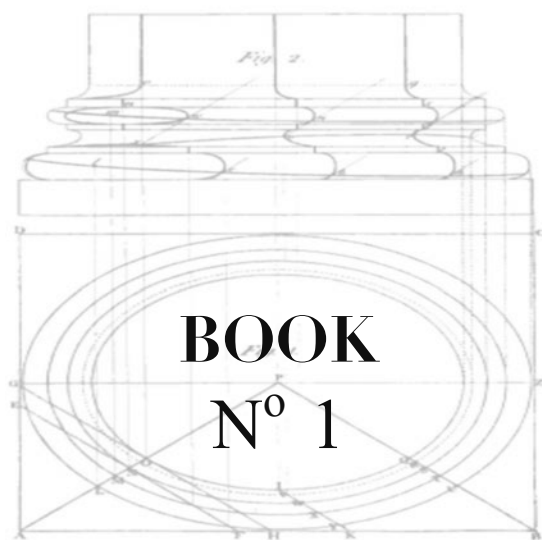


simple RULES

... in building,
art & life ...



London, Published June 1852 by W. Storer & Co. 15

Simplicity is the heart of elegant proportion

SHANNON TAYLOR SCARLETT

Simple Rules is a new kind of builder handbook/design guide.

Inspired by long forgotten sources, the design content included here—timeless composition principles, elegant proportional systems, building techniques and formulas for making buildings more beautiful—is intended as a guide for the modern builder who cares about aesthetics and meaning as much or more than the bottom line.

In this small guide a few select concepts and techniques, salvaged mostly from 18th, 19th and early 20th century builder pocket references and architectural guides, have been resurrected and abridged—or interpreted where possible—for practical use by the 21st century architect and homebuilder.

Simple building practices like the traditional design principles and conventions included here were used in the past to make places that were at once familiar and meaningful, sensible and beautiful. While there is a focus on American vernacular building traditions, most of the ideas here are universal. The design concepts are equally applicable to modern design. In fact, they are intended to serve as archetypes for a new modern architecture, to free builders from the need to simply replicate old styles.

Revealing and instructive for homeowners as well, this collection of rules and traditions should prove handy to anyone involved in residential design, home construction, finance or purchase; inspiring to artists and craftsmen; and appealing to the armchair architect, and others who simply enjoy thoughtfully designed homes.

Shannon Taylor Scarlett, Architect
March 2014

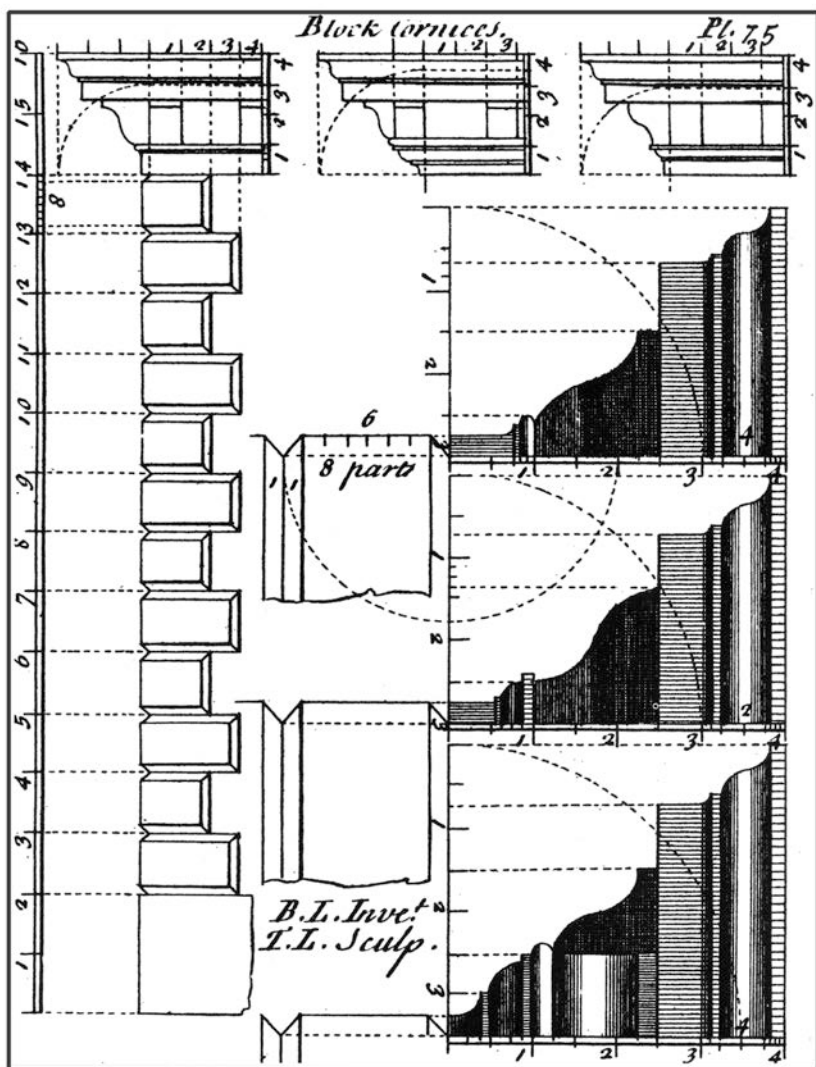
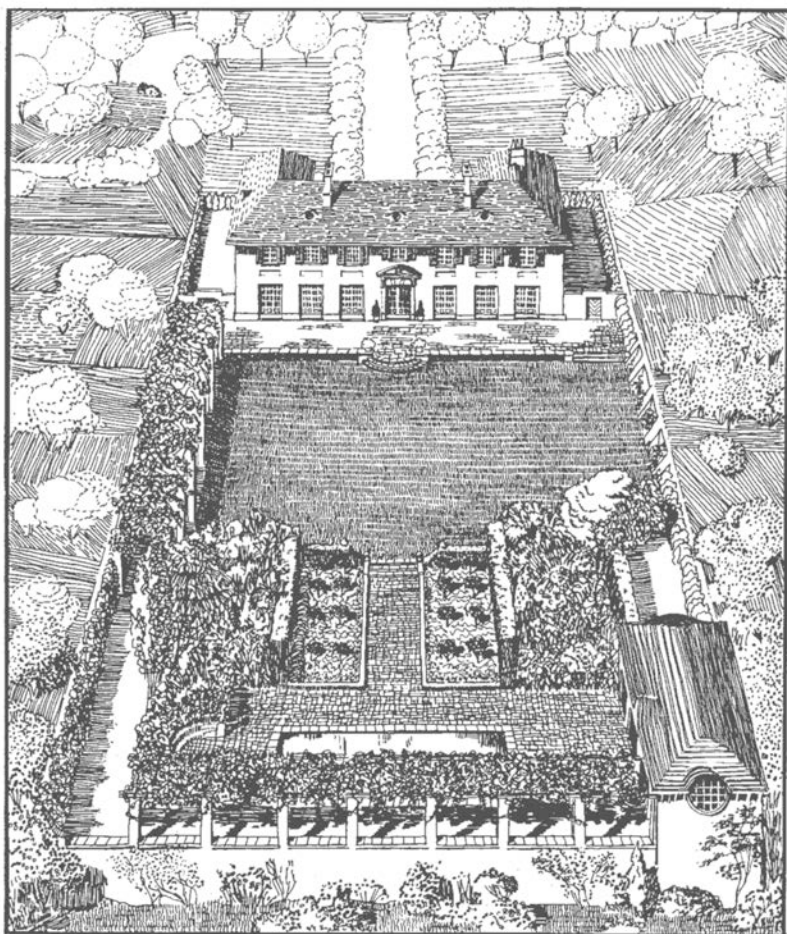


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House and Garden

(Note: All illustrations have been copied from old books, trade journals and design guidelines. Most images were created a hundred years or more ago; and some are copies or reinterpretations of much earlier architecture.)

Introduction

Like the 1896 guide, *Modern Carpentry and Building*, “This book is intended as an aid to the workman, a veritable handy book to be carried in his coat pocket or in his box of tools, ready for instant reference, not left at home.”

