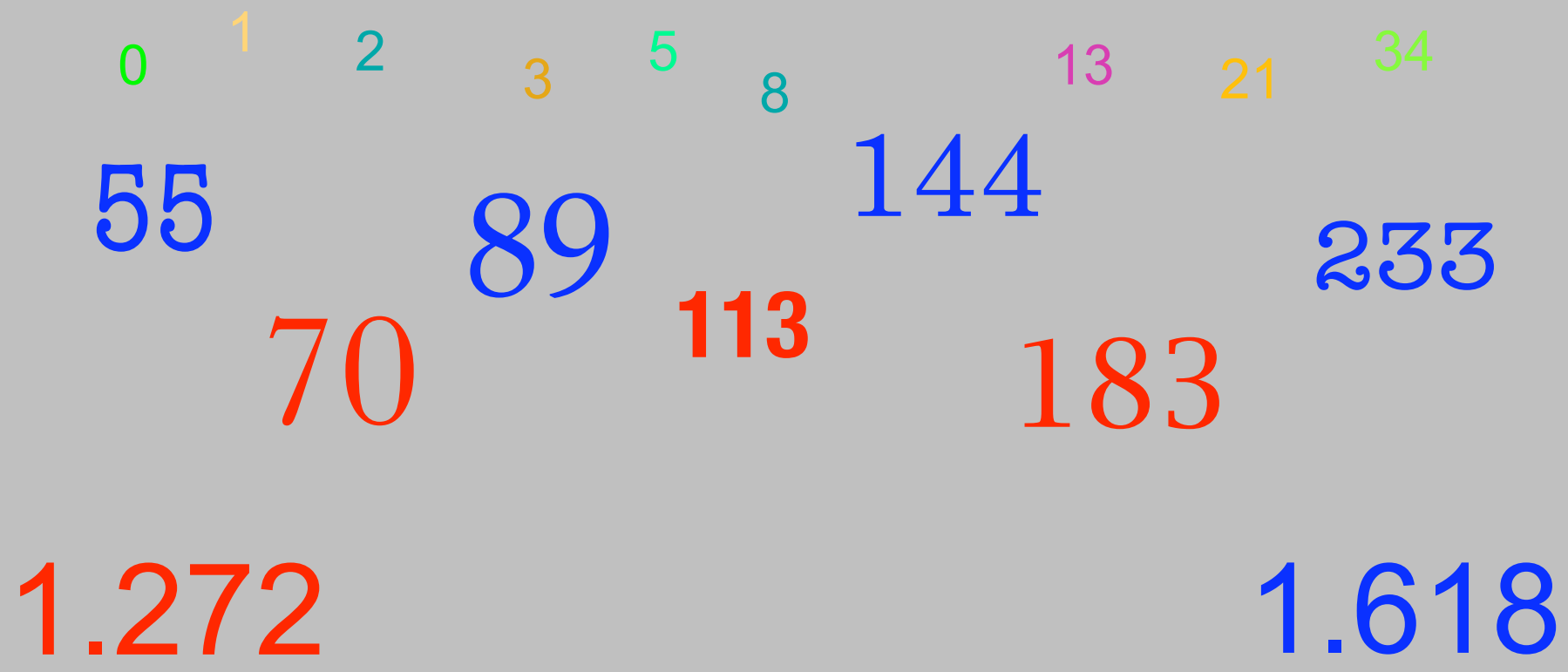
The Fibonacci Series As An Algorithmic Organizing Principle In the Composition Of Figurative Painting.

Christopher Bartlett



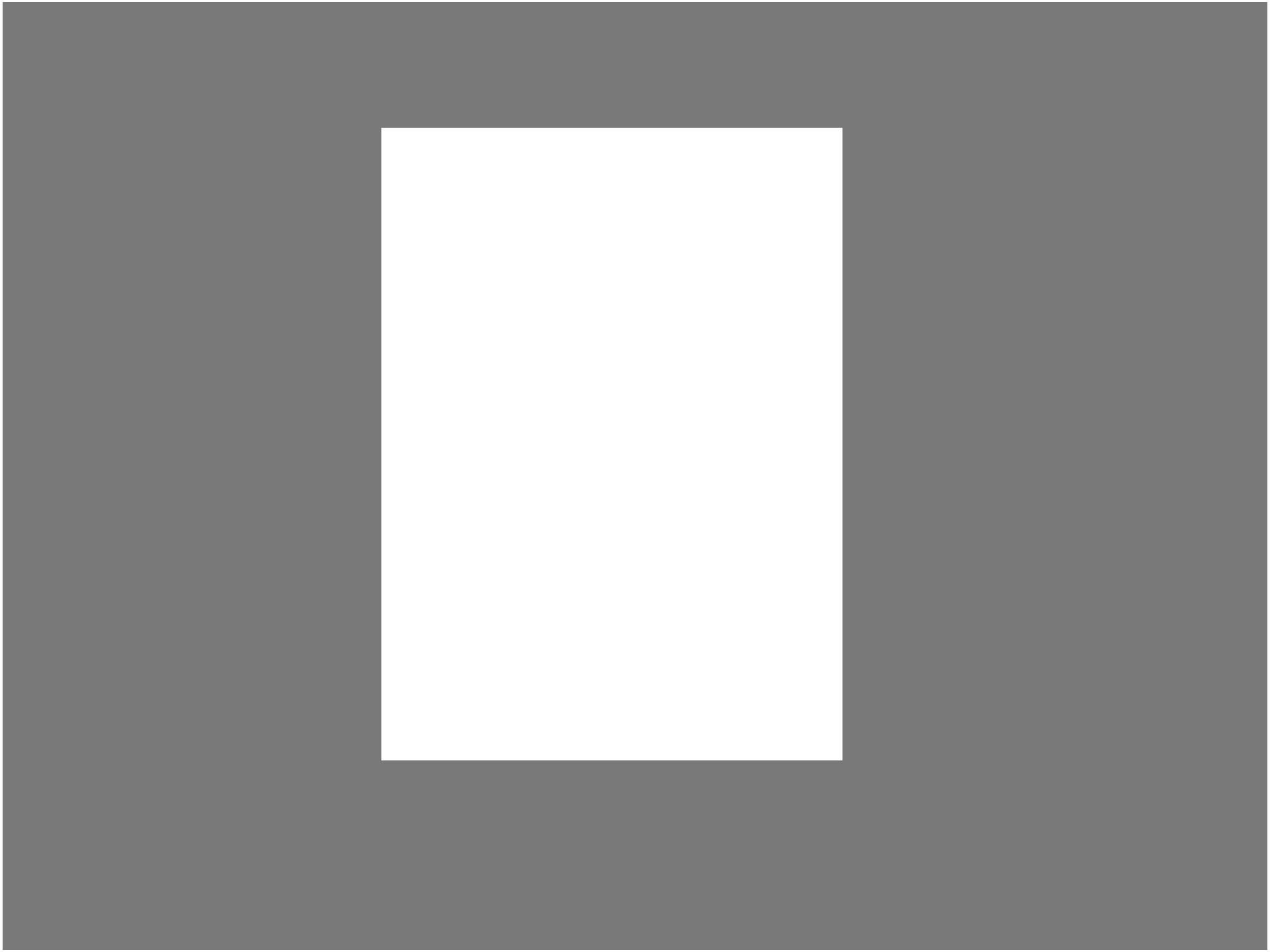
Design/Composition

To achieve Unity of the whole through a relationship of the parts

Chaos/Accident…… Monotony

Variety/Contrast…… Harmony/Order

Proportional relationships structure the invisible plan of a painting

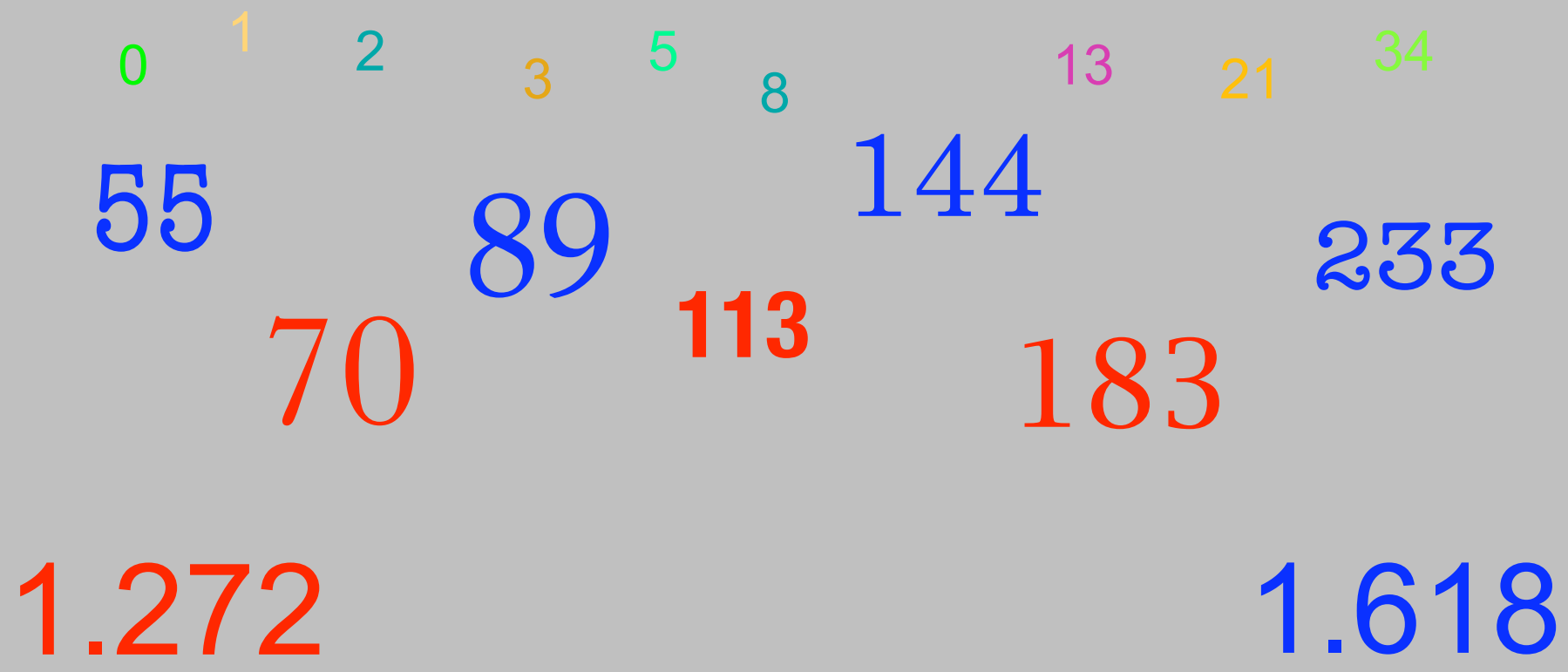


A canvas, normally a rectangle, invites a system of interior proportioning that can provide a unifying invisible grid to guide the arrangement of the subject matter and produce visual coherency.

In choosing a compositional system with an algorithm based on the Fibonnaci series, an artist can divide the canvas into elegant and visually harmonious self referential areas

A repeating structure at which the primary verticals, horizontals, and key focal elements of the painting are positioned.

