

Pay Attention to Proportion

Measure Twice, Cut Once – October, 2022

Rob Carver

Whether you are working from a professionally-designed plan, modifying an existing design, or creating your own design, you know as a woodworker that **proportion** is a critical element in the aesthetic impact of a piece. Among the many factors to consider – stock selection, finish, ornamentation, and so on, the relationship of each part to the whole has considerable impact in any project. If you've ever looked at a piece of furniture and felt that something just wasn't right, the issue may have arisen from insufficient attention to proportion.

Proportion refers to the relative dimensions of the elements within a piece, often expressed as ratios or fractions. Some Guild members might recall Will Neptune's November 2020 presentation analyzing the Chapin High Chest in the Wadsworth Atheneum (see the EMGW.org Guild Video Library or link directly to <https://youtu.be/sVfxBKfWqiQ>). Will provided a thorough tutorial on the ancient Greek and Roman classical orders and how they influenced 18th Century furniture design. In classical design, the dimensions of every part of a column are in a pre-specified proportion to every other part.

Euclid's geometric principles that underlie the classical orders also give us the golden ratio, a.k.a. golden section or mean. In the ancient view, the ultimately pleasing rectangle has a length that is 1.618 times the width. That ratio is symbolized by the Greek letter Phi (Φ). Sizing a tabletop? Your clients will likely be satisfied if the long dimension is Phi times the short dimension. Admire the Parthenon? Phi is lurking throughout it.

Many of the principles we follow in furniture design derive from art and architecture. Not only did the ancient Greeks bequeath us Phi and the classical orders, but they also developed a theory of the divine standard of beauty. Polyclitus is credited with devising the *canon of proportions* (see <https://blog.artsper.com/en/a-closer-look/ancient-greek-canon-of-proportions/>) describing the ideal ratios among various parts of the human body. When, as is obviously the case for EMGW members, every part of one's body is in the ideal ratio to other parts, one has attained the precise mathematical definition of beauty. This is the concept behind Leonardo da Vinci's famous Vitruvian Man.

Outside of the shop, other disciplines also demand attention to proportion. Think about the centrality of ratios in engineering, accounting, chemistry, music, and art. When odds-makers make odds, they are paying attention to proportions. COVID hospitalization rates, fuel economy metrics, and free-throw percentages are all proportions. Bakers and cooks keep a close eye on proportions in recipes, and what would modern life be without the 7-to-1 martini??

Many of us are probably familiar with Cyril Northcote Parkinson's law, which posits that work expands to fill the time available for its completion. Less well-known is his 1957 **law of triviality** stating that people within an organization commonly or typically give disproportionate weight to trivial issues. The law is sometimes expressed in other terms of time or money expended on

a decision. For example, one might note that the time required to debate an issue is in inverse proportion to the importance of the topic or the size of the expenditure.

We all know people who blow their stacks over trivial matters, and sometimes “those people” might even be us! Sometimes it’s the little things that can set a person off. It’s a common challenge to keep things in proportion—in friendships, in the family, at work. In recent years, the notion of work-life balance has received considerable attention. Some say that employers should strive to provide sustainable work-life balance to keep their work forces productive and stable. Others put the onus on the individual: it’s up to employees to manage their own stress levels and find the best way to prioritize their professional and personal lives. While that debate continues, there seems to be agreement all around that it’s important to keep things in proportion. But woodworkers always knew that.