

## **Dating Prehistoric Musical Instruments: The Two Timelines**

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### **Abstract**

Published dates for ancient musical instruments are based on the standard historical timeline. But there is an alternative timeline calculated from historical information in the Bible that gives much younger dates. In this paper I will develop the two timelines, show common historical points that form bridges between them, and determine both dates for various ancient musical instruments. The two timelines have implications for the creation/evolution debate because evolution of the universe requires extremely long periods of time to have elapsed, while literal creationists accept that God created the entire universe in only six days. This also involves the question of whether musical instruments evolved over long periods of time, or whether they were part of the earliest cultures after Creation and Noah's Flood.

### **Introduction**

As is known from archaeological excavations, mankind has been playing musical instruments since the dawn of human history. But how many years ago was that? And how old are these instruments?

The usual published dates for ancient musical instruments are based on the standard historical timeline. But there is an alternative timeline that is based on historical information contained in the Bible; this gives younger dates than the traditional dating. This biblical timeline is held by large numbers of adherents to several major religions.

We will begin by describing the two timelines, first the standard (secular) one and then the biblical one.

### **The Standard Timeline of History**

This evolutionary timeline covers all of history, starting with what is commonly called the Big Bang (considered the beginning of time) about 13.7 billion years ago

(Weintraub 2011, p. 1). The period from about 3000 BC to 300 BC is based on the Egyptian timeline that was calculated from the length of the dynasties by Manetho, a 3<sup>rd</sup>-century BC Egyptian historian and priest (Shaw 2003, p. 1). Scholars have adjusted the original Manetho timeline downward considerably over time, as Crisler (2006/2013) shows, but it still does not match the biblical timeline in the historical period. See Figure 1.

## The Biblical Timeline of History

This timeline is based on the biblical genealogies, the lengths of kings' reigns and other sources of historical information in the Bible. It places the beginning of time a maximum of about 7500 years ago<sup>1</sup>, when God created the earth and universe in six literal days as described in Genesis 1. See Figure 1.

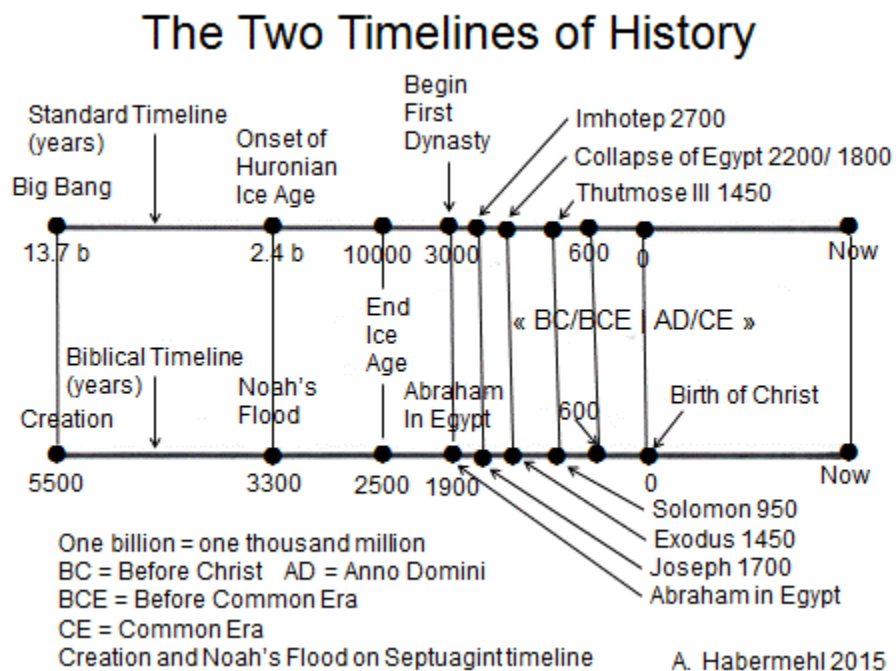


Fig. 1. The standard timeline and biblical timeline of all history are shown as parallel horizontal lines with ten pairs of correlating dates opposite each other. The biblical timeline on the bottom is shown directly proportional to time elapsed; the upper standard timeline is logarithmic. Numbers to the left of zero are years BC (BCE) and to the right of zero are AD (CE). Note that the two timelines merge at about 600 BC. The biblical Joseph, Egyptian Imhotep, biblical Solomon, and Egyptian pharaoh Thutmose III held their official positions over a range of time; the dates shown for them are approximately from the middle of their period of power.

