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

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Abstract

In the introduction to his dictionary, considered to be the first scientific Hebrew dictionary based on the principle of the triconsonantal root, medieval grammarian Judah Hayyūj enumerates eight verbal patterns: the seven presently accepted and the additional pattern $p\hat{o}'\bar{e}l$ (פּוֹעֵל). However, Hayyuj's identification of this latter pattern was not accepted by all medieval grammarians. Ibn Ezra in particular disputed the existence of this pattern in the standard verbs.

This article suggests that the difference between Hayuuj's and Ibn Ezra's views is a result of their different historical contexts. In the tenth and eleventh centuries, the science of Hebrew linguistics, and especially grammar, followed the Arabic model. Accordingly, Hayyūj created the pattern $p\hat{o}$ ' $\bar{e}l$ as the parallel to $f\bar{a}$ 'ala, one of the four basic forms of the Arabic verb. By the twelfth century, however, Ibn Ezra revaluated the issue using the data of Hebrew itself, and found no evidence for this form.

Introduction¹

The systemic structure of the Hebrew verbal system was formulated by Judah Hayyūj in the medieval period. In his dictionary dealing with weak and geminative verbs, Hayyūj presented all the Hebrew patterns (binyānîm), distinguishing, in accordance with the Arabic grammarians, between heavy and light patterns, and then went on to describe eight patterns. This dictionary is the first scientific Hebrew dictionary based on the principle of the triconsonantal root.²

In the introduction to the dictionary, Hayyuj, for the first time in the history of Hebrew grammatical study, enumerates eight verbal patterns – the seven presently accepted, and in addition $p\hat{o}$ ' $\bar{e}l$ (פֿוֹעֵל). These eight are divided into heavy and light patterns, the heavy being: $p\bar{a}$ 'al, pi' $\bar{e}l$, $p\hat{o}$ ' $\bar{e}l$, and hip'il. His student Jonah ibn Janah followed in his footsteps in his $S\bar{e}per$ $H\bar{a}$ - $Rigm\hat{a}$, chapter 13. From their own discussion,

¹ I would like to offer my sincere 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 for their valuable corrections. Many of their contributions are reflected in this article.

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 Hayyūj', (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).

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, *Şahot*, 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.

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 Bal'am', in Magne Saebø (ed.), *Hebrew Bible/Old Testament* (Göttingen: Vandenhoeck and Ruprecht, 2000), vol. I,

it is evident that they do not see any innovation in using this pattern and find it natural that the classification of patterns in Hebrew would include $p\hat{o}'\bar{e}l$.

Several questions arise: Was 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 emerges that Hayyuj's view was not universally accepted by medieval grammarians. Ibn Ezra held a unique view on the $p\hat{o}'\bar{e}l$ pattern, disputing the existence of this pattern in the standard verbs. His view has been examined by several researchers,⁵ though, as I will demonstrate in this article, this examination has yet to encompass the entirety of ibn Ezra's view on the matter. Similarly, a satisfactory explanation has yet to be provided for this dispute between Hayyūj and ibn Ezra.

These issues, which are fundamental to understanding Semitic grammar in the medieval ages, have received little attention. To the best of my knowledge, not a single study systematically examines the views of various medieval grammarians about the $p\hat{o}$ ' $\bar{e}l$ pattern.⁶

The goal of this paper is to fill in some of the lacunas in these fields. In this paper, I point to two different views of $p\hat{o}'\bar{e}l$ among medieval grammarians and I explain the divergent views. I also show that grammarians relied on Arabic grammar in establishing Hebrew grammar, and that the $p\hat{o}'\bar{e}l$ pattern was invented by Hayyūj out of a desire to align Hebrew and Arabic grammar. In the second half of the twelfth century, after the consolidation of Hebrew grammar, ibn Ezra, the most original and critical grammarian of

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 was acquainted with all of Hayyuj's works.

⁵ Behar examined it and Harlap discussed his view. As mentioned, ibn Ezra's view was not explained and I will offer a different explanation concerning several details. I will discuss these scholars further below in this article.

⁶ Jose Martinez Delgado is one of the few scholars to have addressed the parallels of Hayyuj's morphology in Arabic, even addressing $p\hat{\sigma}'\bar{e}l$. See J.M. Delgado, 'The Arabicization of the Hebrew Morphology in al-Andalus: The Adaptation of the Fa'ala 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 $p\hat{\sigma}'\bar{e}l$ very briefly. I will refer to the relevant locations. 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.

