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FRAGMENT OF THE MONTH ARCHIVE

T-S Misc.22.264 - a trope trainer from the Cairo Genizah

Fragment of the Month: July 2022

Marc Michaels

What's On

Whilst searching for more fragments related to my PhD, I cannot but notice other fragments of interest that catch my eye, whether flicking through the screens of the FGP app or flipping the pages of the folders of large Genizah fragments in Cambridge University Library. Indeed it can be quite a distraction and lead you into other side paths of possibilities and alleyways of adventure. As a ba'al gore' (lit. master of the reciting) who periodically leins (the Yiddish word typically used for chanting) from the Torah in my own

and other synagogues, one such fragment that leapt out at me was **T-S Misc.22.264**, our fragment of the month.

T-S Misc.22.264 recto

The musical notation system we employ today was developed by the Masoretes in the 8th to 10th centuries. However, they did not invent this, but were codifying the tunes referenced in Mishnaic times, likely from earlier traditions that accompanied the declaiming of the Torah text in the marketplace and synagogue. For example in Megillah 32a, we read אָמָר רַבִּי יִשְׁפַטְיָה אַמַר רַבִּי יוֹחָנָן כָּל הַקּוֹרֵא בָּלֹא נִעִימָה וְשׁוֹנֶה בָּלֹא זָמְרָה עַלָיו הַכַּתוּב אוֹמֵר וְגַם אַנִי נַתַתַּי לַהֶם חוּקִּים לא טוֹבים וגוֹי (`and Rabbi Shefatya said that Rabbi Yoḥanan [b. Napacha]² said: Concerning anyone who reads [from the Torah] without a melody or studies [the Mishna] without a song, the verse states: "So too I gave them statutes that were not good, and judgments whereby they should not live" (Ezek. 20:25)'). Initially the reader (or singer), was assisted by means of hand signals from the somekh (assistant) that gave general directions as to the notes to use. The system was called chironomy. Indeed, hand signals to assist the modern reader are still present in some synagogues, and even enjoying a resurgence, and it is a system that I, for one, would like to learn as it would be very helpful. These, however, were largely replaced by the 28 symbols⁴ that are placed above or below words in the biblical text of codices, which govern the notes that one uses when chanting from a Torah scroll from the bima (lectern/reading desk) in a service and also indicate the position of the main stress in that word.

Misc. 22. 264.

Torah, scribal halakha forbids the inclusion of any notation (either te amim or negudot (vowel signs)⁵). Thus, you have to remember it all, having practised from a tiggun qor'im (readers guide) prior to the service. So, as you are chanting, in your head you are having to combine a musical note that has a name with the word that is written and sing the word and not the name, with the emphasis on the right syllable. I had seen other cantillation related pages as I searched through, such as T-S Misc. 10.179 and T-S AS 139.14, 6 each of which give a listing of the names and respective symbols. Moreover, the orders of notes given, the spellings, vocalisation and the names of the notes

When one learns the te amim (trope, lit. 'tastes' or 'flavours') from a list, one sings the name of the note to the tune of the note. So, I can

quite easily reel off typical standard musical phrases such as mahpakh pašta zagef gaton, zagef gadol. However, when reading from a

and how comprehensive the list was varies between fragments. The names of the individual notes reflect either the shape of the grapheme employed or the melody associated with the sign, for example מונח (*munah*,'sustained' or 'rest') is called שופר (*šofar*) in Genizah fragments because of its bent shape. פזר (pazer, 'scattered') is perhaps more a reflection of its moving in and out sound, and the even rarer שלשלת (*šalšelet*, 'chain'), called in Judaeo-Arabic סלסלה (*silsila*) in our fragment of the month,⁹ echoes both the zigzag shape of the sign and the extremely long wavering note. However, **T-S Misc.22.264** is very different from these other fragments. Instead of presenting a simple listing, the musical notation and their names are appended to parts of biblical verses in phrases and single words, starting with the very first half of the first verse, Gen.

someone learning to chant from the Torah. It seems to represent an intermediate stage between the lists of notes and learning from the actual text, since it allows you to sing the words which are written large but still see the name of the notes which are in superscript. A clear example of pedagogy at work, as one generation trained the next. 12 Either this teacher, or at some point in time some other teacher

