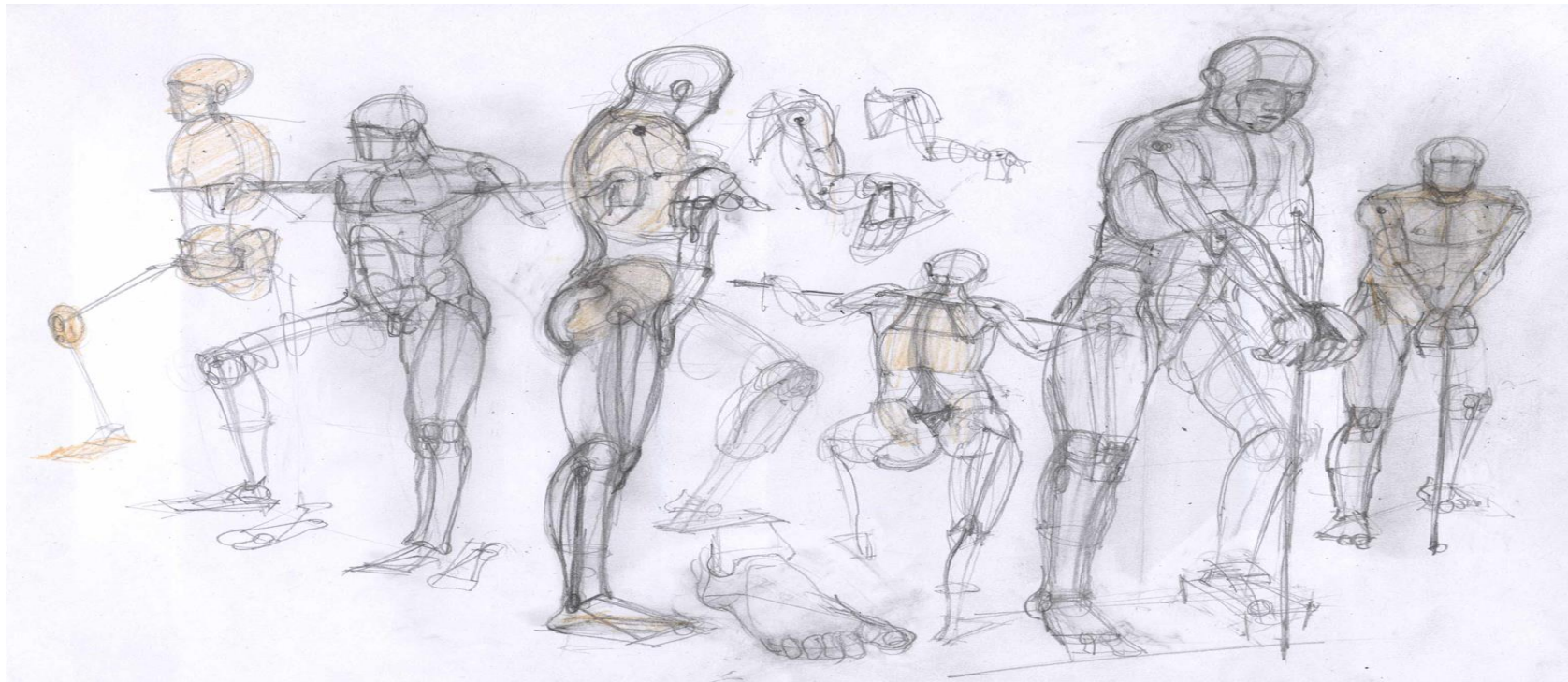


Marina Falco

Artistic Anatomy

Brera Academy of Fine Arts



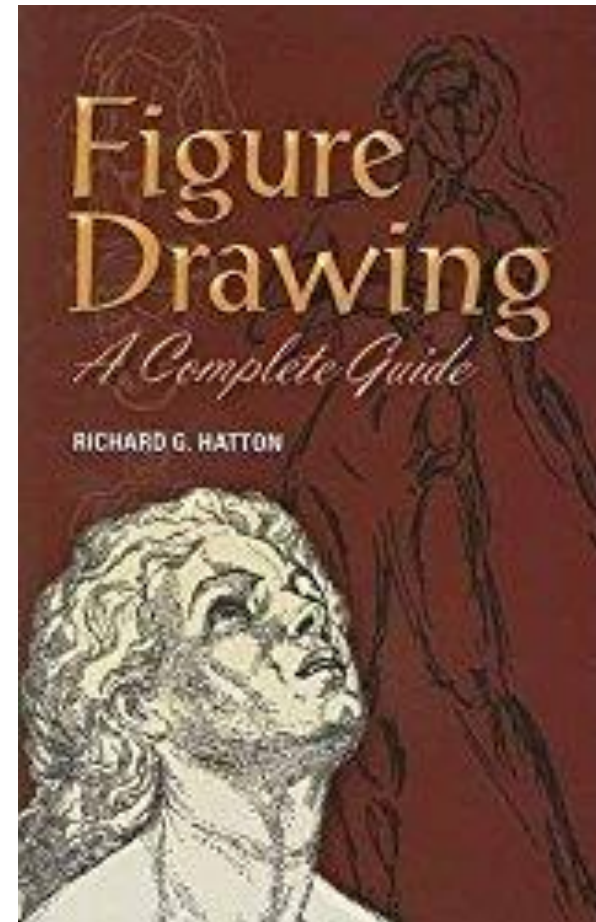
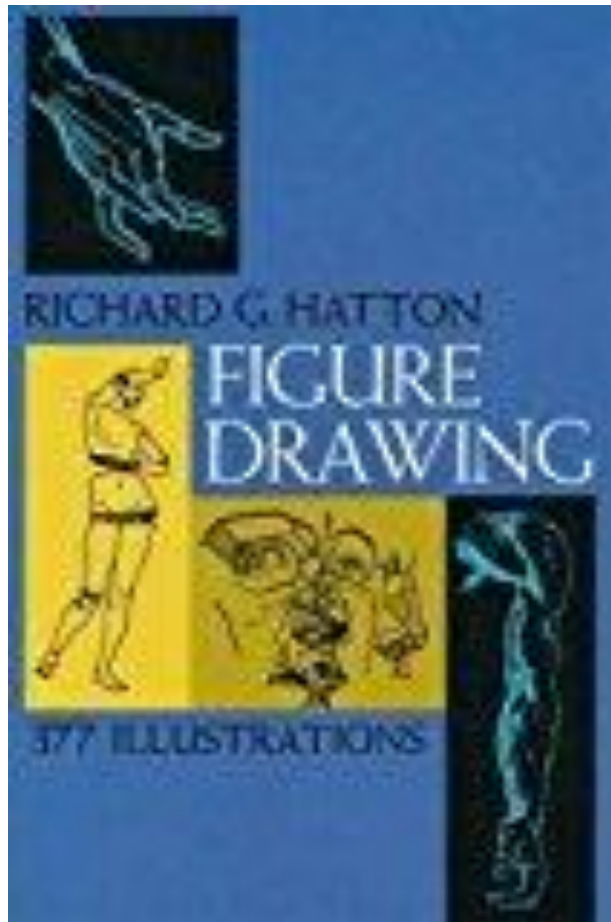
Geometry at Fine Arts and Design Faculties