⁷ Dan Becker has championed this approach, and proved the direct influence, down to word-by-word copying in several places, of the Arabic grammarians on ibn Janah and even Hayyuj.

this period,⁸ began to view the verbal system through a Hebrew lens, positing that the eighth pattern does not exist among the standard verbs. In his opinion, the occurrences in Scripture are not a reliable witness to the existence of this pattern, contrary to the view of Hayyūj and ibn Janah.⁹

Before we discuss $p\hat{o}$ ' $\bar{e}l$ itself in medieval thought, we will compare the Hebrew verbal system in Hayy \bar{u} j and his student ibn Janah to the Arabic verbal system as viewed by Sibawayh and his students. This comparison will illuminate Hayy \bar{u} j'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 was a central topic for Arabic grammarians in the medieval period. In this section we examine the views of Sibawayh, the 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 by way of providing 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, $f\bar{a}'ala$, af'ala] are similar to the quadriconsonantal roots which do not have additions, like dahraja, since their number is like their number, and they are alike in passivity and movement.¹⁰

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. These authors 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 (through the mid-sixteenth century).

¹⁰ Ibn Al-Saraj writes similarly in *al-Usûl al-naḥw* 3, pp. 114–15. See also D. Becker, *Arabic Sources for Jonah ibn Janah's Grammar* (in Hebrew) (Tel Aviv: Tel Aviv University Press, 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).

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 pattern, though his view is not entirely compatible with that of ibn Ezra.

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

More simply put:

Past: dahraja: $fa'lala = fa'ala = f\bar{a}'ala = 'af'ala$.

Future: yudahrij: yufa'lil = yufa''il = yufa'il = yu'af'il.

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 into light and heavy, and I have called by the name 'light' those which come through the pattern $p\bar{a}$ 'altî, for it is the lightest of the patterns; and by the name 'heavy' those which come from outside the pattern $p\bar{a}$ 'altî, like hip 'altî, or pi 'altî, or po 'altî, or other patterns. 13

It may seem strange that Hayyūj mentioned only these four $-p\bar{a}'al$ as a light pattern, $hip'\hat{i}l$, $pi'\bar{e}l$, and $p\hat{o}'\bar{e}l$ as heavy patterns - explicitly, and the other only by implication. In his references to the passive patterns hup'al and pu'al, Hayyuj's fundamental principle is that they are included in the active patterns $hip'\hat{i}l$ and $pi'\bar{e}l$, so that he did not consider it correct to enumerate them separately. However, a question remains regarding nip'al and $hitpa'\bar{e}l$. Furthermore, a thorough examination of his works shows that Hayyūj considers neither nip'al nor $hitpa'\bar{e}l$ a 'heavy' pattern. These four patterns alone, in Hayyuj's scheme, are described as 'light' patterns or 'heavy' patterns. The question, accordingly, concerns nip'al and $hitpa'\bar{e}l$.

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).

¹² Sibawayh, 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).

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, 'Causes and effects in the verbal system', *Lešonenu* 44, 2 (1980), pp. 157–60 (in Hebrew).

¹⁴ These are the passive verbs, $m\bar{a}$ lam yusamma $f\bar{a}$ 'iluhu (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 $pi'\bar{e}l$ framework, and hup'al in the framework of $hip'\bar{i}l$. See Basal, 'Grammatical Theory', p. 139, 146, 152.

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. 201–202 and note 271.

In Jonah ibn Janah's $Kit\bar{a}b$ al-Luma' we find a more explicit discussion of this issue. In the thirteenth chapter, dedicated entirely to the Hebrew verbal system, Janah dedicates the first and main part to the four patterns -qal, $hip'\bar{i}l$, $p\hat{o}'\bar{e}l$, and $pi'\bar{e}l$ — which in turn are classified in two divisions.

Ibn Janah then dedicates several pages to the patterns *nip'al*, *hitpa'ēl*, *hup'al*, and *pu'al*. These are given the title: *wa-mimmā yalḥaq al-fi'l min al-abniya li'l-ma'nā fa-hiya al-infi'āl wa'l-ifti'āl wa-mā lam yusamma fā 'iluhu* – 'and the patterns *added to the verb*, *for adding meaning*, ¹⁶ they are: *nip'al*, *hitpa'ēl*, and that of which its agent has not been mentioned' (i.e., *hup'al* and *pu'al*). ¹⁷ In other words, the basic verbal patterns are the first four patterns, while the rest are built from these four. ¹⁸ Ibn Janah goes on to clarify that the *nip'al* pattern is a variant of the light pattern, ¹⁹ though he is not certain whether *hitpa'ēl* belongs to the light pattern or to *pi'ēl*. ²⁰

Judah Hayyūj and his disciple consider the four abovementioned patterns as the founding patterns in the Hebrew language. As we have enumerated, these are $p\bar{a}'al$ as a light pattern, and $hip'\hat{i}l$, $pi'\bar{e}l$, and $p\hat{o}'\bar{e}l$ as the heavy patterns.