The contents differ for the modern user only in familiarity, as these foundational design principles regarding aesthetics, symbolism and meaning of place were for the old-timer carpenter, simply routine. Unfortunately, these principles began to lose their footing in the late 1800s, when building practices shifted toward more commercial technologies. Today this design wisdom is inaccessible to the average homebuilder; even architects would do well to study these rules.

Handbooks illustrating what was once common knowledge pertaining to design aesthetics, balance and rules of composition—aesthetic qualities Talbot Hamlin described in *The Enjoyment of Architecture*—eventually became overshadowed by charts, formulas, and practices geared toward new materials, and economical building systems:

“The dominant qualities that are common to all beautiful and unified buildings [are] so uniform that they have been codified into laws, or perhaps more really, rules of artistic composition. If they are once understood and applied, sound criticism is the inevitable result, so it is necessary that they be carefully considered.

They are, in brief, the laws of balance, rhythm, good proportion, climax (centre of interest), and harmony... these laws or rules, deduced from good buildings, are practically the same as the laws that govern good literature or good music; that seems sufficient commentary upon their validity.”

The aim of this book is to remind everyone in the building community that simple beauty and meaning—traits common to most old buildings—is still reproducible in new homes, and that many traditional building techniques are still applicable in today’s economy, and within current construction practices.

Learning the principles underlying the design and construction of those old buildings does require a time investment, but the effort pays off once the rules that focus on quality become internalized and routine. These rules—united with the functionality, building materials and details relevant to modern life—help make good design simple.

STRENGTH, UTILITY, AND BEAUTY

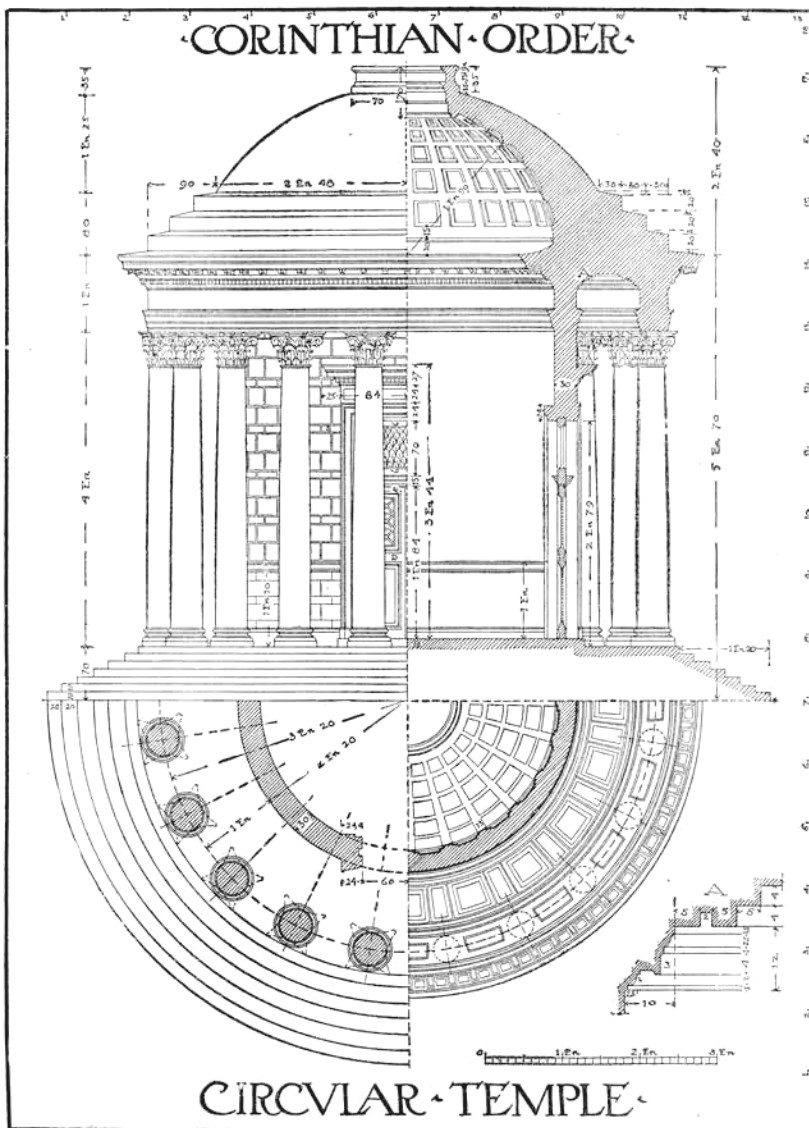


PLATE XXXI.
(A reproduction at small size of Portfolio Plate XXXI.)

simple

RULE

1

STRENGTH, UTILITY, BEAUTY

“All architecture should possess
strength, utility, and beauty.”

~ Vitruvius

Vitruvius Pollio, Marcus (c80 BC- c15 BC) wrote *De Architectura*, the first and most famous treatises on architecture. Based on Greek architecture, the ten books codified the theories guiding Roman architecture of his time. He described a geometric relationship between nature, architecture and the body of man, which was the basis of the famous DaVinci drawing of the Renaissance man inscribed in a circle and square.

STRENGTH, UTILITY, BEAUTY

Strength arises from

carrying down the foundations to a good solid bottom, and from making a proper choice of materials without parsimony†

Utility arises from a

judicious distribution of the parts, so that their purposes be duly answered, and that each have its proper situation

Beauty is produced by

the pleasing appearance and good taste of the whole, and by the **dimensions of all the parts being duly proportioned to each other**

† *parsimony: economy of means, cost-cutting*

~Marcus Vitruvius Pollio
De Architectura, Book

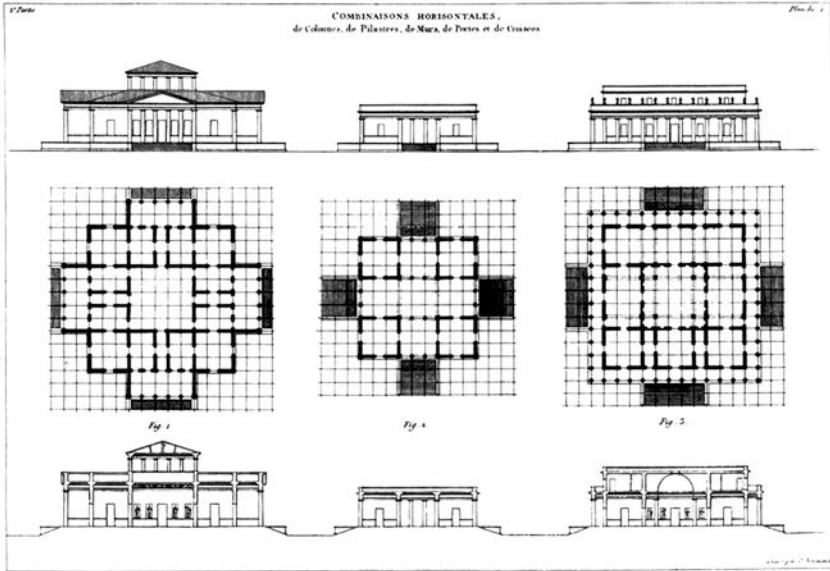
ONE MAIN DESIGN



·FRONT ELEVATION·

“As one principal figure
should always stand out as
the foremost, ...to which
all subordinate purposes
should contribute and lend
their aid.”