EUROPEAN ENCOUNTER OF ERASMUS PARTNER FACULTIES

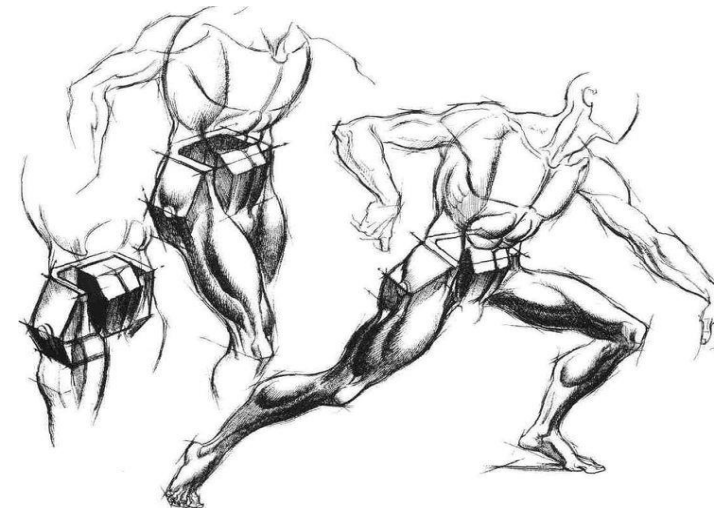
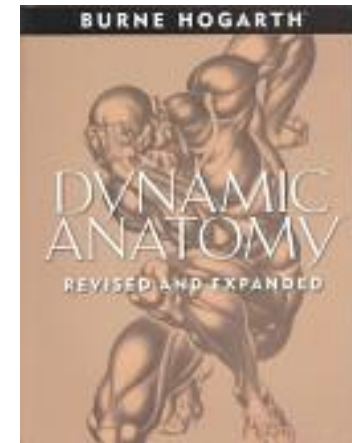
7th - 9th May 2018

i2ADS - Research Institute in Art, Design and Society / Faculty of Fine Arts of the University of Porto
/ Junta de Freguesia do Bonfim, Porto

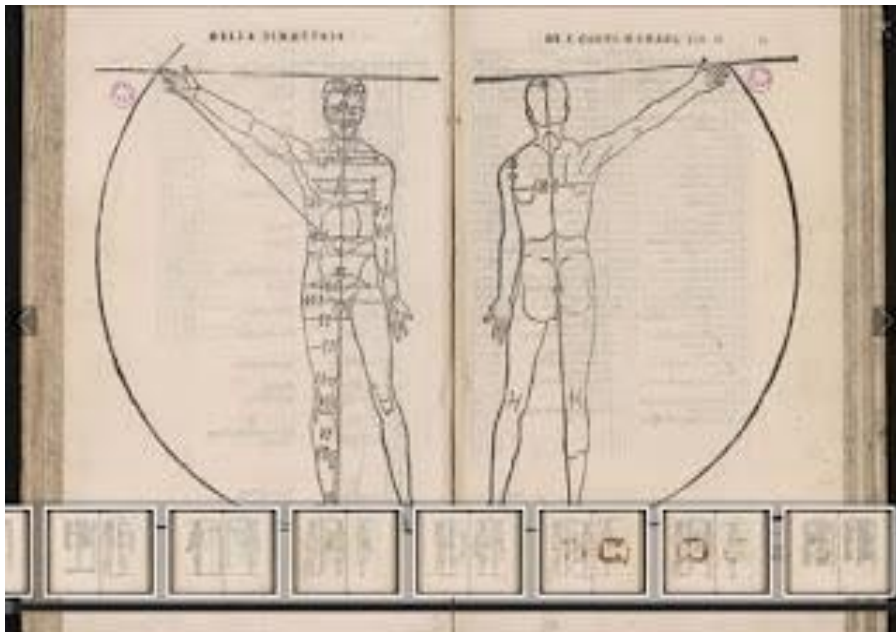
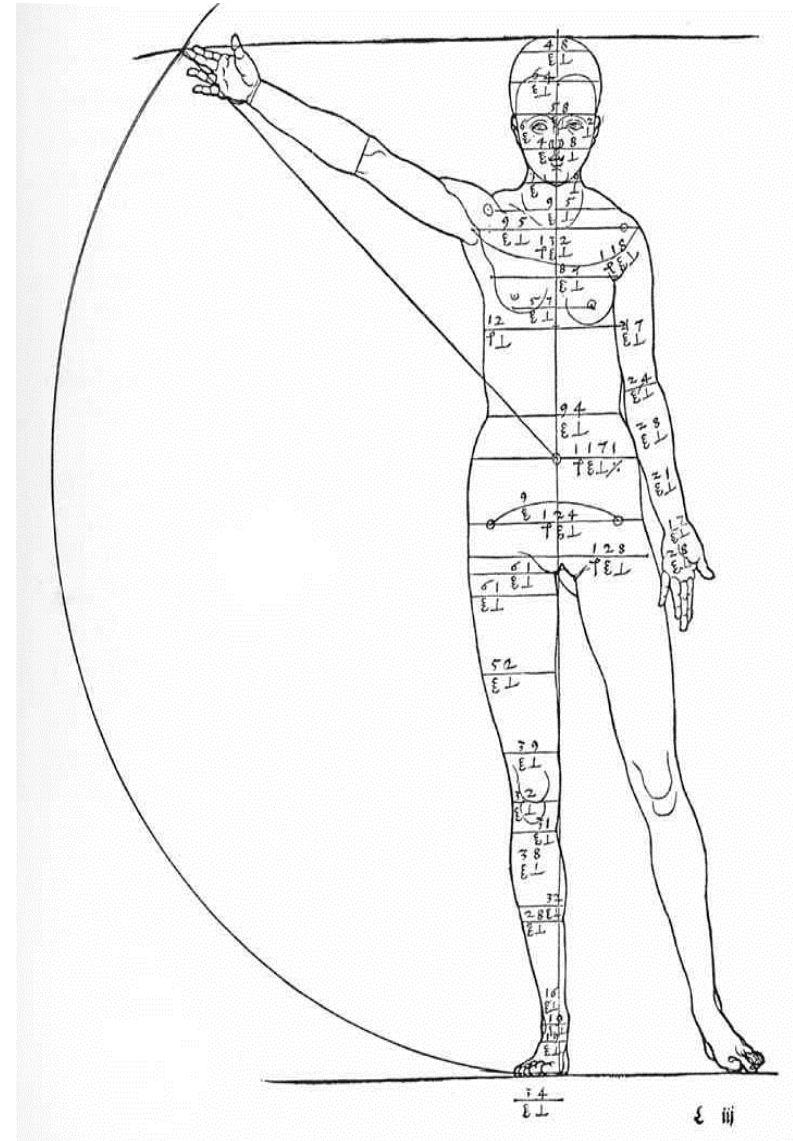
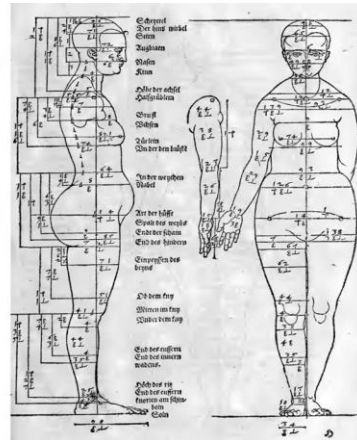
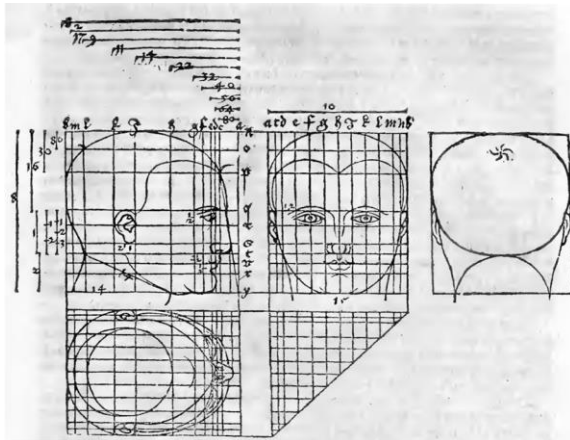
Figure Drawing by Richard G. Hatton (painter 1864 -1926)