The Fibonacci summation series yields the golden ratio by dividing a preceding number into the following number, becoming more accurate the higher in the sequence. The golden ratio is a proportional relationship between 1 and 1.618 and expressed as phi or φ



Can start the Fibonacci sequence with any number:

10 x 1.618 =16

add previous two numbers:

26, 42, 68, 110, etc

÷

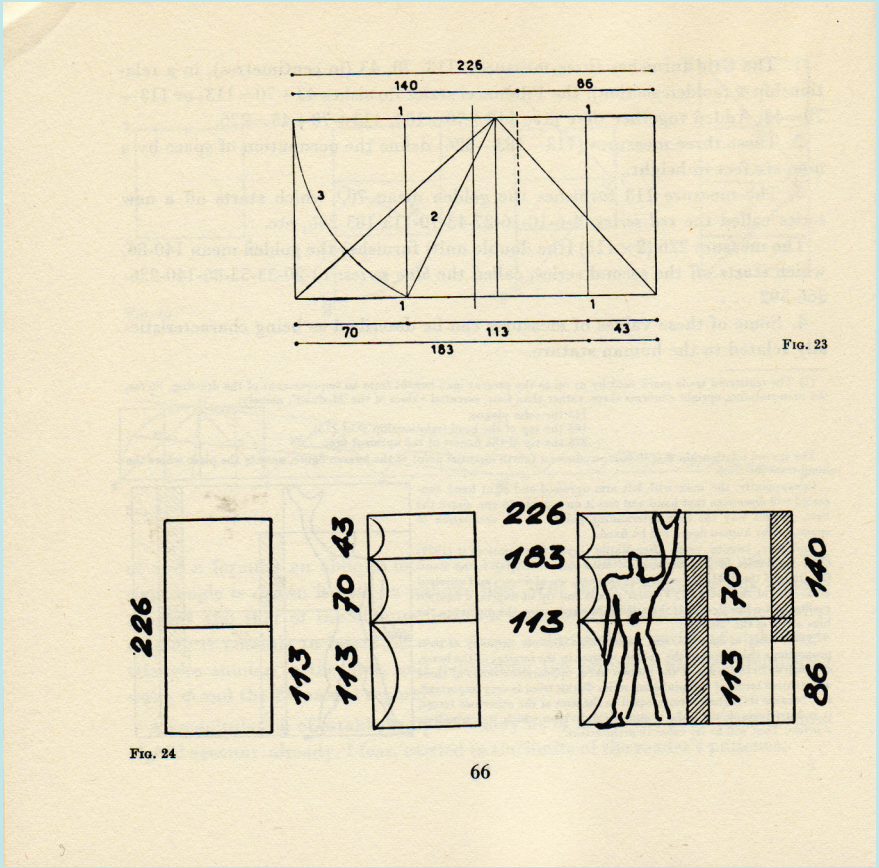
or

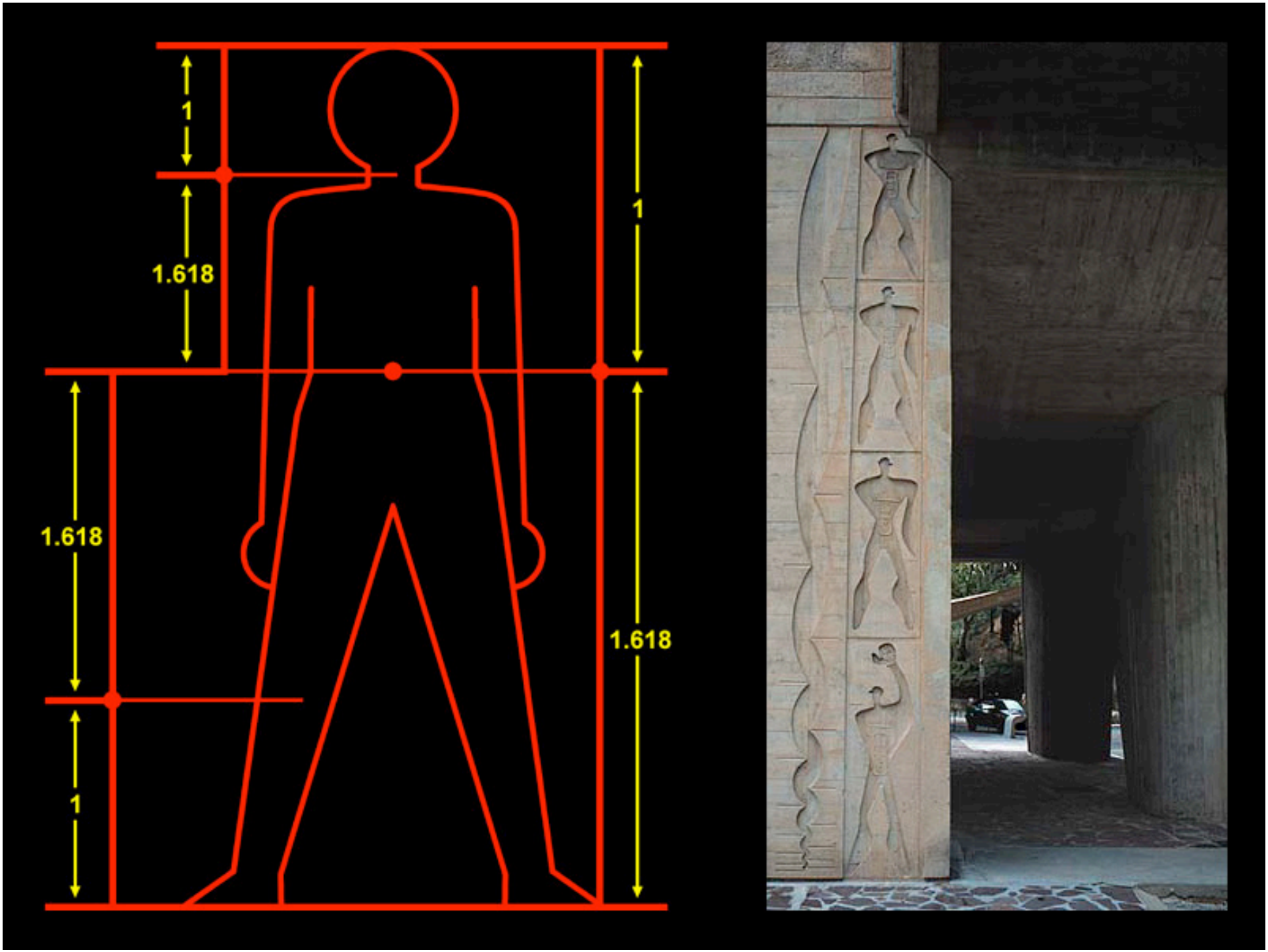
100 ÷1.618 = 61.8, 38.2, 23.6, etc

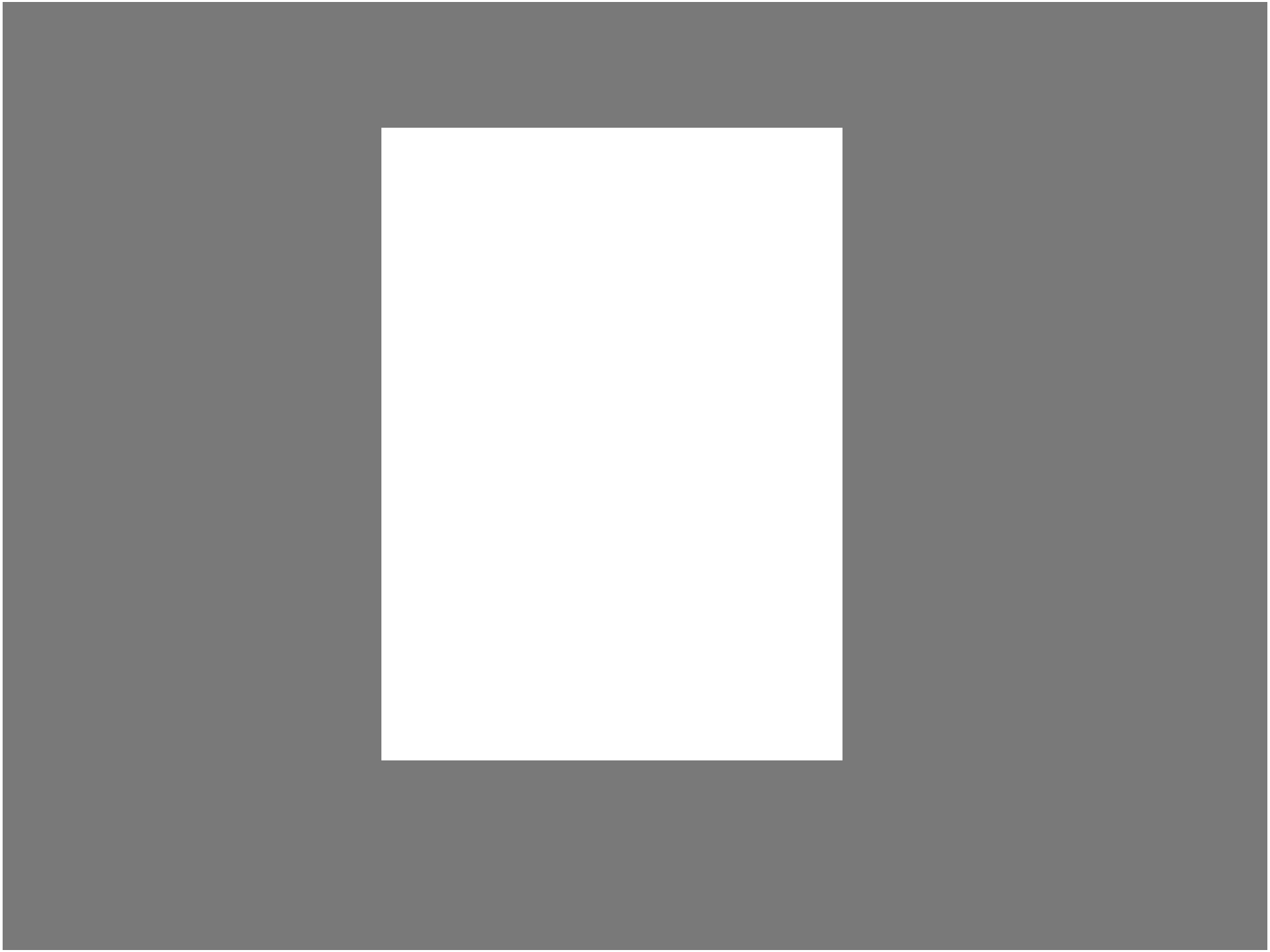
