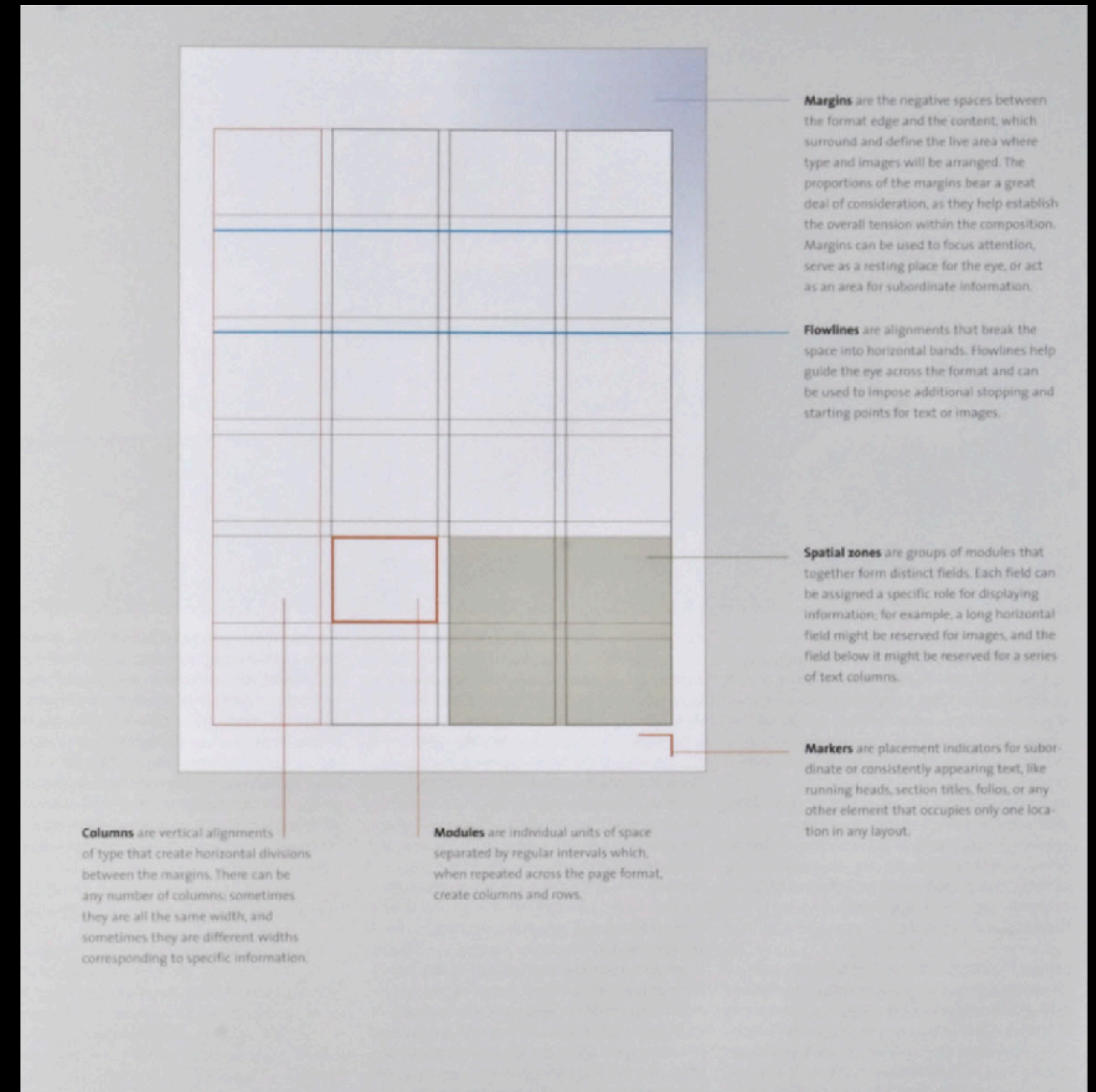


# Grids

# Grid Basics

## Format and Page Structures

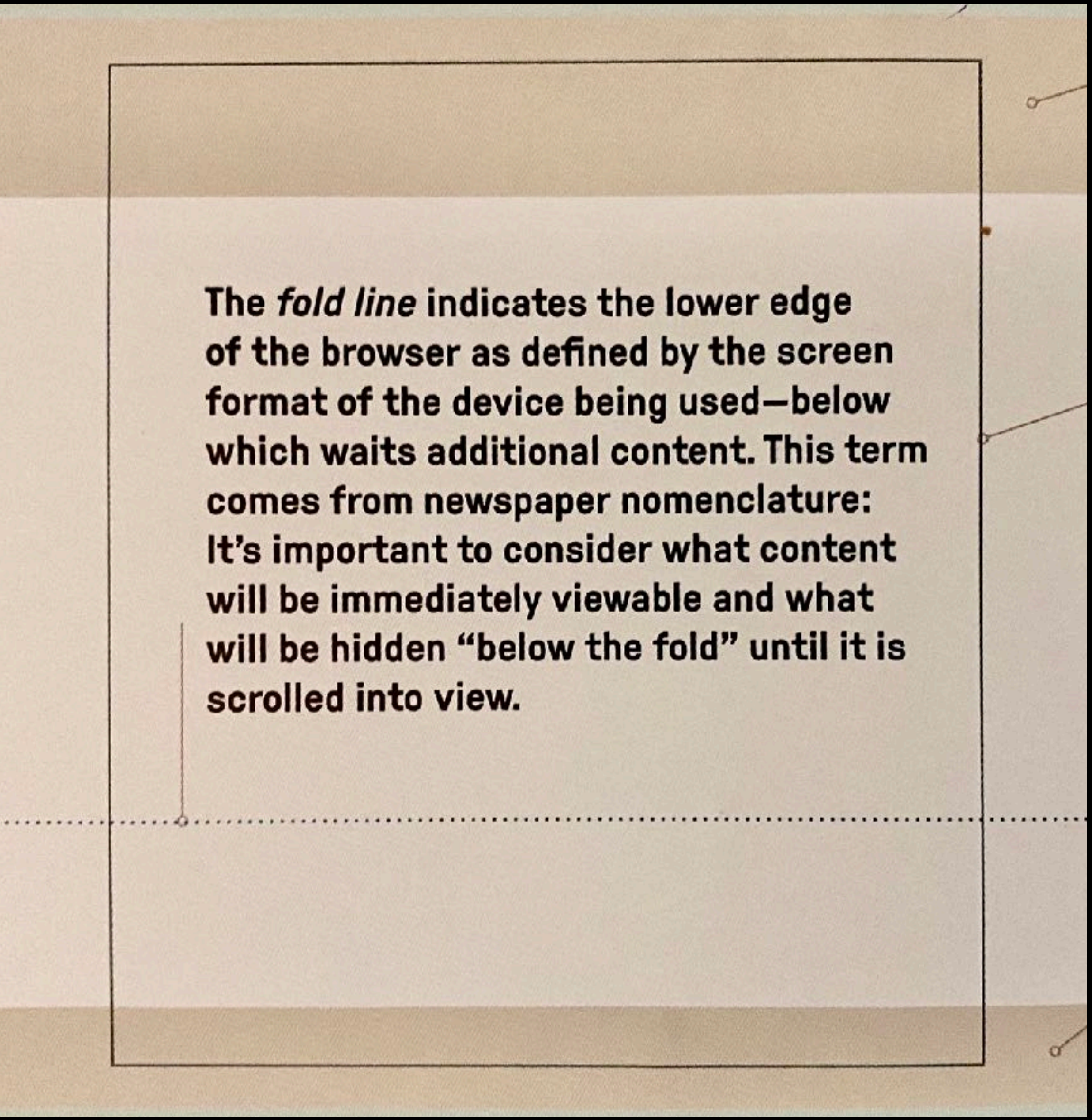
- All page-layout conventions descend from the book format
- This is true for all editorial mediums, including webpages
- Current Web formats define margins around a body that emphasizes columns, rather than rows, this allows for responsive design



# Grid Basics

## Format and Page Structures

- A grid, is what happens inside the margins of an individual page, within the body
- Every grid contains the same basic parts, no matter how complex the grid becomes

