Kelvin and Centigrade Temperature Scales and the Ancient Reckoning System

Charles William Johnson

Throughout the Earth/matriX series, we have been considering the historically significant numbers of the ancient reckoning system in relation to different fields of the exact sciences. Many relationships have been drawn regarding the ancient reckoning system and the fields of mathematics, geometry, and astronomy. Now, let us review some of the relationships that appear to have relevance for the field of chemistry. Within our contemporary concept of science, the study of thermodynamic temperature is conceived to be rather recent. One would not expect any particular coincidence among the field of the study of thermodynamic temperature and the ancient reckoning system’s numbers. Inspite of this preconceived idea, the reader may be as surprised as we were to view some coincidences that seem to reflect not only a coincidence of some of the numbers, but even a similarity of design. Specifically, the fact that some ancient reckoning systems consisted of two main day-counts (260c and 360c), reflects a similarity of design with the measurement of thermodynamic temperature regarding the Kelvin and Centigrade scales (273c and 373c).

The zero mark on the Celsius scale signifies the melting/freezing point of water at 1 atm pressure, while the boiling point of water at that same pressure is fixed at 100 degrees on the Celsius scale. The scale is then marked off by dividing the space between the melting/freezing point and the boiling point into 100 intervals (or, 100 degrees). This interval is equal to the same amount on the Kelvin scale. (The Fahrenheit scale is scientifically meaningless and avoided in scientific studies.) The absolute zero point on the Kelvin scale (which is the same point on the projected Celsius scale) represents the lowest possible temperature (derived from the laws ruling gases), whereby the unit of thermodynamic temperature (Kelvin) is defined as the fraction \( \frac{1}{273.16} \) of the thermodynamic temperature of the triple point of water. Variations arise from the measurements depending upon the measuring complexities themselves (eg., which particular type of glass is employed, producing variations whereby 50 °C equals 323.04 or
323.13 Kelvin). Other variations are given: either 273.16 or, 273.15; etc. Nonetheless, let us remember that the degree Celsius equals the Kelvin (which is not written today with the degree symbol as in expressing Celsius degrees).

Absolute zero, then, is represented as 0 K on the Kelvin scale, and as -273.16 °C on the Celsius scale. (or, -459.67°F). Depending upon the source consulted, one may find the Celsius temperature/figure given as -273 °C, -273.15 °C, and -273.16 °C. However, immediately one is drawn to recognize in these numbers a similarity with one of the ancient maya reckoning numbers, the maya companion number \textbf{1366560}. This number/fractal when doubled is: \textbf{2733120}. Such a similarity could easily be attributed to a coincidence. Yet, other similarities exist which cause one to reconsider the significance of the ancient reckoning system for having utilized such distinctively scientific expressions. Consider the differences among the different numbers offered: 273.312 - 273.15 = 162 (324, 648, 1296 ---an ancient \textit{kemi} number/fractal); 273.312 - 273.0 = .312 (3 x 312 = 936; 936 x 2 = \textbf{1872} ---the maya long count number).

The apparent coincidences do not stop there. Half of 273.15 is 136.575. Turn that into a fractal expression similar to the maya companion number and the following difference obtains: 1366560 - 1365750 = \textbf{810}. In other words, the difference between these two counts is the series that contains the natural numbers related to many other fields of science and reality: 81, 162, 324, 648, 1296, \textbf{2592} (the Platonic Year/fractal), 5184, 10368, 20736, 41472, 82944, 165888,..., the number series observed in the expression of the electrons in the periodic table (Cfr., \textit{Earth/matriX Essays}, Nos. 61 and 62).

Then, consider multiplying the constant number related to absolute zero by the number three and the following obtains: 273 \times 3 = \textbf{819} (the maya \textit{kawil} day-count); 273.15 \times 3 = 819.45; 273.16 \times 3 = 819.48; and, 273.312 \times 3 = 819.936 (!).