Having examined the Hebrew verbal system as reflected in the views of Hayyūj and his disciple, we now return to the central question of this article: On what does Hayyūj rely when attempting to establish the fourth pattern, $p\hat{o}$ ' $\bar{e}l$, in the strong verbs?

The number of occurrences of this pattern in the standard verbs in Scripture is tiny. Only two verbs that are clearly part of $p\hat{o}$ ' $\bar{e}l$ appear in the works of medieval grammarians.

1) אֵשֶׁר אָם־צַדַקָּתִּי, לֹא אָעֲנָה; לְמְשׁפְּטִי אֶתְחַנַן (Job 9:15).

¹⁶ All emphases my own. See also M. Wilensky (ed), *Sēper 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. 110–11; idem, "'The Pā'ūl, the Pō'ēl of which has not been Specified" According to R. Yonah Ben Janāḥ' *Lešonenu* 56 (1992), pp. 213–21 (in Hebrew).

¹⁷ I.e., the p^e 'ālîm šellō' huzkar pô'ălām

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 'Abū Ya'qūb Yūsuf Ibn Nūḥ on the Hagiographa*. (Studies in Semitic Languages and Linguistics, Leiden: Brill, 2000), pp. 53–55.

¹⁹ Marwan ibn Janah, *Kitāb al-Luma*, ed. J. Derenbourg (Paris: F. Vieweg, 1886), p. 162.

²⁰ Ibn Janah, *Kitāb al-Luma*, pp.165–6. And ibn Tibbon's translation in Wilensky (ed), *Sēper Hā-Riqmâ*, p. 189. For explication see ibid., note 8.

2) אָת-הַנְּעָרִים יוֹדַ**עְהִי** אֶל-מְקוֹם פְּלֹנִי אַלְמוֹנִי (1 Sam. 21:3). ²¹

Joseph Kimhi writes as follows in $S\bar{e}per\ Ha-Zikkaron$ on the form $lim \bar{s}\bar{o}pt \hat{i}$ and its grammatical explanation:

And there are found from this form, in the standard verbs, a few words, like $lim \bar{s} \bar{o} p^e t \hat{i}$ 'ethannān, we cannot judge it to be in any other pattern, for were it in qal, it would be $l^e \bar{s} \bar{o} p t \hat{i}$, and if it were from $pi'\bar{e}l$, it would be $lim \bar{s} app^e t \hat{i}$, like $lim gadd^e l \hat{i}$, and if from $hip'\hat{i}l$, it would be $l^e m a \bar{s} p t \hat{i}$, like $magd\hat{i}l\hat{i}$, thusly it was said that $m^e \bar{s} \bar{o} p^e t \hat{i}$ is of the model of $m^e k \hat{o} n^e n \hat{i}$, ' $m^e r \hat{o} m^e m \hat{i}$ $m \bar{i} \bar{s} \bar{s} a' \bar{a} r \hat{e} m \bar{a} wet$ ' (Ps. 9:14).

Kimhi, as we see, explains the form $m^e \bar{s} \bar{o} p t \hat{i}$ as representing the form $p \hat{o}' \bar{e} l$, and hence the form that deviates from the other patterns is explained. The verb $y \hat{o} da' t \hat{i}$ is similarly explained as a first person past tense verb in the $p \hat{o}' \bar{e} l$ pattern.²² Kimhi emphasizes that 'few words are found from this form'; in other words, we have little evidence attesting to its existence.

And here the central question returns: Are a handful of occurrences in Scripture adequate to establish such a broad and significant pattern in the verbal system? Moreover, as we shall see below, ibn Ezra, two centuries after Hayy \bar{u} , correctly argues that there is no clear and sufficient evidence from the Bible to claim that there is a verb pattern $p\hat{o}$ el.

In this article, I would like to speculate that the primary and central motive that influenced Hayyūj in establishing this form was the comparison to Arabic. I will clarify: on the existence of $p\bar{a}$ 'al, pi' $\bar{e}l$, and hip'il in Hebrew there is no question, and the parallelism to Arabic is obvious: $p\bar{a}$ 'al is the light pattern and parallel to fa 'ala/fa 'ila/fa 'ula; the pi' $\bar{e}l$ with gemination is parallel to fa 'ala; hip'il is parallel to af'ala; ²³

²¹ On the root YLD, Hayyūj raises the possibility that the verbs $y\bar{o}ladt$ (Gen. 16:11) $y\bar{o}sa\underline{b}t$ (Jer. 22:23), $s\bar{o}\underline{k}ant$ (Jer. 51:13), $s\bar{o}s\bar{e}t\hat{i}$ (Isa. 10:13) are also part of the $p\hat{o}'\bar{e}l$ structure. See also Basal, 'Grammatical Theory', p. 296–97 and note 347.

