

HEBREW UNION COLLEGE ANNUAL
VOLUME 92

Jason Kalman and Jordan Finkin, Editors

Sonja Rethy, Managing Editor

EDITORIAL BOARD OF DIRECTORS

*David Aaron, Jordan Finkin, Joshua Garroway,
Alyssa Gray, Ruth Langer, Laura Lieber, Michael Marmor,
Haim Rechnittzer, Richard Sarason*

HEBREW
UNION COLLEGE
ANNUAL

Volume 92

Hebrew Union College Press

2022

©2022 by
Hebrew Union College Press

ISSN 360-9049
ISBN 978-0-87820-199-0 (hardback)
ISBN 978-0-87820-256-0 (ebook)

Typesetting by Raphaël Freeman MISTD, Renana Typesetting

Printed in the United States of America

Contents

- 1 *The תורה in רות – Notes on Judean Literary Onomastics*
Jeffrey L. Cooley, *Boston College*
- 15 *Trumpets and Shofarot in the War Scroll (1QM) : Musical and Terminological Insights*
Moshe Piamenta, *David Yellin College of Education*
- 47 *Reckoning the End of Days – A Study in Yefet ben ‘Eli’s Biblical Exegesis*
Meirav Nadler-Akirav, *Bar-Ilan University*
- 71 *The Two Different Endings of Sefer haMiddot*
Seth (Avi) Kadish, *Oranim Academic College of Education, University of Haifa*
- 205 *The Influence of Mendelssohn’s Commentary on Qohelet on Nineteenth-Century Orthodox Jewish Commentators in Eastern and Western Europe*
Tova Ganzel, *Bar-Ilan University*
- 225 *A Translation of and Introduction to Nokhum Borukh Minkov’s On the Edge*
Jordan Finkin, *Hebrew Union College-Jewish Institute of Religion*

Trumpets and Shofarot in the War Scroll (1QM): Musical and Terminological Insights

MOSHE PIAMENTA

David Yellin College of Education

This article is an archaeo-musicological study of the trumpets (*hašošrot*, metal wind instruments) and shofarot (animal horns) in the War Scroll from the Dead Sea Scrolls of Qumran. The study of ancient Jewish music is largely uncharted territory. Many musical terms that appear in the Bible, Second Temple writings, and rabbinic literature, including the names of musical instruments, are not fully understood and there are many questions about their interpretation. For this reason, the War Scroll is one of the most important sources for archaeo-musicological scholarship of the ancient world generally, and of the Second Temple period in particular. This is not only because of the extensive description of the use of trumpets and shofarot in warfare that is found in the scroll, but especially because this rare and rich description is unmatched in any ancient work, Jewish, Hellenistic, or Roman. This uniquely extensive description includes a detailed itemization of the stages when the priests use different types of trumpets to direct the fighting forces, and describes the sounding of the shofarot by the Levites and the people as a means of instilling fear in the enemy. In addition, the scroll lists the types of sounds generated by trumpets and shofarot in battle, using technical and musical terms whose meaning is not always clear.

In this article, I re-examine the interpretations that previous scholars have suggested for the terms describing the sounds made by the trumpets and shofarot in the War Scroll, and, in some cases, I offer new interpretations. I also examine how trumpets and shofarot were used in specific stages of the eschatological war depicted in the scroll and suggest a number of ways to understand the military uses and purpose of the incorporation of these instruments. In addition to contributing to the understanding of the musical terms that appear in the War Scroll, my research opens a window to the rich musical language used by the Dead Sea sect and perhaps also by other groups in the Second Temple era.

INTRODUCTION*

Archaeological-musicological research deals with the study of sound and music in antiquity as well as with abstract musical concepts that have long since passed from the world. In the absence of a musical notation system, all that remains from the vocal and instrumental customs of the ancient people of Israel is the vague echo that emerges from written sources and archaeological finds.¹ The written sources contain scant information about the typology and technical characteristics of the instruments that they name and about the etymology and meaning of the musical terms that they feature. The principal information that emerges from these sources concerns the description of the occasions and functions in which the instruments were used (for example: in religious rites, on the battlefield, and on festivals). In addition, there are more than eight hundred archaeological finds related to the music of the ancient land of Israel, including the remains of musical instruments, as well as finds with visual depictions of musical instruments on coins, reliefs, mosaics, and the like.² Despite the richness of the archaeological finds, it is difficult to establish

* This article is based upon a chapter of my PhD dissertation completed in the Department of Music at Bar-Ilan University, under the supervision of the late Professor Aharon Shemesh, z"l, Dr. Barak Cohen, and Dr. Rachel Kollender: Moshe Piamenta, "The Trumpet from the Bible to the End of the Tannaitic Period: An Archaeo-Musicological Study Regarding Its Function, Shape, Sounds and Symbolic Meaning" (עיון ארכיאומוזיקולוגי) "החצוצרה מן המקרא עד לסוף תקופת התנאים: עיון ארכיאומוזיקולוגי" (בתפקודה, בצורתה, בצליליה ובמשמעותה הסמלית). PhD diss., Bar-Ilan University, 2020. I would like to thank Dr. Shani Tzoref for her suggestions during the preparation of this article for publication. I also extend my thanks to the journal co-editor, Dr. Jason Kalman, for his direction and advice. Please note that translation of quotations of Hebrew Bible follow NJPS, with some modification for context when necessary; the translations of Ben Sira follow NRSV; quotations from Dead Sea Scrolls generally follow Donald W. Parry, Emanuel Tov, and Geraldine I. Clements, eds., *The Dead Sea Scrolls Reader*, 2nd ed., vol. 1 (Leiden: Brill, 2014), again with some modifications. In particular, where citations of the Dead Sea Scrolls contain musical terms discussed in this article, the English translations have been adjusted to reflect my interpretations.

- 1 The written sources are the Bible, the Dead Sea Scrolls, and various Tannaitic sources (e.g., the Mishna, Tosefta, and midrash halakhah), as well as various compositions from the Second Temple era (e.g., the Book of Ben Sira and the writings of Josephus).
- 2 Mira Waner, "תרבות המוסיקה בארץ ישראל בתקופות ההלניסטית, הרומית והביזנטית - ייחודיות מול סינקרטיזם" (PhD diss., Bar-Ilan University, 2007), Abstract, a. The 2008 exhibition, "Sounds of Ancient Music," at the Bible Lands Museum in Jerusalem contained archeological finds related to the music of the ancient Near East, including finds representing ancient Jewish culture from the biblical period to the period of the Tannaim. The creation of the exhibition was directed by the museum's curator, the late Joan Goodnick Westenholz, z"l. I was privileged to participate in the preparation of the exhibit and in writing most of the content for the catalog of its artifacts. See Joan Goodnick Westenholz, *Sounds of Ancient Music* (Jerusalem: Bible Lands Museum, 2007).

the instruments' acoustic effect, due to the poor state of their preservation.³ Against this background, the War Scroll (hereafter, 1QM) stands out as one of the most important sources for the study of the use of trumpets⁴ and shofarot in ancient warfare, as well as for the study of the use of musical terms by the Dead Sea sect.⁵

The War Scroll is one of the first seven scrolls discovered in 1947 in Cave 1 near the site of Khirbet Qumran, and was first published by Yigael Yadin in 1955.⁶ The scroll describes a war that will take place at the end of days, in which the forces of good – the Sons of Light (the members of the sect) – will be pitted against the forces of evil – the Sons of Darkness (the enemies of Israel). It is anticipated that the victory of the Sons of Light in this war will lead to the eradication of evil from the world.⁷ The scroll details the different stages of the war, tactical and military elements related to the organization of the army, the Sons of Light's weapons and methods of warfare, and prayers associated with the war and with the encouragement of the soldiers. The scroll is dated by most scholars to the second half of the first century BCE.⁸ The length of 1QM is approximately 2.30 meters and its height is approximately 16 cm. There are eighteen columns extant in the scroll. The bottoms of the columns have not been preserved, leaving 16–19 lines remaining on each column.⁹

-
- 3 Joachim Braun, *On Jewish Music: Past and Present* (Frankfurt am Main: Lang, 2006), 42–43; Waner, “תרבות,” 26.
- 4 For a discussion of the names of the types of trumpets mentioned in the scroll, their function in the battlefield, and their inscriptions, as well as the source from which the author of the scroll drew his information about the military use of trumpets, see Piamenta, “החצוצרה,” 42–55, 75–103.
- 5 In order to facilitate the understanding of how my interpretations of musical terms are incorporated into the body of the text, the appendix provides excerpts of all the passages in 1QM in which the descriptions of the war contain the terms describing the sounds produced by trumpets and shofarot in the battlefield, along with the musical interpretations proposed in this article.
- 6 Yigael Yadin, *חושך, מגילת מלחמת בני אור בבני חושך* (Jerusalem: Bialik Institute, 1955). In English: *The Scroll of the War of the Sons of Light Against the Sons of Darkness*, trans. Batya and Chaim Rabin (London: Oxford University Press, 1962).
- 7 Brian Schultz, “מגילת מלחמת בני אור בבני חושך: הצד הספרותי,” in Menahem Kister, ed., *מגילות קומראן*, 2 vols. (Jerusalem: Yad Ben-Zvi Press, 2009), 1:321–340, at 321; Rony Yishay, “לבעיית שחזור הנוסח של מגילת המלחמה (שילוב כתבי היד 4Q491 ו-4Q493),” *Meghillot* 11–12 (2016), 41.
- 8 Philip R. Davies, *1QM, The War Scroll from Qumran: Its Structure and History* (Rome: Biblical Institute Press, 1977), 90; Jean Duhaime, *The War Texts: 1QM and Related Manuscripts* (London: T & T Clark International, 2004), 14, 41; Brian Schultz, *Conquering the World: The War Scroll (1QM) Reconsidered* (Leiden: Brill, 2009), 31.
- 9 In 1949, a number of additional fragments of 1QM (1Q33) were discovered in Cave 1, one of which belongs to an additional column. This proves that the end of the composition is missing (Schultz, “מגילת מלחמת בני אור,” 322). In 1952, fragments of texts dealing with eschatological war were discovered in Cave 4. These fragments (assigned to manuscripts 4Q491–4Q496) exhibit similarity to the content and language of 1QM. (Maurice Baillet, “Qumran Grotte 4, III:

One of the topics described at length in 1QM is the priests' use of many types of trumpets,¹⁰ in parallel with the use of shofarot by the Levites and the people. The trumpets are first mentioned in 1QM 2:16 – 3:11. This part of the scroll is devoted to listing the names of thirteen different types of trumpets, each type related to the stage in the war when they will be used (e.g., “the trumpets for assembling” and “the trumpets of pursuit”), and to specifying the different inscriptions that were written on each type of trumpet.¹¹ These inscriptions have religious and eschatological significance (e.g., 1QM 3:4, “the testimonies of God for a holy congregation,” and 1QM 3:5, “the mighty deeds of God to scatter the enemy and to put all those who hate justice to flight”), and they apparently express how the use of each type of trumpet will affect the course of the war (e.g., 1QM 3:9, “on the trumpets of pursuit they shall write, ‘God has struck all Sons of Darkness, He shall not abate his anger until they are annihilated’”). Some of the trumpets are used for administrative purposes (summoning warriors, summoning the leaders of the sect, etc.), and their sounds are not specified. Some are used for tactical purposes, sounding various signals in battle

4Q482–4Q520,” in *DJD* 7 [Oxford: Clarendon Press, 1982], 12–72). There are those who identify some of these fragments as copies of the War Scroll (Duhaime, *The War Texts*, 20–23, regarding 4Q492, 4Q494, and 4Q495), and others as recensions of the composition from which 1QM was derived (Schultz, “מגילת מלחמת בני אור,” 323, regarding 4Q491 and 4Q493). According to Rony Yishay, these fragments are not copies of the War Scroll, but parts of a tradition of what she calls “war literature,” which used traditional units of prayer and set patterns of war descriptions. See Rony Yishay, *ספרות המלחמה בקומראן: כתבי היד 4Q496–491 ופירושו והשוואתם למגילת המלחמה* (1QM) PhD diss., The University of Haifa, 2006), 302–27; Schultz argues that the fragments from Cave 4 contain abridged descriptions of the stages of the eschatological war (*Conquering the World*, 16–30, 366–90).