ONE MAIN DESIGN

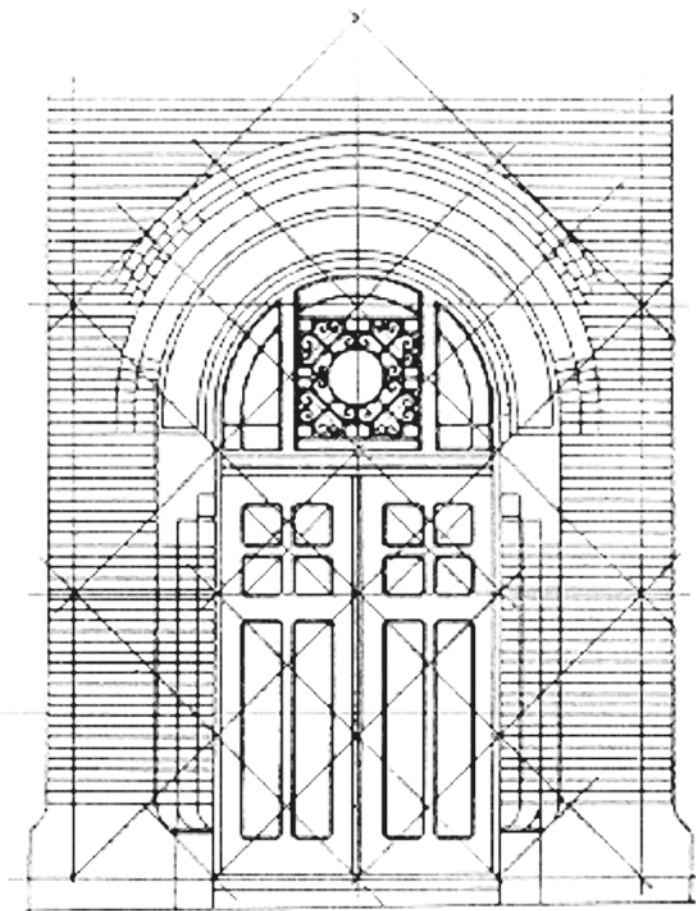


Jean-Nicolas-Louis Durand
Recueil et parallèle des édifices de tout genre (1801)

Durand explored—with his diagrams of known buildings all drawn at the same scale—the concept of typology, looking for common structural types and forms

Durand, Jean-Nicolas-Louis (1760 –1834) was a French architect, author and instructor of rational design through typology. He developed a Neoclassical system of architectural design that employed simple modular elements, that was viewed as a sign of the industrialized building components of the future.

PARTS ADAPTED TO WHOLE



“... the general vigour and impressiveness of the entire piece, is produced by the concentration together into one composition of a variety of different objects and circumstances which all tend to the same result...”

simple

RULE

3

PARTS ADAPTED TO WHOLE

“Each part of a complete
composition fits and adapts itself
to the rest; and each is essential
for the completion of the whole.”

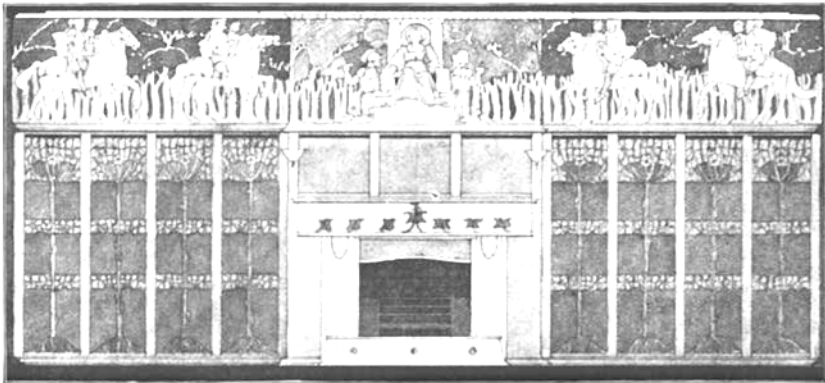
~ George Harris

PARTS ADAPTED TO WHOLE

“Parts in a composition should bear the same relation to one another, and to the principal figure or individual in it, as the different members of the same body, although varying extensively in their nature and purposes, and exercising very different functions one from the other, bear to one another, and especially to the head.

Although these several parts of the composition may be all actually disconnected, they are all related to each other. ... Like the different creations in nature, all bear their respective and appropriate parts in the same grand system...”

The Decoration of a Commonplace Room

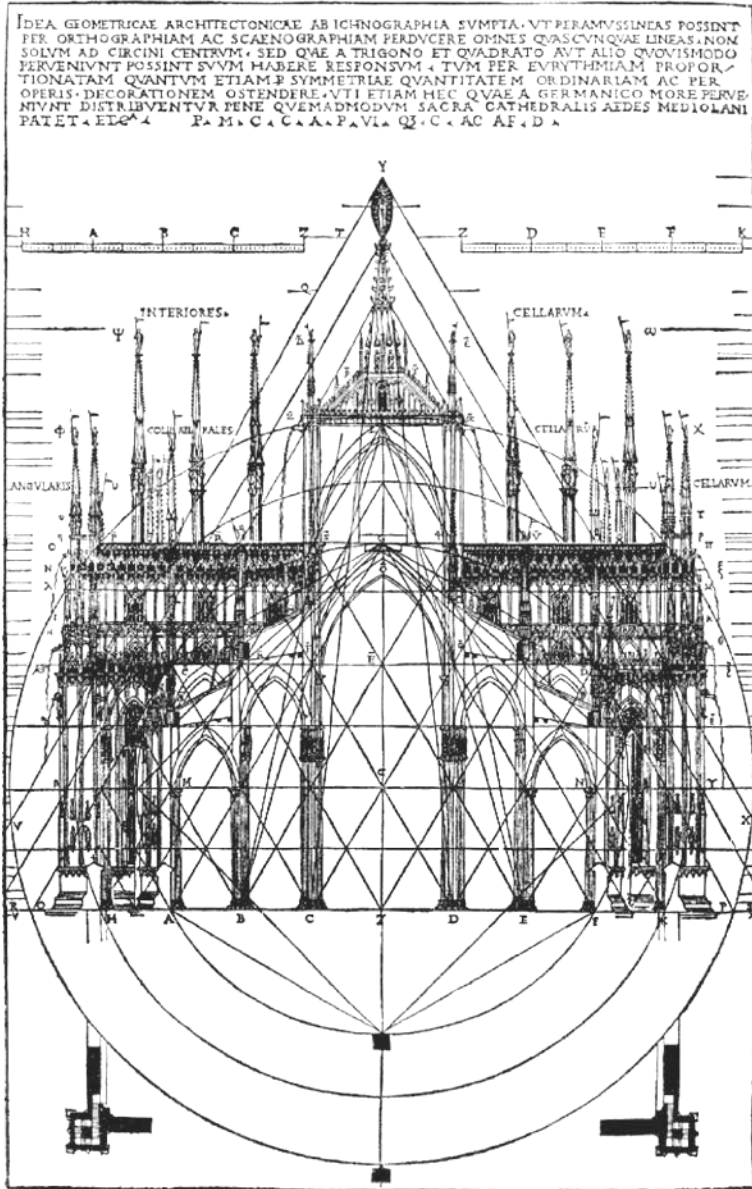


The Theory of the Arts: or, Art in Relation to Nature, Volume 2
~ George Harris

PARTS ADAPTED TO WHOLE

LIBER

PRIMVS



GENIUS OF THE PLACE



Dutch village town center, rooflines, building widths, gable details and crenellations, window type and spacing consistent



THREE DIMENSIONALITY



HAROLD KENNARD, ARCHITECT

equal distribution of detail and composition front and side, same roof form repeated, smaller side porch compliments front porch

simple

RULE

5

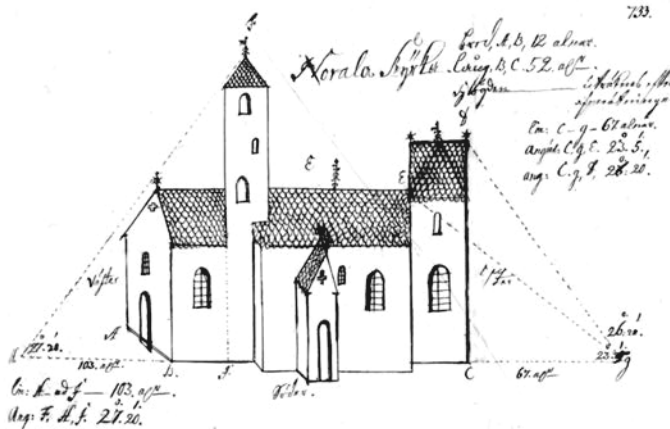
THREE DIMENSIONALITY

“Always keep in mind the perspective appearance when designing the exterior of a detached building, and not merely the front elevation.”

~ Richard Brown, Architect

Brown, Richard, Architect (*1800s*) English architect, author of domestic architectural pattern books

THREE DIMENSIONALITY



“...imagine the building as it appears to a person walking all around it... From every possible view a really good building must have balance, and this accounts for the comparative failure of some of our informal American country houses.