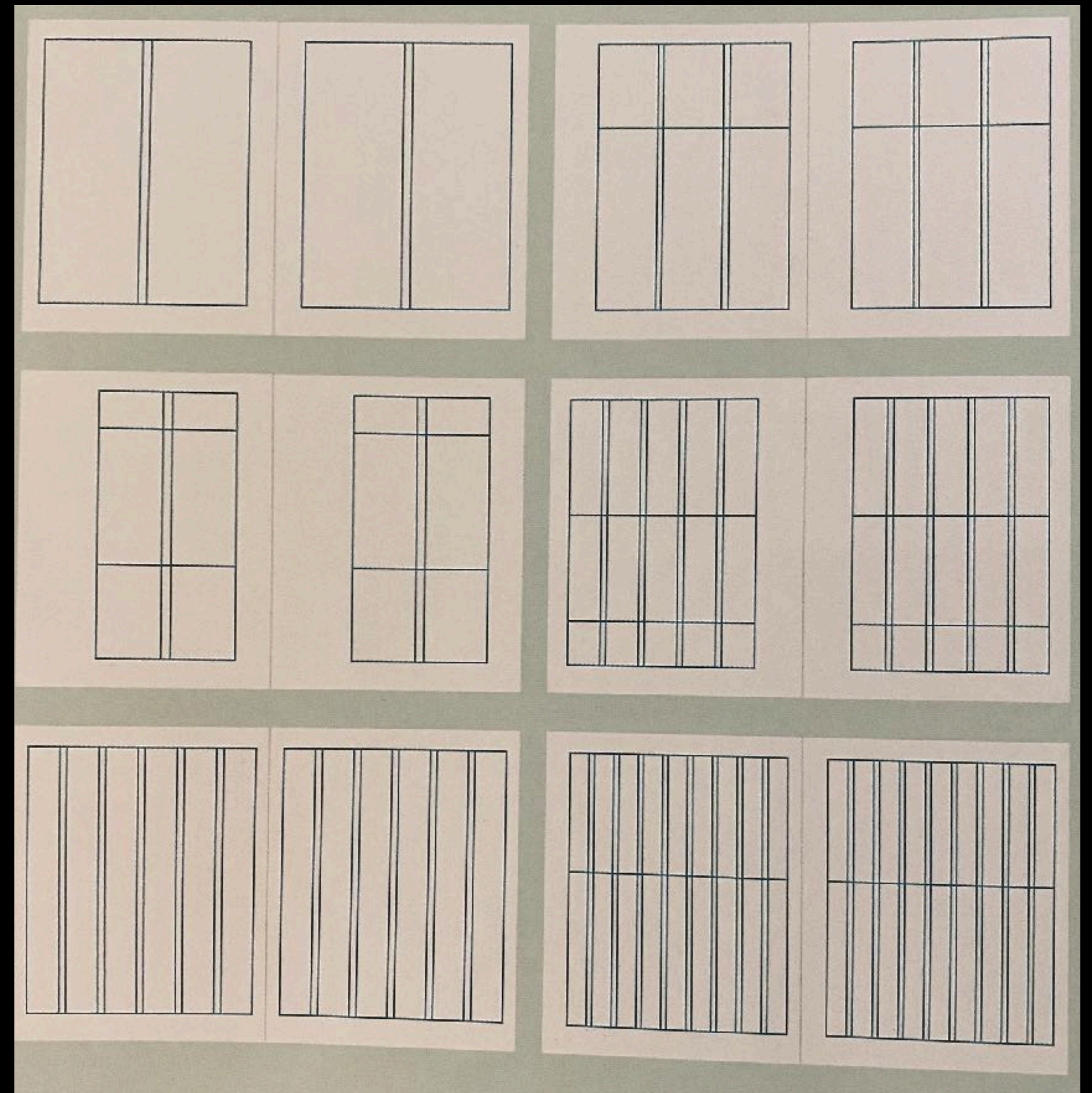
A diagram illustrating the concept of a 'fold line' in web design. It shows a rectangular page layout with a horizontal dotted line near the bottom, representing the lower edge of the browser window. The text is positioned above this line. A vertical line points from the text to the dotted line.

The *fold line* indicates the lower edge of the browser as defined by the screen format of the device being used—below which waits additional content. This term comes from newspaper nomenclature: It's important to consider what content will be immediately viewable and what will be hidden “below the fold” until it is scrolled into view.

# Grid Basics

## The Column Grid

- Columns can be dependent on each other for running text, independent for small blocks of text, or crossed over to make wider columns
- The Column Grid is extremely flexible and can be used to separate different kinds of information (running text, large images, captions, etc)

