

## Save Ancient Studies Alliance

### January 2022 Texts-in-Translation Reading Group

This group is funded by a grant from the Society for Classical Studies  
(Ancient Worlds, Modern Communities)

# An Introduction to Ancient Near-Eastern Music ‘Theory’: Understanding Musical Inscriptions

**\*This is a shared document - please do not make any changes\***

### **Blurb:**

Are you curious about ancient Near-Eastern music ‘theory’ and how it was inscribed on cuneiform tablets?

Don’t worry, you do not need to know much about Sumerian/Akkadian cuneiform transliterations or transcriptions. I will briefly walk you through this process! This will be done alongside established specialists (guest scholars) in the field.

For those new to this subject, the field of “Archaeo-Musicology” is engaged in the study of ancient music informed by Archaeological finds. In the ancient Near-East (Mesopotamia) musical information is primarily deduced or retrieved from instruments, instrumental inlays, wall reliefs, and iconography. On occasion one will find information on cuneiform tablets that discuss some aspect of music. This Reading Group will focus on some of these music ‘theoretical’ tablets.

In the following weeks we will be looking at the 3 ‘major’ (most-cited) cuneiform tablets that inform scholars about ancient Near-Eastern music theory. In combination these theory-based tablets are used to decipher ancient instructional music notation, but this can be a topic for a future Reading Group/Master Class!

By the end of this Reading Group you will be able to:

- Identify the most common cuneiform music symbols and logograms (Sumerograms).
- Interpret numbers (string numbers) written in cuneiform.
- Demonstrate a basic level of understanding of music related terms.
- Understand ancient instrument tuning procedures on a basic level.
- Think critically about ancient Near-Eastern music theory.

### **Structure:**

In terms of prescribed readings, we will be looking at early scholarly contributions, from the 1960s-1980s, that initiated the study of Archaeomusicology. During the course of the sessions I will show you how to go about retrieving the necessary information from the tablets. I will also offer explanations and we will jump into discussions with guest scholars/specialists thereafter (feel free to prepare questions for each session!). Don't worry if you don't fully understand or don't get around to the readings, come along anyway!

If you feel that you have grasped the prescribed readings then you may want to look at the optional readings. They provide improvements, corrections and build upon the previous knowledge and insights provided by the prescribed readings.

### **Your SASA Educational Ambassadors:**

My name is Dylan Lawrence Gibson and I will be your Educational Ambassador for this Reading Group on ancient Near-Eastern music theory.



By way of introduction, I hold a Master's degree in Musicology from Stellenbosch University (Cape Town, South Africa). My Thesis is dedicated to ancient Near-Eastern Music Theory and I plan to focus on re-analysing ancient 'instructional' music notation for my Doctoral (PhD) studies (focusing more on the discipline of Assyriology).

To provide context, in my BA degree (obtained in 2014) I minored in Ancient Culture Studies and this is when I was introduced to and became interested in the field of Archaeomusicology.

I look forward to sharing my knowledge and engaging in discussions during the course of this reading group.

Institutional Email:

[dgibson@saveancientstudies.org](mailto:dgibson@saveancientstudies.org)

**Group Size:**

Open - any size (no specification/limit).

**Dates (3 weeks):**

Thursday's @ 3:00 pm EST

-Session 1: 13 January 2022

-Session 2: 20 January 2022

-Session 3: 27 January 2022

**Location:**

Zoom Meeting Link

<https://us02web.zoom.us/j/84832282924?pwd=YU53VTVDZFJYc3ZseGFaV0JKMmpxQT09>

Zoom Meeting ID

[848 3228 2924](#)

Zoom Meeting Password

[063062](#)