They seem manifestly to be designed with one view point, or two, in mind; from these points they are good, perfect in balance and composition, but from other points the same buildings are a mere hodge-podge, and they lack that little accent on the centre of balance given by a chimney or flower box, or some little point of interest, that would have made the whole seem balanced and in repose.”

~ Talbot Hamlin
The Enjoyment of Architecture

THREE DIMENSIONALITY

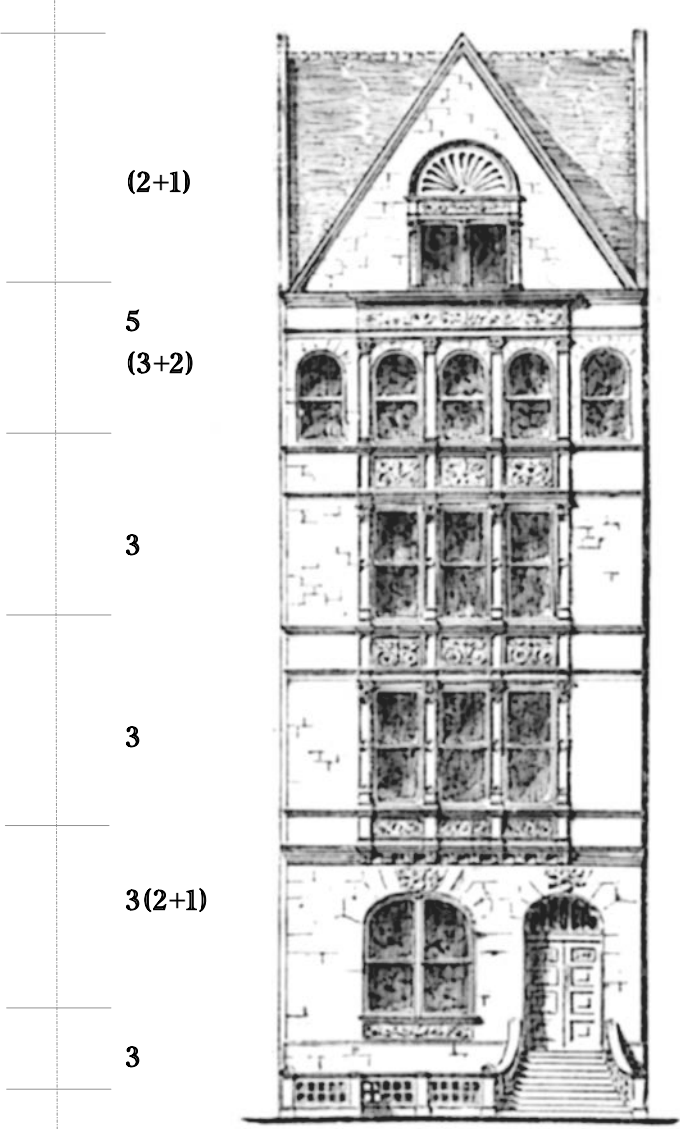


*side view is the first perspective seen as approached from the road,
porch entered both from sides and front*

“From every possible view
a really good building must
have balance...”

~ Talbot Hamlin

DIVISION IN 3 OR 5 PARTS



application of the composition of three and five parts

simple

RULE

6

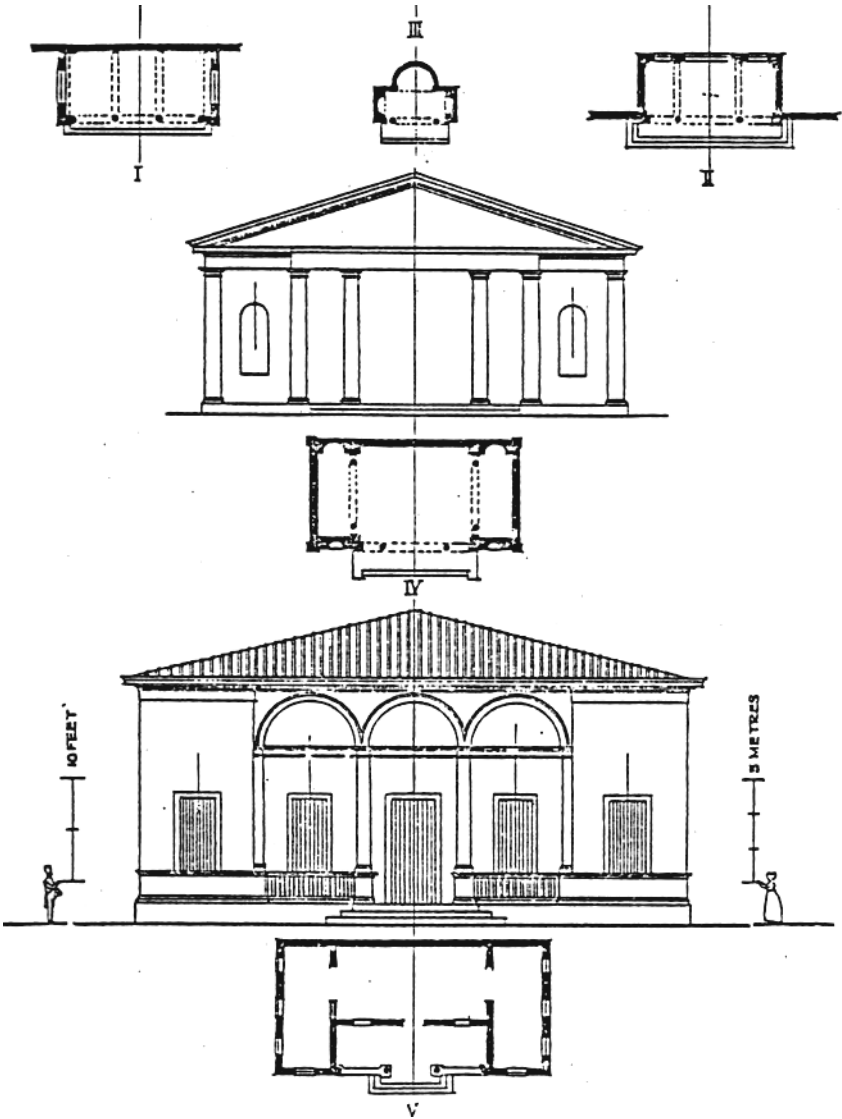
DIVISION IN 3 OR 5 PARTS

“simplicity, in the disposition of a great variety, is best accomplished by following nature’s constant rule, of dividing composition into three or five parts, or parcels”

~ Hogarth

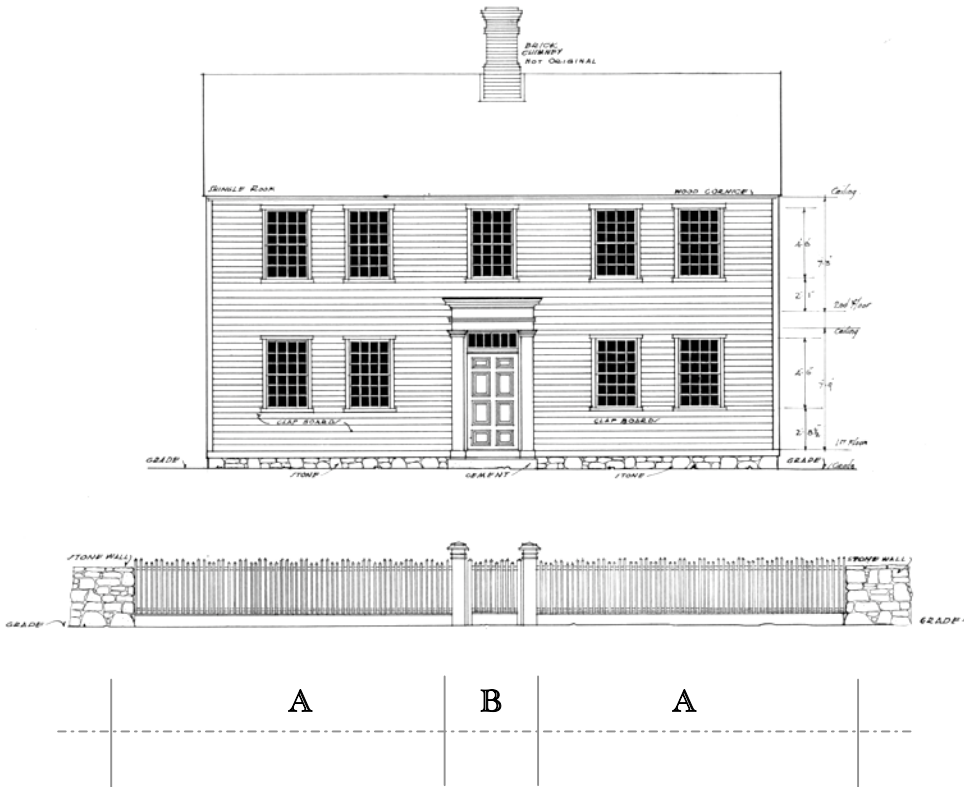
Hogarth, William (1697 –1764) was an English painter, printmaker, pictorial satirist, social critic, and editorial cartoonist credited with pioneering western sequential art. He published his ideas of artistic design in his book *The Analysis of Beauty*, where he professed to define the principles of beauty and grace.