Watad and Sivan, 'Three Treatises', pp. 66-68. On the root YD', Hayyūj raises two possibilities for $y\hat{o}da't\hat{i}$: 1) the $y\hat{o}d$ replaces the heh in the $hip'\hat{i}l$ structure, 2) it is a structure of its own. In other words, the root YD' and the structure of $p\hat{o}$ ' $\bar{e}l$, and the past tense is $p\hat{o}$ ' $alt\hat{i}$. It seems clear that Hayyūj considers $m^e \bar{s}\bar{o}pt\hat{i}$ to be part of the $p\hat{o}$ ' $\bar{e}l$ structure, and he is only unsure regarding $y\hat{o}da't\hat{i}$. See, on his view, Basal, 'Grammatical Theory', p. 139, 152, 333, and more. See also idem., p. 66 and note 25 there.

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 202–203 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'ragim*:

but is it possible to find a parallel to the Arabic $f\bar{a}$ 'ala? Hayyūj was not unique in his desire to find this parallel: both he and ibn Janah failed to define a Hebrew verbal system perfectly parallel to Arabic, as the number of patterns in Arabic is greater than in Hebrew. But they wished to maintain the parallelism at least for the first four patterns in the Arabic verbal system – the light pattern, and the unitary system of the three first heavy patterns, according to Sibawayh's view. This need to create a parallel for $f\bar{a}$ 'ala motivated the creation of the eighth form. Hayyūj simply applied the $\bar{a} > \hat{o}$ pattern here, too, creating $p\hat{o}$ ' \bar{e} l. Delgado claims that the first to compare $f\bar{a}$ 'ala with $p\hat{o}$ ' \bar{e} l was ibn Barun. I am not disputing this. Ibn Barun clearly and openly compares them, while Hayyūj does not explicitly do so. What I am suggesting is that the desire to create a parallel order stems from Arabic. In other words, in the specific case of $p\hat{o}$ ' \bar{e} l, as well as many other instances in Hebrew grammar in general, Hayyūj had Arabic on his mind.

We shall now look at $p\bar{o}$ ' $\bar{e}l$ in the early grammarians.

The pô'ēl pattern

Hayyūj and ibn Janah

Judah Hayyūj appears to be the first of the medieval grammarians to mention $p\hat{o}'\bar{e}l$ as a pattern in its own right.²⁷ The primary quote from Hayyūj on this matter is the one cited above:

And I have divided the verbs into light and heavy, and I have called by the name 'light' those which come through the pattern $p\bar{a}$ 'altî, for it is the lightest of the patterns; and by the name 'heavy' those which come from outside the pattern $p\bar{a}$ 'altî, like hip 'altî, or pi 'altî, or po 'altî, or other patterns.

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. 120–25.

²⁴ Even modern linguistics raises the possibility of its existence (see below), 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 that it exists. Hayyūj, as mentioned, affirms its existence with complete certainty.

²⁵ This happens to preserve a pattern in proto-Semitic, but the medieval grammarians were unaware of this fact.

²⁶ For other examples and studies of this influence in Hayyūj, see N. Kinberg, 'Some Syntactic Notions of Judah Ḥayyuj', *Lěšonénu* 52 (1988), pp. 144–56; N. Basal, 'Syntax in Yehudah Hayyūj *Kitâb al-Nutaf* as an Arabic-Hebrew Cultural Encounter' in Tobi, 'Ever and 'Arav, pp. 95–111.

²⁷ Ibn Ezra credits him with this innovation too; see note 2. It should be noted that the Karaite ibn Nūḥ (who predated 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 *pi 'el, hiph 'il* etc. See also N. Vidro, *Medieval Karaite Pedagogical Grammar* (Leiden: Brill, 2013), pp. 226–29.

In his chapter on verbs ($Riqm\hat{a}$, chapter 17), ibn Janah similarly distinguished between the heavy and light verbs:

But the additive triconsonantal verb is that whose pattern is not the like the light pattern, for instance: $hip'\hat{\imath}l, p\hat{o}'\bar{e}l, and pi'\bar{e}l...$ and each of these species is called 'heavy', as R. Judah explained in $S\bar{e}per$ 'Otiyyôt Hassēter (Riqmâ, p. 163).