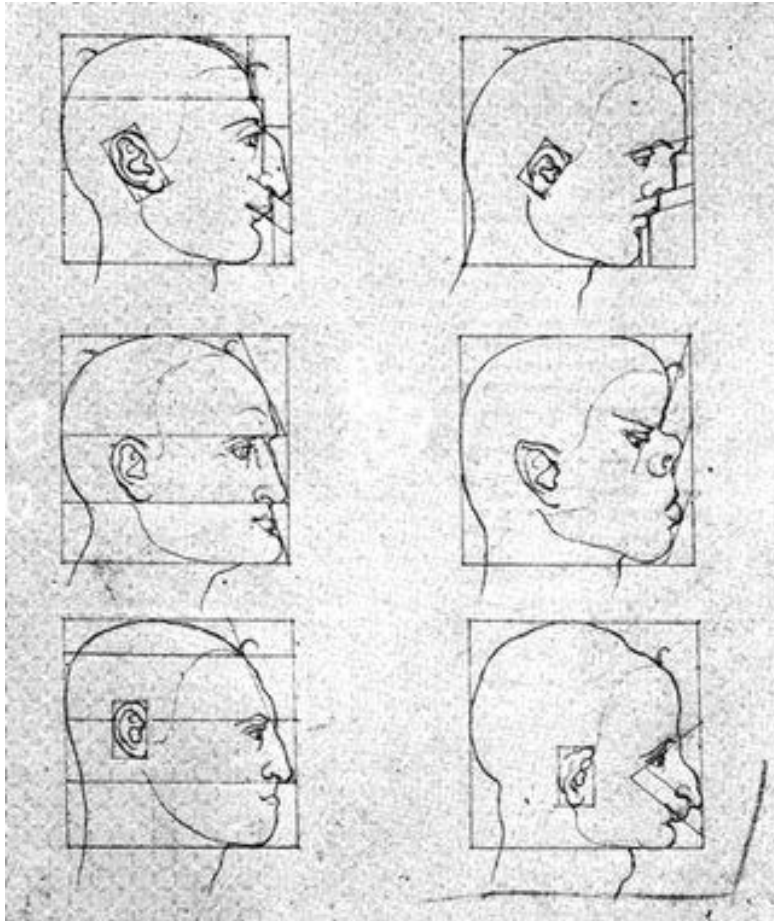
Burne Hogarth (December 25, 1911 – January 28, 1996) was an American cartoonist, illustrator, educator, author and theoretician, best known for his pioneering work on the Tarzan newspaper comic strip and his series of anatomy books for artists.



Albrecht Dürer and his proportional theory

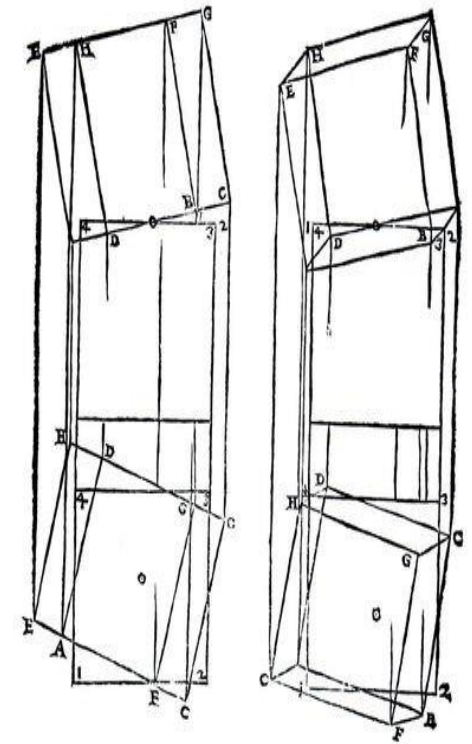
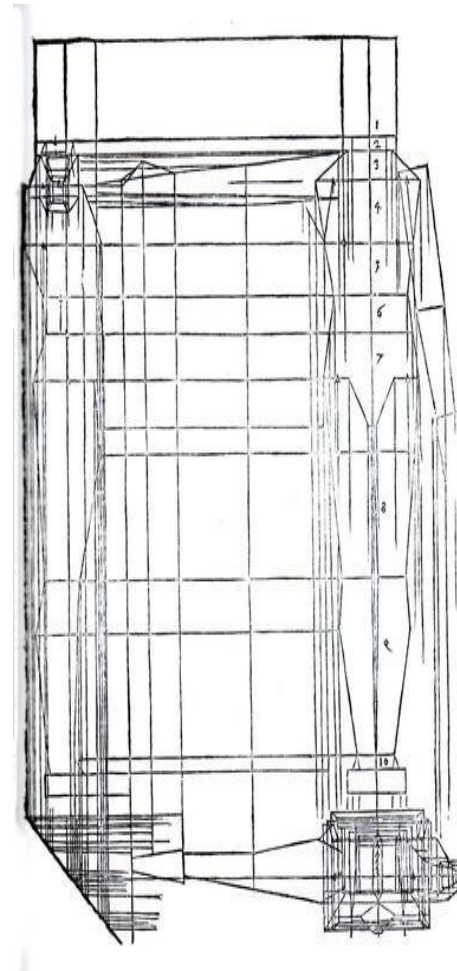
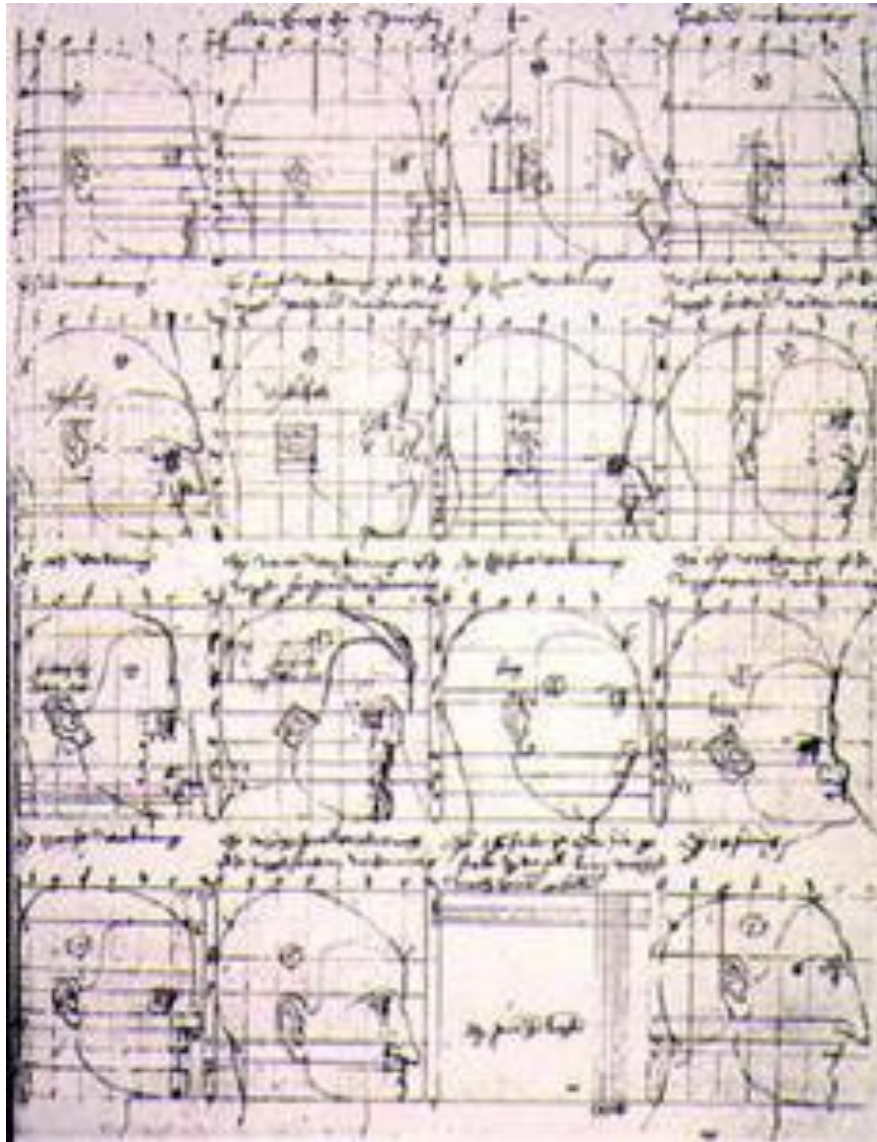


- *Painter, engraver, researcher and writer. Dürer is not an anatomist, he renounces the definition of an ideal canon of beauty. He is the first artist for whom not only the beautiful, but also the ugly, the so-called characteristic, is interesting.*



Dürer's artistic conception was founded on the idea that Geometry and Mathematics, as sciences, are able to establish common rules of representation of the body and space in the Art, but especially in Painting. So Geometry and Mathematics would allow to eliminate falsehoods and errors, often seen in the works of artists, who did not have adequate theoretical training.

