System of Visual Organization in Graphic Design

Nahid Tootoonchi
Art Department
Towson University
8000 York Road
Towson, MD 21252, U.S.A.
E-mail: ntootoonchi@towson.edu

Abstract

Grid is a mathematical device. Without it no long format of any manuscript can be followed. The beauty, harmony, and flow of any manuscript depends on the systematic structure of its grid system.

Introduction

Typography and layout are two of the most important aspects of graphic design. Typography relates to history and design of letterform, and usage of typefaces as text. Layout relates to design of any publication or web page that contains text and imagery based on a grid.

Graphic design is relatively a young profession and modern grid system in design has evolved during Industrial Revolution, yet the ancient Egyptian were the inventor of grid system in art and architecture. [1]

"A grid is a holding pen for information and a way to ordain and maintain order. Although grids have been used for centuries, many graphic designer associate grid with Swiss. The rage for order in the 1940s led to a very systematic way for visualizing information. Decades later, grids were considered monotonous and boring–the sign of "designersaur." Today, grids are again viewed as essential tools, relied upon by professionals who are both new to the practice and those seasoned by decade of experience." [2]

In this paper although our focus is on different mathematical divisions of surfaces that apply to layout design, we also recognize the designer responsibility in considering type and text not only as verbal information that is critical for communication, also as lines of texture that create shapes and color tone which is essential for a harmonious and balance composition. [3]

Grid and Artwork Analysis

All the components of a layout such as head, subhead, text, image, chart, caption, page number, footer or header, footnotes, and any design element has to be organized in relation to the content's meaning. Flowing of any text format, whether it is loose or rigid, hard copy or digital, its balance and beauty is dependent on its grid system, which brings comfort for the reader as s/he navigates through information.

One column, multiple columns, modular, spontaneous or geometrical shapes are various forms of a grid system, which can have various tension (horizontal, vertical and diagonal). This mathematical structure (grid), if is well planned, it can provide endless opportunity for exploration of layout design, and can solve communication problems that have great complexity with many layers of information.
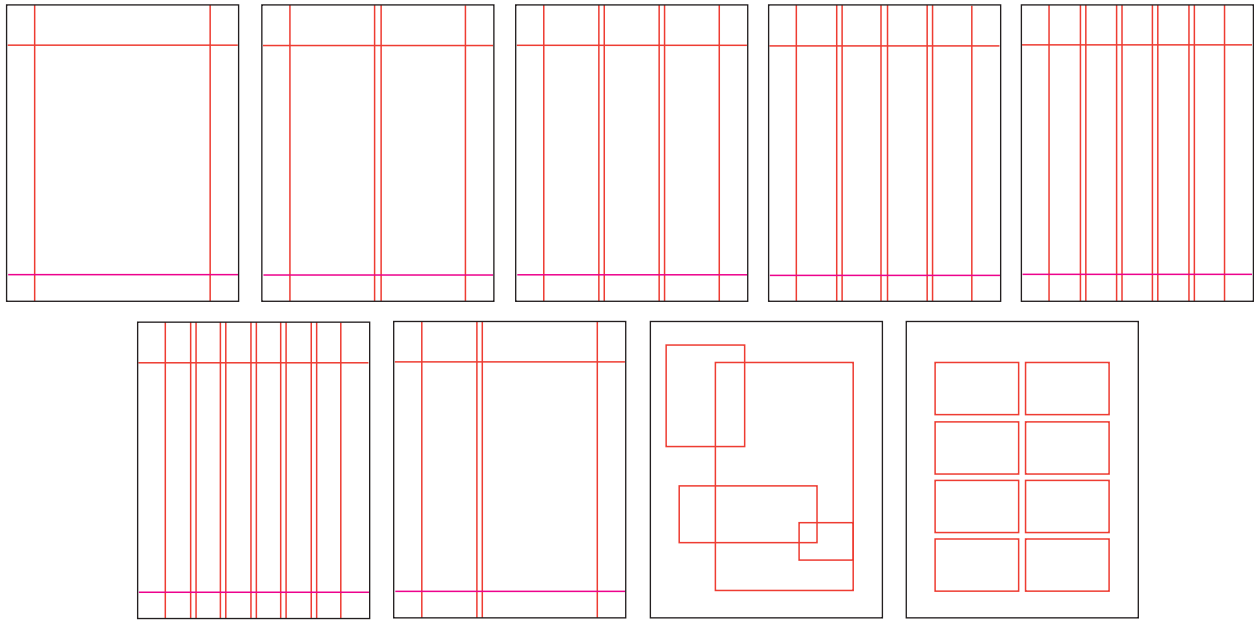
Figures 1 -9: (from top, left to right) *Various forms of a grid system.*