10 Yadin, *The Scroll of the War*, 87; Markus N.A. Bockmuehl, “‘The Trumpet Shall Sound’: Shofar Symbolism and its Reception in Early Christianity,” in *Templum Amicitiae: Essays on the Second Temple Presented to Ernst Bammel*, ed. William Horbury (Sheffield: JSOT Press, 1991), 199–225, at 208. It is interesting to note that the use of trumpets in eschatological war is also mentioned in rabbinic literature, in *Sifre Bamidbar*, 76:2–4. The Midrash expounds upon Num 10:9, “When you are at war in your land against an aggressor who attacks you, you shall sound short blasts on the trumpets, that you may be remembered before the Lord your God and be delivered from your enemies.” It states: “Scripture refers to the war of Gog. You say that Scripture refers to the war of Gog, but perhaps it rather speaks of all of the wars in Torah? Therefore, Scripture specifies, ‘and you will be saved from your enemies.’ Say: Go out and see. What war is it, from which Israel is saved and there is not a subsequent subjugation? You will find none other than the war of Gog.” (See Menahem I. Kahana, ed., *מהדורה מבוארת: ספרי במדבר: מהדורה מבוארת*, [Sifre on Numbers: An Annotated Edition, vol. 1] [Jerusalem: Hebrew University Magnes Press, 2011], 180–81). According to this opinion in the midrash, the obligation of blowing the trumpets mentioned in the Torah will apply only in the war of Gog and Magog, in the End of Days, for only then will there be complete fulfillment of the promise, “you will be saved from your enemies.” Kahana conjectures that this midrash might reflect polemic opposition to the extensive use of trumpets in 1QM (Kahana, *מהדורה מבוארת*, vol. 3, 517). See Piamenta, “ההצורה,” 261–63.

11 Bockmuehl, “‘The Trumpet Shall Sound,’” 209; Yishay, “ספרות המלחמה,” 42–43.

to direct the warriors in the various stages of combat (such as assault, retreat, etc.). The tactical trumpets are a key element in the descriptions of the war in 1QM 7:9–9:9 and 16:3–18:4. These sections of the scroll contain a detailed description of the priests' use of various kinds of trumpets to direct the fighting forces through auditory signals. Moreover, the trumpets are not the only wind instruments used by the army of the Sons of Light on the battlefield. In some of the descriptions of the war, shofarot are used by the Levites and the people, in parallel with the priests' use of trumpets. These descriptions attest to the unique role given to each of the instruments in the war. While the trumpets are sounded for internal purposes, to direct the warriors in the army of the Sons of Light, the shofarot are sounded for external purposes, in order to instill fear and terror in the enemy. The distinction between the instruments is also acoustic. The trumpets and shofarot each produce sounds that are distinctive to their particular instrument class.

Following this distinction in the scroll, I will first discuss the use of trumpets on the battlefield in ancient times and the sound-related terms in 1QM that pertain to the military use of trumpets. I will then discuss the parallel use of shofarot in the scroll, and the sound-related terms associated with the sounding of the shofarot.

THE USE OF TRUMPETS FOR AUDITORY SIGNALS ON THE BATTLEFIELD IN IQM

One of the main challenges that characterized the battlefield in ancient times was the difficulty in transmitting orders to the fighting forces due to the commotion of war and the noise of the battle, alongside difficulties that arose from weather conditions, various geographical obstacles, or simply distance on large battlefields. Ancient armies, especially ancient Hellenistic and Roman armies, developed visual and auditory tools to deal with these challenges and to facilitate the effective transmission of commanders' orders. Visual measures included the use of standards and banners, which were waved as signals for the soldiers' operations on the battlefield. Auditory measures included the use of various types of trumpets to sound pre-determined signals.¹² For the

12 Frank Harrison and Joan Rimmer, *European Musical Instruments* (New York, NY: W.W. Norton, 1964), 9; Bezalel Bar-Kokhva, *Judas Maccabaeus: The Jewish Struggle Against the Seleucids* (Cambridge: Cambridge University Press, 1989) 5, 394; Edward H. Tarr, *The Trumpet* (London: Batsford, 1988), 25–27; John Peddie, *The Roman War Machine* (Stroud, Gloucestershire: Alan Sutton, 1994), 19–20, 28, 36–37; Margaret Sarkissian, “Lip-vibrated Instruments of the Ancient and Non-Western World,” in *The Cambridge Companion to Brass Instruments*, ed. Trevor Herbert and John Wallace (Cambridge: Cambridge University Press, 1997), 5–18; Martijn J. Nicasic, *Twilight of Empire – The Roman Army from the Reign of Diocletian until the Battle of Adrianople*

trumpets to serve as effective transmitters of commands, their sounds needed to be heard loudly and clearly above the din of battle. Similarly, it was necessary to use simple and distinct signals to avoid confusion among the fighters.¹³

Against this background, we can perhaps understand the extensive space allotted in 1QM to specifying the types of trumpets and banners in the possession of the army of the Sons of Light (as described above), and the detailed description of the priests' use of trumpets to direct the fighters employing auditory signals (1QM 7:9–9:9; 16:3–18:4). This description not only contains schematic detail of the stages in the war in which the trumpets, and occasionally the shofarot, are sounded. It also illustrates the nature and features of the sounds of these instruments through the use of technical and musical terms. The meaning of these terms is not always clear, as they are unique terms, unparalleled in any ancient Jewish source, or in Hellenistic or Roman works.¹⁴

To be sure, there are simple descriptions of sounds in the Hebrew Bible, such as: “a very loud blast of the shofar” (Exod 19:16; קול שופר חזק מאד), “the noise of the great shouting” (1 Sam 4:6; קול התרועה הגדולה), “the noise of the shout of joy” (Ezra 3:13; קול תרועת השמחה), and more.

However, rich musical language like that found in 1QM is not found in the Bible or rabbinic writings.¹⁵ As will be discussed below, the richness of this language is expressed in a wide range of terms that most likely indicate specific musical and acoustic features such as intensity, duration, rhythm, and tonal range. The use of these terms allowed the author of the scroll to precisely define the nature of the sounds and their characteristics, and the sounds that would be produced on the trumpets and shofarot during the war. This definition was sometimes conveyed by using a single term describing one musical feature, as

(Amsterdam: Gieben, 1998), 210; John G. Landels, *Music in Ancient Greece and Rome* (London and New York: Routledge, 1999), 180; Margaret Sarkissian and Edward H. Tarr, “Trumpet,” in *The New Grove Dictionary of Music and Musicians*. Second Edition, vol. 25, ed. Stanley Sadie and John Tyrrell (London: Macmillan, 2001), 827; David J. Woolliscroft, *Roman Military Signaling* (Gloucestershire: Tempus, 2001), 21; Michel Feugère, *Weapons of the Romans* (Stroud, Gloucestershire: Tempus, 2002; transl. of *Les Armes des Romains, de la République à l'Antiquité tardive*. Paris: Errance, 1993), 57; Brian Campbell, *Greek and Roman Military Writers—Selected Readings* (London and New York: Routledge, 2004), 33–34, 40–41; Pat Southern, *The Roman Army: A Social and Institutional History* (New York, NY: Oxford University Press, 2006), 159.

13 Yadin, *The Scroll of the War*, 100–101; Yishay, “ספרות המלחמה,” 144.

14 Moshe Zvi Segal, “מגילת המלחמה וזמן חיבורה,” in Chaim Rabin, Yigael Yadin, and Jacob Licht, eds., *מחקרים במגילות הגנוזות: ספר זכרון לאליעזר ליפא סוקניק* (Jerusalem: Shrine of the Book), 11–18, at 11; Yadin, *The Scroll of the War*, 101; Dean O. Wenhe, “The Use of the Hebrew Scriptures in 1QM,” *Dead Sea Discoveries* 5 (1998): 290–319, at 306; Israel Shatzman, “מגילת מלחמת בני אור ובני חושך,” in Kister, *מגילות קומראן*, 1:341–83, at 368; Schultz, *Conquering the World*, 346.

15 Menahem M. Kasher, “חיות דעת על דבר המגילות הגנוזות,” *Talpiot* 4:3–4 (1950): 677–91, at 681–82. On the meaning of various musical terms related to trumpets and shofarot found in rabbinic literature (החצוצרה, תרועה, שברים, יבבה, ילה), see Piamanta, “החצוצרה,” 239–45.

in 1QM 8:5: “The priests shall blow on their trumpets a simple, uniform and sustained sound” (קול מרודד), and sometimes by combining different terms to describe different musical features of the same sound, as in 1QM 8:7: “a low-pitched, strong and powerful sound” (קול נוח וסמוך), and 1QM 8:14 “a low-pitched, simple and sustained, strong and powerful sound” (קול נוח מרודד סמוך).

In the following section, I survey all the tonal and acoustic terms in 1QM, re-examining the interpretations that have been given to them by various scholars.¹⁶ For each of the terms, I will first state my conclusion regarding its correct musical interpretation. I will then discuss the different views put forth by previous scholars regarding the interpretation of the term and explain my reasons for favoring one interpretation or another. The main difficulty in determining the meaning of these terms arises from the evolutionary development of the Hebrew language from the biblical period to the present day, which caused changes in the meaning of various words and phrases.¹⁷ In order to avoid anachronistic misinterpretation of these terms, I will examine them carefully through comparison to similar words and phrases elsewhere in the Dead Sea Scrolls. I will also compare the language of the scroll with Biblical Hebrew, as most scholars agree that the Hebrew Bible was the principal source of influence upon the language and vocabulary of the authors of the Dead Sea Scrolls.¹⁸ I will also examine similar words and phrases in Second Temple and rabbinic writings.¹⁹

16 As described in the discussion of the terminology, the meaning of the musical terms in 1QM has been the subject of extensive scholarship by specialists in Qumran studies and ancient Judaism. Some of this research is marred by anachronism and lack of precision from a musical perspective. See, for example, E.L. Sukenik, *מגילות גנוזות: מתוך גניזה קדומה שנמצאה במדבר יהודה* (Jerusalem: Bialik Institute, 1948), 25; H. Yalon, “ללשון המגילות הגנוזות,” *Sinai* 26 (1950): 283–87; Yadin, *The Scroll of the War*, 103–4; Robert C. Stallman, “Levi and Levites in the Dead Sea Scrolls,” *Journal for the Study of the Pseudepigrapha* 10 (1992): 163–89, at 174; Florentino García Martínez, *The Dead Sea Scrolls Translated* (Leiden: Brill, 1994), 101; Jean Duhaime, “War Scroll (1QM, 1Q33),” in James H. Charlesworth et al., eds., *The Dead Sea Scrolls: Hebrew, Aramaic, and Greek Texts with English Translations. Vol. 2. Damascus Document, War Scroll, and Related Documents*. Princeton Theological Seminary Dead Sea Scrolls Project 2 (Tübingen: J.C.B. Mohr P. Siebeck, 1995), 113; Geza Vermes, *The Dead Sea Scrolls in English* (Sheffield: Sheffield Academic Press, 1995), 133; Michael O. Wise, Martin G. Abegg Jr., and Edward M. Cook, *The Dead Sea Scrolls: A New Translation* (San Francisco, CA: Harper Collins, 1996), 158; Yishay, “ספרות המלחמה,” 120, 144; and David J.A. Clines, ed., *The Dictionary of Classical Hebrew*, vol. 7 (Sheffield: Sheffield Academic Press, 2010), 220.