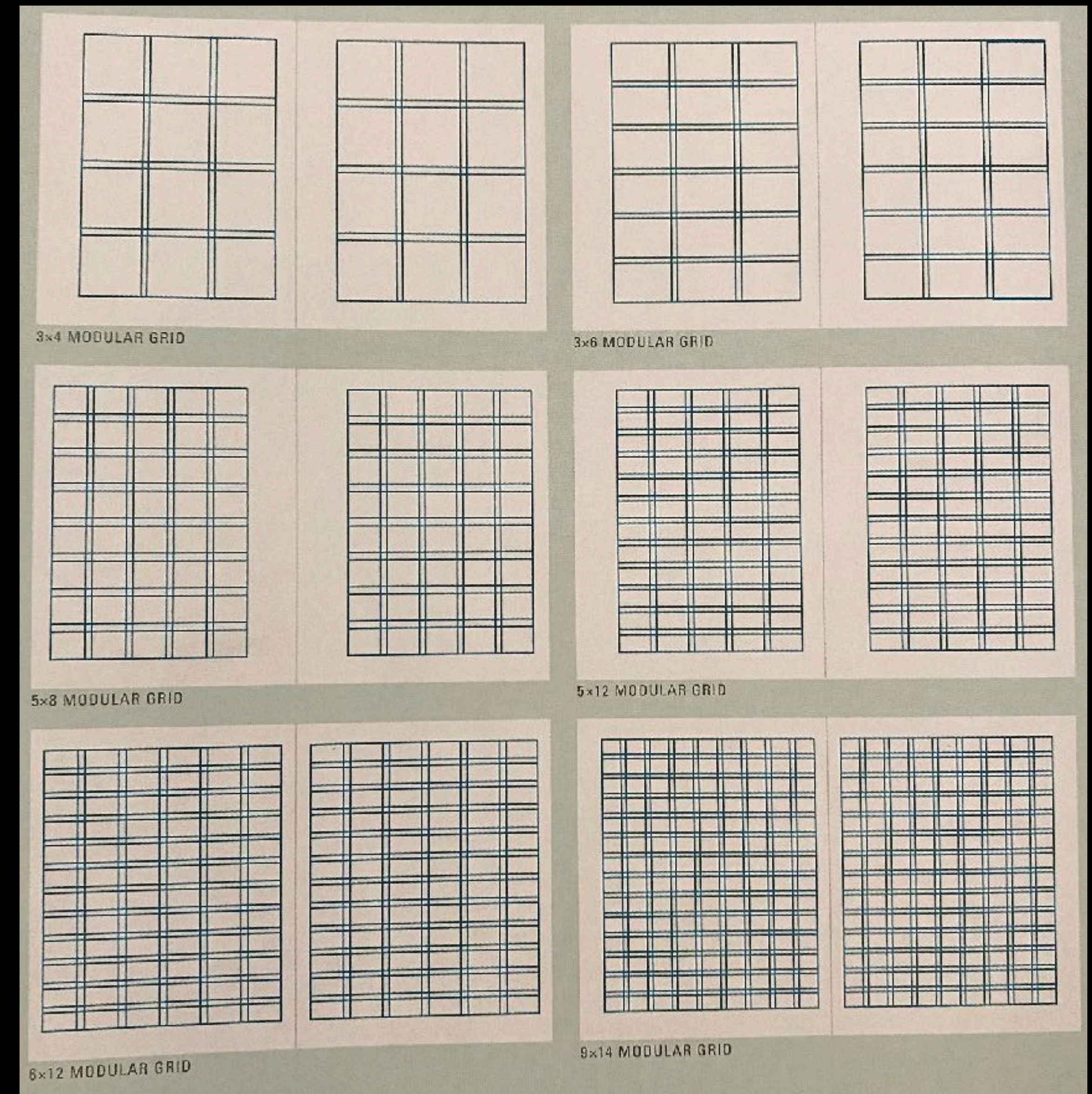


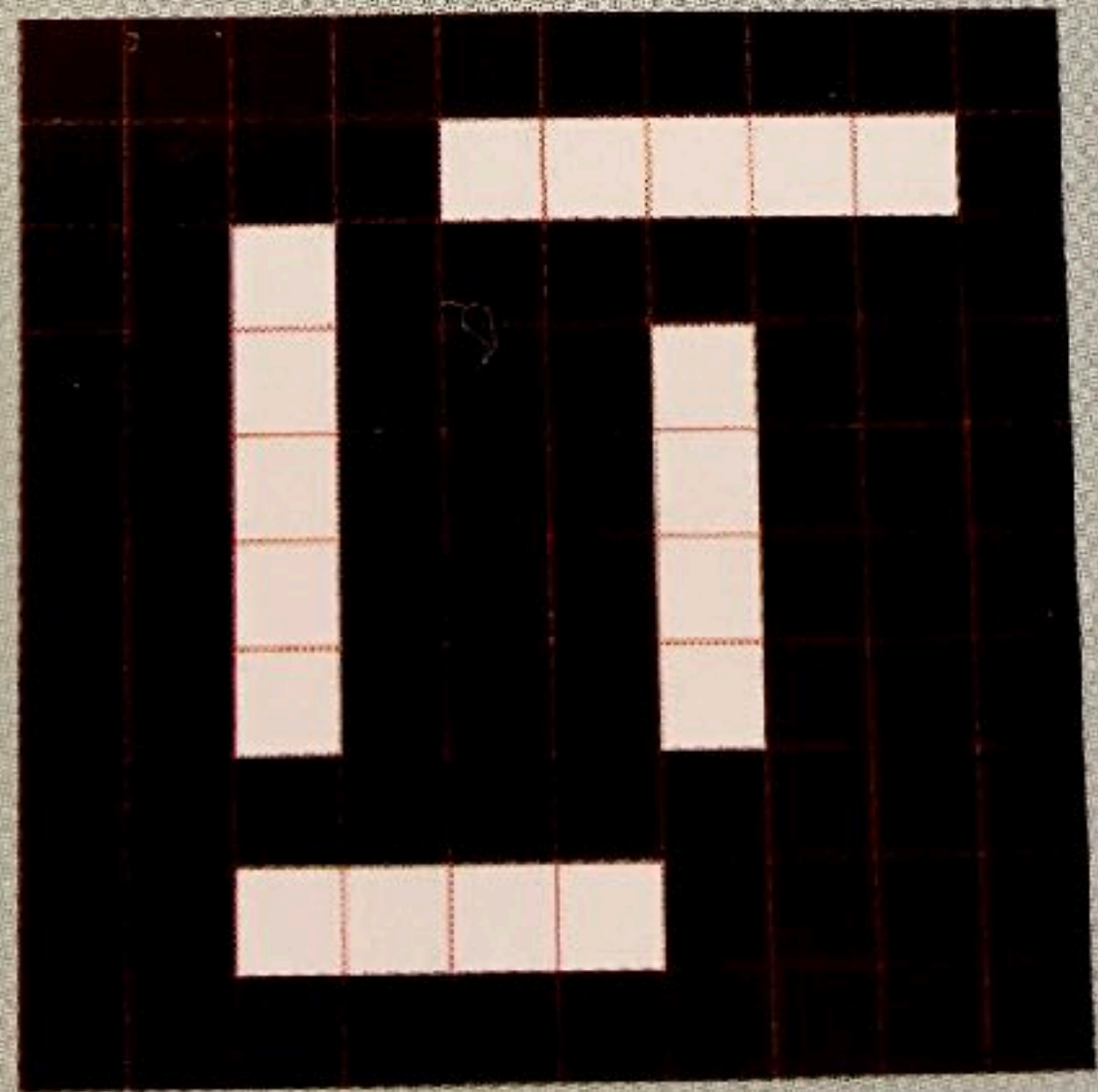


# Grid Basics

## The Modular Grid

- For extremely complex projects involving many different kinds of information
- A modular grid is a column grid with a large number of horizontal flow lines that subdivide the columns into rows, creating a matrix of cells called modules
- Each module defines a small chunk of informational space





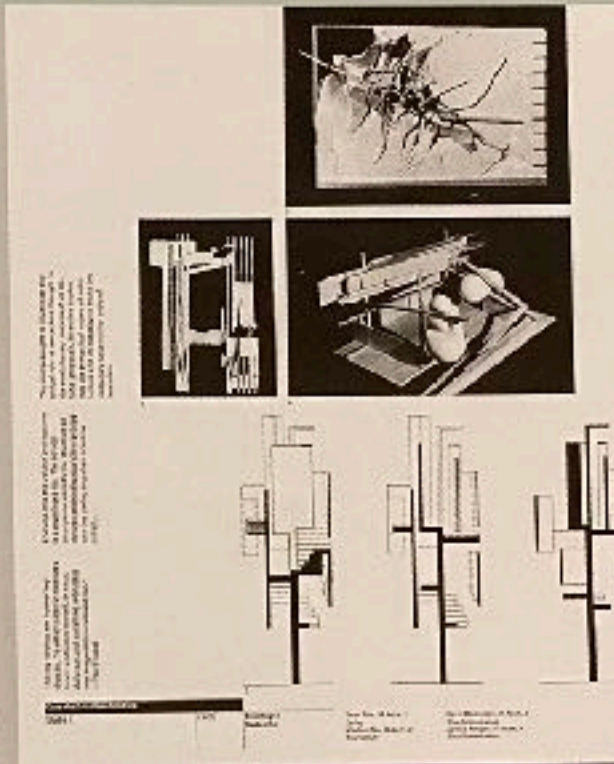
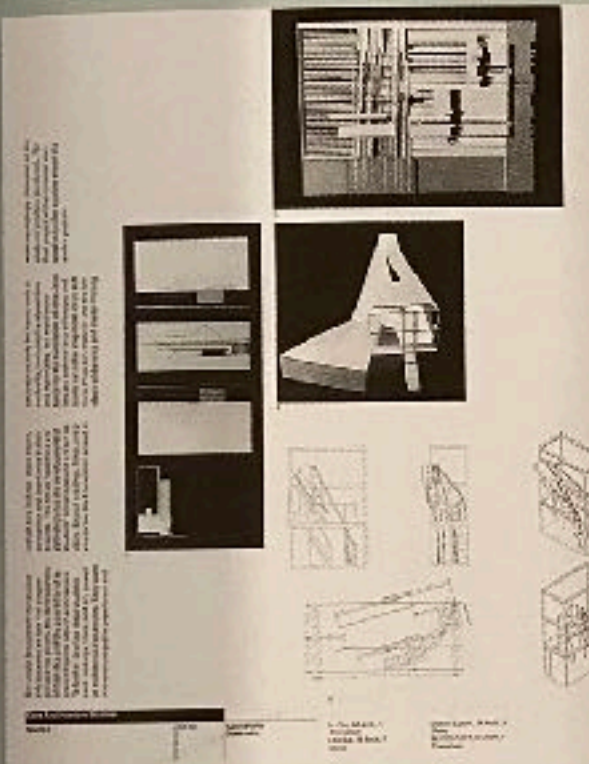
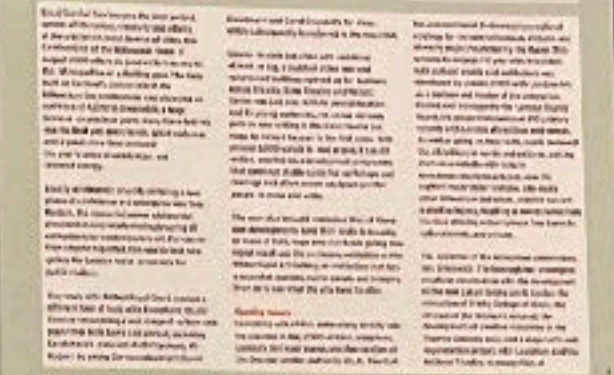
...the abstracted letters of this logo together create a maze of interlocking strokes and spaces that conceptually supports the narrative suggested by the client's name.  
Piscatello Design Centre / USA

A simple modular grid provides the basic component shape and organization of these sign panels. They can be combined in any configuration, for any given need at a particular location.  
Poulin+Morris / USA

vivacity still celebrating the new  
The vibrant world of the new millennium is characterized with a rich tapestry of vibrant colors and textures. The vibrant world of the new millennium is characterized with a rich tapestry of vibrant colors and textures. The vibrant world of the new millennium is characterized with a rich tapestry of vibrant colors and textures.

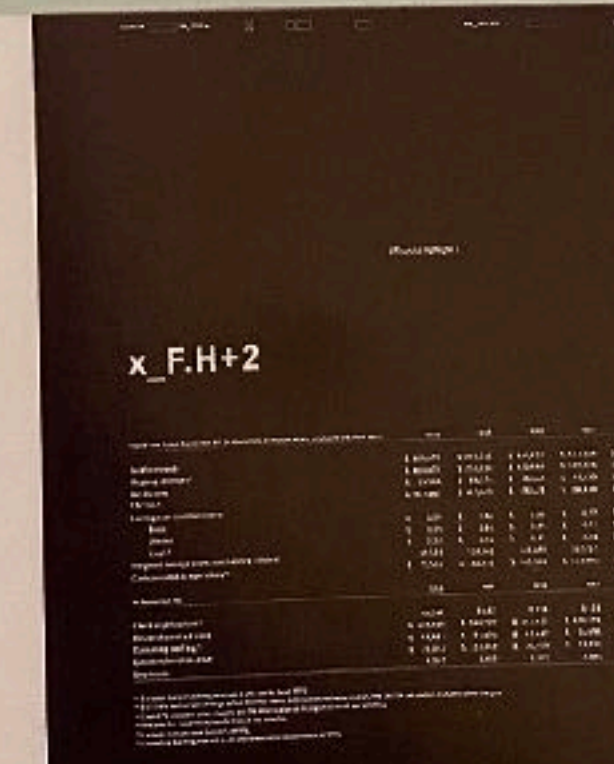
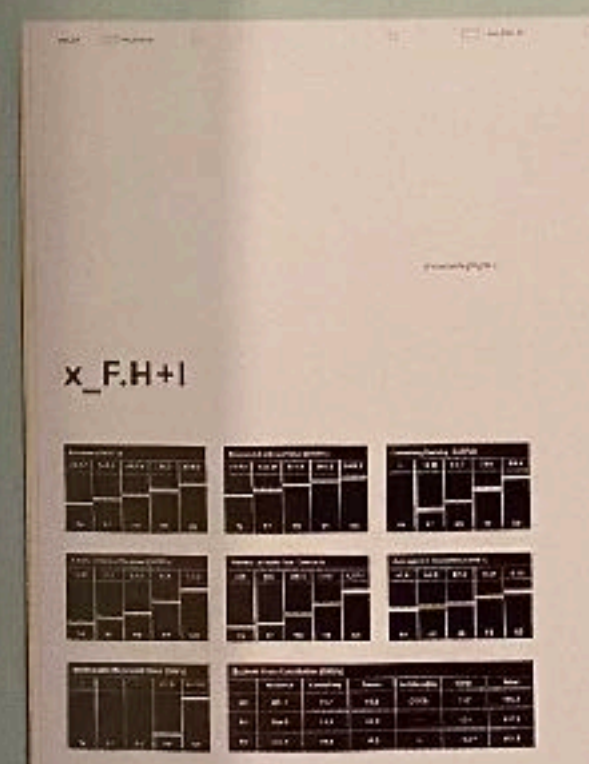