## Correlation of the Two Timelines

The Big Bang/Creation and “Now” points at the opposite ends of the two timelines in Figure 1 are obvious. The point at which the two timelines merge is generally

considered by scholars to be the conquest of Jerusalem by Nebuchadnezzar II, a date rounded off to 600 BC here for practical purposes (Usshur 1658, pp. 103–104; Bickerman 1979). The 0 and birth of Christ dates are the same on both lines. That leaves six pairs of dates positioned between the beginning and 600 BC to account for.

Counting from left to right, the second pair of dates is the onset of the Huronian Ice Age (2.4 b yrs) on the standard timeline, and the worldwide flood of Noah (3300 BC<sup>2</sup>) on the biblical timeline. The Huronian is considered by secular geologists to be the first known ice age (Butusov and Jernelöv 2013, p. 7). Creationists believe that this ice age started just after the worldwide flood (Whitcomb and Morris 1961, pp. 292–303).

The third pair of points is at the end of the Ice Age, when the thick continental ice sheets melted after the great glaciation. On the standard timeline, the end of the meltdown is generally considered to be about 10,000 BC (Dawson 1992, pp. 73–108); as a matter of interest, building at Göbekli Tepe began at this time (Scham 2008). This is estimated to be at about 2500 BC on the biblical timeline, although it could have been somewhat later (see Habermehl 2013a). The time difference between these two points is about 7500 years.

The fourth pair of points is the beginning of the 1<sup>st</sup> Dynasty of Egypt on the standard timeline (3000 BC) (Shaw 2003, p. 481); and the visit of the biblical patriarch, Abraham, to Egypt at the time of a serious drought in Canaan on the biblical timeline (1900 BC) (Genesis 12: 10–20). The placing of Abraham's visit at the beginning of the 1<sup>st</sup> Dynasty of standard history is argued by Habermehl (2013b). Calculation of Abraham in Egypt at approximately 1900 BC on the biblical timeline is shown by Usshur (1658, p. 23). The time difference between these two points is about 1100 years.

The fifth pair of points shows the famous Egyptian Imhotep (2700 BC) opposite Joseph of the Bible (1700 BC). The remarkable resemblances between Joseph, Jacob's son, and Imhotep, vizier to the 3<sup>rd</sup>-Dynasty pharaoh Djoser, have not gone unnoticed. They have name similarity, both were in power at the time of a seven-year famine, both possessed great wisdom, both were seers, and both lived to 110 years old. In addition, the ability of the pharaohs to conscript labor to build great pyramids started at the time of Djoser/Imhotep; this corresponds to the biblical story of pharaoh acquiring ownership of all the people in Egypt through Joseph (Genesis 47: 13–26). For more on Joseph as Imhotep, with detailed references, see Habermehl (2013b). The time difference between these two points is about 1000 years.

The sixth pair of points places the collapse of Egypt opposite the biblical Exodus, when the Children of Israel left Egypt en masse after ten plagues on the Egyptians sent by God (Exodus 12: 31–51). The 2200 BC and 1800 BC are rounded-off dates

for two collapses of Egypt detailed by historians at the end of the 6<sup>th</sup> and 12<sup>th</sup> Dynasties (see, e.g., Shaw 2003, p. 483). What is odd—or should be considered so—is that the same series of events led up to both collapses (Gardiner 1964, p. 147). What is the probability that this same series of events would occur twice? Habermehl (2013b) argues that if historians would study probability, they would realize that the 6<sup>th</sup> and 12<sup>th</sup> Dynasties must have run concurrently and ended in collapse at the same time. What is often overlooked is that this collapse was the direct result of the 10 plagues (Exodus 7–12). The Exodus, then, must have taken place at the end of the 6<sup>th</sup> Dynasty, at 2200 BC on the standard timeline, which is the same as 1800 BC, at the end of the 12<sup>th</sup> Dynasty. On the biblical timeline, the Exodus is generally calculated by scholars to have occurred about 1450 BC, although there is some variation.<sup>3</sup> The difference between the two timelines at this point is 750 years (from end of the 6<sup>th</sup> Dynasty) and 350 years (from end of the 12<sup>th</sup> Dynasty). For further information on this, with detailed references, see Habermehl (2013b).