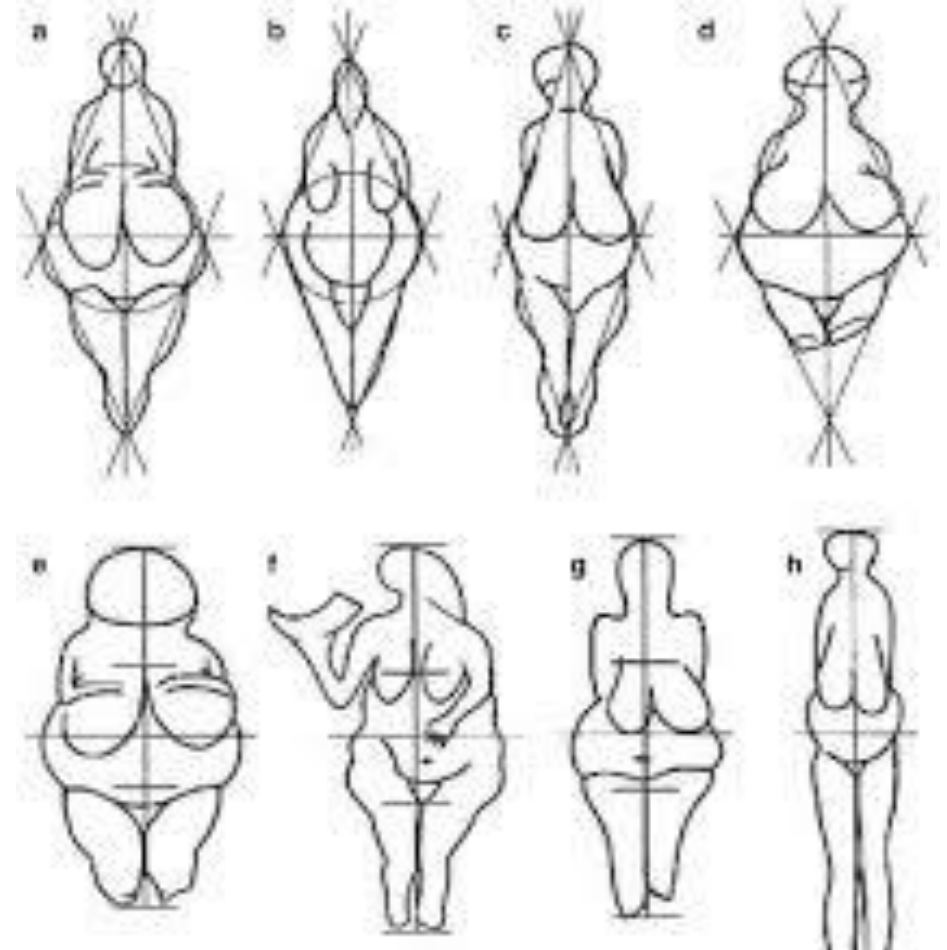
Drawings by Dürer's Treaty of proportions (1527)



A look at history: the geometry of the body

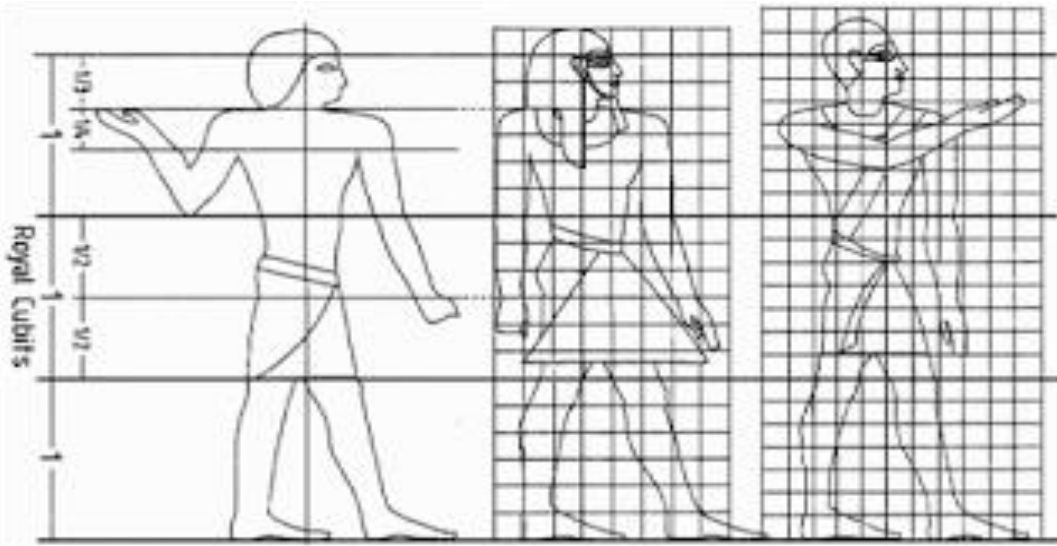
Paleolithic Canon

It is a canon that sees the light 30000 years ago. It has no proportional supports but follows a purely geometrical rule, that is the design of the diamond obtained from the triangle and its symmetrical overturning, which coincides with the biacromial and bitrochanteric prominences.



Drawings of Leroi-Gourhan comparing the shapes of figurines between 14000 years and 30000 BC.