Visiting the CUL reading room in mid-February 2022, I measured the fragment as 19.8 cm high by 14.6 cm wide. 10 It is on rag paper, with barely visible laid lines and, based on the script employed, it is possibly mid-11th century. 11 It is noted in FGP only as 'Cantillation notes – Personal handlist - preliminary description, further examination required', but it is a short and perhaps more practical training manual for

from whom this teacher is copying the text, had taken time out and scoured the bible for examples where phrases would cover the individual notes, including those that rarely occur. This would speed up the student's learning, since otherwise it may be some time before he would encounter a pasug (verse) where a particular rarer musical phrasing occurred. Our teacher has mostly, but not consistently, added negudot (vowel pointing)¹³ presumably to help the student further. He has then drawn boxed rules around each line to separate them off and make them even easier to deal with on the page. I say, teacher and student, but this could equally be a father passing the tradition down to his son. The *chazzan* at my current *Mizraḥi* synagogue, Shimon Tivony, whose father Moni was the *chazzan* at a Cairo synagogue, recalls the seriousness of lessons in the cantorial art and the importance attached to accurate renditions. The grandson, also named Moni, continued the singing tradition, finding fame on

TV's 'The Voice'. It is possible there is another page since not all the notes are covered here, though the last instance on this folio, אל משה ('to Moses') ending part way through the last line may suggest it ended here, as does the fact that the reverse is blank.¹⁴ Interestingly some of the names appended to the *te amim* are sometimes different from any of the traditions mentioned above or those in

other Genizah fragments, mixing Hebrew, Aramaic and Arabic nomenclature, showing the variation by which the trope was conveyed in different localities. The first line brings a fairly standard phrasing attached to Gen. 1:1a, [:בָּרָאשִׁית בָּרַא אֱלֹהָים אֱת הַשַּׁמַ[יִם:] (In the beginning God created the heaven ...'). The first note shown has an extra `alef suggesting the vocalisation is טאפחה (ṭāp̄iḥa, `hand-breadth') rather than ṭipḥa. 15 we have already discussed above. Similarly, את[נ]חא (atnaḥa, 'rest') instead of 'etnaḥta, usually marking the mid-point of a pasuq. The

מארכה *me arkha* (to lengthen) is our modern מירכא *meirkha*. The last note is not fully clear. It is another tapha but is not marked as such,

instead using the name יחי (dekhi, 'thrust back') used before a hemistich break סילוק (silluq). 16

notation that he was following.

We skip to the next biblical verse with וָהַאַּבֵץ הַיָּתָה תֹהוֹ וַבֹהוּ ('and the earth was formless and void') from Gen. 1:2a which introduces a more complex sequence רביע (revia', 'four-square' – a reference to its diamond shape) is followed by a further merkha but this is called here גרה which, according to Prof. Geoffrey Khan, may be the Arabic ($jarr\bar{a}$, 'runner'). What has become known in modern times as double pašţa is rendered here as פישט (pišṭ, 'extended' or 'stretching'). The last note in line 2 is not particularly legible. It is a zagef gaṭon ('lesser upright') but is given here as [זיקף] (zeygef).

Reconstructing the last word of the second line with the first of the third gives us the important combination of $[\tau]$ (darga, 'stepwise' or 'scale') and תבר (tevir, 'broken'), though lacking the *yod* seen in other fragments and modern spelling (תביר). This musical phrase is attached to וַיִּרָא אֱלֹהֵים ('and God saw') from Gen 1:4a. The next sequence involves Gen 1:9a וַיִּאמֶר אֱלֹהִים יָקָוֹוּ הַמַּׁיִם מְתַּחַת הַשָּׁמַׂיִם and takes us across lines 3 and most of line 4. It brings the common combination of *šofar* and *revia* but its main purpose is to introduce to our student the combined phase that feels like a musical rainbow forming a sort of semi-circle over the words, [קדמ[א] קדמ[א] (qadma, 'to proceed') אוזל[ה] (ve azla, 'and go on'). Before the פישט (pišt) we see

something that the teacher appears to note in combined Hebrew and Aramaic, שופר מקלוב (*šofar maglūb*, 'upside-down *shofar'*). This symbol is מהפך (*mahpakh*, 'reversed') in modern trope, but in other fragments we do see it as שופר מהופך (*šofar mehufakh*, 'backwards' or 'inverted shofar' [shape]). The last word on the line is our first individual word and it is the ubiquitous וַיֹּאמֶר ('and he said'). However, the choice is also odd as there is no example of *vayyomer* with the note גרשים (*geršayim*), given as גרישין (*gerišin*) here, in the Masoretic Text of the Torah or Joshua where

the other verses that follow are drawn from. So, this is an odd choice by our teacher, unless there was a different tradition for musical