### Prescribed Readings (~6 pages):

- (1) Anne, D. Kilmer (1965). "The Strings of Musical Instruments: Their Names, Numbers, And Significance", in *Studies in Honor of Benno Landsberger on His Seventy-Fifth Birthday*, edited by H. G. Güterbock and Jacobsen, T. The University of Chicago: pp. 261-272 (focus on heading 4. - pages 264-265).  
Available: <https://oi.uchicago.edu/research/publications/as/16-studies-honor-benno-landsberger-his-seventy-fifth-birthday-april-21-1963>
- (2) Marcelle, Duchesne-Guillemin (1984). A Hurrian Musical Score from Ugarit: The Discovery of Mesopotamian Music, *Sources from the Ancient Near East*, 2(2): pp. 5-32 (special focus on pages 5-6 and heading 2. - pages 9-10).  
Available: <http://urkesh.org/attach/duchesne-guillermine%201984%20the%20discovery%20of%20mesopotamian%20music.pdf>

### \*Optional Readings (~26 pages):

- (3) Richard, Dumbrill (2005). *The Archaeomusicology of the Ancient Near East*. Cheshire: Trafford Publishing (focus on pages 27-36).  
Available: [https://www.academia.edu/875113/The\\_Musicology\\_and\\_Organology\\_of\\_the\\_Ancient\\_Near\\_East](https://www.academia.edu/875113/The_Musicology_and_Organology_of_the_Ancient_Near_East)
- (4) Elizabeth, E. Payne (2010). "A New Addition to the Musical Corpus", in *Opening the Tablet Box, Near Eastern Studies in Honor of Benjamin R. Foster*, edited by Sarah C. Melville and Alice L. Slotsky. Culture and History of the Ancient Near East: Leiden pp. 291-300.  
Available: [https://www.academia.edu/2248586/A\\_New\\_Addition\\_to\\_the\\_Musical\\_Corpus](https://www.academia.edu/2248586/A_New_Addition_to_the_Musical_Corpus)
- (5) Irving, L. Finkel & Miguel. Civil (1982). The Series SIG7.ALAN = Nabnītu. Materials for the Sumerian Lexicon 16. Rome. (focus on pages 23-29).  
Available: [https://books.google.co.za/books?id=4tcu6ibq00gC&pg=PA11&lpg=PA11&dq=nabnit+lecacon&source=bl&ots=Z4z0FLLhQe&sig=ACfU3U2gS\\_i6XG7h033RKGIOIHVVfD0bfA&hl=en&sa=X&ved=2ahUKEwjKuv7hyqX1AhUiQ\\_EDHUvYBDwQ6AF6BAgREAM#v=onepage&q=nabnit%20lecacon&f=false](https://books.google.co.za/books?id=4tcu6ibq00gC&pg=PA11&lpg=PA11&dq=nabnit+lecacon&source=bl&ots=Z4z0FLLhQe&sig=ACfU3U2gS_i6XG7h033RKGIOIHVVfD0bfA&hl=en&sa=X&ved=2ahUKEwjKuv7hyqX1AhUiQ_EDHUvYBDwQ6AF6BAgREAM#v=onepage&q=nabnit%20lecacon&f=false)

\*For those interested, this reading summarizes the contents of the information from the series known as *Nabnītu* (a series of 32 tablets: I-XXXII). The *UET VII 126* tablet is the last tablet (32nd) of this series and informs scholars about the parts/construction of an instrument. This is fitting because the *Nabnītu* series is focused on naming and identifying the parts of the human body and this means that this system was extended to instruments as well (possibly implying that instruments were seen as an extension of the human body).

Session 2 - Week 2 (Thursday - 20th January 2022):

## CBS 10996: Numbered String 'Pairs' / 'Sets'

<p><b>CBS 10996</b> [OrNS29, 273] (Cuneiform Tablet - Photograph)</p>	<p><b>CBS 10996</b> [OrNS29, 273] (Cuneiform Sketch)</p>
	
<p>*Some of the transliterations require updates (the "string" Sumerogram "SA" should be in uppercase because it is interjected into an Akkadian-only text).</p>	
<p>CDLI Link: <a href="https://cdli.ucla.edu/search/search_results.php?SearchMode=Text&amp;ObjectID=P254475">https://cdli.ucla.edu/search/search_results.php?SearchMode=Text&amp;ObjectID=P254475</a></p>	