...the vibrant world of the new millennium is characterized with a rich tapestry of vibrant colors and textures. The vibrant world of the new millennium is characterized with a rich tapestry of vibrant colors and textures. The vibrant world of the new millennium is characterized with a rich tapestry of vibrant colors and textures.



Even a simple, or "loose," grid of three columns and three rows—referred to as a 3 x 3 modular grid—can give rise to a tremendous number of shapes in the way the modules combined.  
Why Not Associates

The exceptional precise, or "tight," grid here consists of 9 columns and 12 rows, or 126 modules on each page. A glance at the layout shows a variety of configurations in a range of positions and numbers of spatial zones—plenty of separation between each.  
Willi Kunz Studio

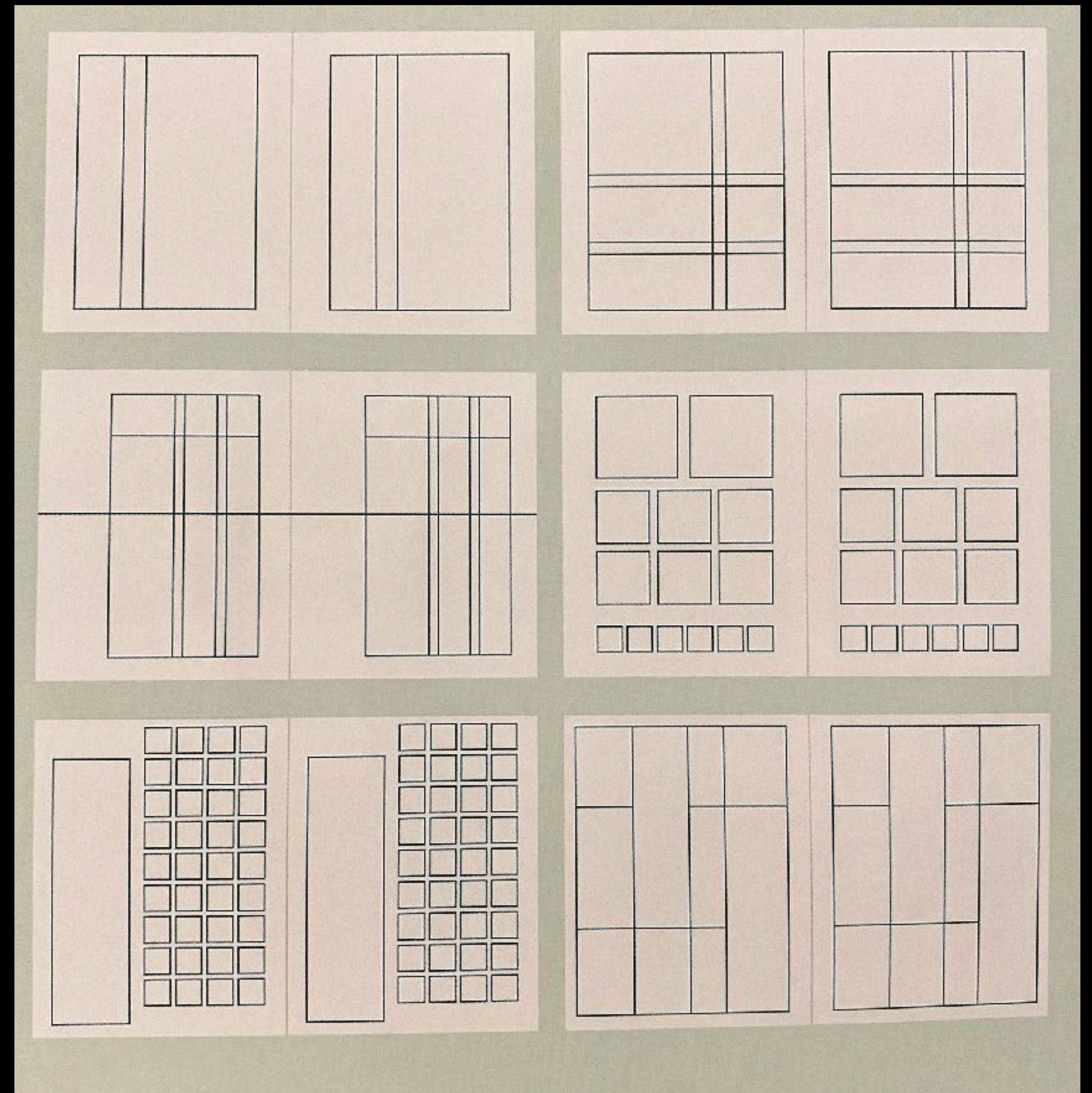


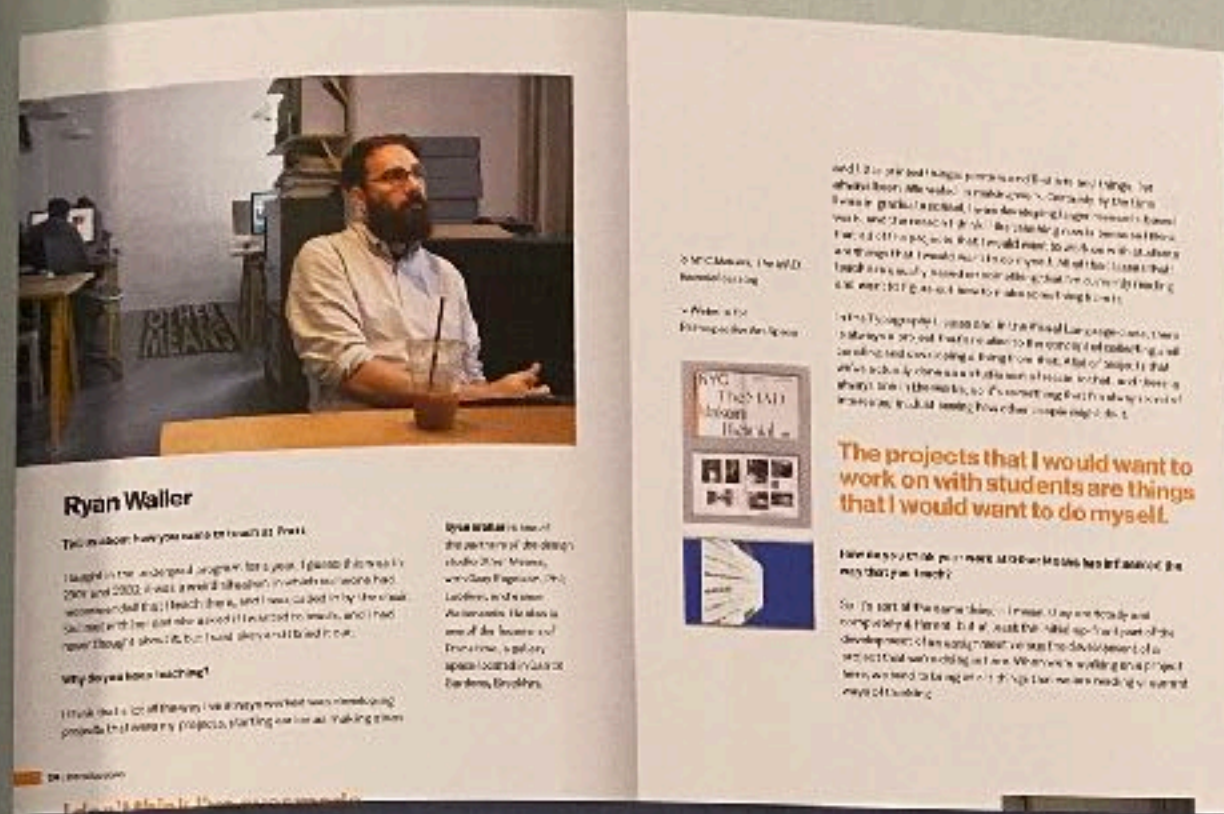
A modular grid lends itself to the design of tabular information, like forms, or so. The rigorous application of the grid helps integrate the surrounding image material.  
Cahan & Associates