DIVISION IN 3 OR 5 PARTS



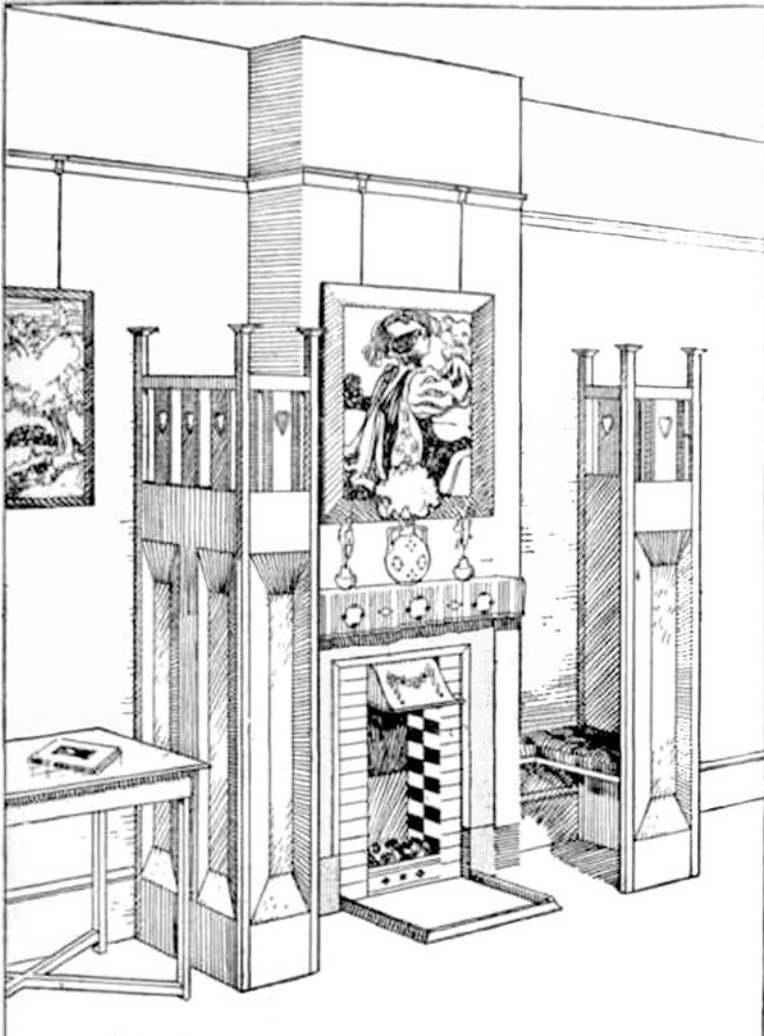
3 and 5 part Loggias
Elements of Form & Design in Classic Architecture

DIVISION IN 3 OR 5 PARTS



“three objects, the center one of which is emphasized, have great compelling power in artistic expression.” Hogarth

FOCAL POINTS



small fireplace becomes focal point of the room when benches are built-in either side to create an inglenook

simple

RULE

7

FOCAL POINTS

“The climax must be the most
interesting motive of the
composition.”

~ John Vredenburg Van Pelt

Van Pelt, John Vredenburg (1874 – 1962) was an architectural historian, author, and American architect active in early to mid-twentieth-century New York City.

FOCAL POINTS

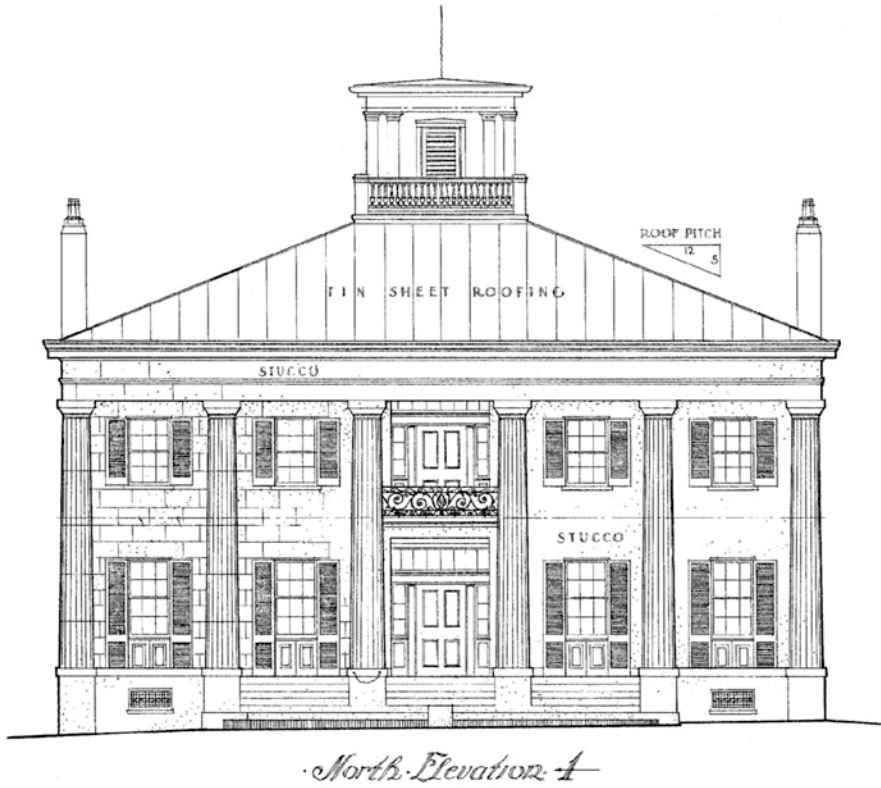
Six Laws of Composition

1. The interest must be focalized, and have its most *potent* expression in one point. ...the climax.
2. The number of secondary focal points must be reduced to minimum; ...and those, conceived primarily in regard to the climax and in their *comparative importance*, must work up to it.
3. Of the different minor elements ...each relating to its own especial focal point, must still feel the *influence* of the climax.
4. Different elements must balance in such a manner that the average of interest will fall in the middle of the frame... balance in relation to the *center of gravity* must be observed.
5. That the different elements of a composition ...may attain to the highest interest, they must *contrast* one with the other.
6. That unity exist in the composition, the laws of harmony must be observed; and *no foreign element* introduced.

~ John Vredenburg Van Pelt

A Discussion of Composition, Especially as Applied to Architecture

FOCAL POINTS



simple

RULE

8

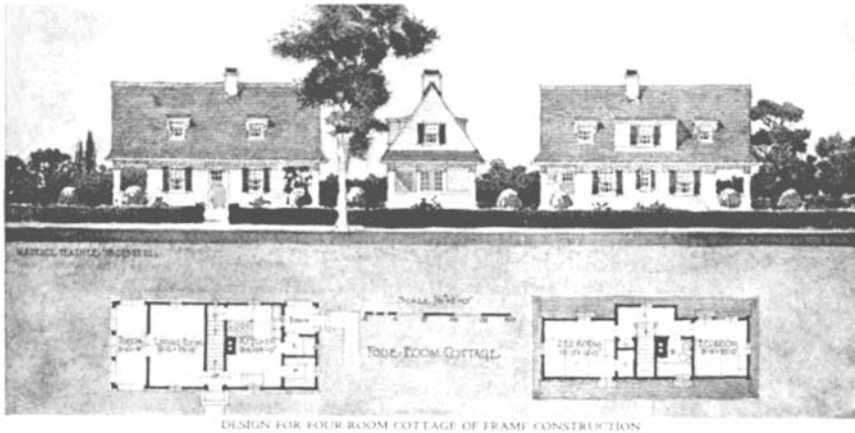
UNIFORMITY

“The law of uniformity applies in nature and design where the character, direction or relative position of the parts are mostly uniform.”