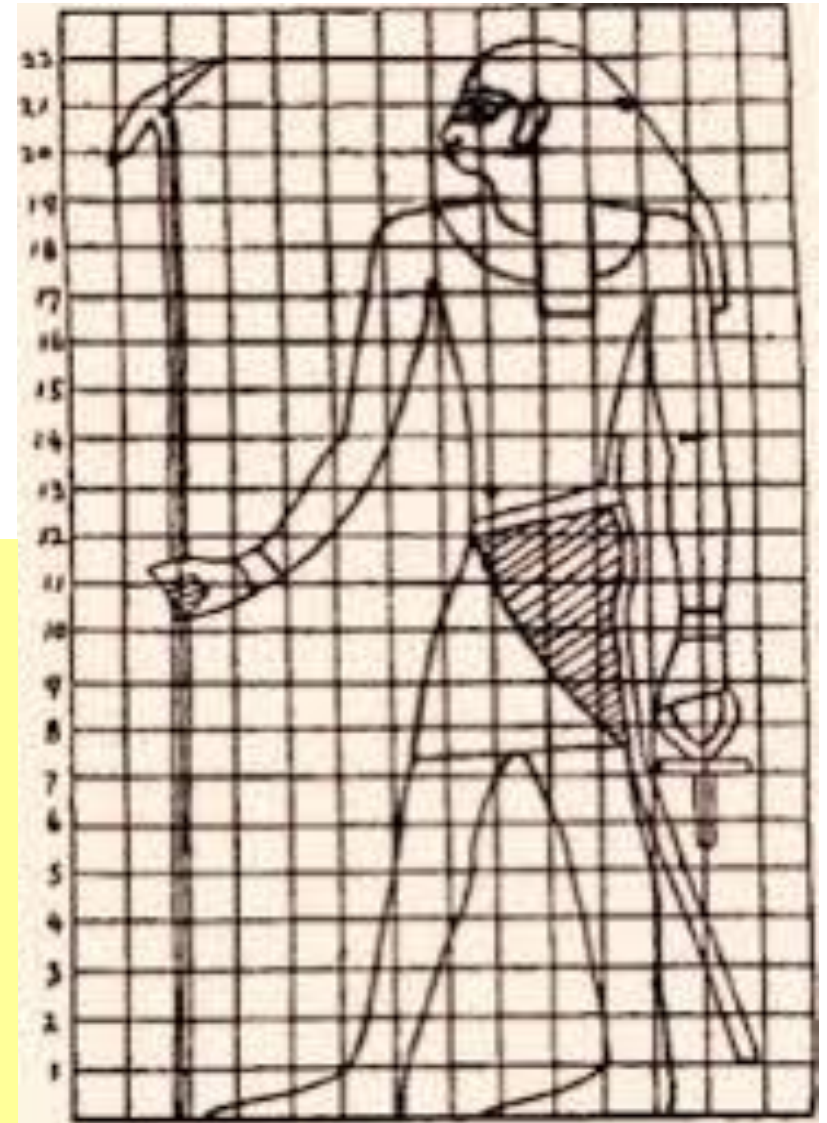
The Egyptian Canon



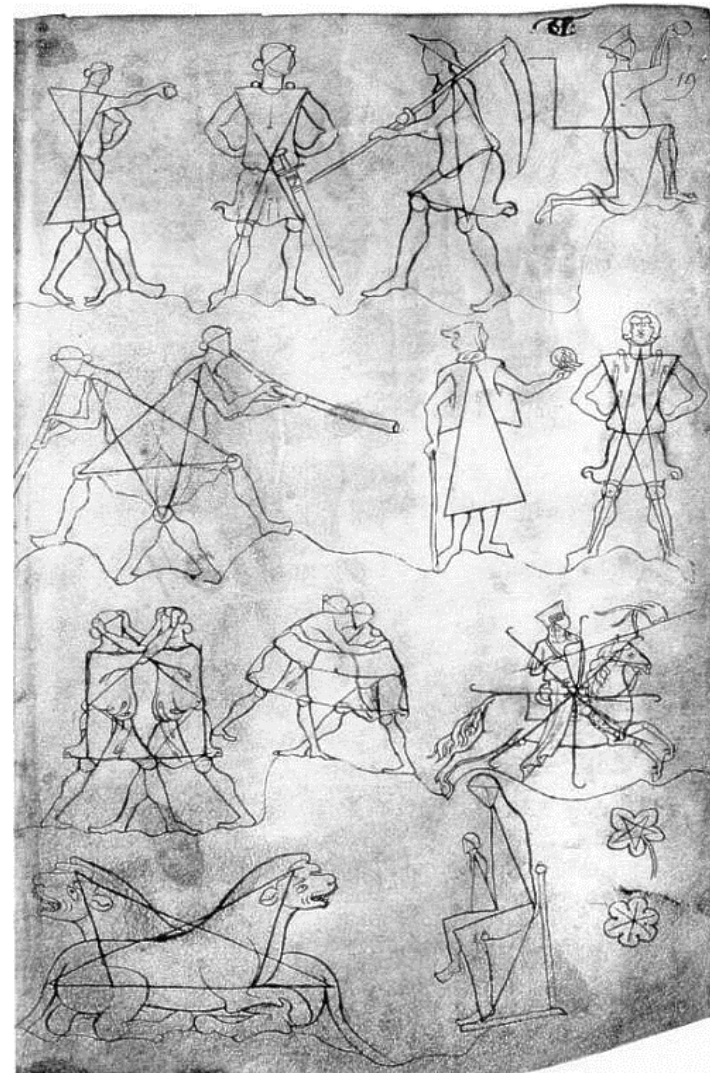
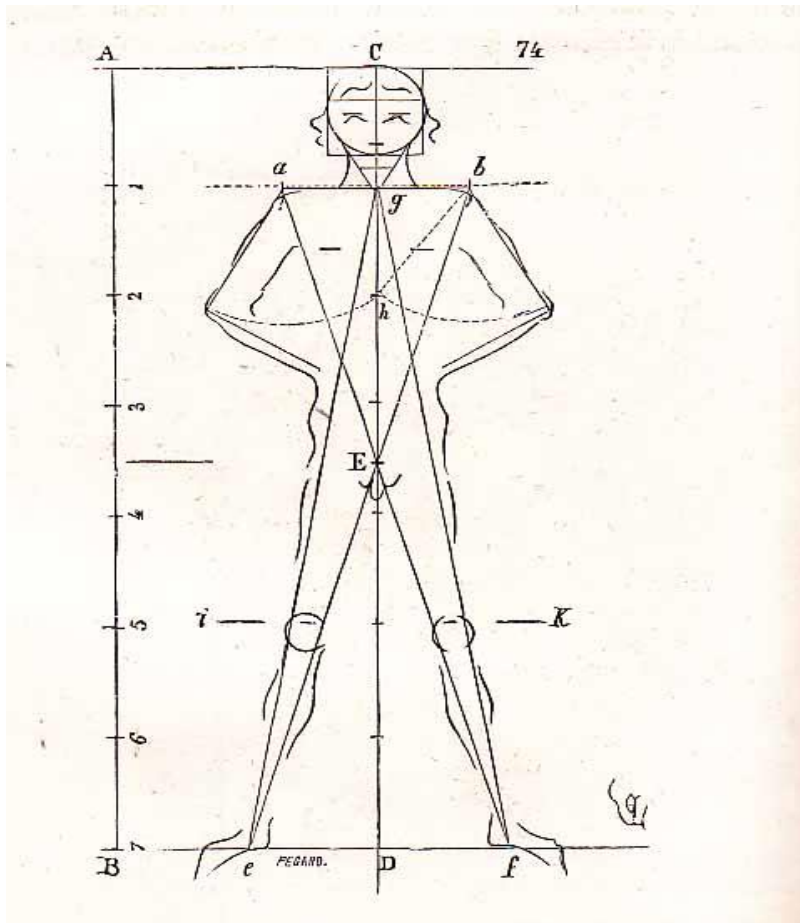
We witness Egyptian art, at the first appearance of a Canon or Rule, which soon assumes two distinct physiognomies: a mathematical measure and an anthropometric measure.

The Egyptian Canon fixed the unit according to the length of the Foot, which can be translated into 29,6 cm.

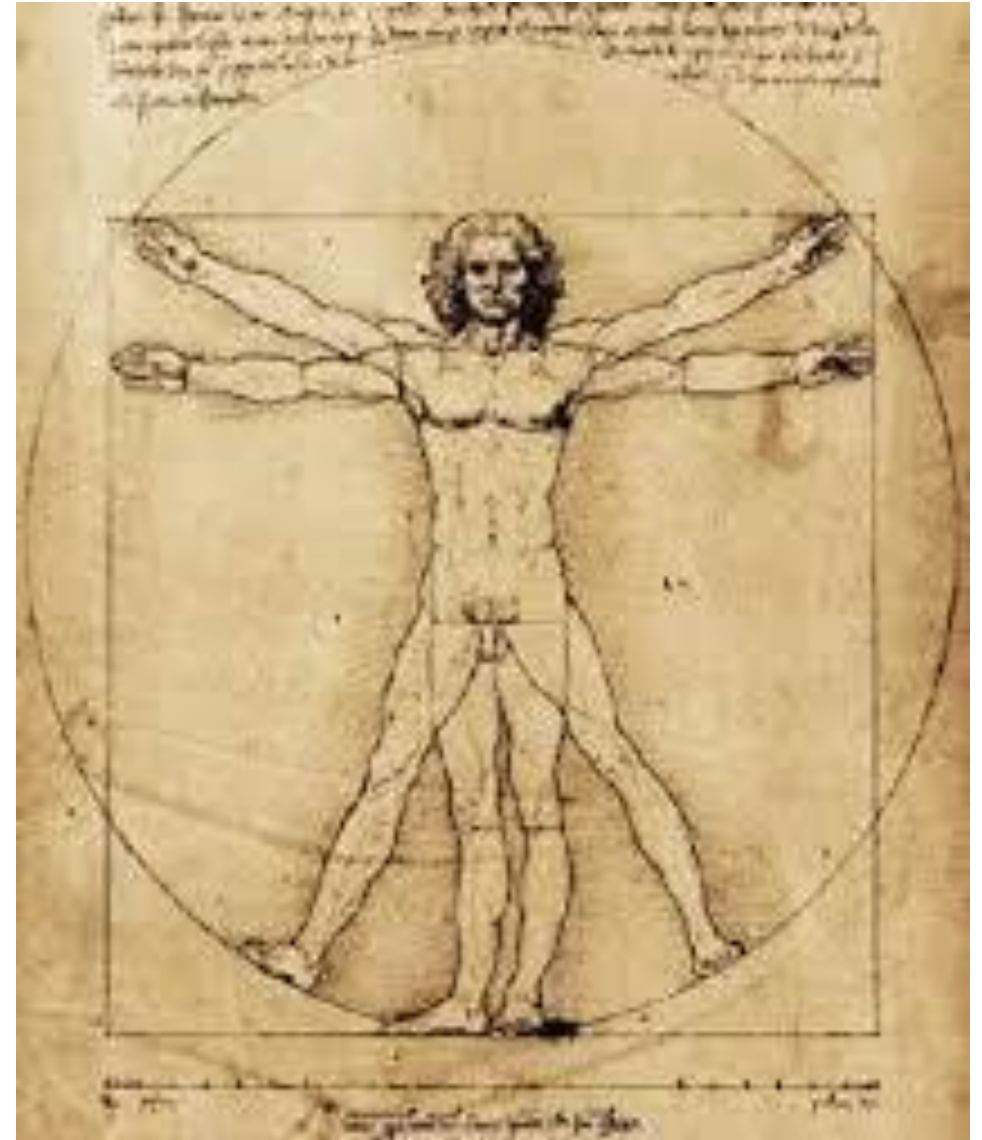
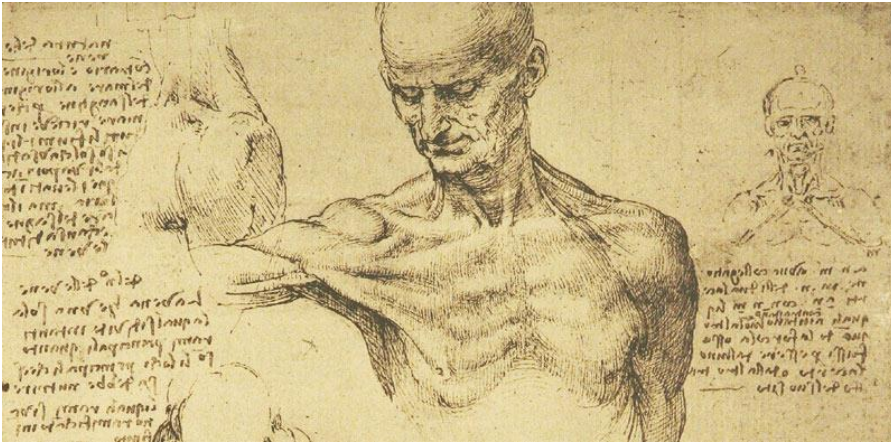
Its multiples were the normal Cubit (one and a half feet), the Royal Cubit (about twice the foot), the Fathon (4 cubits). Sottomultipli were the Palm (1/4 of a foot) and the Finger (1/24 of Cubito).