# Grid Basics

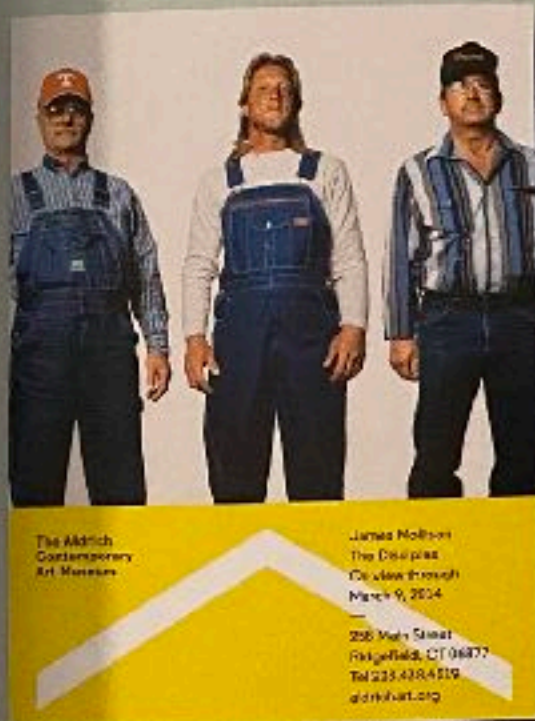
## The Hierarchic Grid

- Conform to the needs of the information they organize
- This is an organic approach to ordering information
- Column widths, the intervals between them, rows, etc may all vary depending on context and use



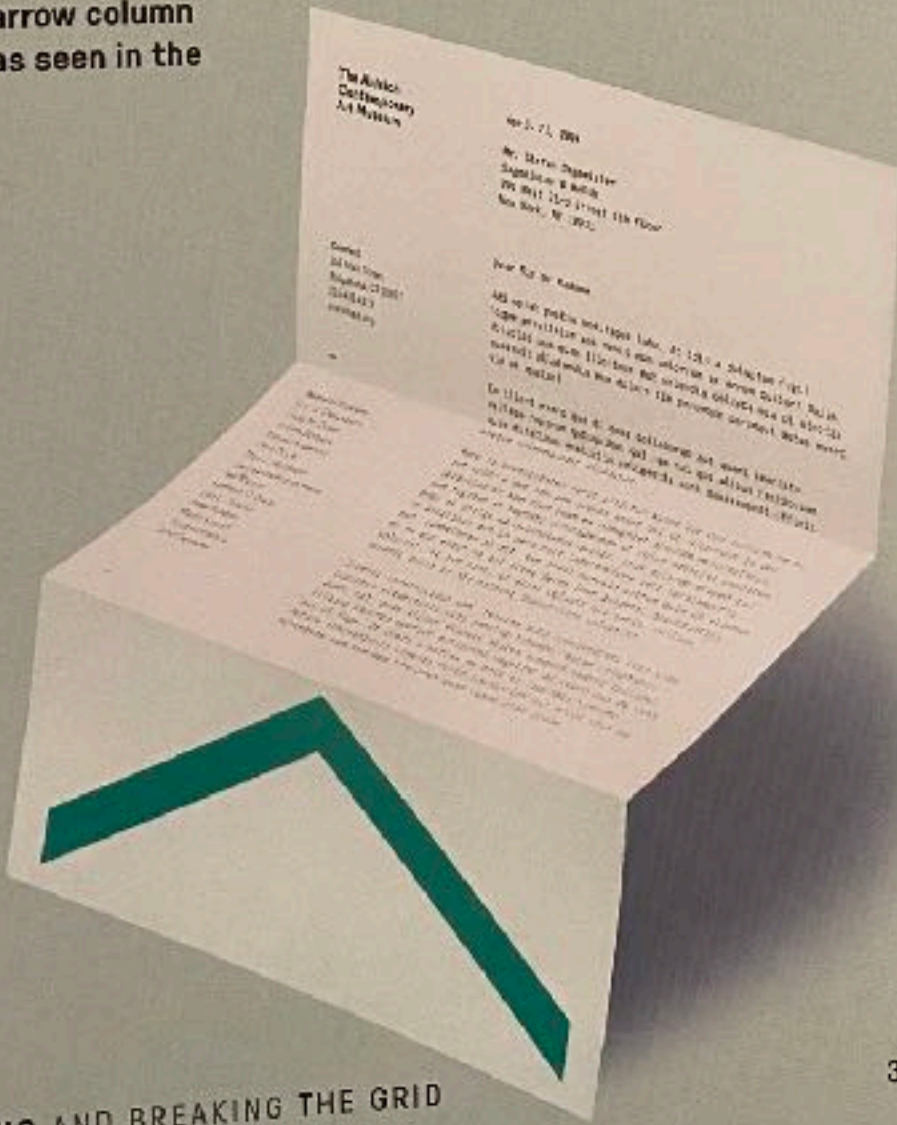
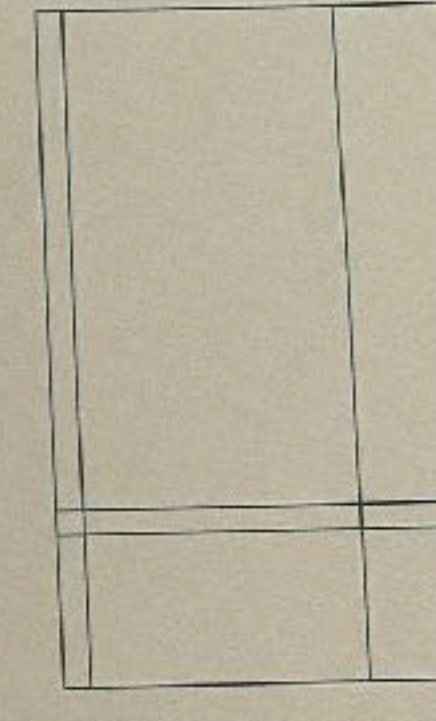


The hierarchic grid of this promotional book for a graphic design program orders information in two columns: a wide one for text and primary images, and a narrow one for captions and secondary, or support, images. The proportions of the two columns are independent of each other, and content can spread across the width of both columns combined. Level Design Group / USA



A simple hierarchic grid, consisting of a wide and narrow column—broken by a single flowline—is used to structure layouts for applications in this museum's identity materials. The grid's lateral orientation (wide column left, narrow column right, as seen in the

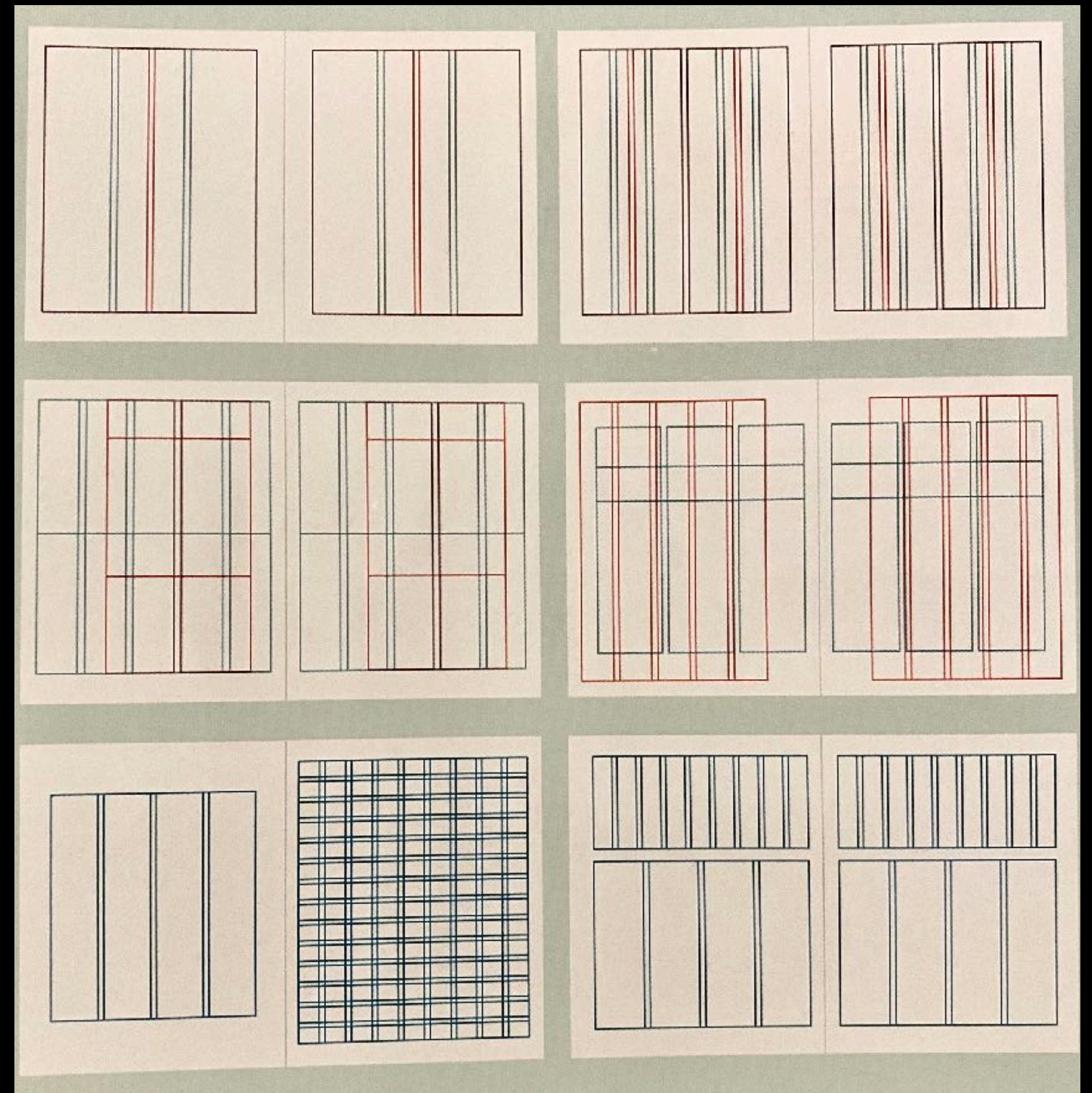
brochure covers) is flipped in the opposite direction when applied to the design of the letterhead, below. Sagmeister+Walsh / USA