We then skip to Joseph's brothers plotting to throw him into the pit, וְעָתֵה וּ לְכוּ וְנַהַרְגָּהוּ ('Come now, let us kill him') from Gen. 37:20 which brings the common *munakh* [pause] *munakh revia* phrase and which is shown here as לג]רמיה (*legarmey*) which, according to other fragments, is an abbreviated form of *šofar legarmey* (*'shofar* standing alone'), ¹⁹ though vocalised without the *yod. Revia* here is this time rendered in Arabic as תגליס (tajlīs) for which Dr Outhwaite notes 'the root jls has to do with 'sitting' (like majlīs) – which would be a good synonym for רביע, 'resting'. ²⁰

We leave the Torah and move to the Prophets for the next phrase from Josh. 1:8a, הַתּוֹרָה הַזֶּה ('let not this Book of the Teaching' לָאריַמֿוּשׁ סָפֶר הַתּוֹרָה הַזֶּה ('let not this Book of the Teaching') cease') – likely a very meaningful phase for our teacher to convey to his student given the next word מָפָּירָ ('from your mouth') and the context in which this teaching is taking place. Perhaps this verse is also a subtle exhortation to the student to keep practising. Aside from rehearsing notes that have already appeared, this phrase introduces תלשא איליטרי (talša ilyiṭri) based on vocalisation given in T-S Misc. 10.179, and related to the Arabic al-yusr \bar{a} ('the left') relating to its positioning on the left of the word. This corresponds to תלישא קטנה (teliša qeṭanna, 'lesser drawing or plucking out') in modern usage. Dr Outhwaite notes that on לא־ at the start of the phrase

This is followed by the single word תלישא גדולה ('this'), which would be Joshua 15:12 given it bears the symbol for תלישא גדולה (*teliša gedola*, 'great drawing out'),²³ which is oddly marked here as זרקה (zarqa, `scattered or throwing') when it should likely be תלשא אלימני (talšaʾ ilyumney) based on vocalisation in T-S Misc. 10.79, and related to the Arabic al-yumnā ('the right'), again relating to its position on the right of the word. Our teacher may have erred here. It first appears at Gen. 5:9, but bearing two notes, this and gerišin, ລໍ້ຽົ. Line 6 into line 7 brings us when you take [a census]') from Ex. 30:12a, repeating munaḥ and gerišin. Skipping three words in' בֵּי תַּ[שַּׁ]א

there is a munah ... [and so] is marked differently from the standard Masoretic edition, which has ga ya and maggef.' 22

which may be the שדי, šerei)²⁴ or) שרי zarqa), this time correctly, with) זרקה like the reading in the MT. He introduces the combination סגול Arabic šady, a variant of šadw ('singing, chanting'). It is not clear whether this is a reš or dalet. Either way, we would know this as segolta), which is an upside-down version of the vowel sign of the same name, but also Aramaic for 'grape cluster',) סגולתא segol) or) referring to its shape).²⁶ Having introduced combined phrases, the last two lines are simply there to bring single notes. First is a וַיֹּאמֶר ('and he said') which, given the gap between the previous and the next instance is possibly from Gen. 37:35 where it takes a זקף גדול (zaqef gadol, `full upright').²⁷ וַיָּמָאֶן (zaqef gadol, `full upright').

from Gen. 39:8 provides the vehicle for the rare note סלסלה (silsila) mentioned above. Even rarer is the combination on two words from Num. אַלְפֵּיִם בָּאַ[מָּה] with the Arabic הלאל (hilāl, `new moon'), which is more commonly known as ירח בן יומו (*yeraḥ ben yomo*, `moon of one day'), reflecting its crescent shape. 29 It is a shame that we cannot see the name assigned on the next word which is known as קרני פרה

the same verse brings יָשׂרָאֵל ֹ לְפָקְדֵיהֶם though our teacher gives the full orthography with waw (male ˈ waw) in the second word, which is not

The final entry is on אֶל־מֹשֶּׁה apparently with zaqef qaṭon again; it could be from Ex. 3:14, its first appearance, or its last in Deut 32:48 or elsewhere. Based on other fragment listings, we would expect to end with סוף פסוק (sof pasuq, 'end of the verse'). However, oddly this note seems to have been omitted from our fragment. At the base of the fragment after the last *te amim* instance, there is in Arabic, ... ותסמיתהא ... ותסמיתהא ('I have finished the [four

letters] אוי״ה and their rules ... and their names (i.e. the names of the rules relating to the contexts in which בגדכפת letters following word-

final vowels represented by the vowel letters אוי״ה become fricative or remain plosives). A section on this topic is found in Hidāyat al- $Q\bar{a}ri^{31}$, but it was common in Masoretic treatises in general. Transcription