17 Menahem Kister, “קווים לאוצר המילים של כתבי קומראן,” in Kister, *מגילות קומראן*, 2:567–69.

18 Elisha Qimron, “הלשון והרקע הלשוני של כתבי קומראן,” in Kister, *מגילות קומראן*, 2:553–555; Kister, *לשונות ראשונים: מחקרי לשון מחקרי לשון במקרא, במגילות, בכתבי קומראן*, “קווים לאוצר המילים,” 562; Moshe Bar-Asher, *מגילות קומראן*, 97; Lewis Glinert, *The Story of Hebrew* (Princeton: Princeton University Press, 2017), 37; Avi Hurvitz, *פרקים בהיסטוריה הלשונית*, 38–40.

19 Qimron argues that the language of the Dead Sea Scrolls is an independent dialect which

SOUND-TERMS RELATED TO THE USE OF TRUMPETS ON THE BATTLEFIELD IN 1QM

1. ידי: “so as to” or “in order to.”

This term probably does not carry any musical valence per se, but its meaning must be clarified as it occurs several times in conjunction with musical terms in the descriptions of war in 1QM.²⁰ According to Eliezer Lipa Sukenik, this word is to be understood as “for” (לשם) or “in order to bring about” (כדי להביא . . . ל).²¹ Yadin explained this word as “signs of.”²² Both of these interpretations take the term ידי as part of a fixed pattern that is intended to specify the type of signal sounded by the trumpets and the military action that was to follow in its wake. For example, when 1QM 8:5–6 states: “a simple, uniform and sustained sound, *signals for* the order of battle. And the columns shall be deployed into their formations, each to his position,” this means that the simple, uniform and sustained sound is produced in order to signal to the fighters that they must move and take their places, an action that is termed “the order of battle” in the scroll.

2. קול מרודר: A simple, uniform and sustained sound (*sostenuto*).

This term appears in two places in the War Scroll: 1QM 8:5: “The priests shall blow on their trumpets a simple, uniform and sustained sound, signals for the order of battle” and 1QM 8:13–14: “Afterwards, the priests shall blow for them the trumpets of retreat, a low-pitched, simple and sustained, strong and powerful sound.” The majority of scholars take this term to designate a uniform sustained sound, without variation in pitch or volume.²³ Some have

might have its origins in the prevalent dialect in Jerusalem in the late Second Temple era, as its linguistic forms are very different from those of Rabbinic Hebrew. See Qimron, “הלשון,” 553–55. In his view, the similarity between the Hebrew of the scrolls and that of rabbinic literature is negligible and is mainly seen in nouns and in syntax.

20 See, for example, 1QM 8:5–6, “The priests shall blow on their trumpets a simple, uniform and sustained sound, *signals for* the order of battle. And the columns shall be deployed into their formations, each to his position.” ותקעו הכוהנים בחצוצרות קול מרודר ידי סדר מלחמה והראשים) (יהיו נפשטים לסדריהם איש למעמדו ובעומדם שלושה) (סדרים יתקעו להם הכוהנים תרועה שנית קול נוח וסמוך ידי מפשע עד קורבם למערכת האויב 8:11–13; 16:5–6; 17:11–12).

21 Sukenik, *מגילות גנוזות*, 25.

22 Yadin, *The Scroll of the War*, 99–100.

23 Yalon, “ללשון המגילות,” 287; Yadin, *The Scroll of the War*, 103–4; Duhaime, “War Scroll,” 113; García Martínez, *The Dead Sea Scrolls Translated*, 101; Geza Vermes, *The Dead Sea Scrolls in*

suggested alternative interpretations: Sukenik offered, “קול דק וממושך” (which we might render as “a thin, extended sound”), without explaining what קול דק means, musically.²⁴ Driver translated, “repeated,” which may be understood to indicate a continuous repetition of a single sound, a phenomenon known as “ostinato” in technical musical terminology.²⁵ Screnock’s “subdued voice” indicates a sound of low volume, technically termed “piano.”²⁶

Outside of 1QM, the root ר.ד.ר does not appear in any of the corpus of Dead Sea Scrolls. The root appears several times in the Hebrew Bible, in the sense of submission, treading, leveling, and flattening.²⁷ Thus:

Isaiah 45:1: “Thus said the Lord to Cyrus, His anointed one, whose right hand He has grasped, treading down nations before him (לְרַד לְפָנָיו גּוֹיִם).”

1 Kings 6:32: “He overlaid them with gold, hammering the gold onto the cherubim and the palms (וַיִּרְדֵּם עַל הַכְּרוּבִים וְעַל הַתְּמָרוֹת אֶת הַזָּהָב).”

Psalms 144:2: “my faithful one, my fortress, my haven and my deliverer, my shield, in whom I take shelter, who makes peoples subject to me (הַרְוִידֵם עִמִּי תַחְתִּי).”²⁸

The root ר.ד.ר appears in the sense of leveling and flattening also in Tannaitic literature:

English, 133; Geza Vermes, *The Complete Dead Sea Scrolls in English* (London: Allen Lane, 1997), 171; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 158; Ludwig Koehler and Walter Baumgartner, *The Hebrew and Aramaic Lexicon of the Old Testament (HALOT)*, 5 vols. (Leiden: Brill, 2001), 4:1189; Florentino García Martínez and Eibert J.C. Tigchelaar, *The Dead Sea Scrolls Study Edition*, vol. 1 (Leiden: Brill, 1997), 127; Parry, Tov and Clements, *The Dead Sea Scrolls Reader*, 1:255; Robert D. Holmstedt and John Screnock, “Writing a Descriptive Grammar of the Syntax and Semantics of the War Scroll (1QM): The Noun Phrase as Proof of Concept,” in *The War Scroll, Violence, War and Peace in the Dead Sea Scrolls and Related Literature: Essays in Honour of Martin G. Abegg on the Occasion of His 65th Birthday*, ed. Kipp Davis et al. (Leiden: Brill, 2016), 92.

24 Sukenik, מגילות גנוזות, 25.

25 Godfrey R. Driver, *The Judaean Scrolls: The Problem and a Solution* (Oxford: Blackwell, 1966), 173; On “ostinato,” see Michael Kennedy, Joyce Kennedy, and Tim Rutherford-Johnson, eds., *The Oxford Dictionary of Music*, 6th ed. (Oxford: Oxford University Press, 2013), 624.

26 John Screnock, “Word Order in the War Scroll (1QM) and Its Implications for Interpretation,” *Dead Sea Discoveries* 18 (2011): 29–44, at 39n31. On “piano,” see Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 650.

27 Shlomo Morag, מחקרים בלשון המקרא (Jerusalem: Hebrew University Magnes Press, 1995), 227; HALOT 4: 1189–1190; Abraham Even-Shoshan, ed., נביאים וכתובים, לתורה, נביאים וכתובים (A New Concordance of the Bible) (Jerusalem: ha-Milon he-Hadash, 2007), 1062; Menahem Zevi Kaddari, מילון העברית המקראית - אוצר לשון המקרא מאלף עד תי”ו (Dictionary of Biblical Hebrew [Alef-Taw]) (Ramat Gan: Bar-Ilan University, 2006), 990; Clines, *Dictionary*, 7:419.

28 NRSV: “who subdues the peoples under me.”

m. Tamid 6:2: “piled the coals on the altar and flattened (וירידן) them with the bottom of the pan.”

m. Ohalot 7:2: “part of it [the tentcloth] is spread out (מרודר) on the ground.”

t. Shabbat 11:2: “Even he who strikes with a hammer upon the anvil is liable, for so do they flatten (מרדין) [metal] sheets for the labor of the Tabernacle.”²⁹

t. Mo'ed Qatan 1:4: “one pokes it with a stake or strikes it with a pick and flattens (ומרדיד) the earth beneath him.”³⁰

These usages of the root support the claim of scholars who take the term קול מרודר as denoting a simple, uniform and sustained sound, known as “sostenuto” in musical terms.³¹

3. סמוך: A strong and powerful sound (forte).

This term appears in two places in 1QM, in conjunction with the terms נוה (discussed below) and מרודר. 1QM 8:7 states: “the priests shall blow for them a second signal, a low-pitched, strong and powerful sound.” 1QM 8:13–14 states: “Afterwards, the priests shall blow for them the trumpets of retreat, a low-pitched, simple and sustained, strong and powerful sound.” Various scholars have understood this term as referring to the proximity between different sounds and therefore interpreted it using the musical term “legato,” which means playing or singing at least two notes consecutively, without a break between one note and the next.³² This interpretation appears to be incorrect because the scroll does not indicate different sounds produced one after the other, but rather a single sound (קול נוה וסמוך, קול נוה מרודר סמוך, etc.). Other scholars have seen the term סמוך as a reference to a prolonged sound.³³ In light of the above discussion concerning the meaning of the term מרודר as denoting

29 Saul Lieberman, ed., *The Tosefta* (New York, NY: Jewish Theological Seminary of America, 1955–1988), *Seder Mo'ed*, 46.

30 Lieberman, *The Tosefta, Mo'ed*, 366.

31 Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 953.

32 Abraham Meir Haberman, *מגילות מדרב יהודה* (Tel Aviv: *Mahbarot Le-Sifrut*, 1959), 199; Duhaime, “War Scroll,” 113; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 158; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:255; Holmstedt and Screnock, “Writing a Descriptive Grammar,” 90; Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 484.