The seventh pair of points is Solomon (950 BC) and his Egyptian father-in-law, Thutmose III (1450 BC). The biblical story of King Solomon, who married the daughter of the (unnamed) pharaoh of Egypt, gives us a specific timeline bridge (I Kings 3:1). The question is whose daughter Solomon married. The important clue in the story is that this pharaoh conquered and burned the city of Gezer, located in Canaan on the western edge of Solomon’s kingdom. This pharaoh then presented burnt-out Gezer to the newlyweds as a (presumably valuable and greatly appreciated ) wedding present (I Kings 9:16). The violent destruction of Gezer by Thutmose III ca 1450 BC (Ortiz 2013) is most likely the one that occurred in Solomon’s time. (Thutmose III as Solomon’s father-in-law is the subject of an unpublished paper by this author.) Solomon’s marriage is dated on the biblical timeline to approximately 950 BC, which would be possibly midway through his reign (Handy 1997, pp. 96–105). Here the difference between the two timelines is about 500 years.

## Dating Ancient Musical Instruments on the Two Timelines

Having established correlation of the two timelines, we now turn our attention to dating eleven musical instruments chosen somewhat at random from history. These are listed in Table I with first, their standard (secular) dates, and second, their biblical dates.

**Table 1**  
**Dates of Prehistoric Musical Instruments**

Instrument(s)		Standard Date	Biblical Date
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Divje Babe bone flute (Turk & Dimkaroski 2011)	50,000 BP	2500 BC
Hohle Fels bone flute (Conard et al. 2009)	35,000 BP	≈2400 BC
Chinese flute set (Zhang et al. 1999)	7,000–5,000 BC	2300–2100 BC
Antaras of Peru (Bishop 2014)	≈4200 BC	≈2100 BC
Harp rock etching from Megiddo (Braun 2002)	≈3300–3000 BC	2000 BC
Lithophone of Vietnam (Lithophone 2008)	3000 BC	1900 BC
Sumerian musicians bas relief (Wilson 2012)	3000 BC	1900 BC
Boat lyre of Ur (de Schauensee 2002)	2500 BC	1600 BC
Megiddo ivory plaque lyre (Bromiley 1986)	1150 BC	650 BC
Harps bas relief from Nimrud (British Museum)	870 BC	625 BC
Hittite musicians sculpture (Ceram 1973)	750 BC	600 BC

Table: A. Habermehl 2015

If we place the dates of these instruments on the two timelines, we get Figure 2.