# Grid Basics

## Compound Grids

- Using multiple grids in the same project, either between sections or even within the same page
- Each grid can be assigned a particular kind of content to organize, or material can be articulated across divisions within the multiple grids



...and  
correspond to the  
dimensions of the



### SELECT RESEARCH HIGHLIGHTS

#### 1. ANGIOTENSIN

Each organ in the body depends upon a complex network of blood vessels to supply nutrients, oxygen, and to take up waste for excretion. The normal stages of blood vessel formation are controlled by several key signaling molecules. In 2000, Regeneron scientists have discovered an entirely new class of molecules, called the Angiotensins, which work in conjunction with ACE2 to form mature blood vessels.

Based on this insight, we have begun to explore the amount of food, growth factors, or chemical cues that lead out of these vessels into surrounding cells. This process is called "vascular permeability," and is a good model for how permeable blood cells and

other molecules can leak out of the vessels in acute and chronic damage. In 2009, Regeneron made an important discovery that Angiotensins can influence the permeability of the vascular system. In 2000, we demonstrated that administration of Angiotensin can both stimulate the survival of blood vessel cells and prevent inflammation. Based on this information, Regeneron is evaluating the potential for an Angiotensin-based drug to treat diseases where permeability is a problem, including stroke, sepsis, and chronic hemorrhage.



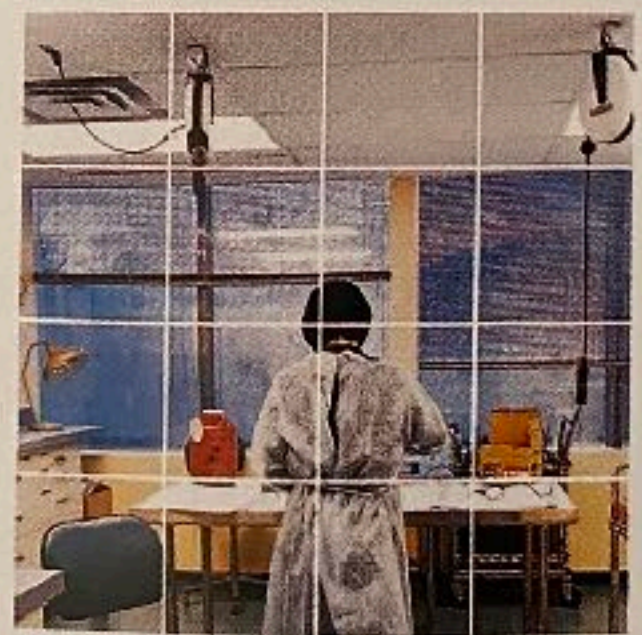
The image shows a cross-section of a blood vessel. The first image shows the vessel wall, the second shows the vessel lumen, and the third shows the vessel wall with a white box highlighting a specific area.

#### 2. MUSCLE PROTEASOMES

There are very few therapeutic agents available to address the pain of conditions that cause a loss of muscle mass. Large muscle atrophy or sarcopenia, which is often associated with aging, can lead to a loss of strength and ability to perform daily activities. In 2009, we discovered that muscle atrophy is associated with an increase in the activity of a specific proteasome, a protein complex that breaks down proteins. In 2010, we discovered that muscle atrophy is associated with an increase in the activity of a specific proteasome, a protein complex that breaks down proteins. In 2010, we discovered that muscle atrophy is associated with an increase in the activity of a specific proteasome, a protein complex that breaks down proteins.

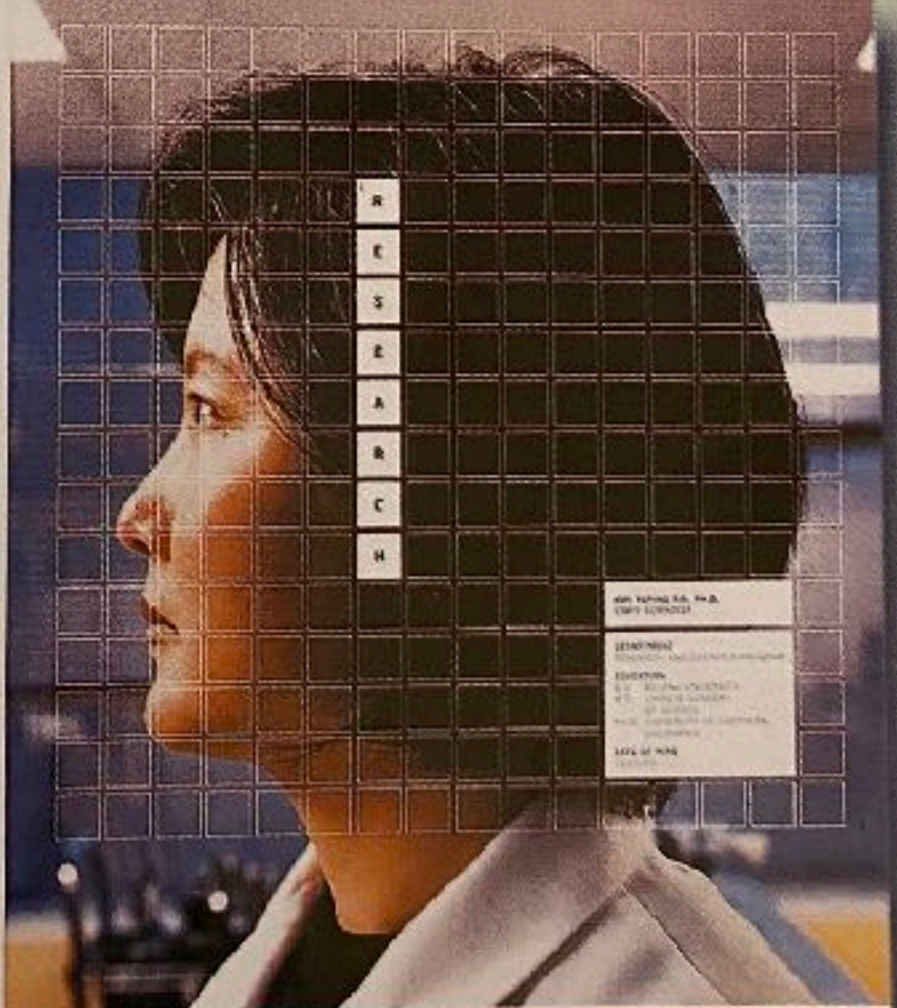
#### 3. REGENERON ORPHAN RECEPTOR 1 (OR1)

Orphan Receptor 1 is a protein associated with aging that causes atrophy of the joint cartilage. Our scientists have discovered the mechanism of action of Regeneron Orphan Receptor 1, which has the potential to improve cartilage. In 2009, we discovered that Orphan Receptor 1 is a protein associated with aging that causes atrophy of the joint cartilage. Our scientists have discovered the mechanism of action of Regeneron Orphan Receptor 1, which has the potential to improve cartilage.



#### C. RESEARCH

Led by Dr. George Khoury, Regeneron Research Laboratories has generated the array of product candidates that fill our pipeline today. It is composed of approximately 200 patented and dedicated scientists, including over 100 M.D.'s and 100 Ph.D.'s, and is supported by some of the most talented scientists in their field. We have exciting research programs underway in areas where there are clear market opportunities, including obesity, inflammatory diseases, cancer, asthma, angiogenesis, blood vessel damage and leak, muscle atrophy, liver fibrosis, neurodegeneration, and bone disorders. Certain of these efforts are conducted in partnership with Procter & Gamble as part of our long-term collaboration. We also collaborate with Merck Inc. to develop monoclonal antibodies as potential drugs.