33 Yadin, *The Scroll of the War*, 103; Driver, *The Judaean Scrolls*, 172; García Martínez, *The Dead Sea Scrolls Translated*, 101; Geza Vermes, *The Dead Sea Scrolls in English*, 133; García Martínez and Eibert J.C. Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127; Clines, *Dictionary*, 7:220.

a prolonged sound, we may conclude that this interpretation is also incorrect. The root **ס.מ.כ** appears several times in the Dead Sea Scrolls in the sense of strengthening, empowerment, and stability. For example, in 1QH 10:9–10, “and you have supported my soul (וּתְסַמְכוּךָ נַפְשִׁי) with a potent strength”; 1QH 15: 9–10, “I thank you, O Lord, that you have sustained me (סַמְכַתְנִי) by your strength, and that you have spread your holy spirit upon me, so that I am not shaken. You have made me strong”; and 1QS 10:25, “I shall enclose it with a strong boundary (גְּבוּל סְמוּךְ),³⁴ so to preserve faith and strict judgment – conforming to the righteousness of God.” In the Hebrew Bible as well, this root appears in several places in the sense of support and strengthening.³⁵ Thus, Genesis 27:37, “I have sustained him with grain and wine (וּרְגַן וּתְיִרוֹשׁ סַמְכִיתִיו)”; Isaiah 63:5, “I stared, but there was none to aid (וְאֵין סוֹמֵךְ). So my own arm wrought the triumph, and my own rage was my aid (וְחַמְתִּי הִיא סַמְכַתְנִי)”; Psalm 54:6, “See, God is my helper; the Lord is my support (וְהָנָה אֱלֹהִים עֲזָר לִי אֲדַנִּי בְּסַמְכֵי נַפְשִׁי)”; and Song 2:5, “Sustain me (סַמְכוּנִי) with raisin cakes, refresh me with apples.” In Ben Sira 44:6, the expression **סוּמְכֵי** occurs in the context of might and power: “rich men endowed with resources (אֲנָשֵׁי חַיִל וְסוּמְכֵי כַח).”³⁶ In light of the above evidence, I suggest that the term **קוֹל סְמוּךְ** in the War Scroll is to be interpreted as denoting a powerful sound, which is called “forte” in musical terminology.³⁷

4. נוח: a low-pitched sound.

This term appears in two places in the War Scroll. 1QM 8:7 states, “the priests shall blow for them a second signal, a low-pitched, strong and powerful sound (קוֹל נוּחַ וְסוּמוּךְ).” 1QM 8:13–14 states, “Afterwards, the priests shall blow for them the trumpets of retreat, a low-pitched, simple and sustained, strong and powerful sound (קוֹל נוּחַ מְרוֹרֵד סְמוּךְ).” The verbal form, **יְנִיחוּ** appears in 1QM 17:14, “Then all the people shall pause the signal/lower the pitch of the signal (יְנִיחוּ קוֹל הַתְּרוּעָה).”³⁸ The majority of scholars have translated the term **קוֹל נוּחַ** with the word “low,” which is musically ambiguous: it could refer to a sound that is low in pitch, or to a sound that is reduced in volume (“piano”).³⁹ Others

34 Parry and Tov translate this phrase as “I shall compass it close about.”

35 Yair Zakovitz, *מבוא לפרשנות פנים מקראית*, (Even Yehuda: Reches, 1992), 63; HALOT 2:759; Even-Shoshan, *קונקורדנציה*, 811; Kaddari, *מילון העברית*, 759; Clines, *Dictionary*, 7:168.

36 Moshe Zvi Segal, *ספר בן סירא השלם: כולל כל השרידים שנתגלו מתוך הגניזה והחזרת הקטעים החסרים*, (Jerusalem: Bialik Institute, 1972), 302.

37 HALOT 2:759; Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 303.

38 Parry and Tov translate **יְנִיחוּ** here as “stil[.]”. The change to “pause/lower the pitch” reflects the ambiguity of the Hebrew, which can refer to a cessation of the sound or a reduction in pitch, as discussed in this section. See Parry, Tov and Clements, *The Dead Sea Scrolls Reader*, 1:255.

39 Habermann, *מגילות מדבר יהודה*, 199; Yadin, *The Scroll of the War*, 103; Driver, *The Judaean Scrolls*, 172; Stallman, “Levis and Levites,” 174; Duhaime, “War Scroll,” 113; García Martínez, *The Dead*

have suggested alternative interpretations. Vermes translated the term as “soft”; Abegg, Bowley, and Cook translated it as “legato.”⁴⁰ This interpretation is incorrect because, as stated, the scroll indicates the playing of one sound, i.e., one note, while the term *legato* refers to the consecutive playing or singing of at least two notes.

Outside of 1QM, the root נ.ו.ח does not appear in other Dead Sea Scrolls in the context of sound or music, except as part of a citation or excerpts of biblical verses, in a manner that preserves the biblical context.⁴¹ This root occurs frequently in the Hebrew Bible, in a number of meanings.⁴² For example:

Quiet, calm, found rest. Thus, e.g., Isaiah 57:2, “Yet he shall come to peace, he shall have rest on his couch (יבוא שלום ינוחו על משכבותם)”; Job 3:26, “I had no repose, no quiet, no rest (לא שלותי ולא שקטתי ולא נחתי)”; Lamentations 5:5, “Exhausted, we are given no rest (יגענו ולא הונח לנו).”

Staying, settling. Thus, e.g., Exodus 10:14, “Locusts invaded all the land of Egypt and settled within all the territory of Egypt (וינח בכל גבול מצרים)”; Isaiah 14:1, “But the Lord will pardon Jacob, and will again choose Israel, and will settle them on their own soil (והניחם על אדמתם).”

Descent, lowering. Thus, e.g., Genesis 8:4, “the ark came to rest on the mountains of Ararat (ותנה התיבה... על הרי אררט)”; Exodus 17:11, “Then, whenever Moses held up his hand, Israel prevailed; but whenever he let down his hand (וכאשר יניח ידו) Amalek prevailed.”

In light of these examples, there are two plausible ways to interpret the term קול נוח in 1QM: either as an expression denoting a sound that is soft, quiet, and calm or as an expression for a sound of low pitch. The first option, a low-volume sound, i.e., “piano,” is to be rejected for two reasons. First, because the use of auditory signals on the battlefield served as a way to transmit orders to the fighters above the noise and commotion of the battle, it is therefore not plausible that a soft note would have been used to transmit orders. Second, the term קול נוח appears in 1QM 8:7, 14 in conjunction with the word סמוך, which we have shown to mean a strong powerful sound. If that interpretation

Sea Scrolls Translated, 101; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 158; García Martínez and Eibert J.C. Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127; Qimron, *מגילות מדבר יהודה: החיבורים העבריים*, vol. 1 (Jerusalem: Yad Ben-Zvi Press, 2010), 119; Holmstedt and Screnock, “Writing a Descriptive Grammar,” 92.

40 Geza Vermes, *The Dead Sea Scrolls in English*, 133; Martin G. Abegg, James E. Bowley and Edward M. Cook, *The Dead Sea Scrolls Concordance: Volume One, The Non-Biblical Texts from Qumran*, Part 1 (Leiden: Brill, 2003), 508.

41 For example, in 4Q252 1-2 I, 9-10, “and on the sixth day the ark came to rest (נחה) on the mountains of Huarat.”

42 HALOT 2:679-80; Clines, *Dictionary*, 5:638-40; Kaddari, *מילון העברית*, 702.

is correct, then we cannot take קול נוח as an expression of a weak sound; this would stand in contradiction to the term סמוך as a strong sound. Therefore, the term נוח must be understood as denoting a low-pitched sound. According to this interpretation, the collocation of the terms קול נוח וסמוך (1QM 8:7) signifies a low-pitched, strong and powerful sound. Similarly, the collocation קול נוח מרודד סמוך (1QM 8:14) indicates a low-pitched, simple and sustained, strong and powerful sound.

5. קול חד טרוד: a very strong sound, possibly in a high register (shrill) which repeats persistently and sequentially (ostinato).

This collocation of the terms חד and טרוד occurs three times in the War Scroll. 1QM 8:8–9 states: “Then the priests shall blow on the six trumpets of the slain a very strong shrill sound which repeats persistently and sequentially (קול חד טרוד).” 1QM 8:11–12 states, “on the tru[m]pets the priests shall continue to blow a very strong shrill sound which repeats persistently and sequentially (קול חד טרוד) to direct the signals of battle until they have hurled into the battle line of the enemy seven times.” 1QM 16:7 states, “Then the six [... the tr]umpets of the slain a very strong shrill sound which repeats persistently and sequentially.”⁴³

To determine the musical sense of this collocation, I will first seek to establish the meaning of each term individually.

קול חד: Most scholars interpret this term as indicating a sound that is very strong and shrill⁴⁴ or sharp.⁴⁵ According to Yishay, this term should be understood as an expression for a strong high-pitched sound.⁴⁶ The term חד appears several times in the Dead Sea Scrolls to designate sharp weapons. Thus, in 1QH 13: 11–12, “And you closed the mouth of the young lions whose teeth are like a sword and whose jaw teeth are like a pointed spear (כחנית חדה)”; 4Q436

43 Parry and Tov present the Hebrew text as follows:

וששתן חוצוצרות החללים קול חד טרוד לנצח מלחמה והליום וכול עם (Parry, Tov and Clements, *The Dead Sea Scrolls Reader*, 1: 268). They do not reconstruct any text in the lacuna. Qimron's text contains a few more letters, and a reconstruction of the missing text:

ומגילות מדבר יהודה (Qimron, *מגילות מדבר יהודה*, 1:128.) It is preferable to restore יריעו rather than יתקעו, on the basis of 1QM 8:8; והכהנים יריעו בשש חצוצרות, 1QM 9:1–2, והחללים; והכהנים יריעו בחצוצרות החללים, 1QM 17:12; והכהנים יריעו בחצוצרות החללים, 4Q491 11 ii, 21, והכהנים יריעו בחצוצרות החללים.

44 Habermann, *מגילות מדבר יהודה*, 199; Yadin, *The Scroll of the War*, 103; Stallman, “Levi and Levites,” 174; Duhaime, “War Scroll,” 113, 131; García Martínez, *The Dead Sea Scrolls Translated*, 101, 111; Geza Vermes, *The Dead Sea Scrolls in English*, 133, 142; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127, 139.

45 Driver, *The Judaean Scrolls*, 172; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 158–65; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:255, 269; Holmstedt and Screnock, “Writing a Descriptive Grammar,” 80.

46 Yishay, “ספרות המלחמה,” 120, 144.

1 i, 7, “And you have made my mouth like a sharp sword (כחרב חדה).” In the Hebrew Bible as well, this word appears in the context of a sharp sword.⁴⁷ Thus, for example, in Ezekiel 5:1, “take a sharp knife (חרב חדה)”; Psalm 57:5, “whose tongue is a sharp sword (חרב חדה)”; Isaiah 49:2, “He made my mouth like a sharpened blade (וישם פי כחרב חדה).”

The above evidence points to two plausible ways of interpreting the term קול חה. One possibility would be a very strong sound of a shrill and sharp nature, sounded in a high register. This option is supported by the fact that the scroll notes that this sound was produced through the simultaneous use of six trumpets, which may be presumed to have led to the creation of an exceedingly loud sound. The other possibility is to interpret the term as indicating a very brief and abrupt sound, known in musical terminology as “staccato,” which is Italian for “separate” or “detached”; i.e., a sound that is separated from the sound that follows it, due to its brevity.⁴⁸ An additional interpretation may be suggested based on 1QpHab 3:6–7, which comments on Habakkuk 1:8, “Their horses are swifter than leopards, fleeter (וחדו) than wolves of the steppe.”⁴⁹ According to various scholars, the word וחדו indicates the swiftness of the horses and the wolves.⁵⁰ Others maintain that we should distinguish between וחדו and קלו; they understand קלו as referring to the swiftness of the horses and take וחדו as referring to a quality of the wolves, most frequently strength.⁵¹ If the scholars who take וחדו as referring to the swiftness of the horses are correct, then it would perhaps be possible to understand the term קול חה in 1QM as referring to sounds that are produced one after another in quick succession. Given the range of possibilities we have presented, it is possible that clarification of the term טרווד in the following discussion will assist with clarification of the term חה.