## Dates of Instruments on Two Timelines

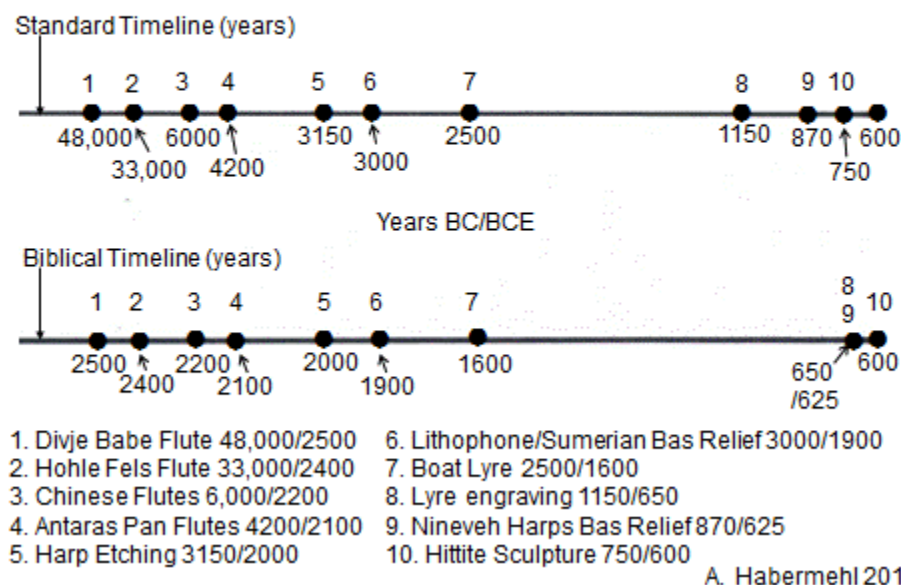


Fig. 2. In each case, the standard date of the instrument is on the upper timeline, and the biblical date is opposite it on the lower timeline. (Note that the lithophone of Vietnam and the Sumerian bas relief are both given number 6 because they have the same dates.) However, there is one point that appears to be an anomaly; this is no. 8, the lyre engraving on ivory, which corresponds to nearly the same point on the biblical timeline as no. 9, the Nineveh harps bas relief sculpture. These two instruments are dated 5 centuries apart on the standard timeline, but fall in the same place on the biblical timeline. As the two timelines head for the convergence point of 600 BC, it is clear that there are about 5 extra centuries in the standard timeline relative to the biblical one at the time of these two musical instruments (nos 8 and 9); timeline revision studies show that these centuries do not really exist.<sup>4</sup> BP dates are 2000 years higher than BC dates.

## **Implications of the Two Timelines**

As we have shown, all instruments from earlier than 600 BC have two dates, the standard one and the biblical one. If we go back into very early times, it is obvious that there is a great discrepancy between the two timelines. But as we get into dynastic times, this discrepancy is less obvious, and the two timelines are often confused and treated as if they are the same. This can get us into trouble.

As an example, because the Boat Lyre of Ur is given a standard date of 2500 BC and biblical Abraham was born around 2000 BC (he was 75 or more when he visited Egypt, according to Genesis 12), it is widely believed that this lyre dates before Abraham's time. However on the standard timeline Abraham would have been born before 3000 BC, and therefore Abraham actually lived well before the time when this lyre was buried. Many examples could be given of this kind of confusion.

It is very important that we never mix the two timelines together. Dating comparisons must always be made on the same timeline. Otherwise we do not get historical events, objects and people in the right order.

## **Implications for the Creation—Evolution Debate**

The basic assumptions on each side of this debate are very different. Creationists believe that there is a God who created the universe less than ten thousand years ago. Evolutionists believe that the universe evolved by itself from nothing just under 14 billion years ago. (There are some other versions of both sides, but we will not consider them here.) The two timelines therefore are based on these two opposing worldviews; the standard timeline is based on evolutionary belief, and the biblical timeline on belief in the Bible. It is our worldview that will determine which side of this debate we will accept.

With respect to musical instruments, these two opposing views translate into the question: do we believe that musical instruments evolved slowly over eons of time, or do we believe that they existed in sophisticated form early in man's history after creation? This is especially significant with respect to the very earliest instruments, such as the Divje Babe Neanderthal flute. This instrument was the subject of a paper published in the proceedings of the 2014 Archaeoacoustics Conference in Malta (Habermehl 2014).

## **Summary**

There are two timelines: the standard one and the biblical one. Starting at about 600 BC, going backwards in time, the two timelines diverge increasingly until we reach the Beginning of Time where the divergence is nearly 14 billion years.

All events, people and objects of ancient history will have two dates determined from the two timelines. When putting a date on anything, we must be aware of which timeline we are using. It is important that comparison of dates always be made on the *same* timeline.

Each timeline is tied to a diametrically different worldview, creationist or evolutionist. Which worldview we choose to adhere to will affect our interpretation of the history of musical instruments.

### Footnotes

1. The best-known manuscript version of the Old Testament of the Bible is called the Masoretic (abbreviated as MT). However there is another version known as the Septuagint (abbreviated as LXX), a third-century BC Greek translation from the ancient Hebrew. The timeline calculated from the LXX is longer than that of the MT. However, it is only in the generations before Abraham that there is a timeline divergence of the MT and LXX manuscripts.
2. The date of 3300 BC is calculated from the LXX.
3. Ussher (1658, p. 39) puts the Exodus at 1491 BC, based on the MT. However, the LXX has 40 years fewer, based on the number of years after the Exodus that Solomon started building his temple (MT I Kings 6:1, LXX III Reigns 6:1).
4. An example of this five-century gap is the placement of Thutmose III at the time of Solomon in Figure 1.

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