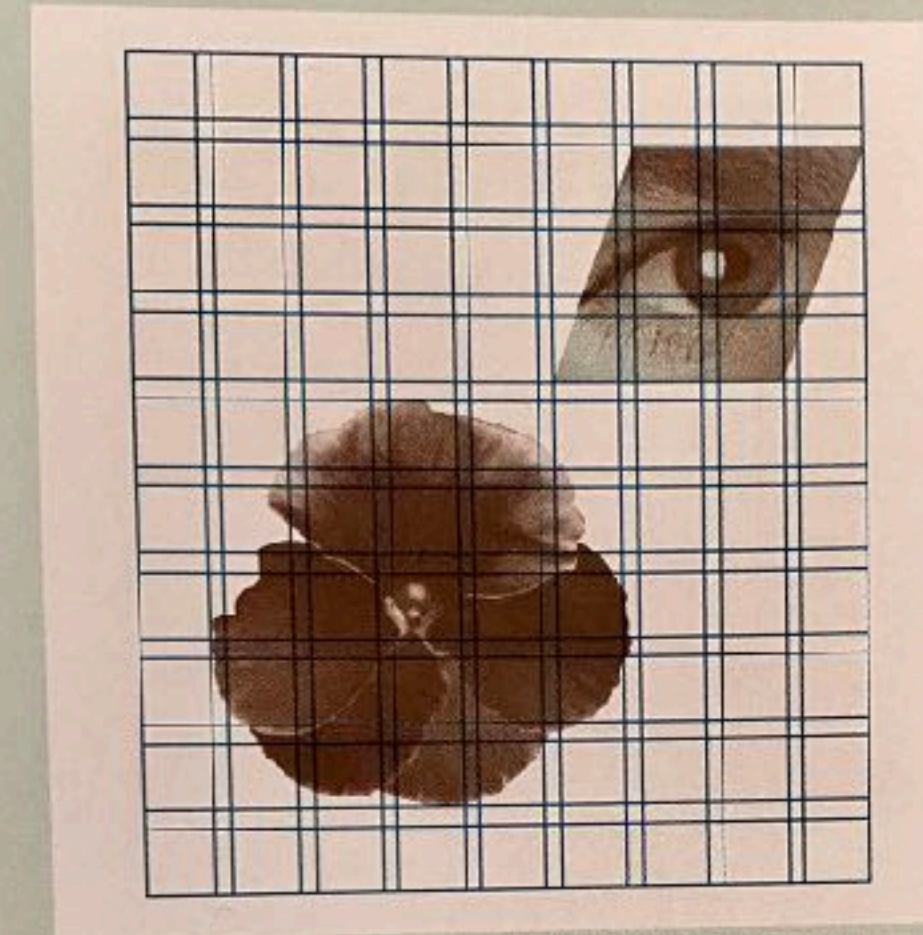
"WHAT EXCITES ME ABOUT WORKING IN THIS LAB? OUR COLLECTIVE DRIVE TO EXCEL. THIS IS A TEAM. WHEN WE MAKE A BREAKTHROUGH IN ONE AREA — SAY, DEVELOP A NEW DRUG DISCOVERY TECHNOLOGY — IT LEADS TO BREAKTHROUGHS IN OTHER AREAS. WE'RE ALL IN THIS TOGETHER."

# Grid Basics

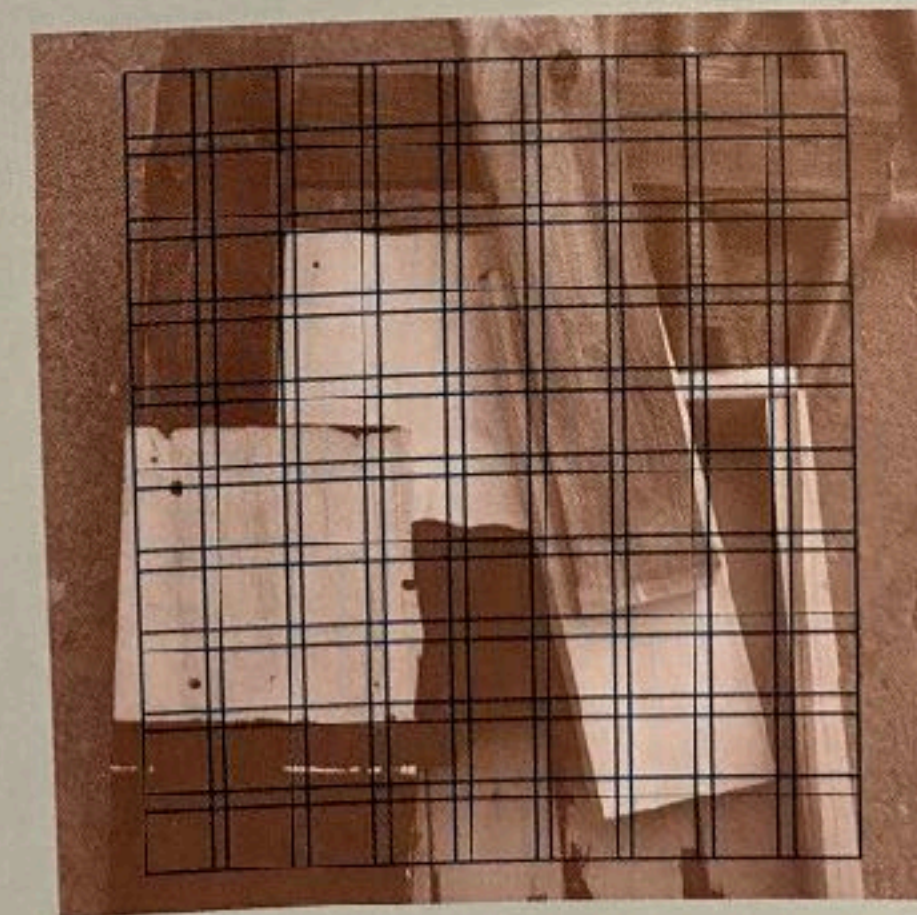
## Image Behavior

- The basic rule is: The edges of images align with the edges of columns, left-to-right, and they align with the edges of rows, top-to-bottom.
- It is OK for images to overlap each other, and to bleed off the page (even across the page gutter) - so long as they adhere to the column and row alignments

### Silhouettes and Full Bleeds



Silhouetted images and those cropped into irregular shapes are perfectly fine, but the designer must ensure that they “feel” as though they’re aligned with guides or that they’re proportionally related to grid widths and depths—which means “eyeballing” them until they look right.