Elsewhere he defines the pattern $p\hat{o}'\bar{e}l$ as an 'extended' ($maz\bar{\iota}d$) verb because of the added $w\bar{a}w$.²⁸

Hayyūj's words present a clear division between the standard verbs and the geminate verbs, on the one hand, and the hollow verbs, on the other. In his opinion, the pattern $p\hat{o}'\bar{e}l$ 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 $pi'l\bar{e}l$. As he writes in his introduction to the hollow verbs:

There are those with a duplicated $l\bar{a}med$ of these weak 'ayin verbs, and the 'ayin hapoal in them is a quiescent $w\bar{a}w$. Sometimes this is to differentiate in meaning. Such was said in $q\bar{a}m$, $h\bar{e}q\hat{i}m - l^e$ 'ôyēb $y^eq\hat{o}m\bar{e}m$ (Mic. 2:8) ... as for $y^es\hat{o}b^eb\bar{u}h\bar{a}$ 'al $h\hat{o}m\bar{o}t\hat{e}h\bar{a}$ (Ps. 55:11), it is not of one those since it is $y^ep\hat{o}$ ' $\bar{e}l$ from $w^es\bar{a}bab$ $b\hat{e}t$ ' $\bar{e}l$ (1 Sam. 7:16) and not $y^epa'l\bar{e}l$, the first bet is the 'ayin of the verb ... and such $m^e\hat{s}\hat{o}m\bar{e}m$ and 'estôm $\bar{e}m - m^ep\hat{o}$ ' $\bar{e}l$ and $etp\hat{o}$ ' $\bar{e}l$, for they are from $s^em\bar{a}m\hat{a}$... ²⁹

In other words, the geminate verbs are like the standard verbs. $S\hat{o}b\bar{e}b$ represents the pattern $p\hat{o}$ ' $\bar{e}l$, in other words, in the non-standard verbs it is a root form, like $y^eq\hat{o}m\bar{e}m$, and the model is y^epa ' $l\bar{e}l$, where the $l\bar{a}med$ is doubled, j0 the model j1 ' $l\bar{e}l$ 1 is the quadriconsonantal double, similar to j1 p $\bar{e}l$ 2, where the first and the third radicals of the verb are reduplicated, like the verb j1 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' mºṭalṭelkā ṭalṭēlâ, (Isa. 22:17); 'im mippānay lō' tāḥîlû (Jer. 5:22), wattiṭḥalḥal hammalkâ mº'ōd (Esth. 4:4)...³¹

This is disputed in modern linguistics. J. Blau, *The Phonology and Morphology of Biblical Hebrew* (in Hebrew) (Jerusalem: Academy of the Hebrew Language, 2010), pp. 295–96 presents the weak verb structure *pi'lēl* and the strong verb structure *pô'ēl* exactly like Hayyūj. For a different presentation, see P. Joüon and T. Muraoka, *A Grammar of Biblical Hebrew* (Rome: Pontifical Biblical Institute, 1991), pp. 156–57.

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, *Cause and effect*, 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.

²⁹ Basal, 'Grammatical Theory', pp. 84–86.

³¹ Basal, 'Grammatical Theory', p. 87. Ibn Janah presents a similar approach in *Kitāb al-Luma*, pp. 142–43.

Ibn Ezra

Ibn Ezra has an entirely different method regarding $p\hat{o}'\bar{e}l$, a view which combines with his view on the hollow verbs, as we will see below. In $Sah\hat{u}t$ (p. 123–4) he explicitly disputes the existence of $p\hat{o}'\bar{e}l$ in the strong verbs:³²

And I do not admit, at all, that there is a heavy pattern and it is $p\hat{o}'\bar{e}l$. And the future ' $\check{a}p\hat{o}'\bar{e}l$, $y^ep\hat{o}'\bar{e}l$, $p^ep\hat{o}'\bar{e}l$, $p^ep\hat{o}'\bar{e}l$. For the proof that all the grammarians have brought is not complete, and it is that they found ' $lim\check{s}\bar{o}pt\hat{i}$ ' ' $ethann\bar{a}n$ ', ' w^e ' et $hann^e$ ' $\bar{a}r\hat{i}m$ $y\hat{o}da't\hat{i}$ ', 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 $y\hat{o}da't\hat{i}$ which is a loan word ... we will make an entire pattern? And the word $lim\check{s}\bar{o}pt\hat{i}$ is also not a proof, for the matter shall not be established by one witness!

