All Clocks Are Wrong

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September 2020
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Every wall clock, wristwatch, or other type of clock I have ever seen has been fundamentally flawed. They may or may not be accurate, but it’s the way we reference the time that is really wrong.

Clocks should be zero to 11:59, not 12 to 11:59, or for a 24 hour clock it should be 0 to 23:59. (This document refers to an analogue 12 hour wall clock but the same logic applies to other devices or displays, including 24 hour clocks not referencing AM/PM.)

Considering a 12 hour clock, when the second, minute and hour hands are all pointed straight up they are pointing to 12 but they represent the starting point which should be zero. The minute & second hands represent the decimal parts of the hour. All hands straight up represents the start or rollover point which is essentially a reset of the timers to zero.

What is "12:01 AM"? It is actually "0:01 AM" because we are moving closer to the first hour, so the only logical whole number prior to 0:01 is 0.

When someone references 12:01 AM, it implies 12 would also be AM, but it is actually PM, it makes little sense. Conversely, if you reference 0:01 AM it makes sense that you are ascending from 0 AM, not 12 PM.

How can you say the time rolls straight from 12:59:59 to 1:00:00? It is lacking the mathematical transition from 0 to 1 (mathematically 0.01, 0.02 ... 0.99; time wise 0:01 to 0:59) .

All common numbering systems start at zero using it as a null placeholder and as the first digit. In base 10, the numbers start at 0 and go to 9. The number 10 is just a value of 1 in the second position (10 to 19) and a value of zero for the first position.

Base 10 example, 207 is actually $7*10^0 + 0*10^1 + 2*10^2$

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   __7
 + _0_
 + 2__

 = 207
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Note that each column is working it's way from 0 to 9. Just like any other numeric system a clock should display time, and we should reference time, with reset or rollover points starting at zero. Not 12 and not 24.

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