The middle age: French architect Villard de Honnencourt, who lived in the 13th century, demonstrates through his sketches the use of the pentagon in the elaboration of human body studies.



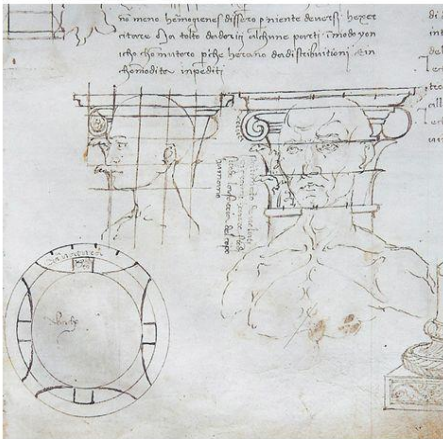
Leonardo's drawing



- The microcosm theory has ancient origins. Leonardo's drawing is based on this theory. Leonardo writes: "l'omo è detto dalli antiqui mondo minore". Man is the microcosm of a superior order, almost an entity showing the elements that make up the whole world.

The Renaissance: following Vitruvius and Leonardo...

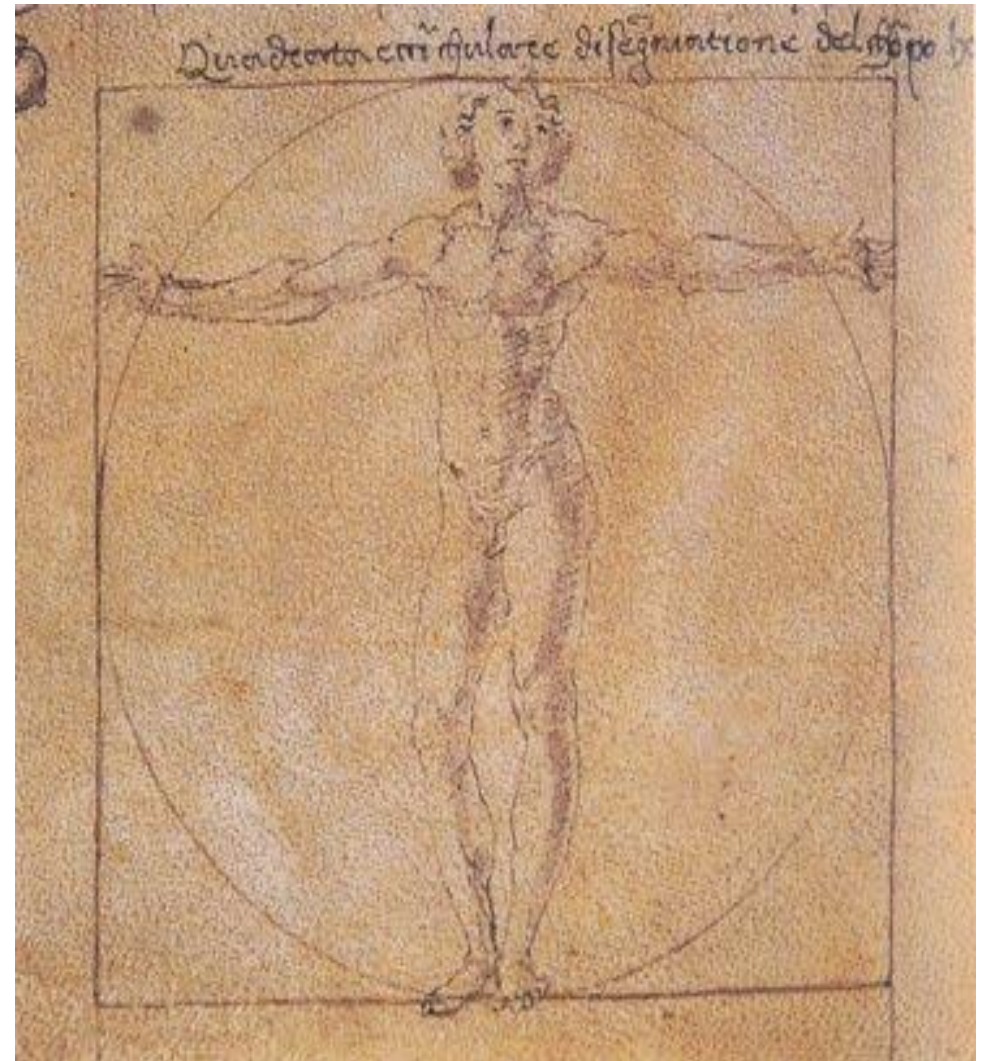
L'analogia antropomorfica
Capitello (lat. *Caput*) come "testa"



Francesco di Giorgio Martini, capitelli
Torino, Bibl. Reale, cod Saluzziano
148, f15r