טרווד: Some scholars maintain that this term refers to a sound that repeats persistently, sequentially and without pause, which is termed “ostinato” in

47 HALOT 1:291; Clines, *Dictionary*, 3:161; Even-Shoshan, *קונקורדנציה*, 347; Kaddari, *מילון העברית*, 275.

48 Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 805.

49 The text is cited according to the MT of Hab 1:8: וקלו מנמרים סוסי וחדו מזאבי ערב. In 1QpHab, the lemma is presented as “וקול מנמרים סוסי וחדו מזאבי ערב.” According to Nitzan, the scribe erred in writing “וקול” rather than “וקלו.” See Bilhah Nitzan, *מגילת פשר חבקוק ממגילות מדבר יהודה*, (Jerusalem: Bialik Institute, 1986), 159.

50 William H. Brownlee, *The Midrash Peshar of Habakkuk* (Missoula, MT: Scholars Press, 1979), 68; HALOT 1:291; Clines, *Dictionary*, 3:161; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 117; Geza Vermes, *The Complete Dead Sea Scrolls in English*, 479; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:447.

51 García Martínez, *The Dead Sea Scrolls Translated*, 198; García Martínez and Eibert J.C. Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:13; Kaddari, *מילון העברית*, 275. Nitzan suggests that the reference is to the sharpness of the wolves’ teeth. (See Bilhah Nitzan, “מגילות הפשרים מקומראן,” in Kister, ed., *קומראן מגילות*, 1:181). This would perhaps be similar to 1QH 13:9–10, cited above.

musical terminology.⁵² Other scholars believe that “טרוד” should be understood as referring to a short, distinct sound, which is separated from the sound that follows it, called “staccato” in musical terminology.⁵³ Yishay combined these two interpretations and explained the terms as fragmented sound repeated persistently and sequentially, known in musical terminology as “staccato ostinato.”⁵⁴ An additional proposal was put forth by Habermann, who understood the term to denote a note that is sounded quickly.⁵⁵ The term טרוד also appears in 4Q267 5 iii, 3–5, in the specification of a halakhah that most likely pertains to public Torah reading, prohibiting a priest who is incapable of clear speech from performing this lectionary function: “and anyone whose [speech] is too soft (?) [or speaks] with a טרוד [voice], not dividing his words so that [his voice may be heard, none of these (?)] shall read from the bo[ok of the Law].”⁵⁶

It appears from these lines that the term טרוד is associated here with fluent speech, free of distracting pauses or interruptions between words or sentences that would interfere with listeners’ comprehension. Some scholars interpreted the use of the word in this scroll using the modern musical term “staccato.”⁵⁷ This interpretation is not tenable because, as noted above, the term “staccato” designates a very short sound that is separate or detached from the sound that follows it, whereas the word טרוד in 4Q267 refers to fluid speech that does *not*

52 Sukenik, *מגילות גנוזות*, 25; Kasher, “חזות דעת,” 682; Rony Yishay, “הרגם של תיאור מלחמת הקץ בספרות,” *Meghillot* 4 (2006): 121–39 at 127.

53 Yadin, *The Scroll of the War*, 103; Stallman, “Levi and Levites,” 175; Duhaime, “War Scroll,” 113; García Martínez, *The Dead Sea Scrolls Translated*, 101, 111; Geza Vermes, *The Dead Sea Scrolls in English*, 133, 142; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 158, 165; García Martínez and Eibert J.C. Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127, 139; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:255, 269; Holmstedt and Screnock, “Writing a Descriptive Grammar,” 80.

54 Yishay, “ספרות המלחמה,” 120.

55 Habermann, *מגילות מדבר יהודה*, 199.

56 Cana Werman and Aharon Shemesh, *לגלות נסתרות: פרשנות והלכה במגילות קומראן* (Jerusalem: Bialik Institute, 2011), 29. Note that the text of the passage has been reconstructed as a composite of three fragmentary manuscripts of the Damascus Document: 4Q266, 4Q267, and 4Q273. The word טרוד is preserved specifically in 4Q267. Parry and Tov (Parry, Tov and Clements, *The Dead Sea Scrolls Reader*, 1:155) translate the word here as “staccato,” but this is probably incorrect, as argued below. We have left the word in the Hebrew here to reflect its ambiguity.

57 Geza Vermes, *The Complete Dead Sea Scrolls in English*, 146; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:601; Joseph M. Baumgarten, James H. Charlesworth, Lidija Novakovic and Henry W.M. Rietz, “Damascus Document 4Q266–273 (4QDa–h),” in James H. Charlesworth et al., eds., *The Dead Sea Scrolls: Hebrew, Aramaic, and Greek Texts with English Translations. Vol. 3: Damascus Document II, Some Works of the Torah, and Related Documents. PTSDSSP 3* (Tübingen: Mohr Siebeck, 2006), 88–89; Florentino García Martínez, *Qumranica Minora II – Thematic Studies on the Dead Sea Scrolls*, ed. Eibert J.C. Tigchelaar. STDJ 64 (Leiden: Brill, 2007), 86; Parry, Tov and Clements, *The Dead Sea Scrolls Reader*, 1:155.

have separation between words and sentences. According to Qimron, this word should be understood as referring to rapid speech, which causes words to run into one another.⁵⁸

The root ט.ר.ר appears in two places in the book of Proverbs in the context of descriptions of continuous and unceasing rain. Proverbs 19:13 contains the phrase “endless dripping (וְדִלְף טוֹרֵד)” and Proverbs 27:15 reads, “an endless dripping on a rainy day (וְדִלְף טוֹרֵד בְּיוֹם סִגְרִיר).”⁵⁹ This root occurs in a similar sense in the Tosefta as well. Thus, t. Kelim 7:3: “would drip drop by drop (הִיא טוֹרֵד טֶפֶה)”;⁶⁰ t. Makhshirin 1:8: “drips drop by drop (טוֹרֵד טֶפֶה אַחַר טֶפֶה).”⁶¹

These sources highlight the problematic nature of the interpretation of the term טוֹרֵד as “staccato,” and reinforce the claim that this term should be interpreted as a reference to a sound that is repeated persistently and continuously, i.e., *ostinato*.⁶² This proposal is further strengthened by the description in 1QM 8:11–12: “but on the tru[m]pets the priests shall continue to blow a very strong shrill and טוֹרֵד sound⁶³ (קוֹל חַד טוֹרֵד) . . . until they have cast [their weapons] into the battle line of the enemy (עַד הַשְּׁלִיכֶם לַמַּעֲרֶכֶת הָאֹיִב) seven times.” According to this description, the sound of the trumpets extends continuously until the warriors have cast their weapons. In addition, in light of the evidence of 4Q267, it may be proposed that this note was not short and separated from the following sounds (as in staccato), but was a relatively extended sound that would repeat persistently. If this interpretation is correct, then the first possibility suggested above is to be preferred. That is, the term קוֹל חַד should be understood to denote a very loud sharp sound, possibly high-pitched, i.e., a shrill sound, and not a rapid or staccato sound.⁶⁴

In conclusion, the collocation קוֹל חַד טוֹרֵד is best understood as a very loud and shrill sound, repeated persistently and without pause until the fighters have completed casting their weapons.

58 Qimron, *מגילות מדבר יהודה*, 1:26.

59 See HALOT 2: 379; Clines, *Dictionary*, 3:374; Kaddari, *מילון העברית*, 385.

60 Moses Samuel Zuckerman, ed., *Tosefta* (Pasewalk: M.S. Zuckerman, 1880, Repr., Jerusalem: Wahrman, 1970) *Taharoth*, 577.

61 *Tosefta*, Zuckerman ed., 674.

62 See above, n. 52.

63 The word is left untranslated in these passages for now, to reflect its ambiguity, which is the subject of this section.

64 See above, nn. 44–46.

THE USE OF SHOFAROT ALONGSIDE THE USE OF TRUMPETS IN 1QM

As noted above, trumpets are not the only wind instruments that serve the army of the Sons of Light. Alongside the scroll's description of the priests' use of trumpets, 1QM also contains a description of the use of shofarot by the Levites and the people. The first time that both instruments are mentioned together is in 1QM 7:9–14, in a passage describing the emergence of the priests and Levites from the ranks of the warriors, as part of the advance of the army of the Sons of Light into battle.⁶⁵ The passage begins with a description of the priests' advance, detailing their roles in the war:

There shall go forth from the middle opening . . . seven priests of the sons of Aaron . . . The one priest shall walk before all the men of the battle line to encourage them for battle. In the hands of the remaining six shall be the trumpets of assembly, the trumpets of memorial, the trumpets of the alarm, the trumpets of pursuit, and the trumpets of reassembly.

Next, the scroll proceeds to describe the Levites' advance:

When the priests go out into the gap between the battle lines, seven Levites shall go out with them. In their hands shall be seven trumpets of rams' horns (שבעת שופרות היובל).

One of the characteristics of this description is the numerical equivalence of the seven priests and the seven Levites. According to Yadin, the choice of this number by the author of 1QM may derive from descriptions in Nehemiah 12:41 (“and the priests Eliakim, Maaseiah, Miniamin, Micaiah, Elioenai, Zechariah, Hananiah, with trumpets”); 1 Chronicles 15:24 (“Shebaniah, Josaphat, Nethanel, Amasai, Zechariah, Benaiah, and Eliezer the priests sounded the trumpets”); and Joshua 6:4 (“seven priests will carry seven ram's horns preceding the Ark. On the seventh day, march around the city seven times, with the priests blowing the horns”).⁶⁶ However, alongside the numerical similarity, there are also some differences between these sources and the description in 1QM:

1. In contrast to 1QM, the descriptions in Nehemiah and 1 Chronicles do not appear in a military context.
2. Whereas Nehemiah and 1 Chronicles describe seven priests carrying trumpets, 1QM describes only six priests carrying trumpets with the seventh priest entrusted with strengthening the spirit and morale of the fighters.

⁶⁵ Bockmuehl, “The Trumpet Shall Sound,” 209–10.

⁶⁶ Yadin, *The Scroll of the War*, 107 n.1.

3. The description in Nehemiah and 1 Chronicles does not contain any reference to the various types of trumpets, while the six priests in 1QM carry five different types of trumpets.
4. The priests carry the shofarot in Joshua, whereas in 1QM it is the Levites.

Moreover, nowhere in the Hebrew Bible is there a description of the use of trumpets alongside shofarot, as is found in 1QM. This and other differences indicate that alongside the biblical influence upon the description of trumpets in 1QM, the scroll contains other elements that demonstrate its author's independence from scripture with respect to the use of trumpets in battle.⁶⁷

DESCRIPTION OF THE USE OF TRUMPETS AND SHOFAROT ON THE BATTLEFIELD IN 1QM

The combined use of trumpets and shofarot on the battlefield is described in the scroll in four places. These descriptions attest to the unique role given to each of the instruments in battle. The trumpets are used by the priests to direct the fighting forces while the shofarot are used by the Levites and the people to cause a psychological effect on the enemy ("to melt the heart of the enemy").⁶⁸

1. 1QM 8:8–12:

Then the priests shall blow on the six trumpets of the slain a very strong shrill sound which repeats persistently and sequentially to direct the battle, and the Levites and all the people with shofarot shall blow a great battle

⁶⁷ On the differences, see Piamenta, "ההצורה," 78–79. On the independence, see also Yadin, *The Scroll of the War*, 87; Wenthe, "The Use," 304–6; Florentino García Martínez, *Qumranica Minora 1: Qumran Origins and Apocalypticism*, ed. Eibert J.C. Tigchelaar. STDJ 63 (Leiden: Brill, 2007), 224.