### Synopsis:

The *CBS 10996* tablet (located at Penn Museum) provides a list of ancient musical terms. For each term, there are two string numbers between 1 and 7. The importance of this is that scholars are able to identify a term by a unique Akkadian name that has specific string numbers attached to it. According to perspective, the strings can be interpreted to be representative of either (1) pitch "pairs" consisting of two strings [X "and" Y], or (2) may be referring to a "set"/sequence of strings [X "to" Y or X-Y-X]. It is important to note that this musical information was recorded on a tablet that is dedicated to recording mathematical constants (coefficients). This may infer that there was a music-mathematical link.

The CBS 10996 tablet (from the Neo-Babylonian period - c. 600 BCE) can be considered as an important 'theory' text because the same specialised term names that are listed on this tablet also appear on the Hurrian instructional 'notation' tablets.

Join us to find out more about how this tablet works and what the implications of this knowledge is for Musicologists/Archaeomusicologists studying ancient music theory.

### Prescribed Readings (~11 pages):

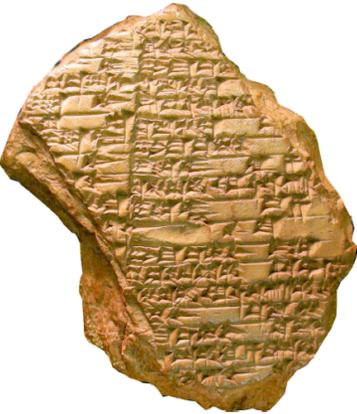
- (1) Anne, D. Kilmer (1965). "The Strings of Musical Instruments: Their Names, Numbers, And Significance", in *Studies in Honor of Benno Landsberger on His Seventy-Fifth Birthday*, April 21, 1965, H. G. Güterbock and Jacobsen, T. , Eds. The University of Chicago: pp. 261-272 (focus on heading 5. - pages 265–267).  
Available: <https://oi.uchicago.edu/research/publications/as/16-studies-honor-benno-landsberger-his-seventy-fifth-birthday-april-21-1963>
- (2) Hans, G. Güterbock (1970). Musical Notation in Ugarit. *Revue d'Assyriologie et d'archéologie orientale*, 64(1): pp. 45-52 (special focus on pages 48-49, but do read the entirety of the article).  
Available on JSTOR: <https://www.jstor.org/stable/23294924>  
\* The "Alternative Access Option" allows you to read 100 articles for free per month.

### \*Optional Readings (~31 pages):

- (3) Richard, Dumbrill (2005). *The Archaeomusicology of the Ancient Near East*. Cheshire: Trafford Publishing (focus on pages 37-45).  
Available: [https://www.academia.edu/875113/The\\_Musicology\\_and\\_Organology\\_of\\_the\\_Ancient\\_Near\\_East](https://www.academia.edu/875113/The_Musicology_and_Organology_of_the_Ancient_Near_East)
- (4) Richard, J. Dumbrill (2019). *Semitic Music Theory*. London: ICONEA (focus on pages 13-30).  
Available: [https://www.academia.edu/38432560/Semitic\\_Music\\_Theory\\_2600\\_500\\_BC](https://www.academia.edu/38432560/Semitic_Music_Theory_2600_500_BC)

Session 3 - Week 3 (Thursday - 27th January 2022):

## UET VII 74: Re-tuning/Modulation Instructions for the *sammú* (Lyre/Harp Instrument)

<b>UET VII 74</b> [U. 7/80] (Cuneiform Cast - Photograph)	<b>UET VII 74</b> [U. 7/80] (Cuneiform Sketch)
	
*Some of the transliterations require updates.	
CDLI Link: <a href="https://cdli.ucla.edu/search/archival_view.php?ObjectID=P347039">https://cdli.ucla.edu/search/archival_view.php?ObjectID=P347039</a>	

### Synopsis:

The *UET VII 74* tablet (in the British Museum) provides scholars with a 're-tuning' or 'modulation' procedure for the *sammú* (likely a harp = <sup>GIS</sup>.ZÁ.MÍ) instrument. This stanza-like process indicates which strings are to be "tightened" and "loosened" to produce "clear" string relationships from previously "not clear" ones. From these instructions, that cycle through string spans of 4ths and 5ths, scholars are able to approximately deduce the relationships between strings for 7 ancient "scales/modes".