טאפחה שופר את[נ]חא [מר]כ[ה] דחי [יִם:]בְּרֵאשִׁית בָּרָא אֱלֹהֵים אֵת הַשָּׁמַ[יִם:] גרה פישט [זיקף] [ד]רג[ה]

(qarney fara, 'horns of a heifer'), reflecting the shape of both teliša notes either end of the same word.³⁰

והאָרץ היתָה תֹּהוֹ ובֹּהו: וַיַּרְ[א] ש[ופ]ר רביע קדמ[א] אלהֶים: ויָאמר אלהֿים יקוֹו ואזל[ה] שופר מקלוב פישט גרישין ַבַּמַּיִם מְתַּחַת הַשָּׁמַיִם: וַ״ֹּאמֶר: ל[ג]רמיה שופר תגליס שופר וְעַתָּה וֹ לְכַוּ ונהרגֹהו: ונֿלך: לְא־ פזר תלש קדמא ואזלא זרקה שופר ימושׁ סֵפֶר התורה הזה: זֹה: כַּי

זרקה שרי or שדי ָתָ[שַּׁ]א : ישראל ֿלפקודיהם: הלאל זקף גדול סלסלה [מֹּה] ויֹאמר : וימאֿן : אַלפַּיִם בא

אל משה כמלת אאויה ושרוטה[א]

]גן ותסמיתהא ... בגנוף [ל]לה ותומי

1 Khan notes that 'The cantillation is a layer of reading that has roots in late antiquity' and that 'and the division expressed by the cantillation are two different layers of exegetical tradition, which occasionally do not correspond with one another. In a number of cases, the cantillation divisions conflicted with the *gere* [(what is read)]' and 'the Targums frequently reflect an interpretation of the text that corresponds to the divisions of the cantillation', Khan, Geoffrey, The Tiberian Pronunciation Tradition of Biblical Hebrew, Volume I.

7 A subject worthy of further study.

used and additional writing in margins and other blank spaces.

26 Oddly omitted from Wickes listing, op. cit., p. 12.

Footnotes

Cambridge, UK: Open Book Publishers, 2020, https://doi.org/10.11647/OBP, pp. 50–53. 2 Second generation Amora, studied under R. Yehuda ha-Nasi and followed him as the director of the academy at Tiberias. Died in 279 CE. 3 Referenced in *Berakhot* 62a, מָפָּנֵי מָה אֶין מָקַנָּחִין בָּיַמִין אֶלָּא בִּשְּׁמֹאל ... נַחָמַן בַּר יָצְחַק אַמַר מִפְּנֵי שֶׁמַרְאֶה בַּהּ טַעֲמֵי תוֹרָה (`why does one not wipe with the right [hand] and rather the left ... Naḥman bar Yiṣḥaq said: Because [the right] reveals the notes of the Torah', i.e. through the hand

gestures). 4 Enumerated in detailed in Binder, A.W. Biblical Chant, Philosophical Library Inc., New York, 1959, pp. 19-22. Hebrew and Aramaic names and translations used in this article are drawn largely from Binder, cross referenced with section 5.3.3 The Accentuation Signs in the Masorah article in Encyclopaedia Judaica, Vol.16 (Supplementary Entries), pp. 1454-1458 and Wickes, William, טעמי אמ"ת A Treatise of the

Accentuation of the Three So-called Poetical Books of the Old Testament, Psalms, Proverbs, and Job, Clarendon Press, 1881, pp. 10 - 23. I have employed the Askhkenazi names for comparison with the modern terms, but Sefardi, Italian, Mizraḥi and Yemenite traditions also have different naming conventions. I am particularly grateful to both Dr Ben Outhwaite and Prof. Geoffrey Khan for their suggestions and guidance with the Arabic names for the *te amim* that feature in this fragment and in others. 5 For example core scribal manual, *Qeset ha-Sofer* 16:6 explains ס"ת המנוקד פסול ... אם היה הס"ת כבר כתוב בהכשר ואח"כ עשו בו נקודות או סימני טעמים מהני בהן גרידה כמו באשר טעיות (`a *Sefer Torah* that has vowels is invalid ... [and] if the *Sefer Torah* was already written in a valid manner, and afterwards one made vowels or trope signs in it, then it is appropriate for them to be scraped like [you would deal with] other errors'). In