The characteristic of the temperature scales, however, appears to be the fact that the \textbf{273:373} relation on the Kelvin scale resembles also the reasoning behind the \textbf{260:360} scale of the ancient reckoning system. Both are distinguished by being separated by an interval of \textbf{one hundred} units (thermal degrees/intervals, and days/cycles, respectively). Now, let us do the obvious; carry out the division of the \(1/273.16\) expression:

\[
\begin{align*}
1 \div 273 & = \quad 0.003663003663 \\
1 \div 273.15 & = \quad 0.003660992 & 1 \div 273.16 & = \quad 0.003660858 \\
1 \div 273.312 & = \quad 0.003658822 & 1 \div 277.108 & = \quad 0.003608701 \\
\end{align*}
\]

(Note, the ancient reckoning systems employed a 36c and a 63c.)

\[
\begin{align*}
\text{Now, consider the obvious:} \quad 373 \div 273 & = \quad 1.3663003663
\end{align*}
\]

In other words, it becomes coincidental that the relation of the freezing point of water (273 K) to the boiling point of water (373K) just happens to be a number/fractal \textbf{(1366300)} suggestive of the ancient maya companion number (1366560). And, furthermore, the
difference between these two numbers, if taken without their fractional expression (given that the ancient *maya* avoided fractions), also happens to be the 260c of the ancient reckoning system: $1366560 - 1366300 = 260$

Now, if we make the computations as of the fractions, then the differences between these numbers reflect numbers close to the *maya* long count numbers/fractals:

$$
\begin{align*}
373.15 \div 273.15 &= 1.366099213 \quad \text{or, } 1366099.213 - 1366560.0 = 460.787 \quad (4608) \\
373.16 \div 273.16 &= 1.366085811 \quad \text{or, } 1366085.811 - 1366560.0 = 474.189 \\
&\quad 948.378 \\
&\quad 1896.756
\end{align*}
$$

In other words, the boiling point of water is to the freezing point of water as of a relation similar to the *maya* companion number/fractal $1.366560$.

If we bring into view another ancient reckoning day-count ($354c$), then other relationships appear. Consider: $273.15 \div 373.15 = .732011256 \times 354c = 259.1319846$ (reflective of the 260c or the 25920 Platonic cycle). If we adjust it, by dividing $273.15 \div 373 = .7323056 \times 354c = 259.236193$, the similarity is even greater with the Platonic cycle number.

Now, if we employ the $310$ K figure that relates to the human body temperature ($37{\degree}C$), then another ancient reckoning number is suggested. Consider: $310.15 \div 273.15 = 1.135456709$, doubled to $2.270913418$. However, if we employ the *maya* ancient number/fractal, the following obtains:

$$
310 \div 273.312 = 1.134234867, \text{ doubled to } 2.268469734
$$

This number/fractal being suggestive of the ancient reckoning number of $2268c$ from Nineveh. Whereby, now the human body temperature is to the freezing point of water as of a number/fractal similar to the ancient Nineveh number ($2268c$), which we have identified as also being relational to the concept of $\pi$ ($\pi$) for a 260c circle (Cfr., *Earth/matrix Essays* Nos. 101-104).

It is difficult to believe that there exists a coincidence between the essential relation of the triple point of water (boiling, freezing and absolute zero), and the ancient reckoning systems whereby the 360c and the 260c appear to be based on an interval of 100c. Consider, for example, $360 \div 260 = 1.384615385$; and, $100 \div 260 = .384615385$. Furthermore, $260 \div .384615385 = 675.9999993$ (or, $676c$, which is contained within the ancient Mesoamerican legend of the Four Suns). And, also consider that $1.384615385 \times 676 = 936$ (or, the 1872 fractal *maya* long count).