Le Corbusier's Modular

starting at 226 and dividing by 1.618 successively = 140 and 86

and with half of 226 = 113 divided by 1.618 = 70 and 43




1
1.618
1
1.618
1.618
1



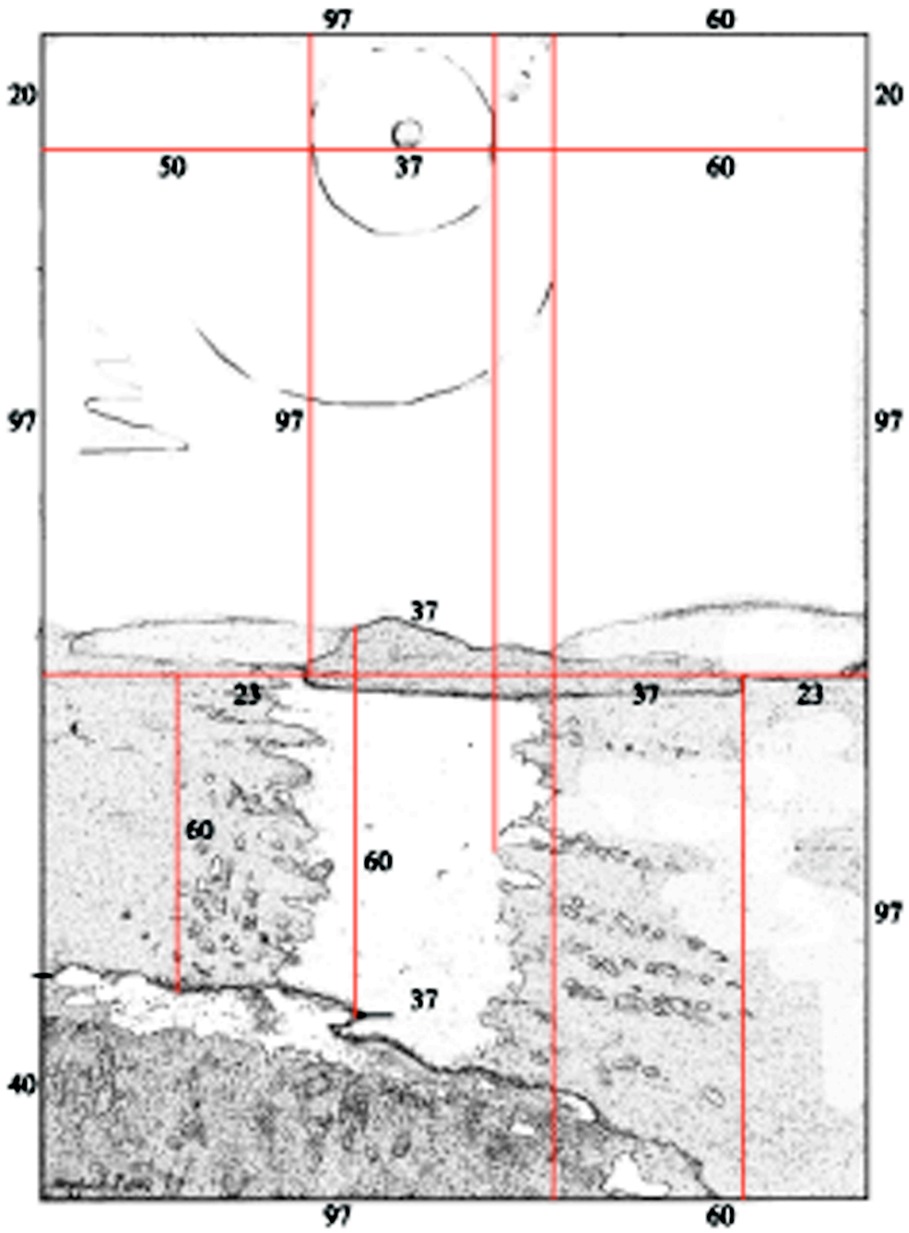
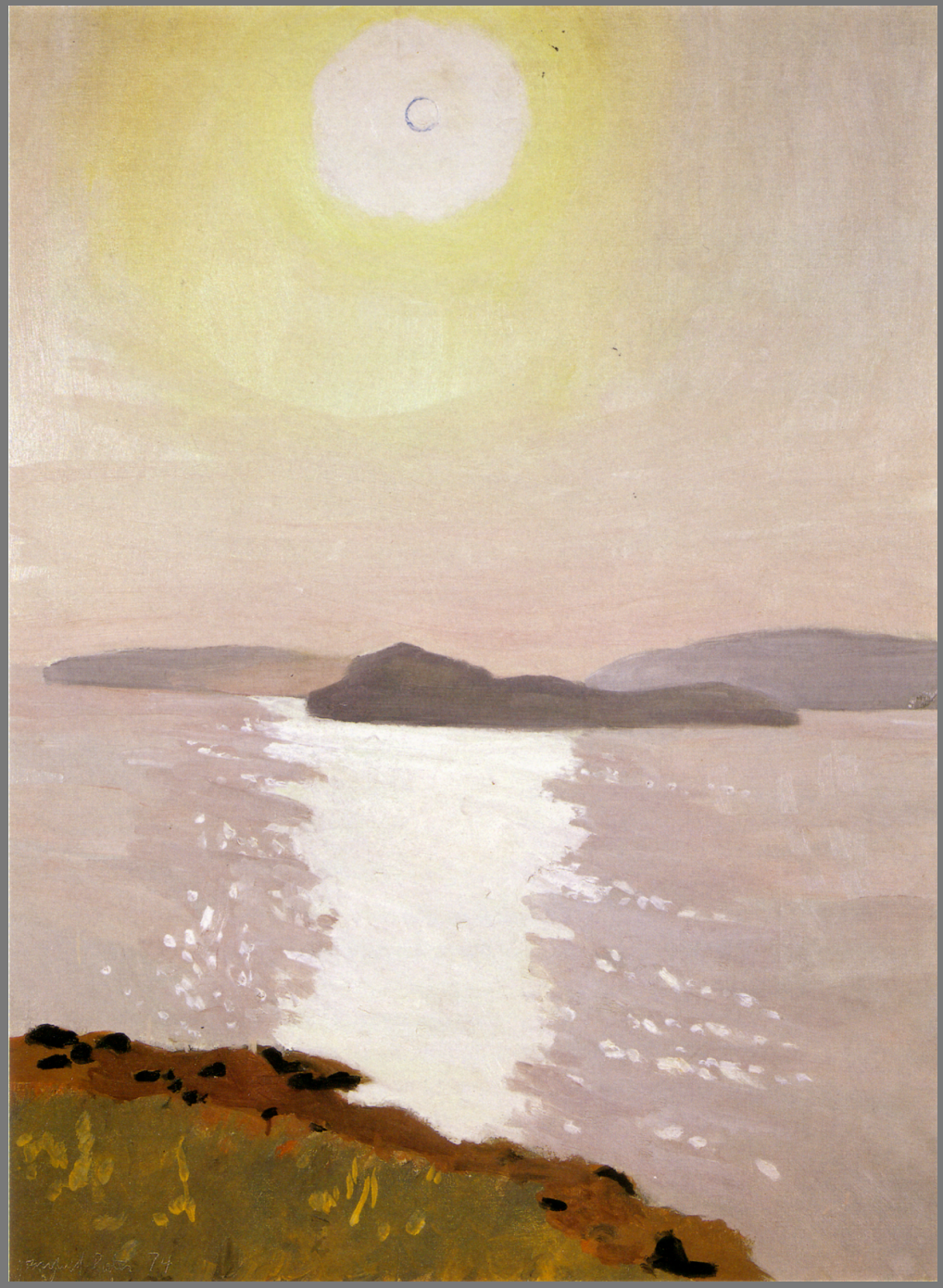


Figure 2. *Yellow Sunrise (1974)* with Φ analysis.



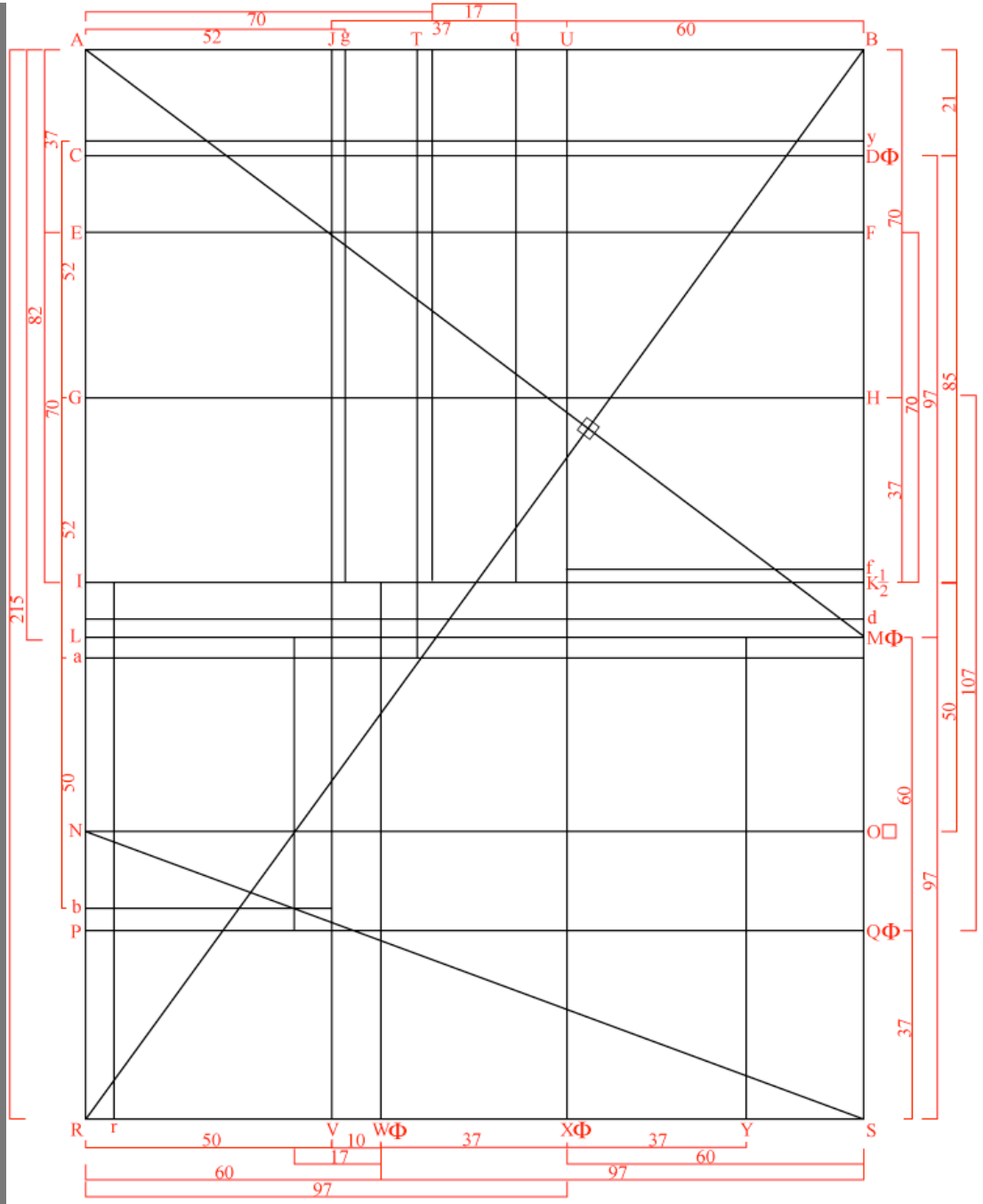


Figure 2. The Golden Section grid governing the composition. The diagonals are left out but numerical similarities are indicated based on a dimension of 215 by157.