A page can be divided into as many columns as the content needs in order to hold different layers of information. Above (figures 1-9) shows different column grids with margin and gutter space between columns to separate the text. These are the most classical layout structures. The width of the column entirely depends on the size of the type and design of the layout for comfortable reading. In many instances geometrical shapes that contain text and images may intersect one another (Figure 8). The modular grid is used when there are different levels of information, which allows the designer to be more playful with color, text, angles, and is mostly used for single page layout (Figure 9).
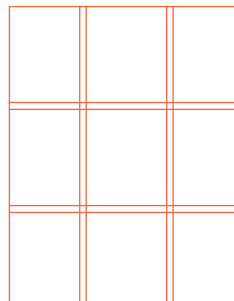
The grid in this vertical and horizontal division create a strong visual order. The poster employs the symmetry of center axis as a focal point. The design is simple with a three-column grid. The large text on top balances itself with vertical lines in center, ending in two diagonal lines that lead the eye to the bottom corners.
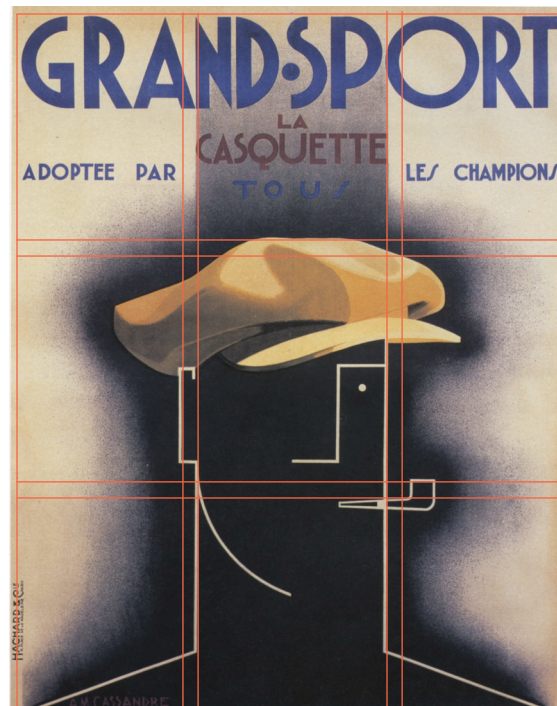
Figure 10: *Grand Sport* poster
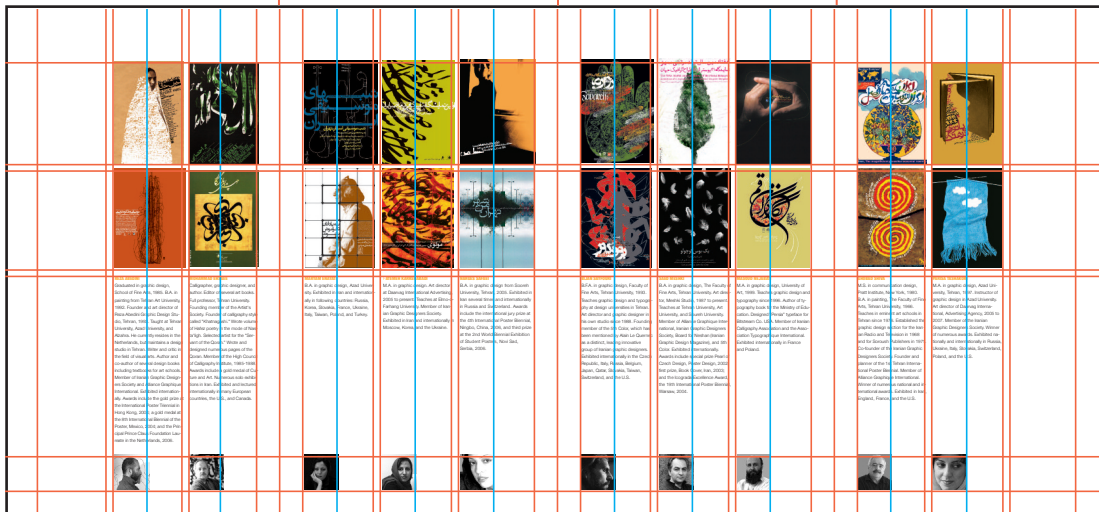*A. M. Cassandre, 1925.* [4]