The variation of relationships among the distinct numbers/fractals becomes infinite. Consider, now, the following: $310.15 \div 273.15 = 1.135456709 \times 260 = 295.2187443 - 259.20 = 36.01874428$. In this relationship many distinctive counts are related. Also, consider:
Another way to conceive this relationship would view the human body temperature and the numbers/fractals of Nineveh and ancient *kemi* (regarding the measurements of the Great Pyramid):

\[
\begin{align*}
310 & \div 273.15 = 1.13490756 \quad (756 \text{ baseline of the Great Pyramid}) \\
310 & \div 136.575 = 2.26981512 \quad (2.268 \text{ Nineveh-like number; with sacred 9}) \\
310 & \div 68.2875 = 4.53963024 \quad (4536; \text{ area of the Great Pyramid; with sacred 9})
\end{align*}
\]

In a single series of relationships, the numbers/fractals of the human body temperature, absolute zero, ancient Nineveh numbers/fractals, and the measurements of the Great Pyramid come together. One can only consider such a relationship of numbers to constitute simply a coincidence of such diverse factors. However, knowing the manner in which the ancient *kemi* believed in the possibility to extend life beyond the grave, such a knowledge of the relationship of the triple point of water and the human body temperature may not have been so coincidental after all.

If the ancients simply considered the numbers without the fractions, then other similarities obtain: 

\[
\begin{align*}
310 & \div 273 = 1.135531136 / 2 = 0.567765568, \text{ whereby we see appear two distinctive ancient numbers of the ancient *kemi* system: 567 and 765 in reverse order within a single number/fractal. But, again, the coincidences keep appearing: 310 / 373 = 0.831099196 \times 260 = 216.0857909 (or, 432.1715818, the Consecration-like number 432c).}
\end{align*}
\]

In other words, the *maya* companion number serves readily as a constant factor multiplier between the freezing point and the boiling point of water: 

\[
273.15 \times 1.366560 = 373.275864, \text{ in any of its variations. And, if we employ the second well-known *maya* companion number, 1385540, as a similar mathematical constant, then approximate measurements of the Great Pyramid appear: 273.15 \times 1.385540 = 378.460251 (or, 756.920502; or, 756.50484 if we employ simply 273c).}
\]

One wonders whether by chance the ancients happened to have chosen two day-count systems, differentiated by one hundred days, similarly as the relationship exists between the freezing point of water and the boiling point of water; the difference of the two systems being a multiple of the 260c system (13, 26).
Today, we continue to seek a measuring system that would allow us to combine the different levels of reality (spacetime) into a single system: distance, weights and measures, and time. From the manner in which the numbers/fractals of the ancient reckoning systems behave, the ancients could have dealt with each of these particular aspects. Yet, it is difficult for us to accept the idea that past societies may have accomplished something that we continue to be unable to resolve. The historically significant numbers of the ancient reckoning system reflect an application to many distinct fields of scientific study as we have presented in the Earth/matriX series of essays and extracts. Sufficient documented evidence does not exist for us to conclude that the manner in which we have computed the numbers/fractals of the ancient reckoning system is actually the manner in which the ancients made their computations. However, the numbers/fractals of the ancient reckoning system, which are known today, would have served just such a computing purpose.

**Kelvin (K) and Centigrade (°C) Temperature Scales:**

<table>
<thead>
<tr>
<th></th>
<th>0 K</th>
<th>273.16 K</th>
<th>373.15 K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Zero</td>
<td>-273.15 °C</td>
<td>0 °C</td>
<td>100 °C</td>
</tr>
<tr>
<td>Freezing point of water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point of water</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The Earth/matriX Thermodynamic Temperature Scales Proposal:**

<table>
<thead>
<tr>
<th></th>
<th>0 Em</th>
<th>100 Em</th>
<th>136.6 Em</th>
</tr>
</thead>
<tbody>
<tr>
<td>Em</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Em</td>
<td>.732 Em</td>
<td>100 Em</td>
<td></td>
</tr>
</tbody>
</table>

One more observation. In considering the human body temperature as expressed on the Fahrenheit scale, an intriguing point appears. Freezing is considered to be 32 °F, while the human body temperature is shown to be represented by 98.6 °F. Consider subtracting them from one another:

\[
98.6 - 32.0 = 66.6
\]

Interestingly enough, the difference between the freezing point of water and the human body temperature is a fractal of 666, often cited as the number of the beast as in the Bible. It might not be difficult to imagine the ancients as having distinguished our own body temperature from a state of frozen water, in which obviously the human body could not possibly survive without an external heat source.

1998 Copyrighted by Charles William Johnson. All Rights Reserved.

www.earthmatrix.com