~ John Addington Symonds

Symonds, John Addington (1840 –1893) was an English poet, and literary critic, he was known for his cultural history of the Italian Renaissance. Wrote *The Principles of Beauty*.

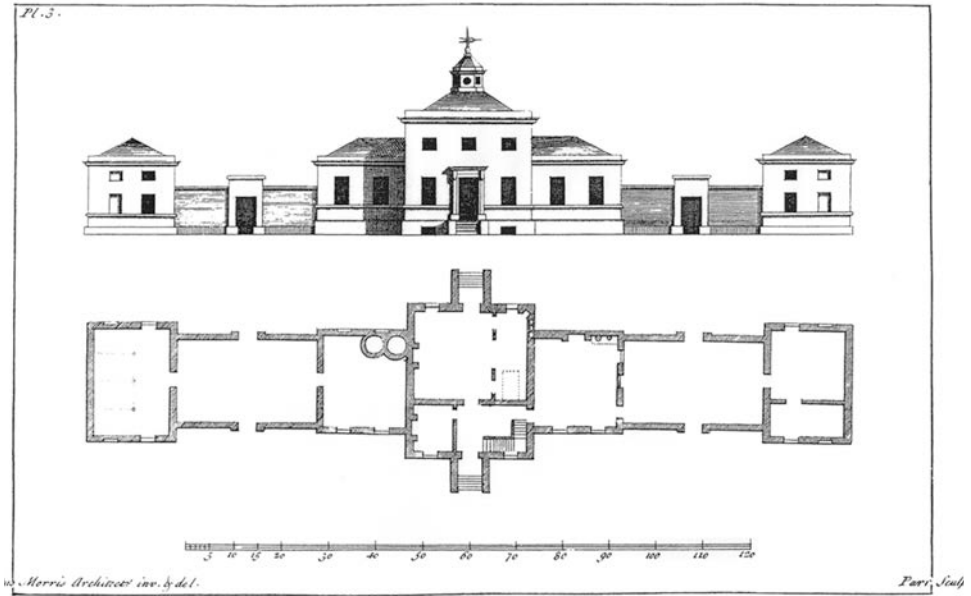
UNIFORMITY



one side corresponding to the other without strict symmetrical balance

“Even where variety of lines and forms is most natural, ...the arrangement is most agreeable to the eye, when, without formality, there is a certain degree of symmetry, as when one side... corresponds to the other, without conspicuously balancing it... where there is the greatest apparent diversity, it is easy to trace the law of uniformity.”

LAW OF BALANCE



Palladian style villa by Robertus Morris, Architect

“The simpler schemes are the most universally successful, and it becomes increasingly difficult to manage the whole composition as motives are added, since the increasing complexity makes it difficult for the eye to seize at once the inherent balance, which is such a large element in the beauty of the whole.”

simple

RULE

9

LAW OF BALANCE

“Every building should be so composed that the parts of it on either side of an imaginary line expressed in some manner in the design, shall be of apparently equal weight; and, the central portion, to be successful, must be strongly dominant.”

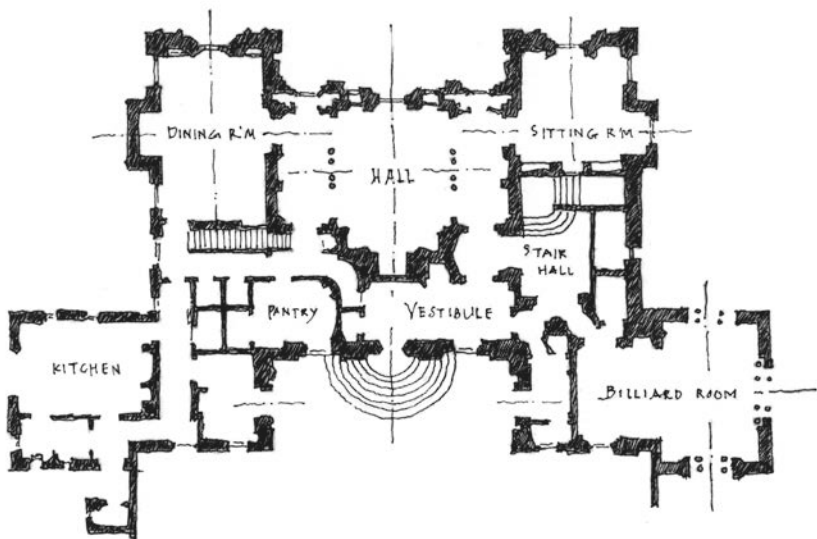
~ Talbot Hamlin

Hamlin, Talbot Faulkner (1889-1956) was an architect, author, architectural historian and educator, who wrote influential books on architectural design. He created the Avery Architectural Index while at Columbia University.

LAW OF BALANCE

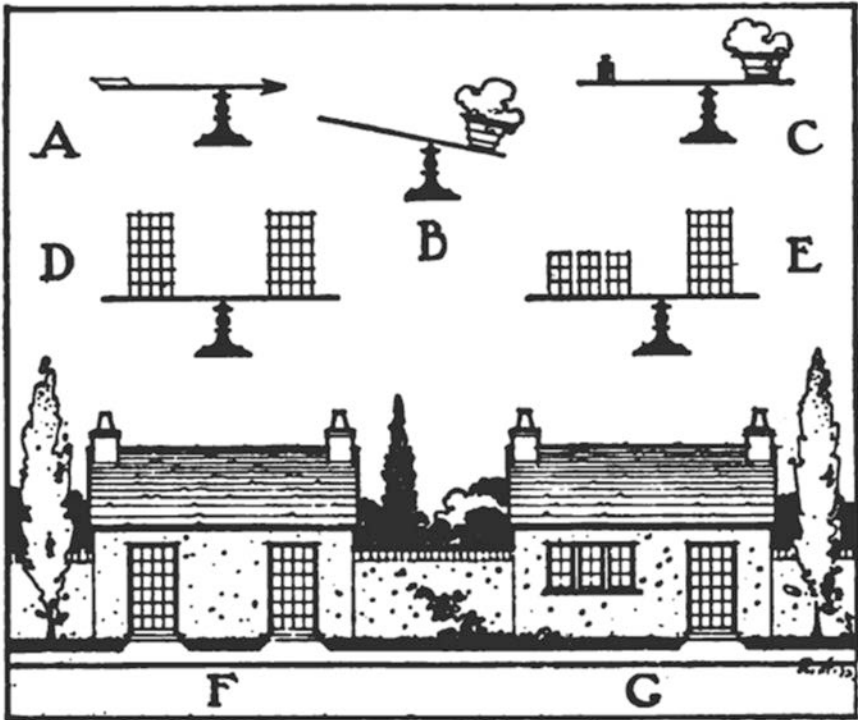
“A second scheme, a shade more complex, consists of a simple rectangular form in the middle, usually, but not always, long and low in effect, with a smaller, but strongly accented form at each end.

Without this additional weight at the corners the building would have had an undistinguished, indecisive air. There would have been always the feeling that there was no reason for the building ending where it did ...”



*Heathcote Manor, England
Edwin Lutyens*

LAW OF LEVERAGE



diagrams showing types of balance, imbalance

simple

RULE

10

LAW OF LEVERAGE

“Masses on one side of an interesting pivotal feature must have counterbalancing masses on the other side; shapes and positions of the masses themselves affect the balance.”