This tablet is dated to the Old-Babylonian period (c. 1800 BCE) and also includes familiar musical term names (the same ones as found on *CBS 10996*) which also act as the names of the ancient 'scales/modes'. The same "front" and "back" string designations that are used on *UET VII 126* also appear on this tablet.

The duplicate tablet *UET VI/3 899* (also Old-Babylonian) completes the bottom section of the *UET VII 74* tablet and describes the same re-tuning/modulation process.

Join us to find out more about how this tuning procedure works and what the implications of this knowledge is for Musicologists/Archaeomusicologists studying ancient music theory and notation.

### Prescribed Readings (~12 pages):

- (1) Oliver, R. Gurney (1968). An Old Babylonian Treatise on the Tuning of the Harp. *Iraq*, 30(2): pp. 229-233.  
Available on JSTOR: <https://www.jstor.org/stable/4199853>  
\* The "Alternative Access Option" allows you to read 100 articles for free per month.
- (2) David Wulstan (1968). The Tuning of the Babylonian Harp. *Iraq*, 30(2): pp 215-228  
(focus pages 220-221 - you are welcome to read the entire document).  
Available: <https://www.jstor.org/stable/4199852>  
\* The "Alternative Access Option" allows you to read 100 articles for free per month.
- (3) Richard, L. Crocker (1978). Remarks on the Tuning Text UET VII 74 (U. 7/80). *Orientalia, NOVA SERIES*, 47(1): pp. 99-104.  
Available on JSTOR: <https://www.jstor.org/stable/43074799>  
\* The "Alternative Access Option" allows you to read 100 articles for free per month.

### \*Optional Readings (~48 pages):

- (4) Richard, Dumbrill (2005). *The Archaeomusicology of the Ancient Near East*. Cheshire: Trafford Publishing (focus on pages 47-67).  
Available:  
[https://www.academia.edu/875113/The\\_Musicology\\_and\\_Organology\\_of\\_the\\_Ancient\\_Near\\_East](https://www.academia.edu/875113/The_Musicology_and_Organology_of_the_Ancient_Near_East)
- (5) Sam Mirelman & Theo J.H. Krispijn (2009). The Old Babylonian Tuning Text UET VI/3 899. *Iraq*, 71(1): pp 43-52.  
Available:  
[https://eprints.soas.ac.uk/30430/2/old\\_babylonian\\_tuning\\_text\\_uet\\_vi3\\_899\\_1.pdf](https://eprints.soas.ac.uk/30430/2/old_babylonian_tuning_text_uet_vi3_899_1.pdf)
- (6) Sam Mirelman (2010). A New Fragment of Music Theory from Ancient Iraq. *Archiv für musikwissenschaft*, 67(1): pp 45-51.  
Available:  
[https://docs.google.com/document/d/1gdavzMM5XPe4yMx69aGyp\\_aXr7KJly-wvBH7PtyfYto/edit](https://docs.google.com/document/d/1gdavzMM5XPe4yMx69aGyp_aXr7KJly-wvBH7PtyfYto/edit)  
\* The "Alternative Access Option" allows you to read 100 articles for free per month.
- (7) Sam Mirelman (2013). Tuning Procedures in Ancient Iraq. *Analytical Approaches to World Music*, 2(2): pp 45-55.  
Available: [http://www.aawmjournal.com/articles/2013b/Mirelman\\_AAWM\\_Vol\\_2\\_2.pdf](http://www.aawmjournal.com/articles/2013b/Mirelman_AAWM_Vol_2_2.pdf)

## Additional Readings:

- (1) Bathja Bayer. (2014). The Mesopotamian Theory of Music and the Ugarit Notation: A Re-examination, in: Westenholz, J.G, Maurey, Y. & Seroussi, E. (eds.). Music in Antiquity: The Near East and Mediterranean. Berlin: Walter De Gruyter. pp. 15-91.