⁶⁸ Yadin, *The Scroll of the War*, 107–8; Stallman, "Levi and Levites," 175; Yishay, "הרגם," 127; "ספרות," 120. The exclusivity of the use of trumpets by the priests is also found in Sifre Bamidbar 75: 1–2: "And the children of Aaron, the priests, will sound a blast. Why is it said? Because had it said 'if he will sound one [trumpet] ...,' I might have understood that the meaning [of 'sounding a blast'] includes even an Israelite [as opposed to a priest]. The [Torah's] teaching [therefore] says: 'And the children of Aaron, the priests...'" (ובני אהרן הכהנים יתקעו - למ' נא. לפי שהוא אר'').⁶⁸ Kahana, *1:178 ספרי במדבר*, וראם באחת יתקע, שומע אני אף יש' במשמע. ת"ל ובני אה' הכהנ' Sifre Zuta 10:8: "and the children of Aaron' ... the [Torah's] teaching [therefore] says: 'the priests'" (ספרי זוטא על ספר במדבר עם חלופי גרסאות והערות, ed. Chaim Saul Horowitz, Jerusalem: Wahrman Books, 1966], 262). In addition, as in 1QM, the passage in Sifre Zuta specified that the sounding of the shofarot should not be done by the priests: Sifre Zuta 10:8, "And the children of Aaron' ... the [Torah's] teaching [therefore] says 'the priests' shall blow the trumpets, not the shofarot ... (יתקעו בחצוצרות לא בשופרות)."

alarm together in order to melt the heart of the enemy. With the sound of the alarm, the battle darts shall fly out to bring down the slain. Then the sound of the shofarot יחישו,⁶⁹ but on the tru[m]pets the priests shall continue to blow a very strong shrill sound which repeats persistently and sequentially to direct the signals of battle until they have hurled into the battle line *vacat* of the enemy seven times.

2. 1QM 9:1–2:

Their hands shall begin to bring down the slain, and all the people shall יחשו the sound of alarm, but the priests shall continue sounding on the trumpets of the slain to direct the fighting until the enemy is defeated and turns in retreat.

3. 1QM 16:7–9:

Then the six [the tr]umpets of the slain a very strong shrill sound which repeats persistently and sequentially to direct the fighting. The Levites and all the people with shofarot shall blow [], a loud noise. As the sound goes forth, the infantry shall begin to bring down the slain of the Kittim, and all the people יחשו the signal, [but the priest]s shall continue blowing on the trumpets of the slain and the battle shall prevail against the Kittim.⁷⁰

4. 1QM 17:12–14:

Then the priests shall blow on the trumpets of the slain [and the Levites and the al]l the people with shofarot shall sound a signal for battle. The infantry shall attack the army of the Kittim, [and as the soun]d [of the si]gnal [goes forth], they shall begin to bring down their slain. Then all the people shall pause the signal/lower the pitch of the signal,⁷¹ while the priests continuously blow on [the trumpets of the slai]n.

The distinction between the two types of instruments is also reflected on the acoustic level. The trumpets sound a specific tonal signal (a very strong shrill sound which repeats persistently and sequentially, (קול חר טרוד), whose purpose is to direct the warriors by means of a clear and distinct sound. On the other hand, the function of shofarot is to arouse fear and dread among the enemy, and 1QM labels the sounds of their war cries with terms indicating their great power rather than musical qualities such as pitch or duration. Thus, 1QM 8:10,

69 The word is left untranslated in these passages for now, to reflect its ambiguity, which is the subject of this section.

70 See n. 43 above on the reading and reconstruction of this passage.

71 The Hebrew word here is יניחון. See n38 above and the discussion of this term below.

“a great battle alarm (תרועת מלחמה גדולה);”⁷² 1QM 16:8, “a loud battle alarm (תרועת מלחמה בקול גדול);”⁷³ 1QM 17:13, “battle alarm (תרועת מלחמה).”

In my opinion, the reason the priests use six trumpets is to amplify the sound to be loud enough to be heard clearly, in parallel with the loud sounds issued by the shofarot.

SOUND-RELATED TERMS PERTAINING TO THE USE OF SHOFAROT IN BATTLE IN 1QM

Similar to the description of the use of trumpets on the battlefield discussed above, the description of the use of shofarot extends beyond a schematic description of the stages in the war in which these were sounded. Here, too, technical and musical terms are used to describe the nature of the sounds that they produced. Most scholars identify two stages in the descriptions of the combined use of trumpets and shofarot in 1QM.⁷⁴ The first stage involves the simultaneous sounding of the trumpets and shofarot to signal the beginning of the casting of the weapons (by the trumpets) and instilling fear in the enemy (through the shofarot). In the second stage, the sounding of the shofarot ceases, and only the blast of the trumpets continues until the completion of the warriors' casting of their weapons. This division is based on their interpretation of the expressions “Then the sound of the shofarot shall quiet (קול השופרות יחישו)” (1QM 8:11); “and all the people shall quiet the sound of alarm (תחישו מקול התרועה)” (1QM 9:1); and the similar 16:8–9: “and all the people shall cease the signal (יחשו

72 Duhaime, “War Scroll,” 113 renders this as “a great sound of alarm.” García Martínez, *The Dead Sea Scrolls Translated*, 101 and García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127 translate: “a deafening war alarm.” Geza Vermes, *The Complete Dead Sea Scrolls in English*, 171: “a mighty alarm.” Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 158; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:255; and Holmstedt and Screnock, “Writing a Descriptive Grammar,” 80: “a great alarm.”

73 The reconstruction of the Hebrew follows Qimron, *מגילות מדבר יהודה*, 1:128. For the interpretation and translation, see Duhaime, “War Scroll,” 113: “a great sound”; García Martínez, *The Dead Sea Scrolls Translated*, 111, and García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127: “a deafening noise”; Geza Vermes, *The Complete Dead Sea Scrolls in English*, 180: “a mighty clamour”; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 165, as well as Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:269: “a loud noise.”

74 Stallman, “Levi and Levites,” 175; Duhaime, “War Scroll,” 113, 115, 131, 135; García Martínez, *The Dead Sea Scrolls Translated*, 101, 111, 113; Geza Vermes, *The Dead Sea Scrolls in English*, 133–34, 142–43; Clines, *Dictionary*, 3:330; 7:220; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 158, 165–66; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127, 139, 141; Abegg, Bowley, and Cook, *Concordance*, vol. 1, 1:508; Yishay, “ספרות המלחמה,” 166; Screnock, “Word Order,” 36; Parry, Tov, and Clements, eds., *The Dead Sea Scrolls Reader*, 1: 255, 269, 271; Holmstedt and Screnock, “Writing a Descriptive Grammar,” 90.

“קול התרועה”); and “Then all the people shall stil[l] the sound of the signal (יניחו) “קול התרועה” (1QM 17:14) as indicating the cessation of the sounding of the shofarot with the beginning of the warriors’ casting of their weapons, in the manner termed “pausa” in musical terminology.⁷⁵ In contrast, Yadin identified three stages. In the first stage, only the trumpets of the slain were sounded. In the second stage, following the sounding of the trumpets, the soldiers began to lay down their weapons and the sounding of the shofarot began. In the third stage, the shofarot ceased while the sounding of the trumpets continued until the warriors completed casting their weapons.⁷⁶

Given the linguistic differences between the verbs יחישו, יחשו, and יניחו used in the above-mentioned texts, I would like to re-examine these terms, particularly in light of my interpretation of the term קול נוח above as denoting lowering the pitch of the sound. An additional expression that is relevant to this context is “and all the people with shofarot shall blow a great battle alarm together (וכול עם) (השופרות יריעו קול אחד)” (1QM 8:9–10), which can help clarify the use of shofarot in the description of the battle in col. 8 of 1QM.

1. יחשו, יחישו: There are three possible interpretations for these terms: a cessation of sound (pausa); a continuation of sound, without change; an acceleration of sound.

The difficulty with clarifying these terms stems from the question of whether their underlying root is *ḥ.š.h.* or *ḥ.w.š.* The root *ḥ.š.h.* does not appear elsewhere in any of the Dead Sea Scrolls, but it occurs several times in the Hebrew Bible in the sense of “silence.”⁷⁷ For example:

Isaiah 62:1: “For the sake of Zion I will not be silent (למען ציון לא אחשה)”

Psalms 107:29: “He reduced the storm to a whisper, the waves were stilled (ויחשו גליהם).”

Ecclesiastes 3:7: “A time for silence (עת לחשות) and a time for speaking.”

Nehemiah 8:11, “The Levites were quieting (מחשים) the people, saying, ‘Hush, for the day is holy; do not be sad.’”

Based on these examples, if the root of יחישו and יחשו is *ḥ.š.h.*, then these words should be understood as expressions for the cessation of the sounding of the shofarot, with the beginning of the casting of weapons by the warriors.

⁷⁵ Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 640.

⁷⁶ Yadin, *The Scroll of the War*, 107–108, 160.

⁷⁷ HALOT 1:361; Even-Shoshan, *קונקורדנציה*, 405; Clines, *Dictionary*, 3:330; Kaddari, *מילון העברית*, 361.

The root *h.w.š.* occurs in 1QM 1:11–12: “It is a time of distress fo[r all] people who are redeemed by God. In all their afflictions none exists that is like it, hastening to its completion/from the beginning to its completion”⁷⁸ (מחושה עד תומה) as an eternal redemption.”

Some scholars take the word מחושה to denote the speed of the arrival of the distress.⁷⁹ Others understand the expression מחושה עד תומה as indicating the beginning of an action through to its completion.⁸⁰ In addition, the root *h.w.š.* occurs in other manuscripts from Qumran. Thus:

1QS 8:8: “whose foundations shall neither be shaken nor swayed (ובל יחישו).”

In light of the first part of the sentence, the most common view is that the word יחישו here refers to a strong stance or immobility.⁸¹

1QH 11:11–12: “All wombs hasten (החישו כול משברים)” and 1QH 14:32: “And then the sword of God will come quickly at the time of judgment (ואז תחיש ויארב אל בקץ משפט).” The dominant view among scholars is that the words החישו and תחיש in these 1QH usages indicate the speed of the arrival of the birth pangs and the action of God’s sword.⁸² Licht and Clines, however, explain the words as indicating the beginning of the birth pangs and of the action of the sword.⁸³

4QSongs of the Sabbath Sacrifice^d (4Q403 1 ii, 13): “And all the decorations of the inner shrine make haste (יחישו) with wondrous psalm.” A number

78 The initial translation is from Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:243; the second translation is an alternative possibility, as discussed in this section.

79 Habermann, *יהודה, מגילות מדבר יהודה*, 198; Duhaim, “War Scroll,” 97; García Martínez, *The Dead Sea Scrolls Translated*, 95; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 152; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:115; Schultz, *Conquering the World*, 98; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:243.

80 Jacob Licht, *מגילת ההודיית ממגילות מדבר יהודה* (Jerusalem: Bialik Institute, 1996), 117–18; HALOT 1:300; Geza Vermes, *The Dead Sea Scrolls in English*, 126; Clines, *Dictionary*, 3:179.