Figure 11-12: 11 (top) and 12 (bottom), *Brochure for poster exhibition.*

This doublegate fold brochure consists of eight panels, four outside panels (figure 11) and four inside panels (figure 12). Each inside panel has a six vertical column grid with carefully considered margins and column-gutters for different text length and various image sizes. The grid is flexible to turn from one to six-column format whenever it's required for positioning of design elements.

Artwork in Figure 12 (inside panels) hangs from the top of the page, inside a vertical three-column grid. The text length varies in each column, and creates an organic pattern toward the bottom of the brochure. This corresponds to the various textures of the overall artwork and also breaks the stiff vertical lines.
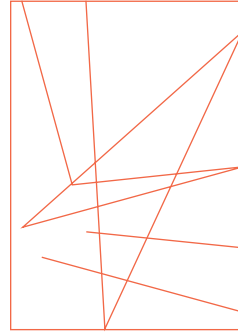
Photos placed on the foot of the page, inside a narrow vertical six-column grid, are to hold the natural ending depth of the text. The horizontal placements of the photos on the baseline are the third layer of information corresponding to the top margin where the artworks are hanging.

In column grid we have subordinate structures such as horizontal lines that separate different types of information–artwork from text, and text from photo.

On the cover Figure 11 (third panel from left), the text sits above midline where the artwork ends inside the brochure layout and the text also occupies one column grid on the left and right panels.

Spontaneous Geometric Composition
Intersecting diagonals, and sharp angular movements, derived from the juxtaposition of photographic and typographic line elements, create a dynamic organization for the imagery and information in this poster. The designer uses the vertical diagonal of the crane arm and disorient the viewer and provides a primary superstructure for the poster. The typography moves upward and out ward, with positions for each line determined in part by the superstructure. At the same time, the designer counters the tumult with subtle alignments and focal point: The airplane at lower left anchors the composition and creates an optical alignment between lines of information that echo the direction of the superstructure. [5]

Figure 13: *Lift, promotional poster.*

Reference

[1] ScienceDaily (Sep. 24, 2010)
http://www.sciencedaily.com/releases/2010/09/100924084615.htm

[2] Beth Tondreau, *Layout Essentials,* page 8*,* Rockport Publishers, Inc. 2009.

[3] Kemberly Elam, *Grid System,* Princeton Architectural Press, New York, 2004.

[4] Steven Heller & Seymour Chwast, Graphic Style, From Victorain to Post-Modern, Harry N. Abrams, Incorporated, New York, 1994.

[5] Timothy Samara, *Making and Breaking the Grid,* page 186-187*,* Rockport Publishers, Inc., 2002.