Available:

<https://jewish-music.huji.ac.il/sites/default/files/01%20The%20Mesopotamian%20Theory%20of%20Music%20and%20the%20Ugarit%20Notation%20%20A%20Reexamination%20incl%20title%20pages.pdf>

\*In this reading Bathja Bayer (2014:17) discusses the criteria concerning what type of ancient documents could be considered as music theory texts, offering insight into the “science of doing” music. In brief, the minimalist flexible definition offered by Bayer (2014:17) holds that a music theoretical text must reveal a system that (a) names and lists abstract pitch/note values (*CBS 10996* and *UET VII 126*); (b) reveals a relationship between these pitch values and a scale/mode system (*UET VII 74*); and lastly, (c) reveals a clear relation that shows (a) and (b) are from the same system and share related terms. All three of the tablets (*UET VII 126*, *CBS 10996* and *UET VII 74*) conform to this definition.

- (2) Jöran Friberg (2011). Seven-Sided Star Figures and Tuning Algorithms in Mesopotamian, Greek and Islamic Texts, *Archiv für Orientforschung (AfO)/Institut für Orientalistik*, 52(1): pp. 121-155 (focus on pages 133-154).

Available: <https://musicircle.net/wp-content/uploads/2018/08/Friberg.pdf>

\*In this reading Jöran Friberg (2011: 133,135,141) offers helpful diagrams of each of the tablets discussed in this Reading Group/Master Class. He discusses the *UET VII 126* tablet on page 133, *UET VII 74* on page 135 and *CBS 10996* on page 141.

- (3) Arnd Adje Both (2009). Music Archaeology: Some Methodological and Theoretical Considerations. *Yearbook for Traditional Music*, 41(1): pp.1-11.

Available: <https://www.jstor.org/stable/25735475>

\*In this reading Arnd Adje Both (2009) discusses what is meant by the terms “archaeo-musicology” and “ethno-archaeo-musicology”, and how one can approach these fields methodologically.

- (4) Richard, D. Barnett (1969). New Facts about Musical Instruments from Ur, *Iraq*, 3(2): pp. 96-103.

Available: <https://www.jstor.org/stable/4199874>

\*In this reading Richard Barnett (1969) provides a helpful summary concerning information about the ancient harp and lyre instruments that were excavated at *Ur* (the famous Woolley excavations). In this reading he provides an explanation for how one can identify the difference between a harp and a lyre.

- (5) Dylan, L. Gibson (2021). A Re-Examination of Ancient Near-Eastern Music-Theoretical Tablets and Notation; Concerning A Tablaturisation for the Hurrian H6 Cuneiform Tablet. Master Thesis, Stellenbosch: Stellenbosch University.

Available: <https://scholar.sun.ac.za/handle/10019.1/123820>

\*In this thesis I work on providing an 'Africanist' inspired re-analysis of the 'major' music theoretical tablets (*UET VII 126*, *CBS 10996* and *UET VII 74* alongside some 'minor' tablets). The Africanist inspired perspective can be briefly described as a type of "organized skepticism" (Disclaimer: some transliterations still require updates and improvements). This serves as the core of what was discussed in the 3 Reading Group sessions described above.

## Invited Guest Scholars:

- Theo Krispijn
- Sam Mirelman
- John Franklin
- Stefan Hagel
- Richard Dumbrill
- Daniel Sánchez Muñoz
- Jerome Colburn

\*In the past, our Educational Ambassadors have invited guest scholars to join them for a session, an expert/specialist in an area that will be discussed. People really enjoy getting the perspective of, asking questions to, and discussing ideas with multiple scholars in the field in order to help them get a well rounded view of the topic.