. Hayyuj, in the root YLD raises the possibility that the verbs *yōladt* (Gen. 16:11) *yōšaḇt* (Jer. 22:23), *šōḵant* (Jer. 51:13), *šôsētî* (Isa. 10:13) are also part of the *pô‛ēl* structure. See also Basal, ‘Grammatical Theory’, p. 296–7 and note 347. [↑](#footnote-ref-22)
22. Watad and Sivan, ‘Three Treatises’, pp. 66-68 on the root *YD‛*, Hayyūj raises two possibilities for *yôda‛tî.* 1) the *yôd* replaces the heh in the *hip‛îl* structure. 2) it is a structure of its own. In other words, the root *YD‛* and the structure of *pôʿēl*, and the past tense is *pô‛altî.* It seems clear that Hayyūj considers *mešōp̱ṭî* to be part of the *pôʿēl* structure, and he’s only debating *yôda‛tî.* See, on his view, Basal, ‘Grammatical Theory’, p. 139, 152, 333, and more. See also idem., p. 66 and note 25 there. [↑](#footnote-ref-23)
23. For comparison, see, among others, E. Lipiński, *Semitic Languages: Outline of a Comparative Grammar*, 2nd ed. (Leuven: Peeters en Department Oosters Studies, 2001), pp. 378–92; W. Wright, *Lectures on the Comparative Grammar of the Semitic Languages* (Amsterdam: Philo Press, 1966), pp. 165–207, and especially 202–3 with regard to the third structure in Arabic. In practice, almost all the linguistics texts compare these. See also S. Morag, ‘The Tiberian Tradition of Biblical Hebrew – Homogeneous and Heterogeneous Features’, in E.S. Rosenthal(ed), *P’raqim: Yearbook of the Schocken Institute for Jewish Research of the Jewish Theological Seminary of America.* Vol. 2 (in Hebrew)(Jerusalem: Defus Merkaz, 1969–74), pp.120–5. [↑](#footnote-ref-24)
24. Even modern linguistics raises the possibility of its existence (see later on), but it is aware to the fact that there are a limited number of instances of the structure, and it is hard to definitively state its existence. Judah Hayyuj, as we’ve said, states its existence with complete certainty. [↑](#footnote-ref-25)
25. This happens to preserve a pattern in proto-Semitic, but the medieval grammarians weren’t aware of such things. [↑](#footnote-ref-26)
26. For other examples and studies of this influence in Hayyuj, see N. Kinberg, ‘Some Syntactic Notions of Judah Ḥayyuj’, *Lĕšonénu* 52 (1988), pp. 144–56 PLEASE TRANSLATE THIS TITLE (תפיסתו התחבירית של רבי יהודה חיוג'?); N. Basal, ‘Syntax in Yehudah Hayyūj *Kitâb al-Nutaf* as an Arabic-Hebrew Cultural Encounter’ in Tobi, *‘Ever and ‘Arav,* pp. 95–111. [↑](#footnote-ref-27)
27. Ibn Ezra credits him with this innovation too. See note 2. It should be noted that the Karaite Ibn Nūḥ (earlier than Ḥayyūj) and other Karaite grammarians regard it as a distinctive morphological pattern (Khan, *Diqduq*, p. 366), but he was not using the system of abstract patterns *piʿel, hiphʿil* etc. See also N. Vidro, *Medieval Karaite Pedagogical Grammar* (Leiden: Brill, 2013), pp. 226–9. [↑](#footnote-ref-28)
28. The initial division of the triconsonantal root of ibn Janah in the beginning of Gate 14 (13) is the comparison between *mazīd* and *ġayr mazīd*. The *mazīd* is ‘that which is not light’ al-Luma*,* 136. Ibn Janah himself equates *mazīd* and ‘heavy’ verbs. See Eldar, *Abot wetōlādōt* [PLEASE TRANSLATE THIS TITLE], p. 157. It may very well be that ibn Janah prefers the term *mazīd* which reflects the transformation of the verb from triconsonantal to quadriconsonantal as we saw in Sibawayh on structures 2, 3, 4. [↑](#footnote-ref-29)
29. Basal, ‘Grammatical Theory’, pp. 84–6. [↑](#footnote-ref-30)
30. In modern day linguistics this is disputed. J. Blau, *The Phonology and Morphology of Biblical Hebrew* (in Hebrew) (Jerusalem: Academy of the Hebrew Language, 2010), pp. 295–6 presents the weak verb structure *pi‛lēl* and the strong verb structure *pô‛ēl* exactly like Hayyuj. For a different presentation, see P. Joüon and T. Muraoka, *A Grammar of Biblical Hebrew* (Rome: Pontifical Biblical Institute, 1991), pp. 156–7. [↑](#footnote-ref-31)
