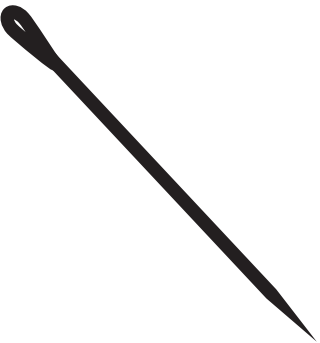


## Form, Function

The most famous phrase about functionality and design is "Form follows function". Originating with the American architect, Louis Henri Sullivan (1856-1924), it is a perfect phrase, elegant and packed with meaning. First coined by Sullivan as "Form ever follows function", the later, streamlined phrase is more graceful and has better impact. Its pure simplicity and alliteration make it repeat in memory and underscores its perfection.

In three words it tells us that the shape of a thing is determined by its use and by implication, the needs of the user. It tells us this in a compact and matter-of-fact manner that underscores the point being made, demonstrating its truth rather than merely presenting us with it. The statement made is a declaration of the ranking of issues related to the design of an object. The apparent ambiguity created by the fact that the word 'form' actually precedes function within the sentence that informs us that it should follow, demonstrates the dynamic tension in the ranking. Yes, function is the prime issue, but form is closely linked and of such great importance too



that it demands to be spoken first. The form of the sentence follows its function. It relates a simple and yet powerful idea in a phrase that is likewise simple and yet powerful. This aspect of the sentence reinforces the point made. Trimming the superfluous 'ever' polishes the phrase allowing it to glide more smoothly into consciousness. Design is deliberate, purposeful, it has intent. Never random, it is what we mean to do. 'By design' could also be phrased as 'According to plan'. The best design embodies the highest values of harmony, order and clarity. Visually, it combines elements in an aesthetically pleasing fashion, placing them with respect to their individual attributes so that a pleasing whole is achieved. Functionally, it is ordered to draw our attention to its most relevant attributes and presents to us its purpose. It is important that the result be visually pleasing despite the fact that function is the first issue to be addressed. If the design is not harmoniously balanced, it will likely be difficult to apprehend the function. If all design has a purpose, then it is reasonable to expect that we would be able to discern the function of a design by examining and/or using it.

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## Safety Pin

The safety pin while simple and streamlined, is still relatively complex. It fastens by piercing, gripping and locking. It is also a spring, a hinge and a lever. There is nothing on a safety pin that is unnecessary, or which impedes its function. The safety pin is a perfect example of fluid and functional design.

There are two main types of safety pin. The very old-fashioned sort that are made all of one piece of metal bent to purpose, and the more modern 'safer' pin with a cap on the end of it providing the hook that holds the pin in place. The older model, while more elegantly constructed, has more impediment to its function, as the hook has an exposed end, which can snag material it is not intended to catch. This could be viewed as a secondary function of the device, but since it isn't particularly useful, it was designed out of the object. The modern safety pin with its molded cap is more complex to manufacture, but fulfills its function with less risk of acciden-



tal damage. The cap is all of one piece and molded to the post; it usually allows for the pin to be fastened and released from either side, though some, particularly for diapers, have only one access opening. Diaper pins also often have an extra cap that can slide down to cover the opening and prevent accidental injury to the baby or caregiver.

At the other end of the post is the spring/hinge of the apparatus. If there were no spring, the pin would not function nearly as well and it would have a greater tendency to break. The spring makes several things possible:

- 1) It creates the hinge that opens and closes the pin,
- 2) It creates the tension that holds the pin closed,
- 3) It prevents metal fatigue
- 4) By bisecting the wire it makes each segment shorter and the aspect ratio (thickness: length) gives added strength to each.