In other words, a pattern should not be added simply to account for rare occurrences. In order to establish a categorical class, such as a form in the verbal patterns, we should find thousands like it. Ibn Ezra proffers alternative explanations for these unique forms.³³ As mentioned above, the primary source for Hayyūj and his disciple was not the occurrences in the Bible, but rather the Arabic verbal system, which served as their lodestar. It is unclear whether ibn Ezra was aware of the comparison that Hayyūj and ibn Janah made to the Arabic verbal system, leading to the creation of the $p\hat{o}$ ' $\bar{e}l$ pattern, but it is certainly clear he did not accept it. In order to fully understand his view on this pattern, we must examine his view on all aspects relating to hollow verbs, which he dubs the 'twos'.

As is known, ibn Ezra accepts the principle of the triconsonantal root. His statement on Hayyuj's great innovation is often quoted:

Know, that the early ones would say, the root $y\bar{a}sar$ is SR alone, and the root of $S\bar{a}b$ $S\bar{b}B$ alone, and we will find like that in most of the early $Piyy\hat{u}tim$... 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 Hayyūj, to recognize the passive letters, and how they are added and missing and replaced ($S\bar{a}p\hat{a}B^er\hat{u}r\hat{a}$ 25:2).

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 rejects it. See Becker, *Arabic Sources*, pp. 74–75; L.R. Charlap, *Rabbi Abraham ibn Ezra's Linguistic System: Tradition and Innovation* (in Hebrew) (Beersheba: Ben-Gurion University, 1999), p. 133.

 $^{^{33}}$ $M^e \bar{s} \bar{o} \underline{p} t \hat{i}$ is explained here by ibn Ezra as an adjective form; $y \hat{o} da' t \hat{i}$ is explained as a $y \hat{o} d - h \hat{e}$ swap – a possibility which Hayy \bar{u} raises in his dictionary, entry YD'. See above note 18.

³⁴ Regarding the question whether Dunash (Adonim Halevi in ibn Ezra), composer of the commentary 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. 237-66; M. Wilensky, *Studies in Language and Literature* (in Hebrew) (Jerusalem: Academy of the Hebrew Language, 1978), pp. 190–94; Eldar, 'Hayyūj's Grammatical

But, as Goldenberg and Eldar have writen, Hayyūj's greatest innovation was not establishing that there are no roots with fewer than three consonants; rather, it was the innovative establishment of al- $s\bar{a}kin$ al-layyin, a term which is not found in Arabic, but was invented by Hayyūj and applied to Hebrew. In Hayyūj's opinion, what Arabic marks with the long and full vowel, Hebrew could mark by way of a defective vowel, that is, without a difference as read. This is how the verb $q\bar{a}m$ for example, emerges 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 $(q\bar{a}ma)$ in this case). Thus the hollow verbs belong to the triconsonantal roots, according to Hayyūj.

Ibn Ezra theoretically agrees with this term. By way of example, the verb ' $ess\bar{a}q$ as in ' $ess\bar{a}q$ mayim (Isa. 44:3) contains three consonants, and the missing radical is swallowed up by the doubling of the s. However, when a long vowel precedes the expected position of the consonant (i.e., where an ' $\bar{a}lep$, $y\hat{o}d$, or $w\bar{a}w$ is added), ibn Ezra disagrees with Hayy \bar{u} j and claims that we should not see a consonant. Accordingly, ibn Ezra does not see a triconsonantal root in $q\bar{a}m$ and similar forms.

And R. Šmuel Hanagid of blessed memory said that the truth of $q\bar{a}m$ 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] $q\hat{o}m\bar{e}m$, $s\hat{o}b\bar{e}b$, $k\hat{o}n\bar{e}n$ lammispāt kis' \hat{o} ; and a great grammarian said that they are by the model $p\hat{o}$ ' $\bar{e}l$ and it is another heavy pattern, and he did not say anything ... since if there is a word $q\bar{a}m$ from three letters, then $q\hat{o}m\bar{e}m$ is in the model $pa'l\bar{e}l$, for the resting $w\bar{a}w$ 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 two we cannot put them in the $p\hat{o}$ ' $\bar{e}l$ model, which is one of the triconsonantal roots.

According to ibn Ezra, the forms $q\hat{o}m\bar{e}m$, $k\hat{o}n\bar{e}n$, and their ilk do not represent a $p\hat{o}'\bar{e}l$ pattern. He attacks from all possible angles the 'great grammarian' who said that they do. If the hollow verbs are triconsonantal and the 'ayin of the verb is indeed a $w\bar{a}w$ – 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 $k\hat{o}n\bar{e}n$ must be $pa'l\bar{e}l$, because the $w\bar{a}w$ belongs to the root and is not an addition. Conversely, if there are no hollow verbs and the root is biconsonantal QM, as ibn Ezra indeed believes, it would be absurd to place the form $k\hat{o}n\bar{e}n$

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 ff. is the definitive research on the topic, and it shows that there were almost certainly 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*, pp. 140–1; idem, 'Remnants of Tahbir', pp. 95–6.