31. Basal, ‘Grammatical Theory’,p. 87. Ibn Janah writes similar thingsin *Kitāb al-Luma*, pp.142–3. [↑](#footnote-ref-32)
32. In *Môznayyîm* he counts *pô‛ēl* among the verb structures in the standard verbs. But in his later works, and primarily *Ṣaḥot,* his all-encompassing work on the Hebrew language, ibn Ezra opposes its existence. See Becker, *Arabic Sources*, pp. 74–5; L.R. Charlap, *Rabbi Abraham ibn Ezra’s Linguistic System: Tradition and Innovation* (in Hebrew) (Beersheba: Ben-Gurion University, 1999), p. 133. [↑](#footnote-ref-33)
33. *mᵉšōp̱ṭî* is explained here by ibn Ezra as an adjective form; *yôda‛tî* is explained as a *yôd*-*hê* swap – a possibility which Hayyūj raises in his dictionary, entry *YD‛*. See above note 18. [↑](#footnote-ref-34)
34. As for the question whether Dunash (Adonim Halevi in ibn Ezra), composer of the comments on Saadia Gaon is the Dunash who disputes Menahem, see S. Poznanski, ‘New Material on the History of Hebrew and Hebrew–Arabic Philology’, in *The Jewish Quarterly Review* 16 (1925), pp. 237-266; M. Wilensky, *Studies in Language and Literature* (in Hebrew) (Jerusalem: Academy of the Hebrew Language,1978), pp. 190–4; Eldar, ‘Hayyūj’s Grammatical Analysis’, p. 175; R. Hazon, ‘The Linguistical Theory of the Author of the “Responses” to Saadia’ (in Hebrew) (Ph.D thesis, Tel Aviv University, Tel Aviv, 2006), pp. 3–4 and more is the definitive research on the topic, and it shows almost certainly that there were two different authors. See also Dotan,‘Comparative Linguistics’, p. 130; Morag, ‘The Linguistic Heritage of the Spanish Communities’, *Pe’amim* 53 (1993), p. 11 (in Hebrew); Basal, *Kitāb* [full details needed], pp.140–1; idem, ‘Remnants of Tahbir’, pp. 95–6. [↑](#footnote-ref-35)
35. G. Goldenberg, ‘*ha‛îbrî*’'על השוכן החלק והשורש העברי' [PLEASE TRANSLATE THIS TITLE], *Lešonenu* 44 (1980), pp. 287–92; For further explanation see Eldar, ‘Hayyuj’s Grammatical Analysis’, pp. 171–4. See also N. Faust and Y. Hever, ‘Empirical and Theoretical Arguments in Favor of the Discontinuous Root in Semitic Languages’, *Brill’s Annual of Afroasiatic Languages and Linguistics* 2 (2010), pp. 80–118. [↑](#footnote-ref-36)
36. I have punctuated this somewhat differently from Charlap. As I noted, ibn Ezra addresses two possibilities – his view and Hayyuj’s. See Charlap, *Ibn Ezra’s Linguistic System*, pp. 142–3. [↑](#footnote-ref-37)
37. In modern linguistics, Muraoka presents this similarly. See P. Joüon and T. Muraoka, *Grammar of Biblical Hebrew*, pp. 156–7. [↑](#footnote-ref-38)
38. Ibn Ezra believes that in the geminate verbs the *‛ayin* is omitted and not the *lāmed*. See Ṣaḥot, [PLEASE PROVIDE THE FULL PUBLICATION DETAILS IN ENGLISH(מהדורת ליפמאן, פיורדא תקפ"ז. כל ההפניות לספר צחות זה מכאן), p. 25: ‘For they said that its model is *pê*, for it is missing the *lāmed*; but what is correct is that it is missing the *‛ayin*.’ [↑](#footnote-ref-39)
39. G. Bergsträsser, *Hebräische Grammatik, mit Benutzung der von E*. *Kautzsch bearbeiteten* (Hildesheim: G. Olms), p. 28; Auflage von W. Gesenius, *Hebräischer Grammatik* (Leipzig : F. C. W. Vogel, 1962), p. 108. See also Joüon and Muraoka, *Grammar of Biblical Hebrew*, p. 59a. Waltke and O’Connor *Biblical Hebrew Syntax*, NO PAGE NUMBER; Blau, *The Phonology*, p. 226; Morag, ‘The Tiberian Tradition’ NO PAGE NUMBER, PLEASE PROVIDE FULL REFERENCE TO THE WHOLE ARTICLE. Wright, *Lectures on the Comparative Grammar*, p. 34 even makes the direct connection between *fāʿil* and *pô‛ēl.* [↑](#footnote-ref-40)
40. It must be emphasized: this article doesn’t try to settle the question of *pô‛ēl*, rather to examine the main views in the Middle Ages. It must further be emphasized: this article does not deny the existence of comparisons in ibn Ezra between Hebrew and Arabic. There are a great many of them. But creation of the verbal system, ibn Ezra didn’t see a need to compare the two languages. [↑](#footnote-ref-41)