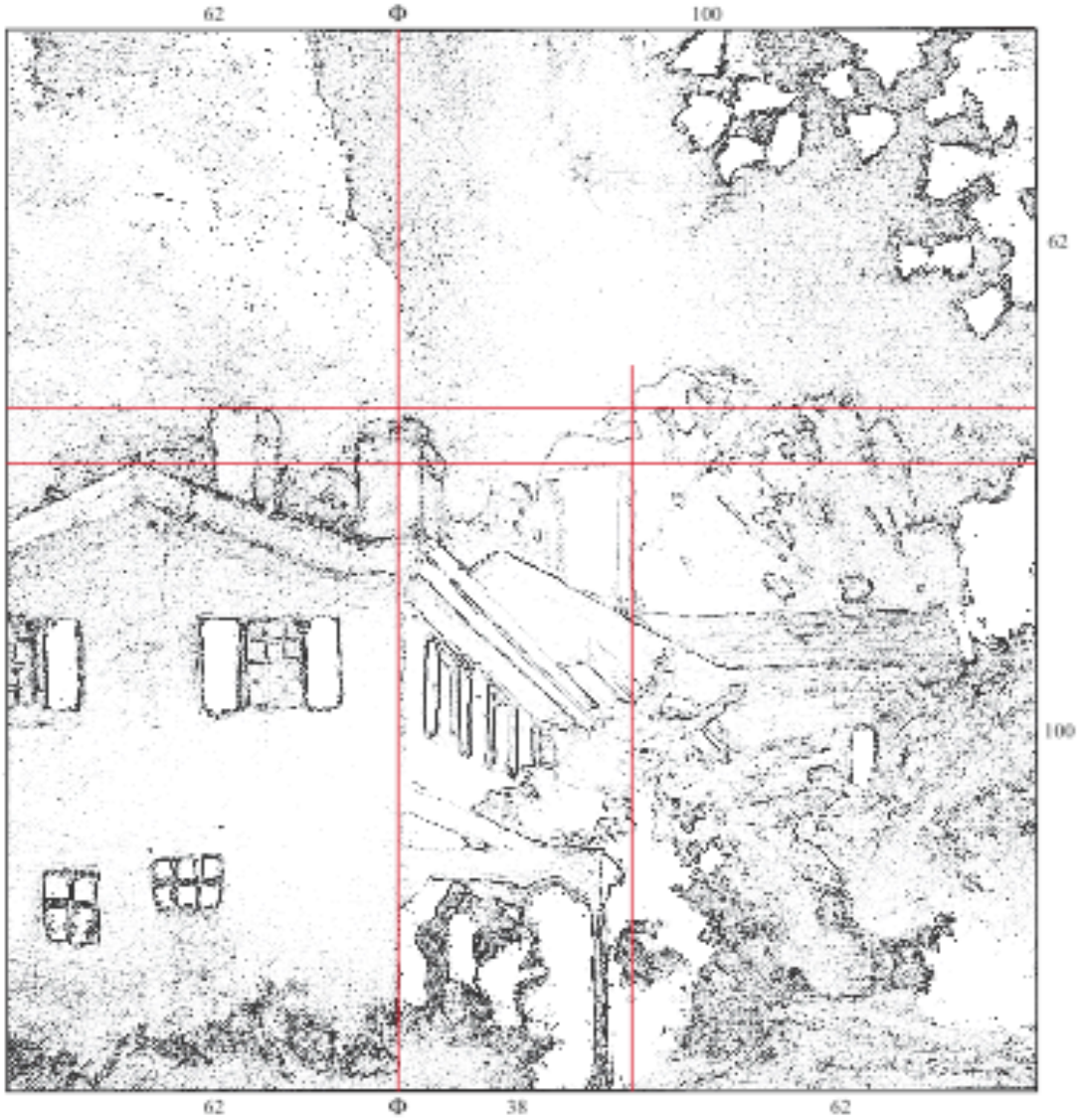
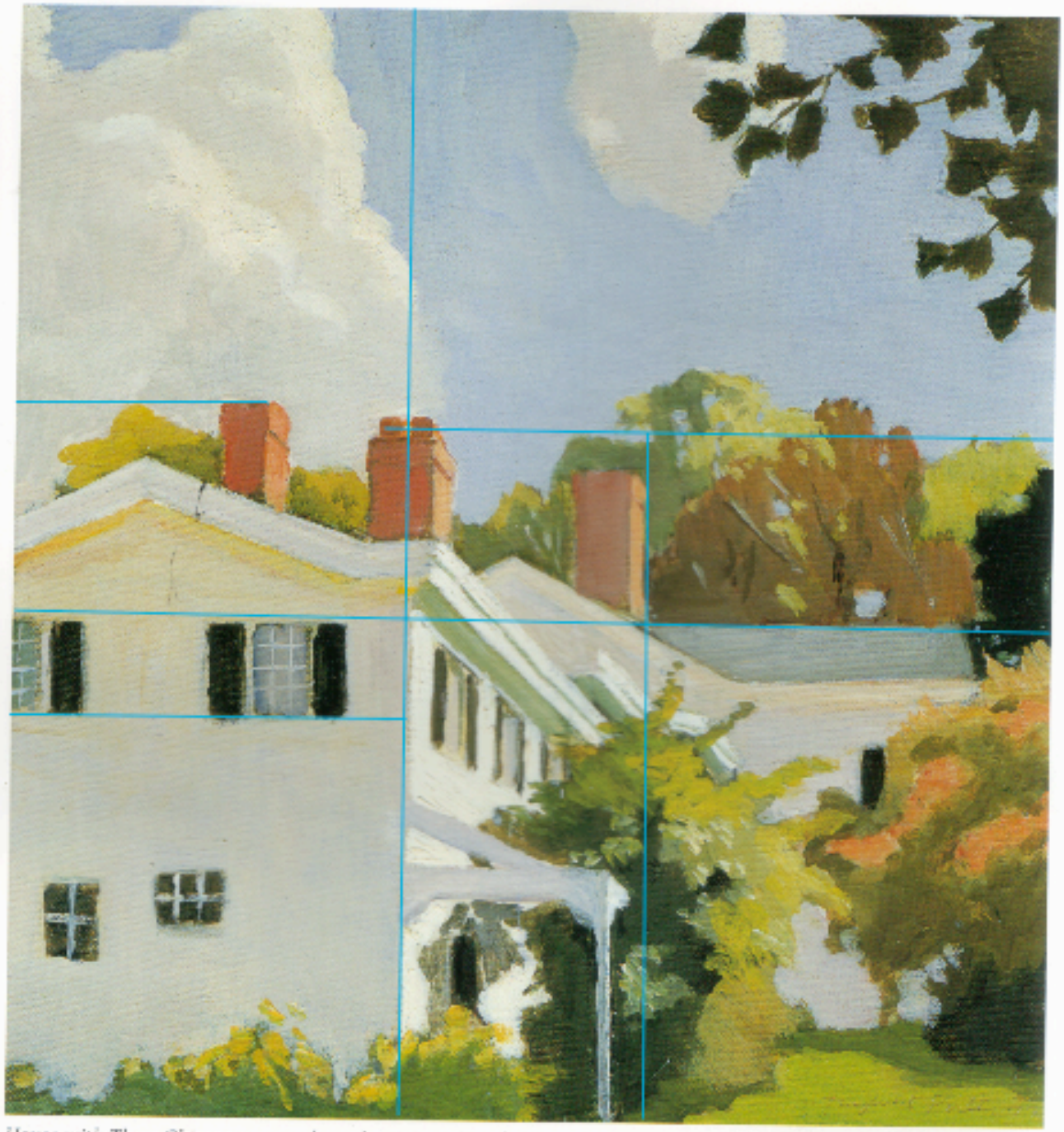
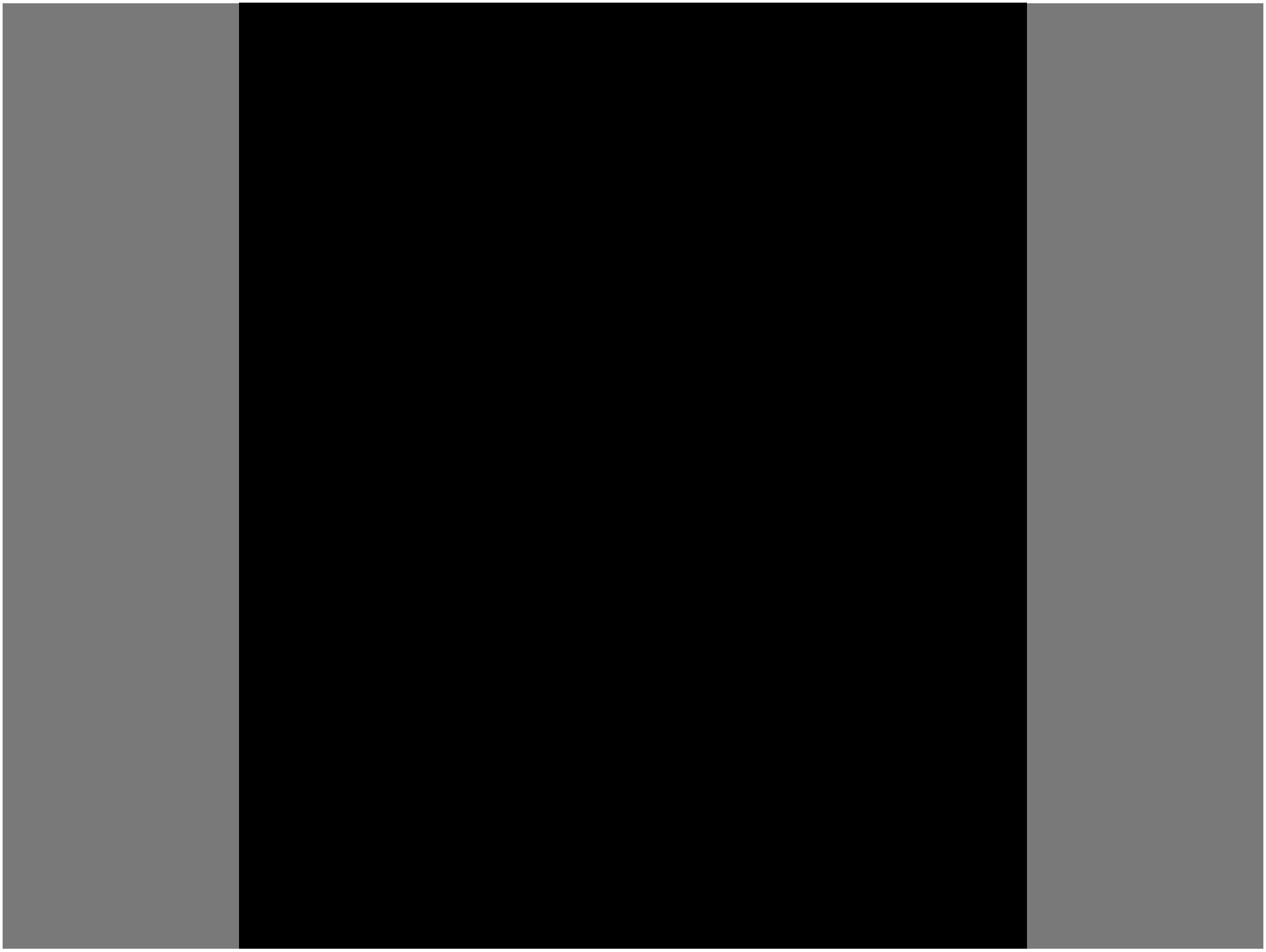
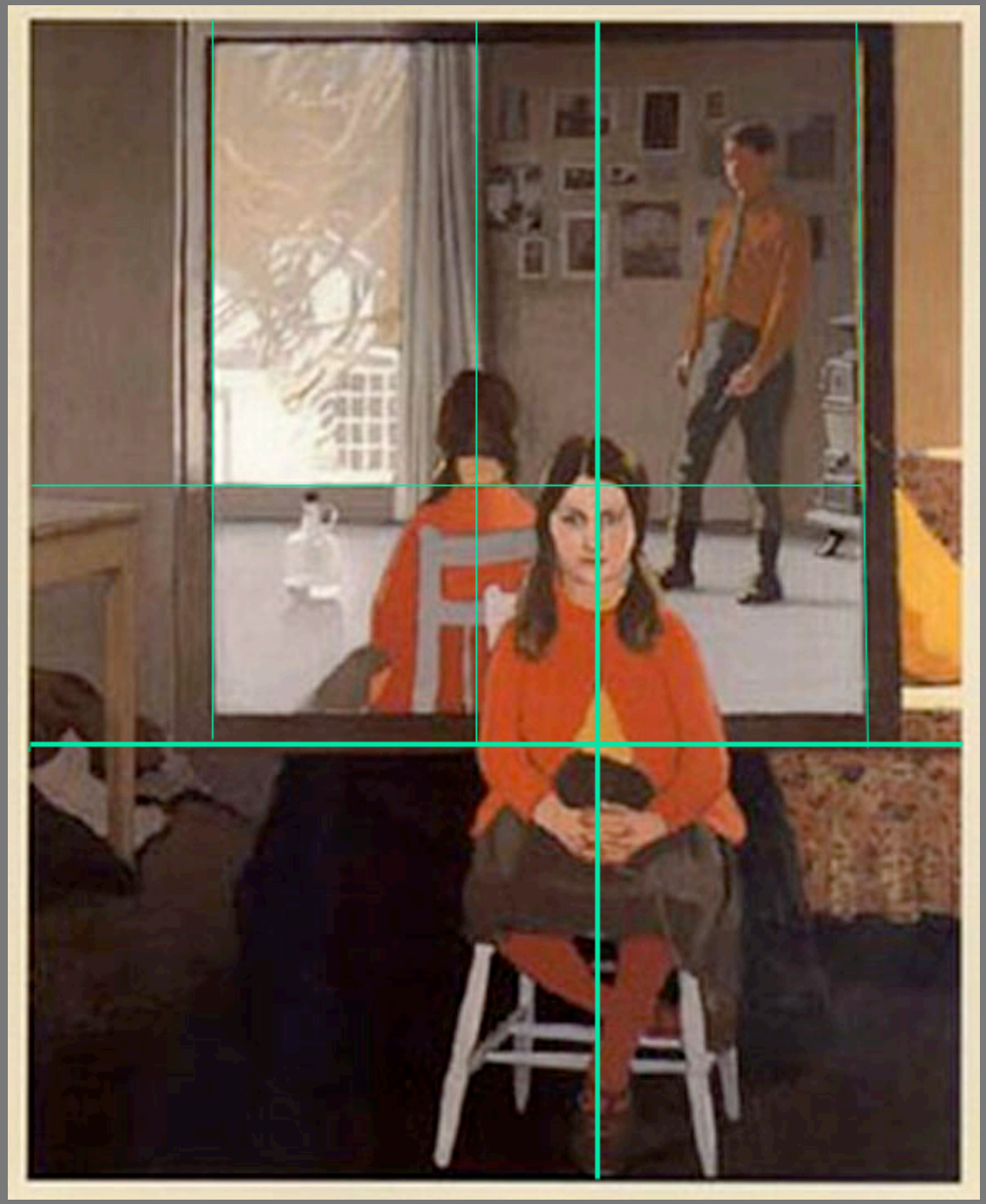