³⁵ G. Goldenberg, 'On the Weak Quiescent and the Hebrew Root', *Lešonenu* 44 (1980), pp. 287–92; For further explanation see Eldar, 'Hayyūj's Grammatical Analysis', pp. 171–74. 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.

in the triconsonantal $p\hat{o}$ ' $\bar{e}l$ pattern. In other words, ibn Ezra disagrees with Hayy \bar{u} j, and rejects the idea that hollow verbs belong to the $p\hat{o}$ ' $\bar{e}l$ pattern. Ibn Ezra has another solution for the forms of $k\hat{o}n\bar{e}n$.

And you should know that regarding 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 $d^eg^e\tilde{s}\hat{i}m$, 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 $q\hat{o}m\bar{e}m$, $s\hat{o}b\bar{e}b$, $k\hat{o}n\bar{e}n$ lammiš $p\bar{a}t$ kis ' \hat{o} . (Ṣaḥût, p. 122–3)³⁶

Ibn Ezra raises here a possible attack, based on both his and Hayy \bar{u} j's view of the hollow verbs. In his view, this class is of the 'duplicates', that is, it is biconsonantal roots. In the $q\bar{a}l$ pattern two consonants are present, but in $p\hat{i}$ ' $\bar{e}l$ 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 according to Hayy \bar{u} j's view, which holds that this class of verbs is triconsonantal, the hollow verbs, these letters cannot receive a dagesh when they come in $p\hat{i}$ ' $\bar{e}l$ (the heavy form with dagesh). The duplication of the $l\bar{a}med$ of the verb is the morphological and phonetic alternative to the duplicative dagesh that 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 In theory, the geminate verbs which have three consonants do not require this solution, and should act like the standard verbs (swallowing up the *'ayin* of the verb in some cases),³⁸ 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, $y^e s \bar{o} b^e b \hat{u}$ is said instead of $y \bar{a} s \bar{o} b b \hat{u}$, and this is like $y^e k \hat{o} n^e n \hat{u}$. (Sahût, p. 165)

The future conjugation of the root SBB in qal, in its original form is with doubling of the $b\hat{e}t$, $y\bar{a}s\bar{o}bb\hat{u}$, and such appears fifteen times in the Bible. The verb $y^es\hat{o}b^eb\hat{u}$ (two occurrences: Ps. 59:7, 15) is a mixture of the biconsonantals and the geminate verbs $(y^es\hat{o}b^eb\hat{u} [SBB] = y^ek\hat{o}n^en\hat{u} [KNN])$. But there is not complete overlap. The similarity between the classes, according to ibn Ezra, exists only in the past and future tenses, while in the present progressive the difference will be maintained:

And the difference between them is in the present, for from SBB it will be said $s\hat{o}b\bar{e}b$, and from the duplicate $m^ek\hat{o}n\bar{e}n$ with the addition of a *mem*. (ibid., p. 165)

The model $m^e p \hat{o}' \bar{e}l$ 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 $p\hat{o}' \bar{e}l$, similar on the occurrences in Scripture.

To summarize, we see that ibn Ezra based his theories about the verbal system, especially $p\hat{o}'\bar{e}l$, on the occurrences in the Bible. Accordingly, there is no foundation for the existence of the pattern $p\hat{o}'\bar{e}l$ in the standard forms. The only cases found in the standard forms can easily be interpreted otherwise.

³⁷ Muraoka presents this similarly from a modern linguistics perspective. See P. Joüon and T. Muraoka, *Grammar of Biblical Hebrew*, pp. 156–7.

³⁶ I have punctuated this somewhat differently from Charlap. As I noted, ibn Ezra addresses two possibilities – his view and Hayyūj's. See Charlap, *Ibn Ezra's Linguistic System*, pp. 142–3.

³⁸ Ibn Ezra believes that in the geminate verbs the 'ayin is omitted and not the $l\bar{a}med$. See Ṣaḥot, p. 25: 'For they said that its model is $p\hat{e}$, for it is missing the $l\bar{a}med$; but what is correct is that it is missing the 'ayin.'