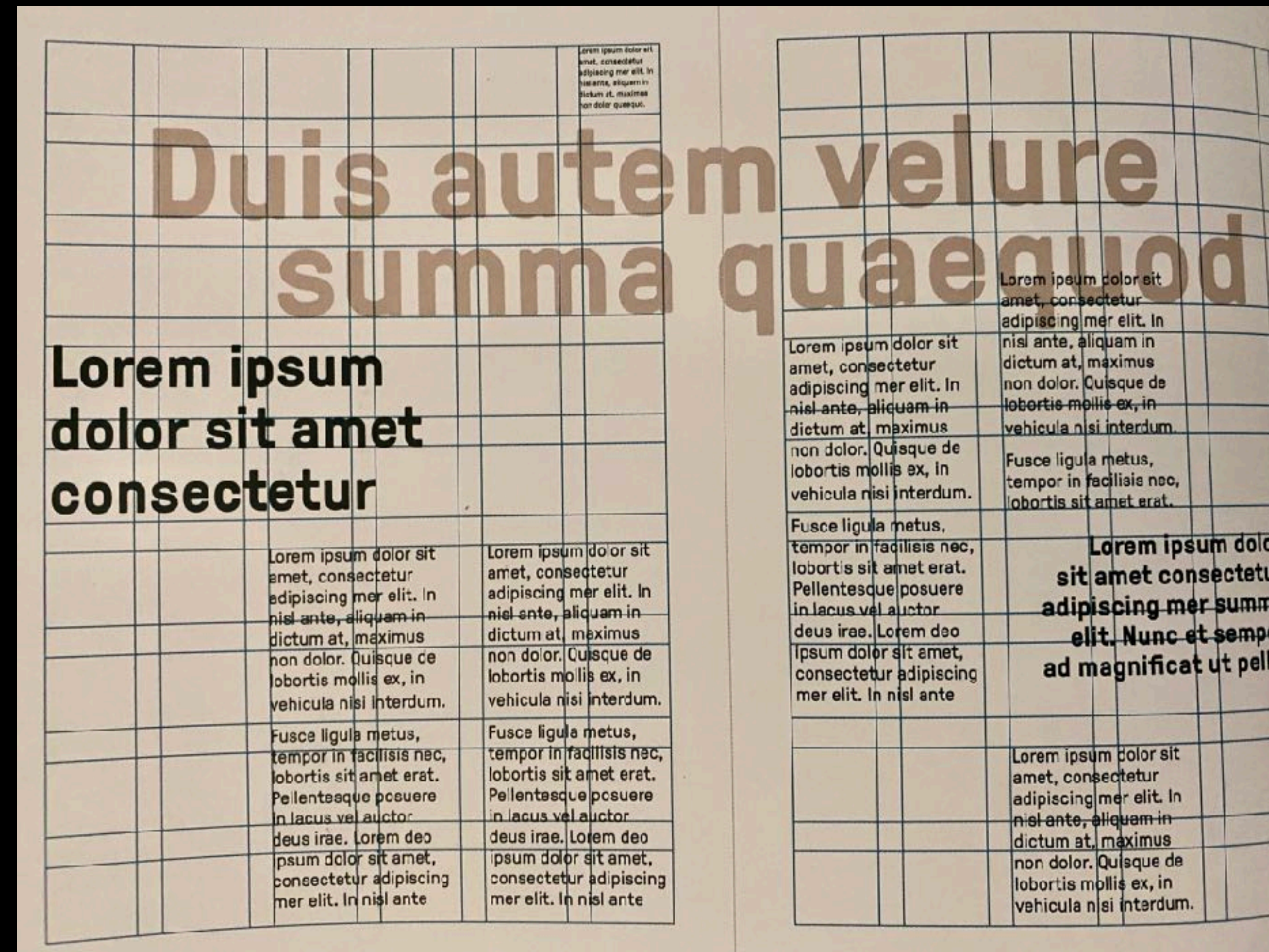


Images that fill an entire page or spread from edge to edge can be made to relate to the underlying grid through careful sizing and cropping—so that key visual features align with a column or row guide, or refer to widths or depths evident in adjacent elements.

# Grid Basics

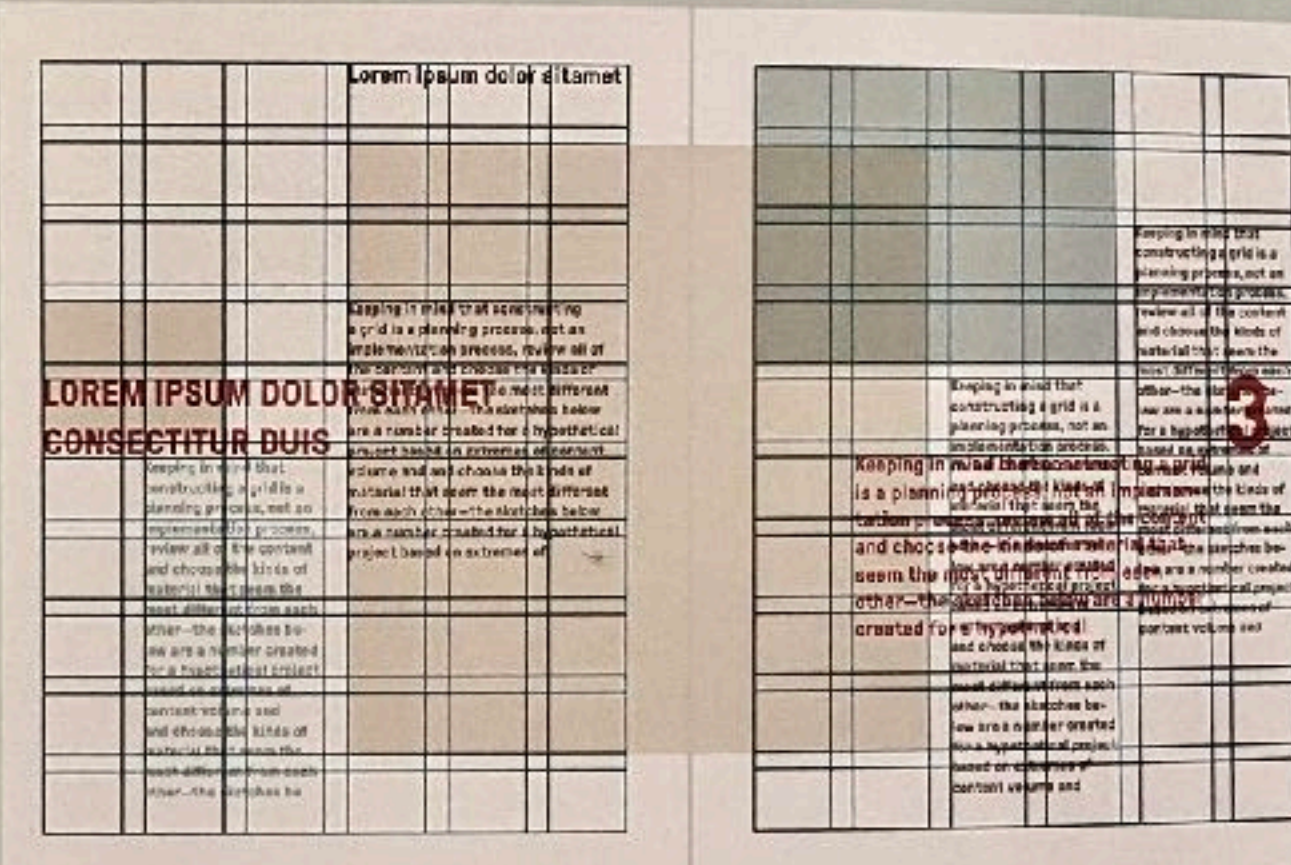
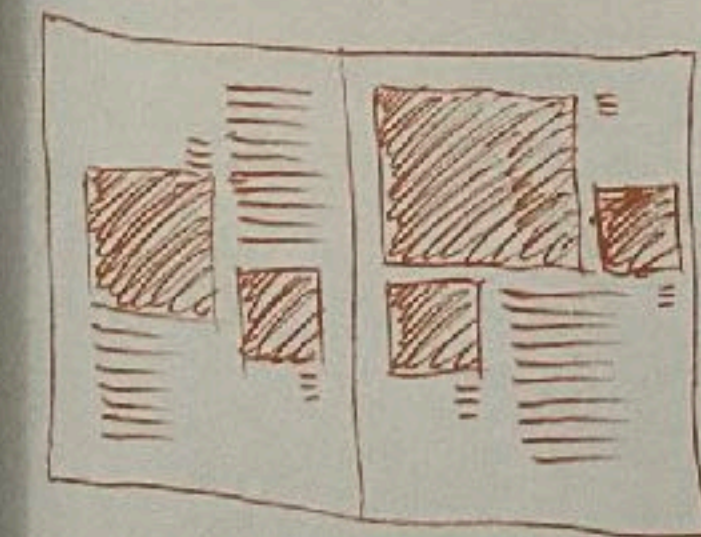
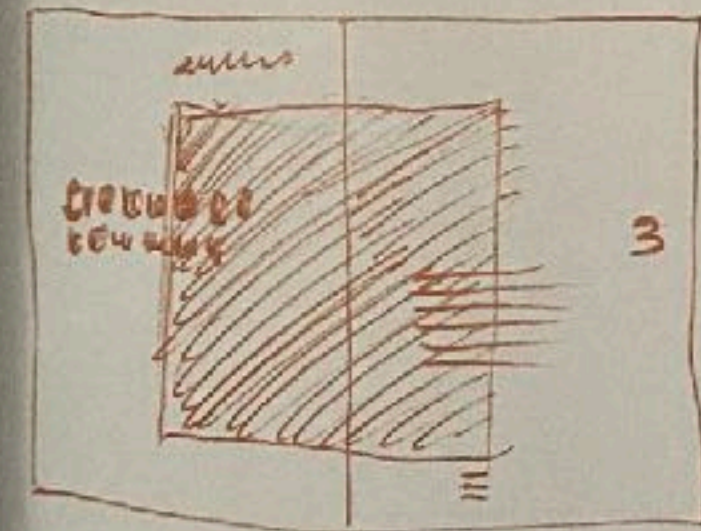
## Text Behavior

- Similar to Images, Text should correspond to a grid's alignment
- The possibilities for how type may be shaped on a grid - are endless
- The grid's organizing logic not only promotes visual flexibility and contrast, but clarity of informational hierarchy



Keeping in mind that constructing a grid is a planning process, not an implementation process, review all of the content and choose instances that differ most widely—the sketches below were created for a hypothetical project based on extremes of content volume and kind.

Working by hand (yes!) frees one from the mechanical qualities of working with mouse and software, and working small prevents getting overly invested in details. The sketches are very raw, but an overall visual concept is clear enough to proceed to the next step.



Scan the sketches (or, if working digitally, export PDFs from the page layout program and then convert them to image file formats). Within image-editing software, overlay the sketches transparently so as to see the elements through all the layers [top image].

You'll discover some corresponding alignments and proportions between elements from different layouts. Most likely, there will also be elements that don't match up. Working from those that do and adjusting those that don't—splitting the difference between

some that are close—construct a column grid and add any flowlines that the composite suggests, or convert it to a modular grid for more precise, detailed control and flexibility.

Nothing, though, can truly replace up-front planning...