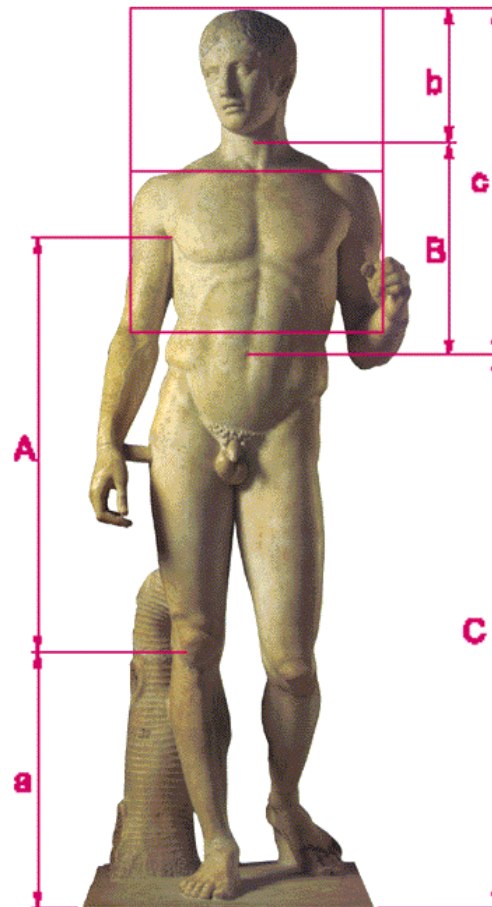
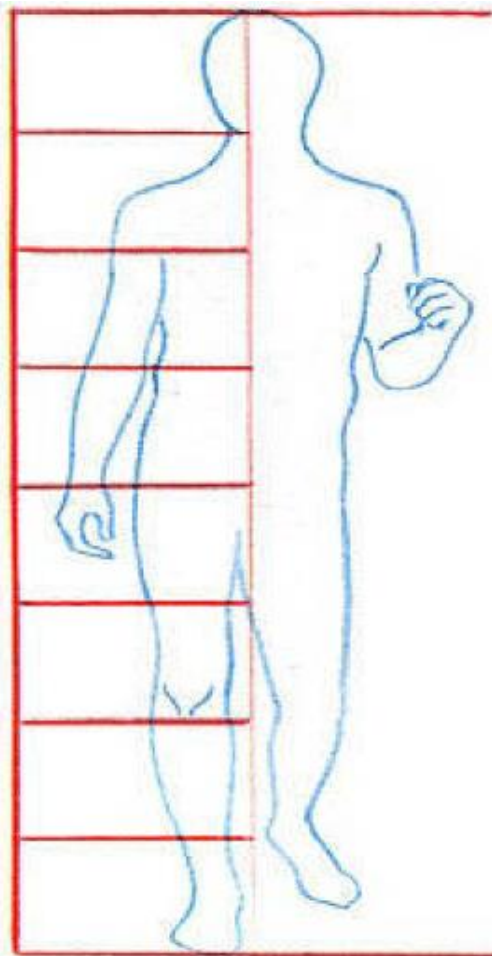


Giuliano da Sangallo, Capitelli



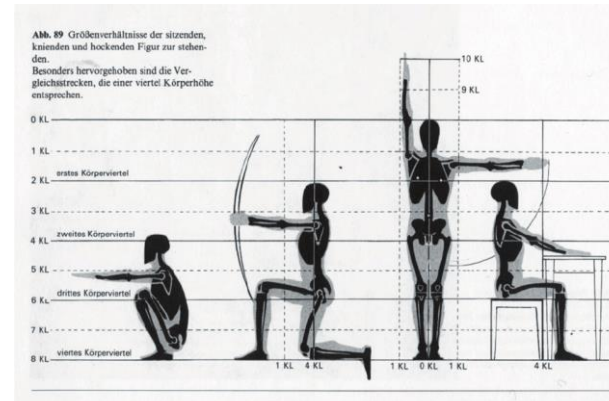
- On the right Homo ad circulus, by Francesco di Giorgio an interpretative drawing of the Vitruvian Canon.

The Greek Canon



- The figure shows the application of the canon of the Doriforo, the famous sculpture by Policleto.
- The proportions respect the golden ratio (1:1.618) and the height is built with 8 heads.

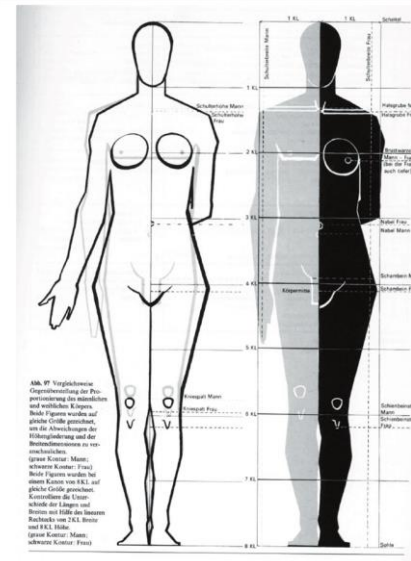
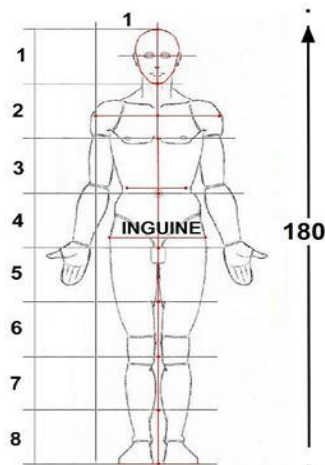
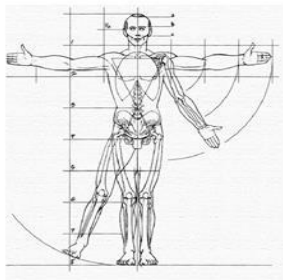
Human body proportional structures by contemporary authors

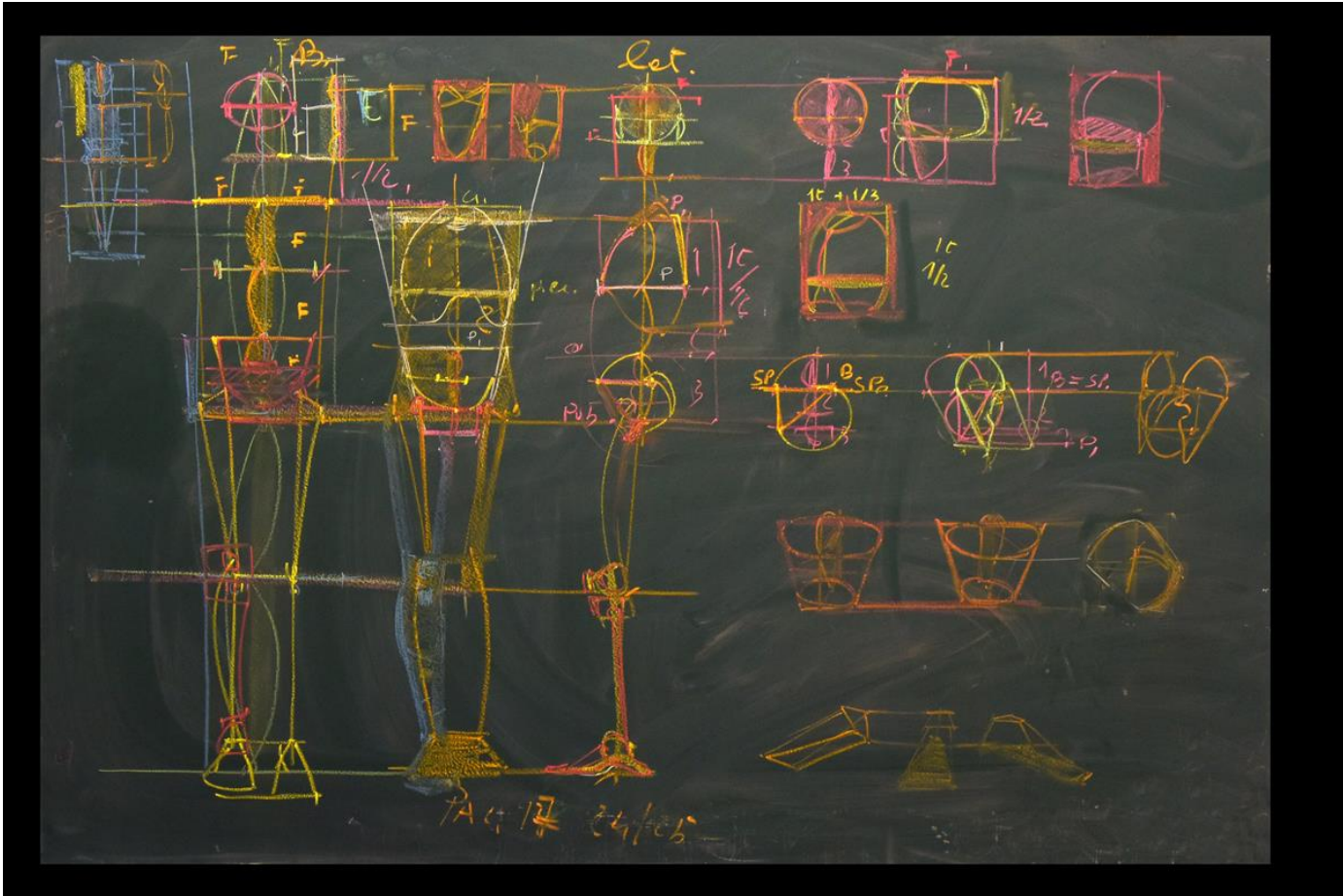


CANONE DI POLICLETO
(GRECO, 5° SEC. A.C.)