81 Licht, *מגילת ההודיית*, 175; García Martínez, *The Dead Sea Scrolls Translated*, 12; Elisha Qimron and James H. Charlesworth, “Rule of the Community (1QS; cf. 4QS MSS A–J, 5Q11),” in James H. Charlesworth et al., eds., *The Dead Sea Scrolls: Hebrew, Aramaic, and Greek Texts with English Translation. Vol. 1: Rule of the Community and Related Documents*. PTSDSSP (Tübingen: Mohr Siebeck, 1994), 35; Clines, *Dictionary*, 3:179; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 137; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:89; Parry, Tov, and Clements, eds., *The Dead Sea Scrolls Reader*, 1:23.

82 García Martínez, *The Dead Sea Scrolls Translated*, 331, 342; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 94, 100; Geza Vermes, *The Complete Dead Sea Scrolls in English*, 260, 273; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:165, 177; Parry, Tov, and Clements, eds., *The Dead Sea Scrolls Reader*, 2: 293, 306.

83 Licht, *מגילת ההודיית*, 80, 117; Clines, *Dictionary*, 3:179.

of scholars understand the word יחשו to denote the speed of the praise of the decorations.⁸⁴

The root *h.w.š* appears several times in the Hebrew Bible in the sense of speed.⁸⁵ For example, Judges 20:37: “One ambush quickly deployed against Gibeah (והארב החישו ויפשטו אל הגבעה)”; 1 Samuel 20:38: “And Jonathan called after the boy, Quick, hurry up (מהרה חושה). Don’t stop!”; Isaiah 5:19: “Let Him speed, let Him hasten (ימהר יחישו) His purpose”; Psalm 119:60: “I have hurried and not delayed (חשתי ולא התמהמהתי) to keep Your commandments.” The root *h.w.š* appears in the sense of speed also in the Book of Ben Sira 36:10: “Hasten the ending, appoint the time (החיש קץ ופקוד מועד).”⁸⁶

If the root *h.w.š* is the root of the words יחישו and יחשו in the descriptions of the war in 1QM, then there are three possible ways to explain these words. The first way is based upon the interpretation of the expression מחושה ועד תומה in 1QM and of the words החישו and תחיש in 1QH as indicating the beginning of an action. According to this view, the terms יחישו and יחשו in the War Scroll designate the beginning of the sounding of the shofarot, after the sounding of the trumpets. This suggestion is to be rejected because 1QM 8:8–12 and 16:7–9 describe the simultaneous use of trumpets and shofarot, and it is only in the second stage that it is written of the shofarot that יחישו and יחשו.⁸⁷ The second explanation depends on the interpretation of the word יחישו in 1QS 8:8 as denoting a strong stance or lack of movement. Following this interpretation, the terms יחישו and יחשו in 1QM may be understood as the beginning of the warriors’ casting of

84 Carol A. Newsom, *Songs of the Sabbath Sacrifice: A Critical Edition* (Atlanta, GA: Scholars Press, 1985), 229; García Martínez, *The Dead Sea Scrolls Translated*, 423; Wise, Abegg, and Cook, *The Dead Sea Scrolls: A New Translation*, 372; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 2:821; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 2:589.

85 HALOT 1:300; Even-Shoshan, *קונקורדנציה*, 353; Clines, *Dictionary*, 3:178–79; Kaddari, *מילון העברית*, 283.

86 Segal, *ספר בן סירא*, 227; HALOT 1:300; Clines, *Dictionary*, 3:179. However, Ben Sira 35:20 raises a similar ambiguity to the uncertainty regarding יחישו and יחשו in 1QM: “their petition reaches the clouds (וצעקה ענן חשתה).” If the root of חשתה is *h.w.š*, then this word is to be understood as signifying the speed of the rising of the shout (Segal, *ספר בן סירא*, 223; Clines, *Dictionary*, 3:179). If, instead, the root is *h.š.h*, then the word refers to the silencing of the shout.

87 The simultaneous sounding of the two instrument classes is indicated by the conjunctive *waw* in these two descriptions, which joins the use of the trumpets to the use of the shofarot. Thus, in 1QM 8:8–10: “Then the priests shall blow on the six trumpets of the slain... and all the Levites (הלוים) and all the people with shofarot shall blow a great battle alarm together”; and in 1QM 16:7–8: “Then the six [... the tr]umpets of the slain... and the Levites” (הלוים). Qimron’s Hebrew text reads:

וששת והכוהנים יתקעו באחוצרות החללים קול חד טרוד לנצח מלחמה והלוים וכול עם השופרות יריעו תרועות מגילות מדבר יהודה, (Qimron) מלחמה בקול גדול (1:128). See n43 above on his reconstruction, and my argument for restoring יריעו rather than יתקעו.

their weapons, so that there would be no change in the nature of the sounds of the shofarot, and they would continue to sound until the completion of the casting of the weapons, in conjunction with the sounding of the trumpets. The third possibility emerges from the interpretation of the expression *מחושה ועד תומה* in 1QM and of *יהישו* and *תחישו*, *החישו* and *יהישו* in 1QH and 4Q403 as designating speed. According to this interpretation, the terms *יהישו* and *יחשו* in 1QM may be understood as indicating that at the beginning of the warrior's casting of their weapons, there was an acceleration in the speed of the sounding of the shofarot, in the manner termed "accelerando."⁸⁸ This option is supported by the use of the root *h.w.š* as an expression of speed in Ben Sira.

As the above discussion indicates, it is impossible to definitively resolve the question of the underlying root of the words *יהישו* and *יחשו*. We cannot determine the musical sense of these terms and the matter remains inconclusive.

2. *יניחו*: There are two possible interpretations for this term: a cessation of sound ("pausa"); or a reduction of the pitch of the note.

The uncertainty about the meaning of the terms *יהישו* and *יחשו* is further intensified by the ambiguity of the expression *יניחו קול התרועה* in 1QM 17:14. As noted above, the dominant opinion among scholars is that this phrase denotes the cessation of the sounding of the shofarot. However, in light of the interpretation of *קול נוח* brought above, as an expression for the reduction in the pitch of the note sounded by the trumpets, the term *יניחו* is best interpreted as an expression for the reduction of the pitch of the note sounded by the shofarot, and not for the cessation of the sound, in conjunction with the beginning of the warriors' casting of their weapons.

3. *קול אחד*: rhythmic synchronization; producing a sound as one person, in a uniform beat.

The term *קול אחד* appears in 1QM 8:9–10, and seems to describe the simultaneous production of a sound by a number of participants: "the Levites and all the people with rams' horns shall blow a great battle alarm together (*קול אחד*) in order to melt the heart of the enemy." Some scholars have rendered this term as "together," which does not have a clearly defined musical meaning.⁸⁹ There are three different ways in which this interpretation could be understood, reflecting two different musical components: the absolute acoustic pitch or the rhythm. The first approach would be an expression of joint instrumental or vocal production of sound by a number of participants in one acoustic register,

88 Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 4.

89 Clines, *Dictionary*, 1:180; Duhaime, "War Scroll," 113; Parry, Tov, and Clements, *The Dead Sea Scrolls Reader*, 1:255. See also Yadin, *מגילת מלחמת בני אור בבני חושך*, 101n64: בצורתא.

which is called “unison” in formal musical terminology.⁹⁰ The second approach takes the term as describing the joint instrumental or vocal production of sound by several participants in different acoustic registers, but with a unified beat, which may be termed, “rhythmic unison.” The third approach combines the previous two; i.e., instrumental or vocal sound production by multiple participants in a single acoustic register and a uniform beat. Other scholars have translated קול אחד as “single blast” or “single note.”⁹¹ This interpretation is also not clearly defined musically, since the word “single” can be understood as the sounding of the shofarot in a single acoustic register (“unison”) or as the sounding of a very short, single note.

The term קול אחד most likely occurs in 4Q491 13, 8, where it is partially restored in the context of a statement spoken by the nation: “[and] all the people shall answer, raising [on]e voice, and say (ו[ו]ענו כל העם והרימו קול [אחד] ואמרו).”

In contrast to the other sound-related terms in 1QM, which, as noted, are not known from any other ancient sources, the term קול אחד is also attested in Biblical Hebrew as an expression for joint speech by the people, and as an expression for the simultaneous use of a large number of instruments:

Exodus 24:3 “and all the people answered with one voice (קול אחד).”

2 Chronicles 5:12–13: “all the Levite singers, Asaph, Heman, Jeduthun, their sons and their brothers, dressed in fine linen, holding cymbals, harps, and lyres, were standing to the east of the altar, and with them were 120 priests who blew trumpets. The trumpeters and the singers joined together (ויהי אחד להשמיע קול אחד . . . כאחד) to praise and extol the Lord; and as the sound of the trumpets, cymbals, and other musical instruments, and the praise of the Lord . . .”

These descriptions pose a challenge to the interpretation of קול אחד as an expression for the production of the same notes simultaneously by different voices or instruments for two reasons. First, although using a large number of shofarot to sound the same note is possible, it would require a high level of expertise on the part of those sounding the shofarot. Moreover, the descriptions in 4Q491 13, 8 and in Exodus do not use the term קול אחד in reference to musical instruments but rather to the spoken word, describing statements being made by a large group of people. Although human speech does take place in a tonal register, it is not plausible that the entire nation would have responded in a

⁹⁰ Eric Werner, *The Sacred Bridge: The Interdependence of Liturgy and Music in Synagogue and Church during the First Millennium* (New York, NY: Ktav, 1984), 37–38; Stallman, “Levi and Levites,” 175; Kennedy, Kennedy, and Rutherford-Johnson, *Oxford Dictionary of Music*, 875.

⁹¹ García Martínez, *The Dead Sea Scrolls Translated*, 101; García Martínez and Tigchelaar, *The Dead Sea Scrolls Study Edition*, 1:127; Holmstedt and Srenock, “Writing a Descriptive Grammar,” 92.

single pitch. The more reasonable interpretation is that the nation “responded” (ענו) and “spoke” (אמרו) together, each person in their own voice, and not in a single absolute unified pitch. In addition, 2 Chronicles 5:12–13 describes the simultaneous use of a large number of instruments of various types. It could be feasible to produce sounds in a single unified pitch using trumpets, harps, and lyres. However, since the Levites’ instrument ensemble also included cymbals, which produce a metallic and undefined sound, it is not plausible that they could have been used to produce a sound identical in pitch to that of the other instruments.

Therefore, in my opinion, the term קול אחד should be seen as an expression for the synchronized production of sound by multiple participants with uniform timing, which can be called: “rhythmic unison.” If this interpretation is correct, then the function of the term קול אחד in 1QM 8:9–10 (“and the Levites and all the people with shofarot shall blow a great battle alarm together”), is to describe the sounding of the shofarot by the Levites and the people as all of them sounding shofarot in rhythmic unison.

CONCLUSION

This article examined the musicological aspects of the description of the use of trumpets and shofarot in the War Scroll. The information in 1QM is an important addition to the scant available knowledge about musical terminology in antiquity in general, and in Second Temple Judaism in particular. For example, the expressions קול חד טרוד and קול נוח וסמוך, and the other terms we have examined, yield a kind of “musical lexicon” that provides interpretations of terms describing the acoustic properties of the trumpets during battle, as well as the combination of trumpets and shofarot and its purpose. According to these interpretations, the use of these instruments included a variety of types of sounds played at different acoustic pitches, at powerful volumes, in different rhythmic beats and durations. In addition to contributing to the understanding of the musical terms that appear in 1QM, this study expands our understanding of how trumpets and shofarot were used in ancient warfare. It opens a window to understanding the rich musical language that was familiar to the Dead Sea sect and perhaps also to other groups in Second Temple times.

