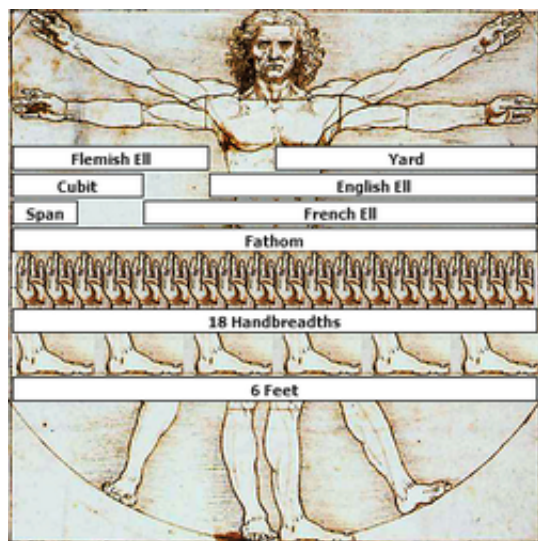


Cubit, Rod, League: How Far is That Distance?



Writers often use obsolete terms to describe measurement, generally because these add a flavor of “olden times” to the setting. This is a time-proven style choice especially in fantasy and historical fiction. If we are reading about, or gaming in, a place where we count the distance to the next city in leagues, we know we are not living in present times, but somewhen with a distinctive historical feel to it.

And here is where many writers encounter a problem. They use terms and measures of distance that they do not in fact understand very well, with results like the following:

- Our heroes galloped hard all day to cover the vast span of a league through the wilderness.
- The grand plaza is a magnificent expanse, measuring a whole 100 cubits across.
- The looming tower is so tall it can be seen for a distance of many rods away.

What's wrong with these statements? So many things.

A league is the distance a person can cover on foot in one **hour**, not one day. (The “galloping a horse all day” is another problem here, one I'll address in a future post.)

The cubit was more often used as a measure of construction lengths, like the dimensions of a house foundation or a block of quarried stone, and is only 18 inches long. Using it to describe a “grand” square is like measuring a surface in board feet instead of yards. And although “100 cubits” may sound vast, it is in fact only 150 feet in length (half a football field across): not quite the very grand scale the plaza is supposed to be.

A rod is a measure derived from the length of an ox goad, 5.5 yards or 16.6 feet long. This is like saying that looming watch tower can be seen from yards and yards away – hardly an impressive measure of its size.

This misuse of archaic terms of measurement is fairly commonplace. The examples above are all things I have read in printed works in the last year, and many more examples abound. The problems this misuse creates are three-fold:

1. Readers who know the meanings of these terms are jarred out of the narrative by the error.
2. It propagates incorrect meanings of words: a new writer who does not get educated differently assumes a league equals a day's travel and reproduces this mistake in his own writing.
3. It is a blatant display of ignorance on the part of the writer/world-builder who should know better. If world builders don't know this stuff, who will?

If the last sounds harsh, it is nevertheless true. When you as world builder are creating a setting for your audience to enjoy, you need to portray it in a way that does it justice. That includes the simple wordsmithing craft of using words and definitions correctly.

And the Solution is...

Very few of us these days grow up knowing what cubits and rods are, but we can all learn, especially if we plan on using archaic terms to depict lengths and distances in our worlds. As a general rule of thumb, if you plan to use an obsolete term, look up its meaning first and be certain of its usage before you employ it.

To that end, here is a brief reference list that gives more info on common obsolete distance measurements and their relative differences. Below that are links to more extensive information about archaic terms, plus a great conversion utility so you can figure out what the equivalent measurements should really be.

This is not meant to be an exhaustive list, but addresses the words I see most often (mis)used in fantasy settings, which is where these obsolete measurements most often turn up.

Common Archaic Measurements Handy for World Builders to Know

Cubit: from the Latin *cubitum*, "elbow," representing the length of a man's forearm from elbow to tip of middle finger. This length is about 18 inches (45 cm). This unit of measure was frequently mentioned in the Bible, but was used through Roman times and in English measures as well. In the English system the cubit is exactly 18 inches. The cubit was most commonly used in construction and in architectural measurements.

Rod: The rod and the furlong were the basic distance units used by Anglo-Saxons before the Norman conquest. A rod was a unit of distance equal to 5.5 yards (16.5 feet). It is thought the term originated as the length of an ox-goad, a pole used to control a team of oxen. This unit is also called a perch or a pole, and is also related to the length of the military polearm called the pike. The rod became the basis of land measurement, land records and taxes in England.

One square rod (272.25 sf) equals one acre. There are 40 rods in a rod, and 160 rods in an acre.

Furlong: Furlong comes from the Old English *fuhrlang*, meaning "the length of a furrow." This represented the distance a team of oxen could plow without needing to rest. A typical acre was measured as 4 rods wide by 1 furlong in length, and was considered to be the area a team could plow in a day.

A furlong equals 40 rods, equivalent to 10 chains, 220 yards, 660 feet, or 1/8 mile. A 200 meter dash covers a distance very close to a furlong, and this measure is commonly used today to describe the distance in horse races.

Fathom: 2 yards or 6 feet (1.829 m). The word comes from Old English *faethm*, "outstretched arms", because a fathom is the distance between a man's outstretched fingertips. This was a common measurement in England during Saxon times and into the medieval era. One foot = 1/6 fathom. The term lingers on today in nautical terminology where it is used to measure water depth, length of ship's cables, and so on.

League: The Romans adopted this ancient Celtic unit of measure as the *leuga*, and it became a common distance measurement throughout western Europe. It roughly represented how far a person could walk in an hour. The original Celtic unit was rather short (about 1.4 statute miles-perhaps a reflection of the terrain they had to cover), but over time the unit grew longer, and varied also from country to country. As a rule of thumb, an English league in the Middle Ages was about 2 miles long. In later times it came to reckon about 3 miles in length, perhaps a reflection of road improvements and changes to terrain as England's great forests were cut down.

For a larger list of definitions and a very handy conversion utility, see these links:

Free Distance and Length Conversion Table at unitconversion.org:

http://www.unitconversion.org/unit_converter/length-ex.html

How Many? A Dictionary of Units of Measurement, by Russ Rowlett, Director of the Center for Mathematics and Science Education at the University of North Carolina at Chapel Hill:

<http://www.unc.edu/~rowlett/units/index.html>. Of particular interest are the English Customary Measures, here: <http://www.unc.edu/~rowlett/units/custom.html>

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A version of this information appeared in one of the weekly tips from the World Building Academy. This and related tips about distance, travel, and much more will soon be available in our forthcoming book, *World Building Tips Volume 2*. [Click here to visit the book page.](#)