~ Talbot Hamlin

LAW OF LEVERAGE



L-shaped house with center entry; chimney balancing left side, arched window balancing composition on the right

LAW OF LEVERAGE

“First, a heavy member close to that interesting feature which expresses the centre of balance—the pivot, as it were—will counterbalance and be balanced by a long, low, lighter member further from that point.

Secondly, the shapes and positions of the masses themselves affect the balance. A member that projects forward always seems heavier than a receding member.

The best place on an “L” type building for the centre of interest is on the long side, near the angle, (the projecting wing, nearer the eye, seems heavier than the rest, requires a longer portion to balance it.)”



a.



b.

Fig. a.

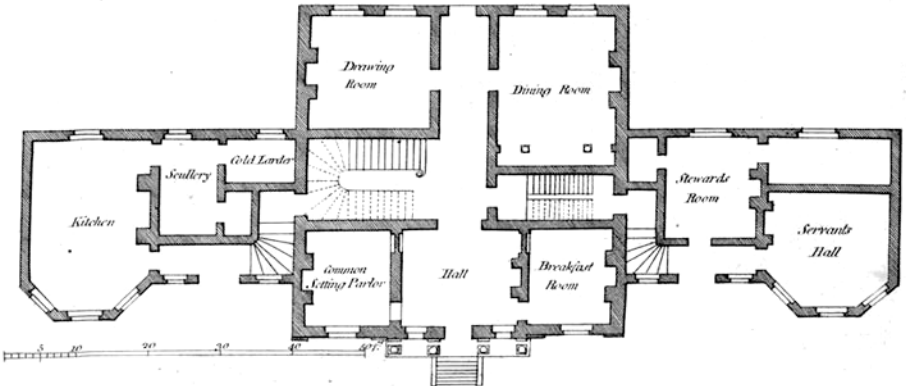
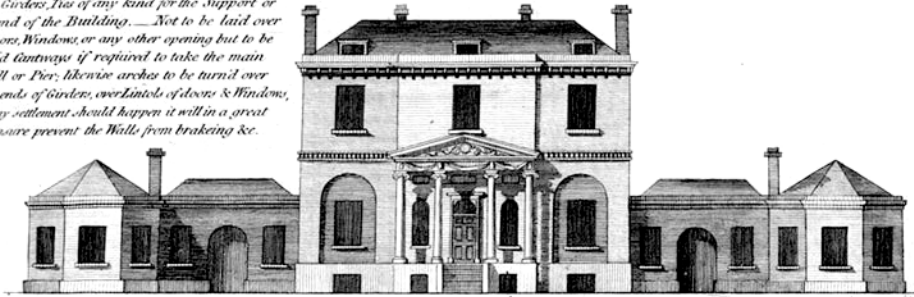
A balanced composition, where entry porch is the pivotal point of interest, with taller mass on the left balanced by a wider mass on the right.

Fig b.

An unbalanced composition, where entry porch is the pivotal point of interest, but both the taller mass and wider mass are both left of the main focus.

AXES

A Caution for laying in Timbers in Buildings, as Girders, Trusses of any kind for the Support or Bond of the Building. — Not to be laid over Doors, Windows, or any other opening but to be laid straightways if required to take the main wall or Pier; likewise arches to be turned over the ends of Girders, over Lintels of Doors & Windows, if any settlement should happen it will in a great measure prevent the Walls from bracking &c.



Published by W. Pain, August 24, 1780

William Pain Builder Handbook

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RULE

11

AXES

“Every building should be so composed that the parts of it on either side of an imaginary line expressed in some manner in the design, shall be of apparently equal weight; and, the central portion, to be successful, must be strongly dominant.”

~ Talbot Hamlin

ASYMMETRY



The Orchards CFA Voysey

simple

RULE

12

ASYMMETRY

Balance in Asymmetry: “the axis of balance must be expressed in some way, by door, or balcony, or porch, or some interesting feature.

This, perhaps, is the most important point of all. If the axis of balance is so expressed by such a feature of the building, the eye will be drawn to it at once, and, resting on it, will feel that the mass of building on each side is approximately equal. ”

~ Talbot Hamlin

ASYMMETRY



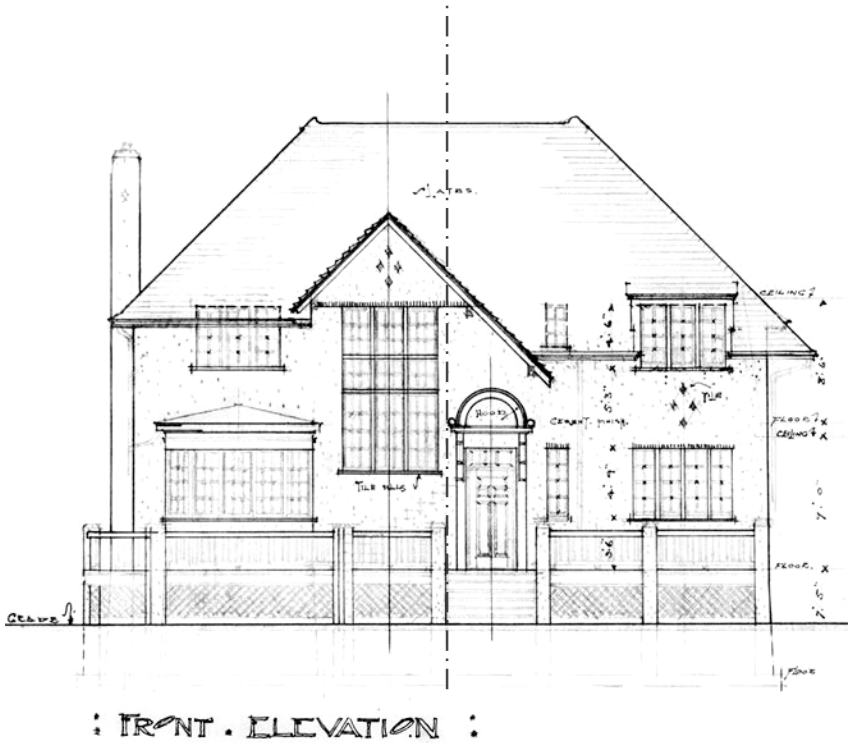
Where “the lack of symmetry is in certain details, rather than in scheme... if well carried out is always successful ... but balance and beauty result only when the mass of the two unsymmetrical parts is kept almost the same.”

~ Talbot Hamlin
The Enjoyment of Architecture

ASYMMETRY

“The balance of inclinations is felt more than the balance of shapes.”

~ Dr. Denmon Ross in *The Aesthetic Attitude* (1920)

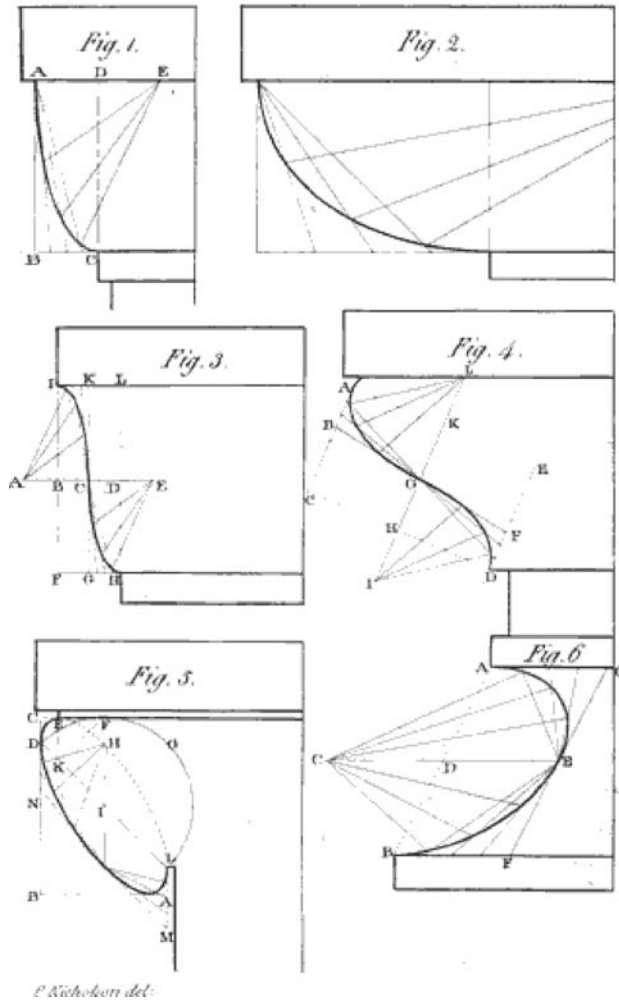


*asymmetrical but balanced composition:
doorway balanced by adjacent window in gable, curved bay window
balanced by composition of four grouped and one single window,
chimney offset with roof overhang and raised shed dormer*

MOULDING ASSEMBLY

“A profile is an assemblage of essential parts and mouldings.”