Figure 5. House with Three Chimneys, (1972)



House with Three Chimneys, 1972 [1791]

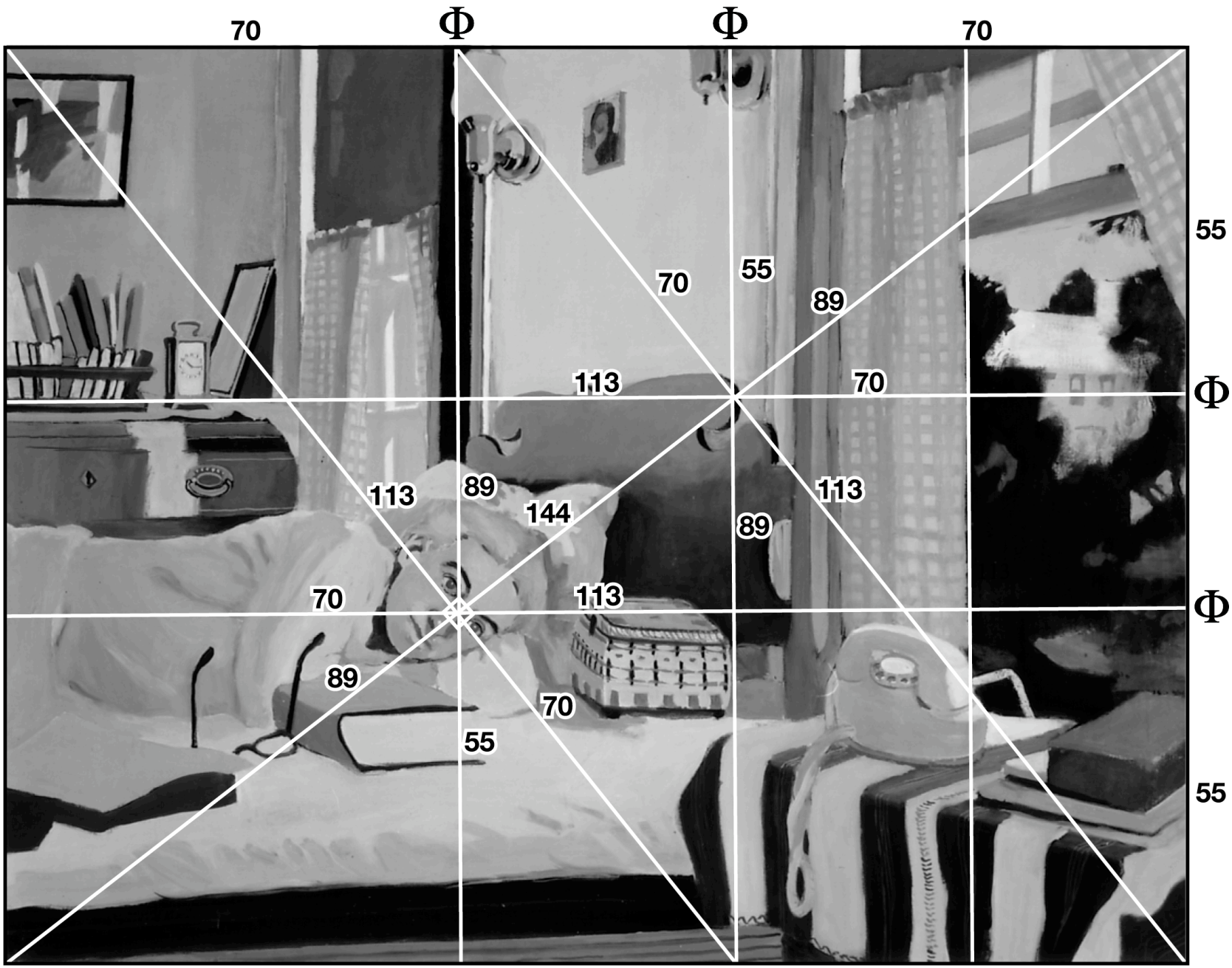


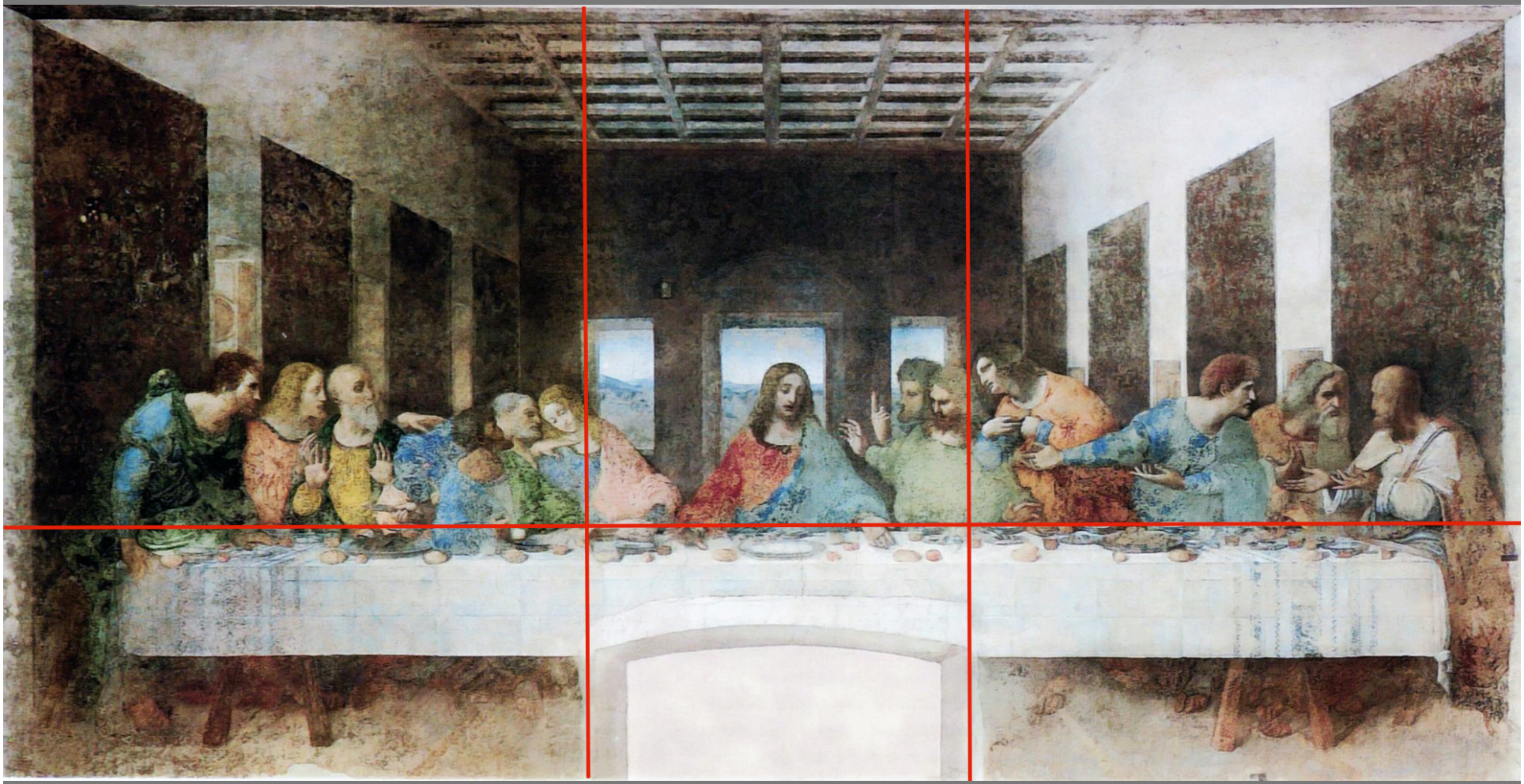


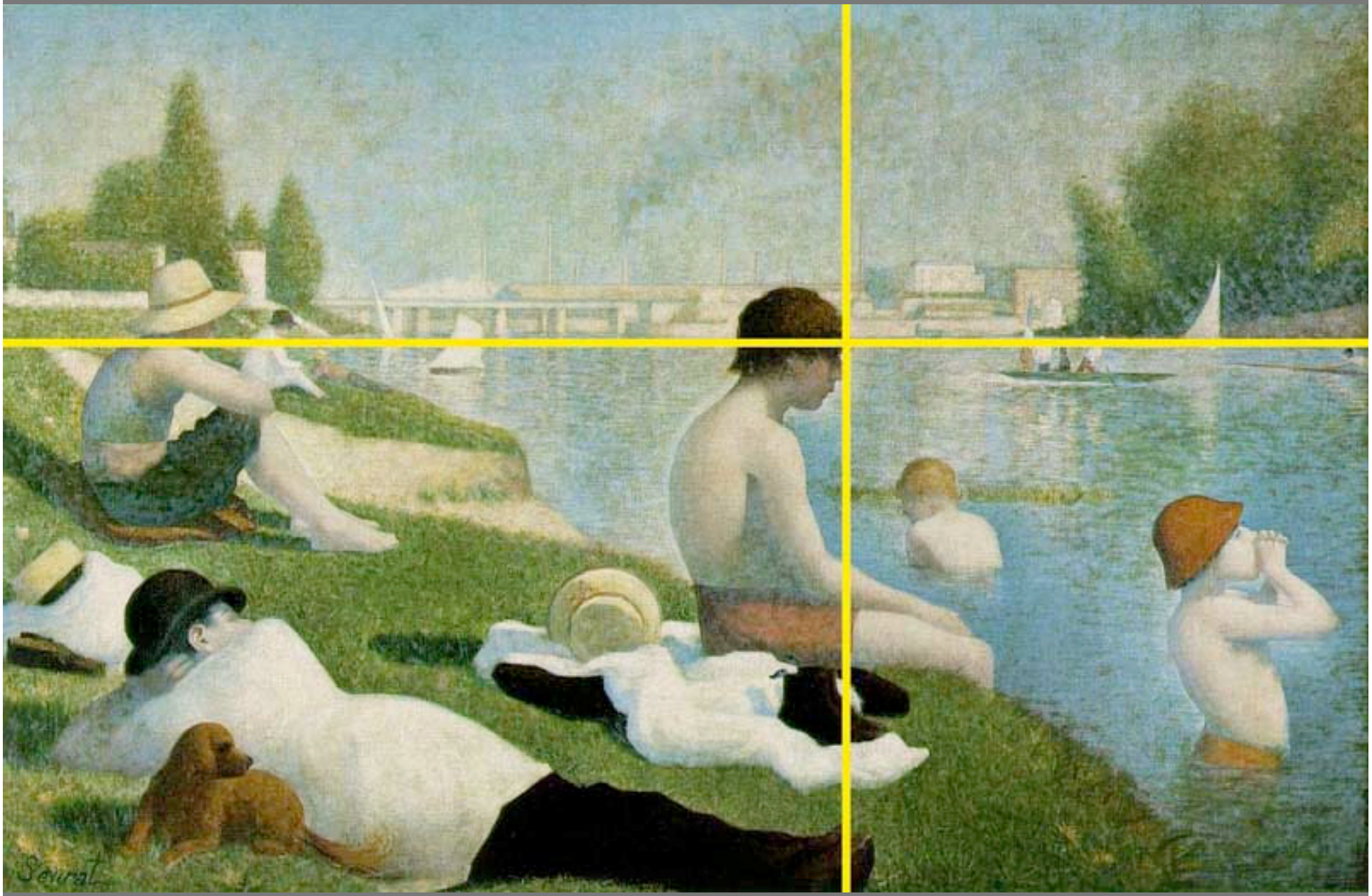
Root measures, such as the root of 1.618 (1 : 1.272) can be applied inside a rectangle of any proportion.