Conclusions

This article has discussed the fundamental difference between Hayyūj, the father of scientific Hebrew grammar, and R. Abraham ibn Ezra. The former built a Hebrew verbal system similarly to that in Arabic, introducing corresponding forms to the four first patterns in Arabic. The latter built the verbal system internally, based on the evidence and occurrences in Scripture, without resort to comparisons to Arabic.

It is interesting to note that in $S\bar{a}p\hat{a}\ B^e r\hat{u}r\hat{a}h$ (p. 40), after disputing Hayyuj's view of $p\hat{o}'\bar{e}l$, ibn Ezra criticizes his predecessors for their comparison between the quadriconsonantal verbs, like $kirs\bar{e}m$, and the model $pa'l\bar{e}l$:

And they erred in everything when they weighed the quadriconsonantal roots on the model $p\hat{o}'\bar{e}$, they said that $kirs\bar{e}m$ is on the model $pa'l\bar{e}l$, and how can it be that a quadriconsonantal word has the model of a triconsonantal word?

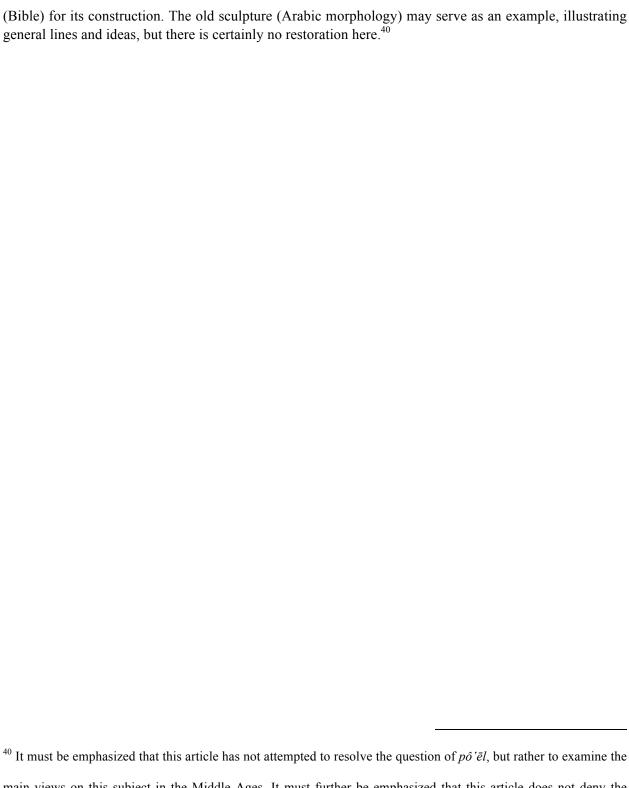
As we have seen in the article, the comparison between the model *pa'lēl* and the quadriconsonantal roots stands at the very foundation of Sibawayh's Arabic grammar, which categorizes the second, third, and fourth roots in one morphological division, identical by syllables and similar to the model *pa'lēl*. Hayyūj and ibn Janah adopted this view from Sibawayh, and, as noted, compared Hebrew to the Arabic verbal system.

The dispute we have described here is also reflected in modern linguistics, which is also divided regarding the existence of the pattern $p\hat{o}'\bar{e}l$ in the standard verbs in Hebrew. Scholars who deny its existence employ claims remarkably similar to those of ibn Ezra as described above.

Afterword

In this article, we see an example of 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 model. This served, and rightfully so, as the lodestar for the new and innovative science of linguistics. At this stage, the objective was to make the copy as similar to the original as possible. This is why Hayyūj and his disciple after him created the pattern $p\hat{o}$ $\bar{e}l$, as the parallel to $f\bar{a}$ '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 the existence of this form. We might liken Hayyūj and ibn Janah to someone restoring an ancient sculpture, only partially finished (Hebrew grammar), on the basis of another statue, more completely finished (Arabic grammar). Even if the original foundation stones (the Bible) are missing, the sculpture can be restored. Ibn Ezra, by contrast, is a sculptor building a new sculpture (Hebrew morphology) using the materials he found

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*; Blau, *The Phonology*, p. 226; Morag, 'The Tiberian Tradition'. Wright, *Lectures on the Comparative Grammar*, p. 34 even makes the direct connection between $f\bar{a}$ 'il and $p\hat{o}$ 'ēl.



It must be emphasized that this article has not attempted to resolve the question of $p\hat{o}'\bar{e}l$, but rather to examine the main views on this subject in the Middle Ages. It must further be emphasized that this article does not deny the existence of comparisons in ibn Ezra between Hebrew and Arabic, of which there are a great many. However, in defining the verbal system, ibn Ezra did not see a need to compare the two languages.