MOULDINGS



Grecian mouldings

simple

RULE

13

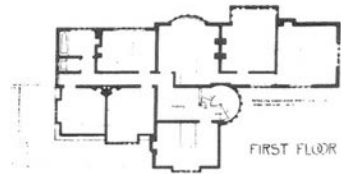
MOULDING ASSEMBLY

Proper Use of Mouldings:
“That profile produces the
happiest effect which is composed
of but few members, varied in
form and size, and arranged so
that the plane and the curved
surfaces succeed each other
alternately.”

~ Robert Griffith Hatfield

Hatfield, Robert Griffith, (1815-1879) Architect, Late Fellow of the AIA, Member of The American Society Of Civil Engineers, wrote a builder guide *The American House-Carpenter*, published in 1844.

PICTURESQUE



Artist's Cottage, (1885)
CFA Voysey Architect

simple

RULE

24

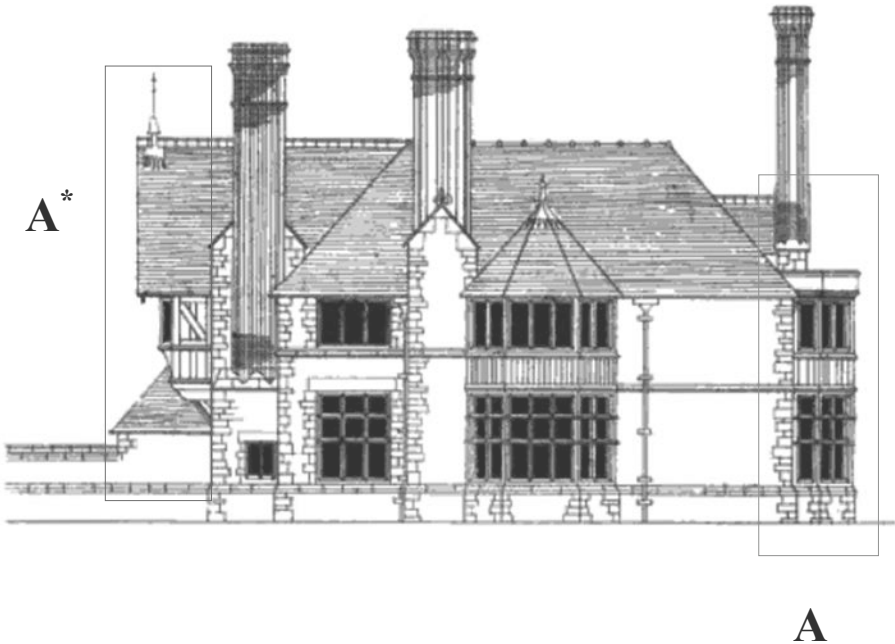
PICTURESQUE

“a principle... of picturesque
character [directs] a certain
subordination of the various parts
of a composition to one
predominant feature or group.”

Sydney Smirke, Lecture IV

Smirke, Sydney (1798 – 1877) London architect, received the RIBA Royal Gold Medal in 1860, wrote articles for *The Civil Engineer and Architect's Journal*.

PICTURESQUE

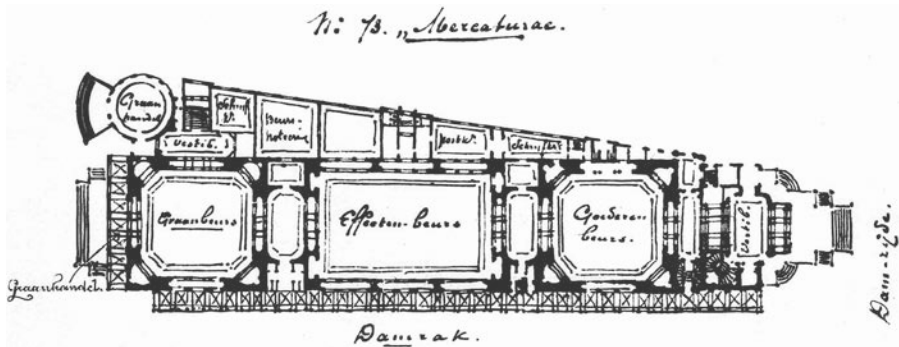


element A*, upper bay left, is balanced proportionately with element A, lower bay, on the right.

composition of picturesque asymmetrical elements balanced around a strong central element (the curved bay window and adjacent chimney together establish the central focus).

“In every large composition, whether it be a building, or ...picture, a kind of unity should be preserved by concentrating effect; by giving, not indeed an undue absorbing interest to any one portion of the design, but a decided and clearly marked preponderance to one portion, ... where interest is scattered it is sure to be weakened.”

PICTURESQUE



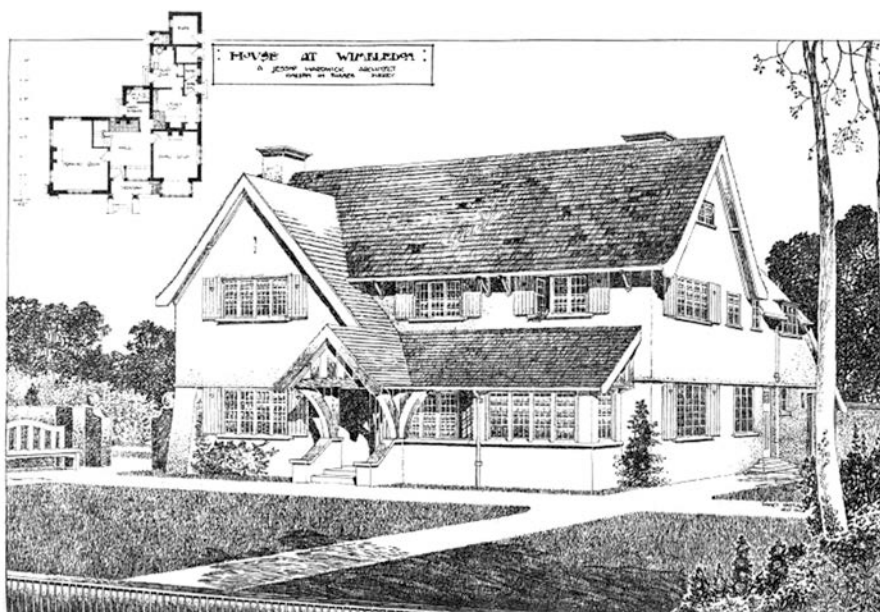
~ Berlage

three central halls establish the central focus for all the adjacent support areas that fill in the odd shaped lot

“Two ideas, therefore, are essential to picturesqueness,—the first, that of sublimity (for pure beauty is not picturesque at all, and becomes so only as the sublime element mixes with it), and the second, the subordinate or parasitical position of that sublimit... whatever characters of line or shade or expression are productive of sublimity, will become productive of picturesqueness... angular and broken lines, vigorous oppositions of light and shadow, and grave, deep, or boldly contrasted color; and all these are in a still higher degree effective, when, by resemblance or association, they remind us of objects on which a true and essential sublimity exists, as of rocks or mountains, or stormy clouds or waves.”

John Ruskin, *Seven Lamps of Architecture*

FRANKNESS & DECISIVENESS



simple

RULE

25

FRANKNESS & DECISIVENESS

“One of the most difficult, yet vital things to accomplish is the delineation of character, in all the practical elements necessary to the building.”

~ Sydney Smirke

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“The idea that a house must be large in order to be well built, is altogether of modern growth, and is parallel with the idea, that no picture can be historical, except of a size admitting figures larger than life.”

John Ruskin, *Seven Lamps of Architecture*