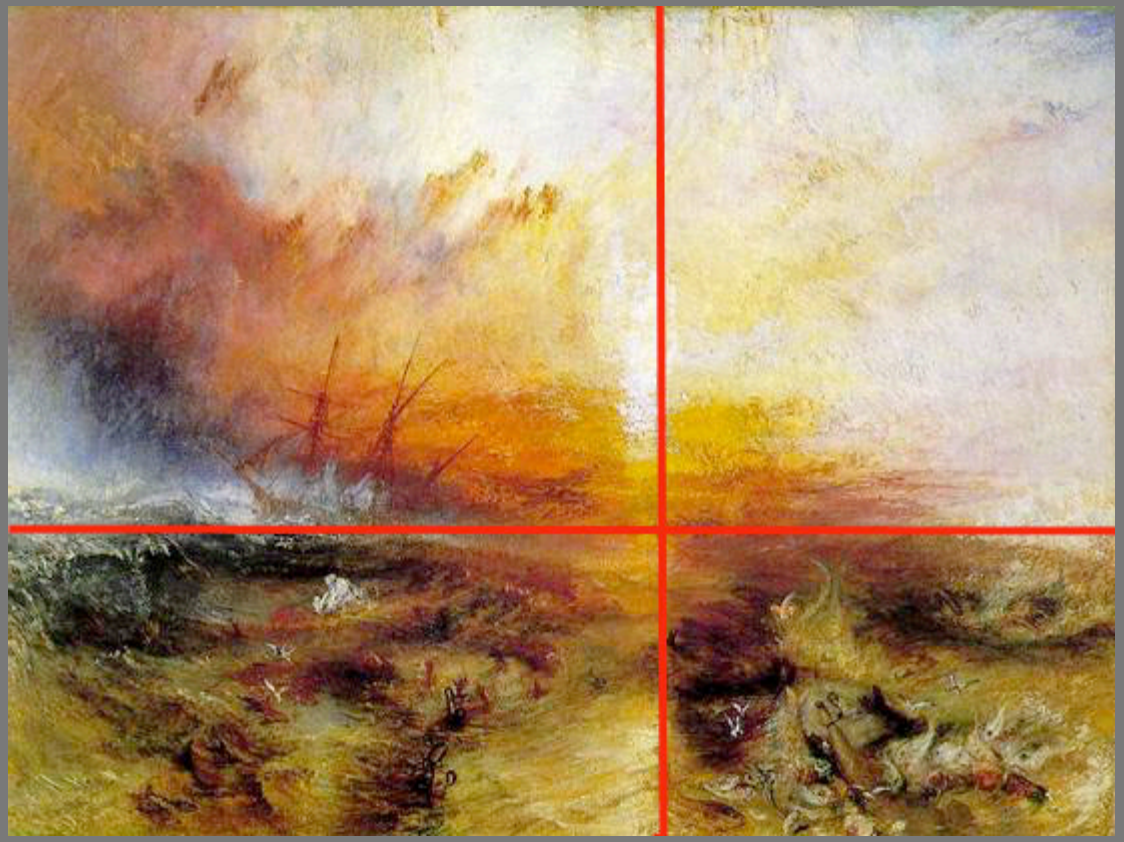
With a canvas side of 100, the sequence of measures to divide the rectangle would be: 78.6, 61.8, 48.6, 38.2, 30.0, etc. where every second number is the golden ratio.

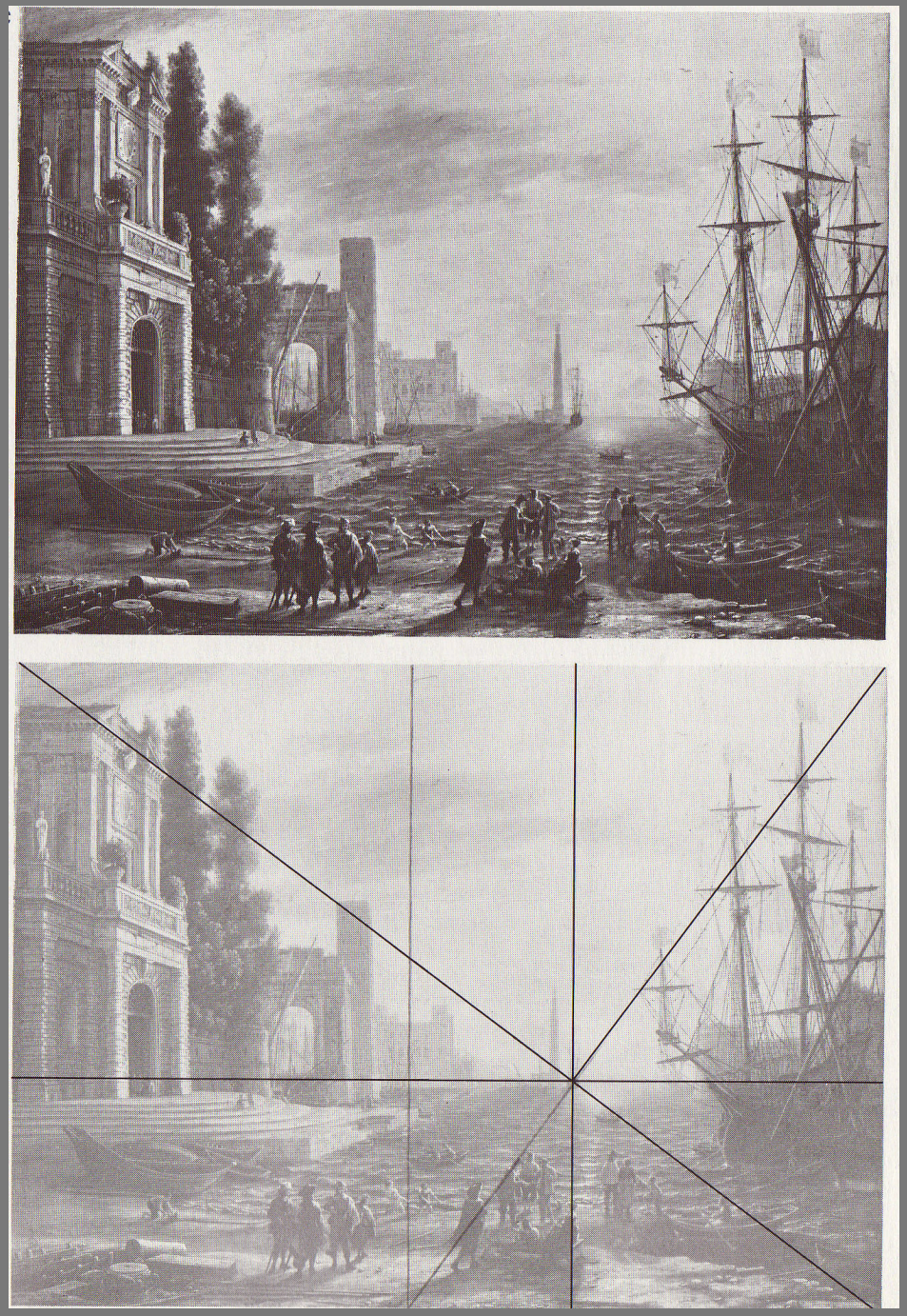
One can also transpose short side measures onto the long side, and vice versa

