A Proposed Easy to Use Dozenal Number System Ø123456789$\chi\tau\varepsilon$|

Way back in the nineteen forties this writer, while in High School, was introduced to the duodecimal system. Now that I am semi-retired, I have a little spare time to devote to such esoteric studies as alternate counting and color theory. I have spent most of my career, over the past 46 years, engaged in the design and construction of buildings and the survey and layout of construction sites. I can't be counted in the ranks of the anti-metre organizations because we were taught the Metric system in Elementary School along with the IPP (inch-pint-pound) system and even the Roman numeral systems of measure. It has always been my practice to use whatever system seems most convenient for the sort of work being done. An old friend, Jonathan R. Hatfield says that: "Feet an' inches an' lines work best for house framin' work 'cause it is awful damned hard to get the decimal in the wrong place".

In construction practice, there are a couple of things fundamentally wrong with the Metre:

1. The millimeter is too small. So field measurements must be rounded to 5 mm in practice. That bastard (5 mm) unit is larger than either the 0.01 foot or the 1/8 inch (1-line unit) that has been used in construction for many generations of carpenters and other craftsman in the United States. Metric construction is customarily built to the looser 1/5" tolerance.

2. The Metre, being based on ten, makes for complicated and awkward visual proportions that are almost automatically correct when using feet and inches. It is no accident that our ceilings are a standard eight feet high and that the commercial door has a 3-0x6-8 nominal size.

The preceding words bring up the subject of the very useful **Construction Hand Calculator**. This electronic tool is reasonably priced and handles feet, inches, and yards, without a pause. The Dozenal Society of Great Britain and the Dozenal Society of America should make it a priority to fund the commercial development of a dozenal-based Hand Calculator. This little instrument should be capable of being easily switched between decimal and dozenal notation modes. I believe that without the availability of this sort of affordable tool, in most classrooms, the Dozenal System will remain another backwater dream in the intellectual progress of mankind.

Ready to use but specific **symbols** must be adopted for the Base 12 number system. When first developed the commonly accepted alphanumeric glyphs proposed were the 0 1 2 3 4 5 6 7 8 9 x e. These are more available than the upside-down numbers 2 and 3 now used by some. Whatever the Standard adopted, the characters must be present in most personal computer type fonts.

Here are the problems with the old symbols. In calculations the 0 placeholder, as used, is easily confused with the base 10 placeholder. Therefore, the 0 must be replaced with another symbol. The decimal point must also be replaced with a unique 'dozimal' symbol.

Suggestions for consideration:

Use the O stroke [**Ø**] instead of the zero.

Use the Vertical Bar [**|**] instead of the decimal point. This **|** character would be used for **ALL** dozenal numeric notations as an identity tag. For example, **1ØØ|** would therefore represent **one gross** and could not easily be confused with **one hundred**.

The ***** symbol would always be used for the multiply by sign (as it is on the numeric keypad) to avoid confusion with the number Dek.

Characters that are more suitable can be developed later for inclusion in future editions of the **Unicode** typography Number Forms Standard in Range 2150-248F.

Note that the unique dozenal zero half-stroke points to 12 o'clock & enlarged chi and epsilon lowercase letters are utilized.
The new designs for the revised dozenal characters could look something like the pen stroke examples illustrated below.

Single Stroke Dozenal Characters

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