6 After embarking on this FOTM, I checked through the Friedberg Genizah Project (FGP) searching the sub-domain cantillation. Some fragments relate to treatises on the trope, but having checked various fragments there are a number of fuller and partial listings, such as T-S AS 139.40, T-S AS 139.43, T-S Misc.26.18. T-S NS 259.78, BL OR 10578N.3 (Alt: Gaster 1345.3), JTS ENA 2710.37, AIU IX A.11, Paris, Moss. I,61.2 (Alt: G 13), Paris, Moss. I,74.2 (Alt: G 26), T-S K5.26. T-S K9.11, T-S Ar.31.164 and T-S NS 194.12. No doubt there are others.

my scribal work, I have repaired several *Sifrey* where vowels were added to help a *Bar* or *Bat- Mitzvah*.

8 Wickes suggests it is a 'shake' or 'trill', op. cit., p. 17. Though the Encyclopaedia Judaica suggests that 'it apparently does not refer to the melody, but to the sign (פַזְרַה Aramaic = whip)', op. cit., p. 1454. 9 Also, in T-S D1.30, JS ENA 2710.37 and Paris, Moss. I,61.2 (Alt: G 13).

10 It is difficult to get a sense of scale of a piece from online study, so seeing the fragment in reality is always worth the effort.

11 Through creating an abecedary and comparison with examples given in Beit Arié, M, (in collaboration with Engel E. and Yardeni, A.), אסופות כתבים מימי-הביניים כרך א: כתב מזרחי וכתב תימני (Specimens of Medieval Hebrew Scripts, Part 1: Oriental and Yemenite Scripts), The Israel Academy of Sciences and Humanities, Jerusalem, 1987. My thanks to Vince Beiler for being a second pair of eyes to confirm my dating suggestion.

12 For example, *Nedarim* 37a explains רַב אַמַר שָׂכַר פִּיסוּק טְעָמִים (`Rav said the payment [of a teacher] is for looking after [children] and R. Yoḥanan said payment is for [teaching] the pauses of the cantillation'). 13 In the body text I have given the text as it appears in MT, and in the transcription as the teacher wrote it. 14 Paper was a precious commodity and not lightly wasted as we can see from the many examples in the Genizah of documents being re-

15 My thanks to Prof. Geoffrey Khan who explains this as an Arabicised form, similar to קאמצה for *games*. Also often called טרחא *tarḥa* in other fragment listings and see Wickes, op. cit., p. 19. 16 My thanks to Dr Ben Outhwaite for his suggestions as regards a number of notes that were damaged and thus difficult to read on the fragment. The trope for the opening to Genesis is quite pedestrian. One might have expected something a little more dramatic, using rarer

more exciting notes - dare one say, to start with a big bang. 17 Personal correspondence 17/1/22. 18 In other fragments this doubling is also referred to in Aramaic as תרין קדמין *tereyn qadmin* (twice *qadma*') since *pašṭa* and *qadma*' are

basically the same sign. שופר מונח לגרמיה' ("trumpet, horn [sustained] by itself", *op. cit.*, p. 1455. 20 Personal correspondence 21/12/21.

21 According to Prof. Khan, personal correspondence 17/1/22. 22 *Ibid..*

23 It appears only once in the Torah at Gen. 5:9, but bearing two notes, this and *gerišin*, ລໍູ້້. 24 'Attested for segolta in some sources' according to Dr Outhwaite, personal correspondence, 21/12/21. 25 According to Prof. Khan, 17/1/22. Having viewed the fragment at CUL, either could be possible as the letter joins to the preceding \sin .

27 It first occurs at Gen. 3:10, then again in 3:11 and elsewhere, so could equally be these. 28 Occurs only seven times in the *Tanakh*. 29 Wickes also notes that it is called גלגל *galgal* (wheel), *op. cit.*, p. 12 and details on p. 22. 30 I have made a highly speculative guess in the transcription at some of the letters (shown in grey) based on seeing the fragment up

31 Khan, Geoffrey, The Tiberian Pronunciation Tradition of Biblical Hebrew, Vol. II. Cambridge, UK: Open Book Publishers, 2020, pp. 276,

76 and 95 in particular.

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Encyclopaedia Judaica articles: Cantillation, Masoretic Accents and Masorah (particularly section 5.3.3 The Accentuation Signs in Vol.16

https://www.myjewishlearning.com/article/cantillation-chanting-the-bible/ (accessed 16/12/21) Information excerpted with permission from Discovering Jewish Music, Jewish Publication Society.

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(Supplementary Entries), pp. 1454-1458).

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