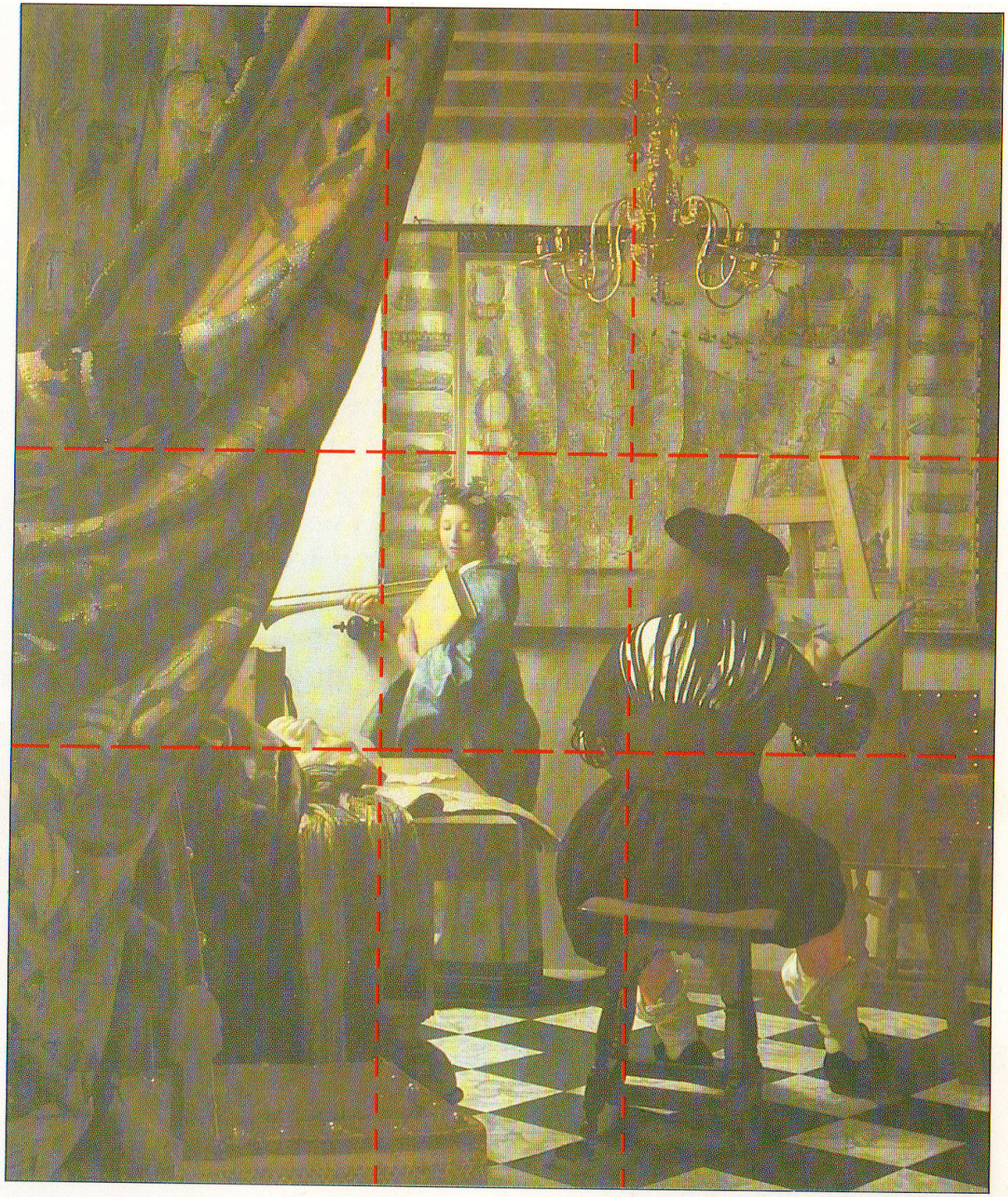

70
Φ
Φ
70
55
Φ
Φ
55
70
55
89
113
70
113
89
144
89
113
70
113
89
70
55

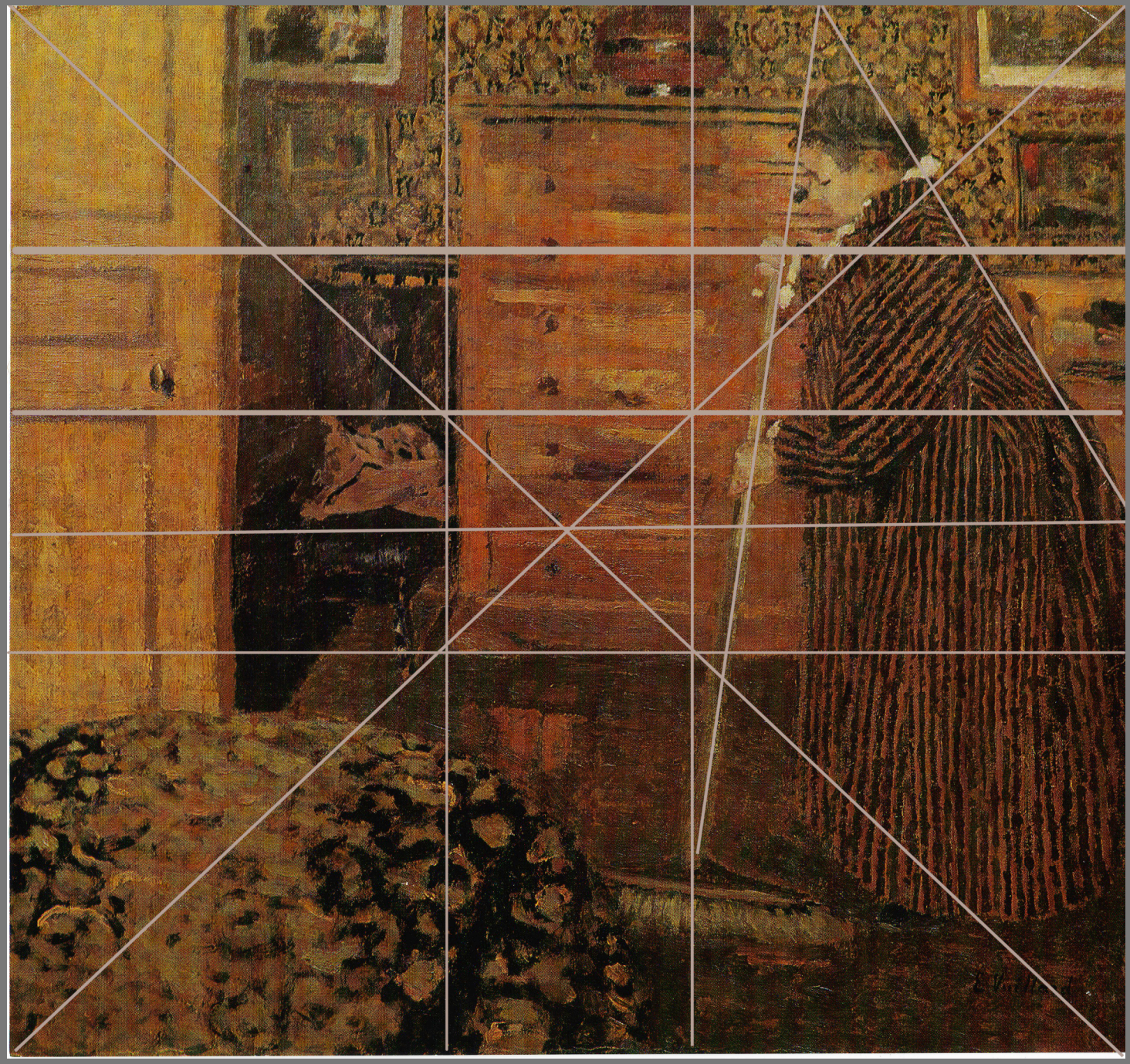


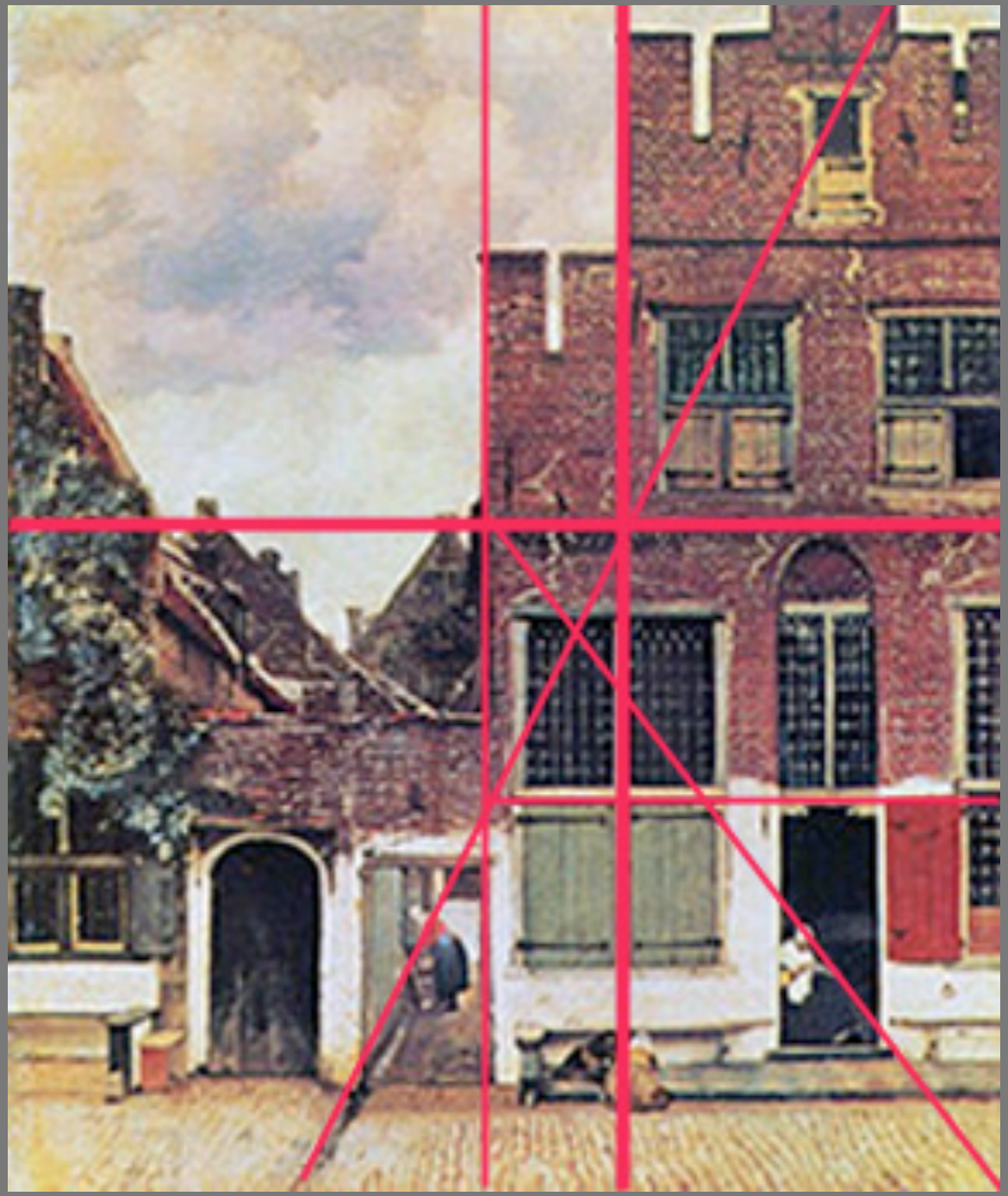

Seurat

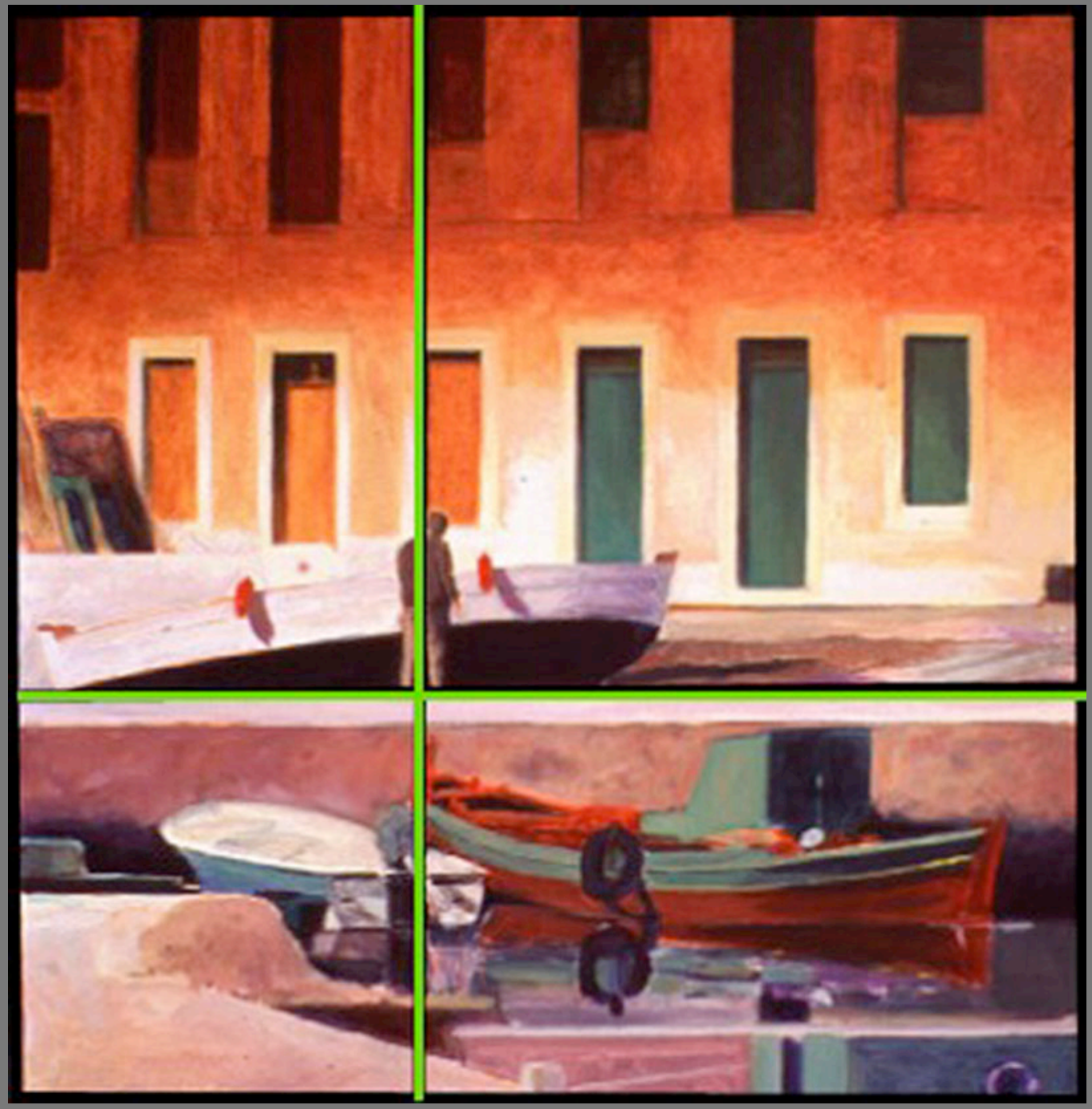


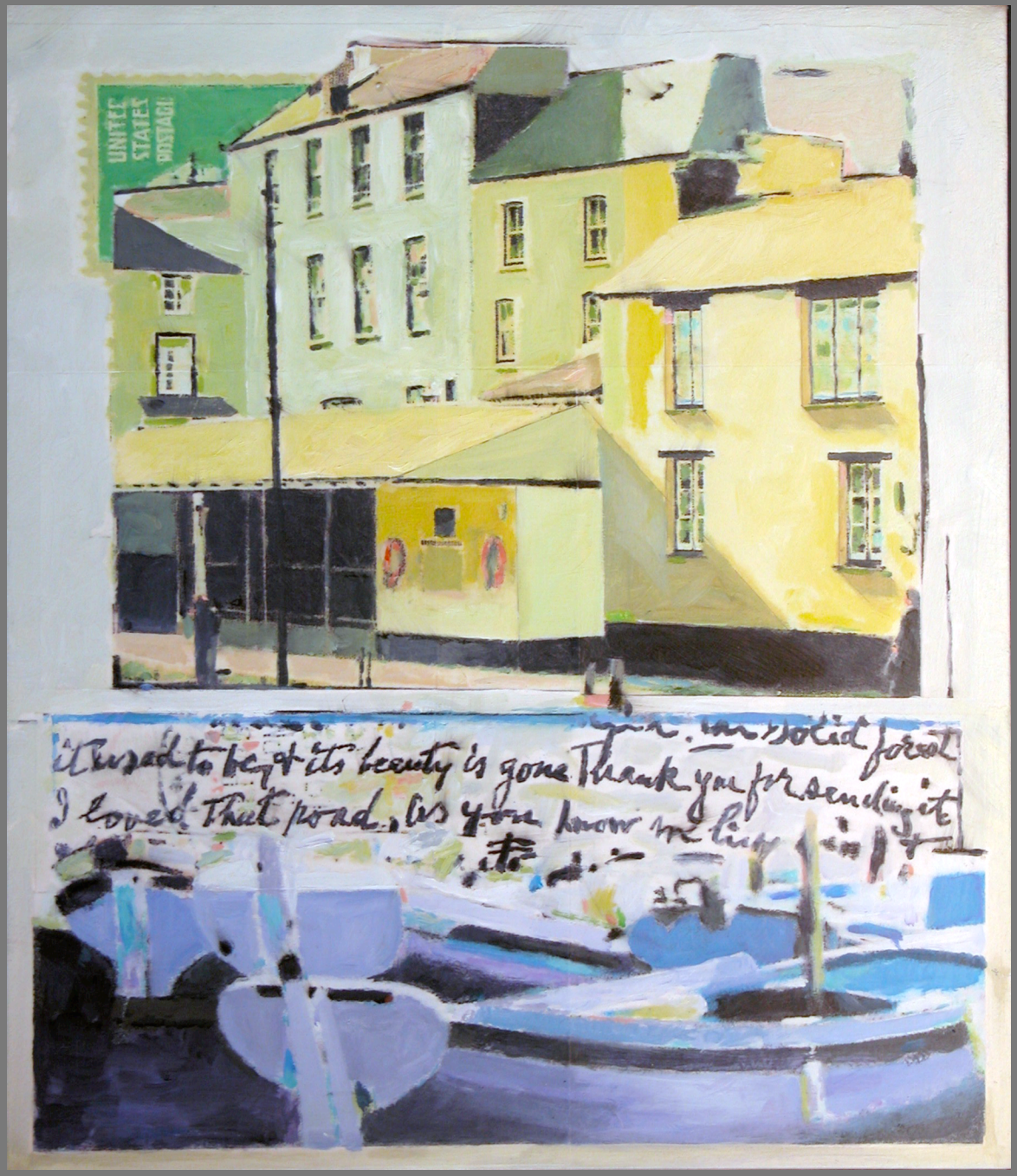