The following table presents the conclusions reached in our analysis regarding the meaning of the terms in 1QM that describe the sounds produced by the trumpets and shofarot in the eschatological war of the Sons of Light against the Sons of Darkness.

1QM term	Musical interpretation of the term associated with the trumpets	Musical interpretation of the term associated with the shofarot
מרודד	a simple, uniform and sustained sound (sostenuto)	
נח	a sound produced in a low pitch	
סמוך	a strong and powerful sound (forte)	
חד	a very loud, sharp sound, perhaps in a high register (shrill sound)	
טרוד	continuous repetition of a single sound (ostinato)	
יניחו		two possibilities: (1) pausa: cessation of the sound (2) lowering of the pitch
יחישו\יחשו		Three possibilities: (1) pausa: cessation of the sound (2) continuation of the sound, unchanged (3) acceleration of the speed of the sound
קול אחד		rhythmic synchronization, as a single voice
תרועת מלחמה גדולה, קול תרועה גדולה, בקול גדול		a sound produced with powerful force

The following table provides the musical explanation for the collocations of terms that appear in some of the descriptions of the war in 1QM, which describe various musical features of the sound produced by the trumpets.

Collocations in 1QM	Musical Explanation
קול נוח וסמוך	a low-pitched, strong and powerful sound
קול נוח מרודד סמוך	a low-pitched, simple and sustained, strong and powerful sound
קול חד טרוד	a very strong sound of a sharp nature, perhaps in a high register, repeated continuously

APPENDIX

The following passages in 1QM contain the descriptions of war that feature the musical terms describing the sounds produced by trumpets and shofarot in the battlefield: 1QM 8:1–17; 1QM 9:1–2; 1QM 16:3–9; 1QM 17:10–15. The Hebrew text follows Qimron, מגילות מדבר יהודה. The English translation follows Parry, Tov, and Clements, but modifies the musical terms to incorporate the interpretations proposed in this article.

(1 טור ח 17-1:92)

- 1 החצוצרות תהיינה מריעות לנצח אנשי הקלע עד כלותם להשליך שבע
- 2 פעמים ואחר יתקעו להם הכוהנים בחצוצרות המשוב ובאו ליד המערכה
- 3 הראישונה להתיצב על מעמדם. ותקעו הכוהנים בחצוצרות המקרא ויצאו
- 4 שלושה דגלי בינים מן השערים ועמדו בין המערכות ולידם אנשי הרכב
- 5 מימין ומשמאל. ותקעו הכוהנים בחצוצרות קול מרודד (קול אחיד וממושך) ידי (כדי להביא לידי) סדר מלחמה
- 6 והראשים יהיו נפשטים לסדריהם איש למעמדו. ובעומדם שלושה סדרים
- 7 יתקעו להם הכוהנים תרועה שנית קול נוח וסמוך (קול נמוך וחזק) ידי (כדי להביא לידי) מפשע עד קורבם
- 8 למערכת האויב ונטו ידם בכלי המלחמה. והכוהנים יריעו בשש חצוצרות
- 9 החללים קול חד טרוד (קול חזק מאוד וגבוה [?]) החוזר ברצף לנצח מלחמה והלויים וכול עם השופרות יריעו
- 10 קול אחד (בסנכרון רתמי) תרועת מלחמה גדולה (קול חזק מאוד) להמס לב אויב. ועם קול התרועה יצאו
- 11 זרקות המלחמה להפיל חללים. קול השופרות יחישן (יחדלו)מישכו באותו האופן\ יאיצו את מהירותם) ובחצוצרות יהיו
- 12 הכוהנים מריעים קול חד טרוד (קול חזק מאוד וגבוה [?]) החוזר ברצף לנצח ידי מלחמה עד השליכם למערכת
- 13 האויב שבע פעמים ואחר יתקעו להם הכוהנים בחצוצרות המשוב
- 14 קול נוח מרודד סמוך (קול נמוך, מתמשך וחזק). כסרך הזה יתקעו הכוהנים לשלושת הדגלים ועם

92 Qimron, מגילות מדבר יהודה, 1:119.

- 15 הטל הראישון יריעו ה[כוהנים והלויים וכול עם השו]פרות קול תרועה
- 16 גדולה לנצח מל[חמה]... יתקעו[ן] להם הכוהנים
- 17 בחצוצרות המשוב... והתיצבו על מעמדם במערכה
- (2) טור ט 1-2⁹³
- 1 יחלו ידם להפיל בחללים וכול העם יחשו (יחדלו)ימשיכו באותו האופן\איצו את מהירותם) מקול התרועה. והכוהנים יהיו מריעים בחצוצרות
- 2 החללים לנצח המלחמה עד הנגף האויב והסבו עורפם.
- (3) טור טז 3-9⁹⁴
- 3 את כול הסרך הזה יעשו [ביום ה]הואה על עומדם נגד מחני כתיים ואחר יתקעו להמה הכוהנים בחצוצרות
- 4 הזכרון ופתחו את שערי המלחמה וי[צאו] אנשי הבינים ועמדו ראשים בין המערכות ותקעו להם הכוהנים
- 5 תרועה סדר והראשים [יהיו נפשט]ים לקול החצוצרות עד התיצבם איש על מעמדו ותקעו להם
- 6 הכוהנים תרועה שנית ידי (כדי להביא לידי) התק[רב] ובעומדם ליד מערכת כתיים כדי הטל ירימו איש ידו בכלי
- 7 מלחמתו וששת [הכו]הנים יתקעו ב[חצוצרות החללים קול חד טרוך] (קול חזק מאוד וגבוה [?] החוזר ברצף) לנצח מלחמה והלויים וכול עם
- 8 השופרות יריעו [תרועת] מלחמה ב[קול גדול] (קול חזק מאוד) ועם צאת הקול יחלו ידם להפיל בחללי כתיים וכול
- 9 העם יחשו (יחדלו)ימשיכו באותו האופן\איצו את מהירותם) קול התרועה והכוהנים יהיו מריעים בחצוצרות החללים והמלחמה מתנצחת בכתיים
- (4) טור יז 10-15⁹⁵
- 10 ואחר הדברים האלה יתקעו הכוהנים להם לסדר דגלי המערכה. והראשים נפשטים לקול החצוצרות
- 11 עד התיצבם איש על מעמדו. ותקעו הכוהנים בחצוצרות תרועה שנית ידי (כדי להביא לידי) התקרב. ובהגיע
- 12 אנשי [הבינים ליד מע]רכת כתיים כדי הטל ירימו איש ידו בכלי מלחמתו והכוהנים יריעו בחצוצרות
- 13 החללים [והלויים וכול עם השופרות יריעו תרועת מלחמה] (קול חזק מאוד). ואנשי הבינים ישלחו ידם בחיל
- 14 הכתיים [ועם צאת קול התרועה יחלו להפיל בחלליהם. וכול העם יניחו] (יחדלו)ינמיכו את גובה) קול התרועה. והכוהנים
- 15 יהיו מריעים בחצוצרות החללים והמלחמה מתנצחת בכתיים וכול חיל בליעל נגפים לפניהם

93 Qimron, מגילות מדבר יהודה, 1:120.

94 Qimron, מגילות מדבר יהודה, 1:128.

95 Qimron, מגילות מדבר יהודה, 1:129.

1QM 8:1-17

1. The trumpets shall blow continually to direct the slingers until they have completed hurling seven
2. times. Afterwards the priests shall blow on the trumpets of return, and they shall go along the side of the first battle line
3. to take their position. The priests shall blow on the trumpets of assembly, and
4. the three divisions of infantry shall go out from the gates and stand between the battle lines, and beside them the cavalymen,
5. at the right and at the left. The priests shall blow on their trumpets a simple, uniform and sustained sound, signals for the order of battle.
6. And the columns shall be deployed into their formations, each to his position. When they have positioned themselves in three formations,
7. the priests shall blow for them a second signal, a low-pitched, strong and powerful sound, signals for advance, until they draw near to
8. the battle line of the enemy and take hold of their weapons. Then the priests shall blow on the six trumpets
9. of the slain a very strong (high pitched?) sound of a sharp nature, repeated continuously to direct the battle, and the Levites and all the people with rams' horns shall blow
10. a very loud battle alarm in rhythmic synchronization, as a single voice in order to melt the heart of the enemy. With the sound of the alarm,
11. the battle darts shall fly out to bring down the slain. Then the sound of the rams' horns shall pause/continue the sound unchanged/accelerate the speed of the sound, but on the tru[m]pets
12. the priests shall continue to blow a very strong (high pitched?) sound of a sharp nature, repeated continuously to direct the signals of battle until they have hurled into the battle line
13. *vacat* of the enemy seven times. Afterwards, the priests shall blow for them the trumpets of retreat,
14. a low-pitched, simple and sustained, strong and powerful sound. According to this rule the [pr]iests shall blow for the three divisions. When
15. the first division throws, the [ho]rns shall blow a great alarm
16. to direct the bat[tle] the priests [shall blow] for them
17. on the trumpe[ts] in their positions in the battle line

1QM 9:1-2

1. their hands shall begin to bring down the slain, and all the people shall pause/continue the sound unchanged/accelerate the speed of the sound of alarm, but the priests shall continue sounding on the trumpets
2. of the slain to direct the fighting until the enemy is defeated and turns in retreat.

1QM 16:3–9

3. They shall carry out all this Rule [] that [] at the place where they stand opposite the camps of the Kittim. Then the priests shall blow for them the trumpets
4. of remembrance. The gates of w[ar] shall open, [and] the infantry shall go out and stand in columns between the battle lines. The priests shall blow for them
5. a signal for the formation and the columns [] at the sound of the trumpets until each man has taken his station. Then the priests shall blow for them
6. a second signal: [confron]tation. When they stand near the battle line of the Kittim, within throwing range, each man shall raise his hand with his weapon of
7. war. Then the six [the tr]umpets of the slain a very strong (high pitched?) sound of a sharp nature, repeated continuously to direct the fighting. The Levites and all the people with
8. rams' horns shall blow [], a very loud noise. As the sound goes forth, the infantry shall begin to bring down the slain of the Kittim, and all
9. the people shall pause/continue the sound unchanged/accelerate the speed of the signal, [but the priest]s shall continue blowing on the trumpets of the slain and the battle shall prevail against the Kittim.

1QM 17:10–15

10. And after these words ^{the priests} shall blow for them a signal to form the divisions of the battle line. The columns shall be deployed at the sound of the trumpets,
11. until e[ach man] has tak[en his] station. Then the priests shall blow another signal on the trumpets, signs for confrontation. When
12. the infa[ntry] has approached [the battle] line of the Kitt[im,] within throwing range, each man shall raise his hand with his weapon. Then the priests shall blow on the trumpets
13. of the slain [and the Levites and the al]l the people with rams' horns shall sound a very loud signal for battle. The infantry shall attack the army
14. of the Kittim, [and as the soun]d [of the si]gnal [goes forth], they shall begin to bring down their slain. Then all the people shall pause/lower the pitch of the sound of the signal, while the priests
15. continuously blow on [the trumpets of the slai]n, and the bat[tl]e p[revail]s against the K[it]tim,] are [de]feated before them.