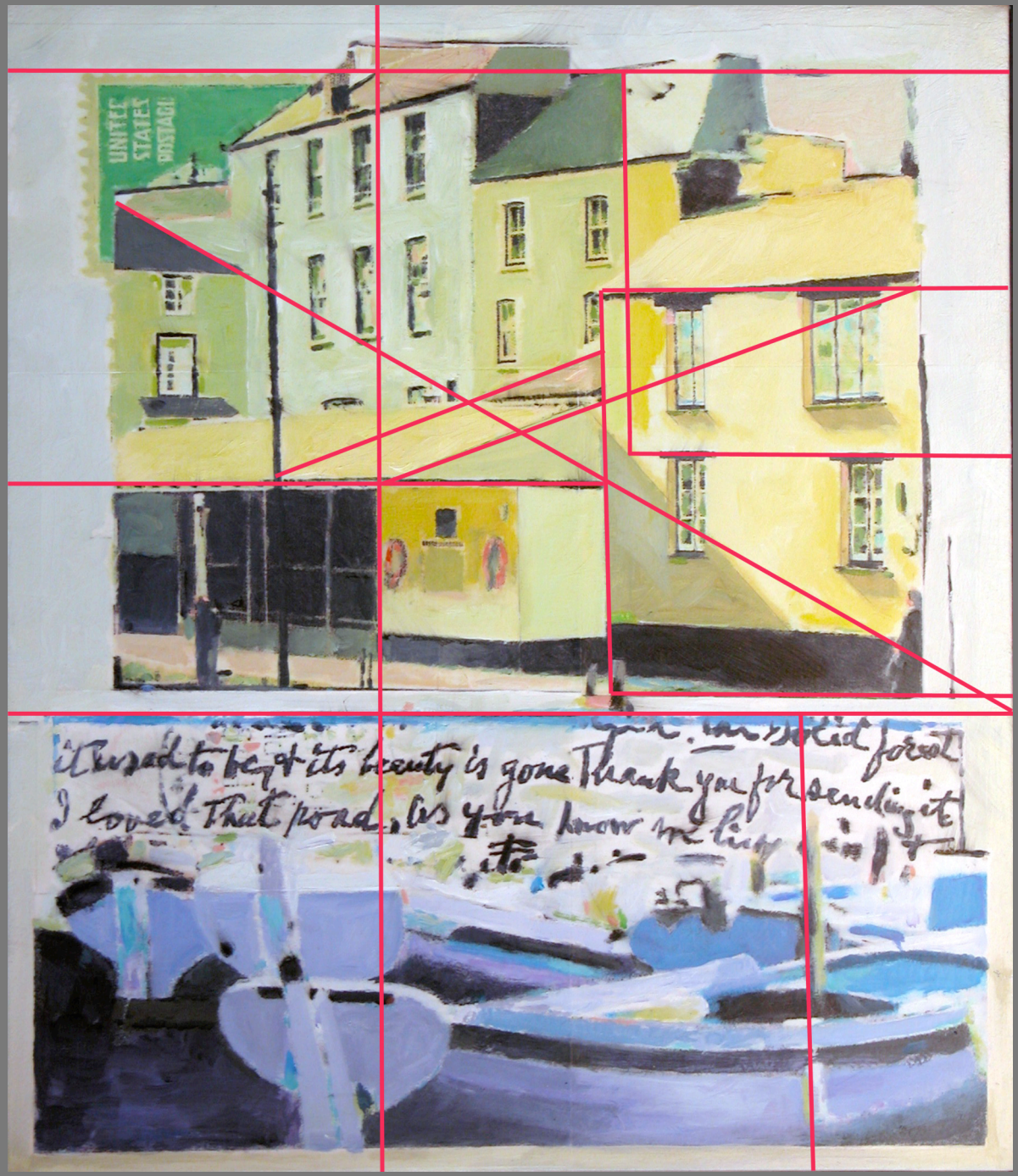









UNITED STATES POSTAGE
it used to be & its beauty is gone Thank you for sending it
I loved that road. As you know me


UNITED STATES POSTAGE
I used to be but its beauty is gone Thank you for sending it
I loved that road, as you know