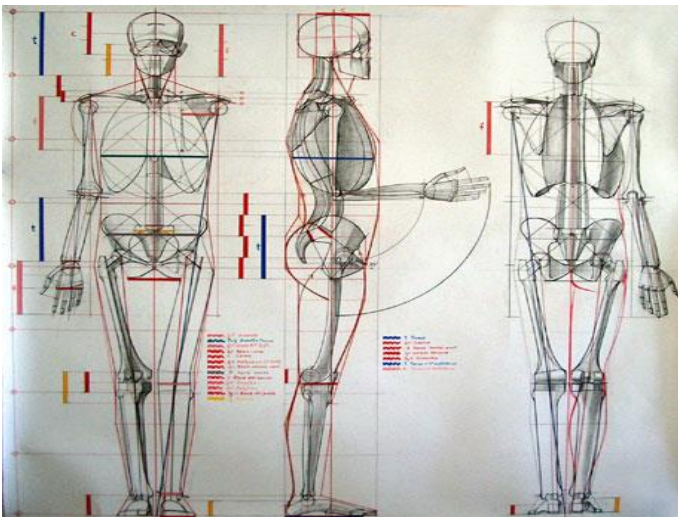
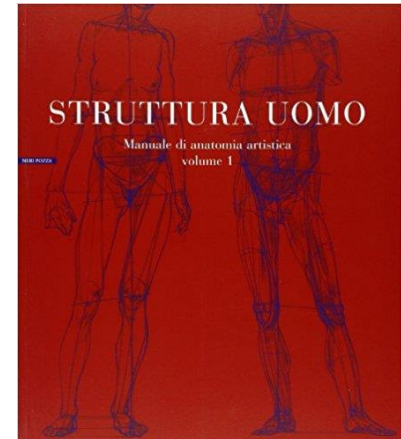
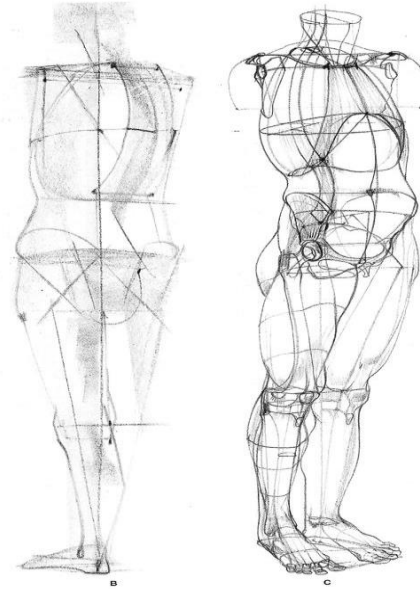
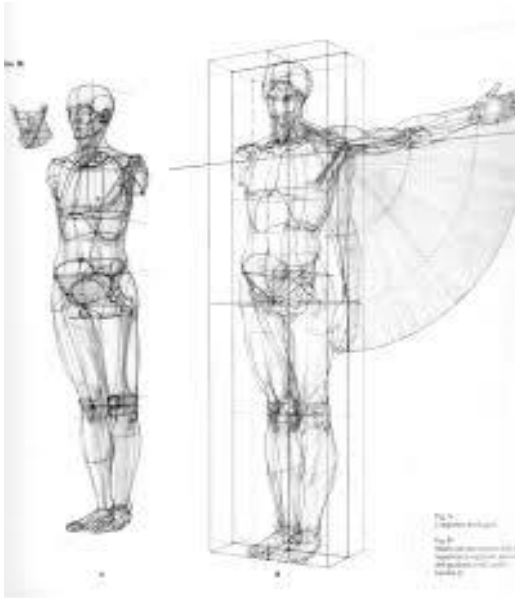
LA TESTA

STA 8 VOLTE NEL CORPO



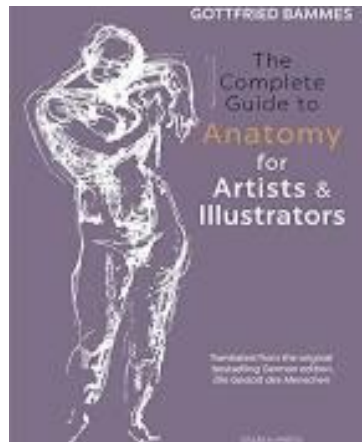
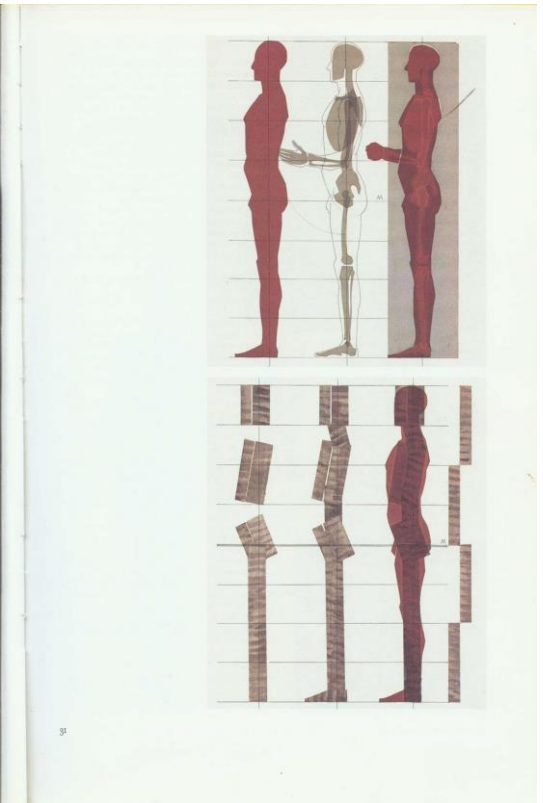
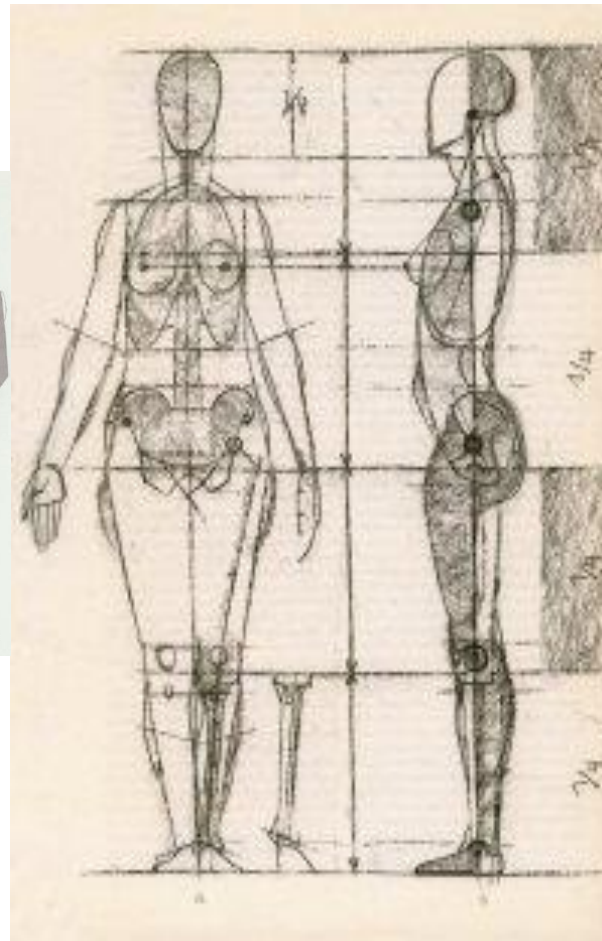
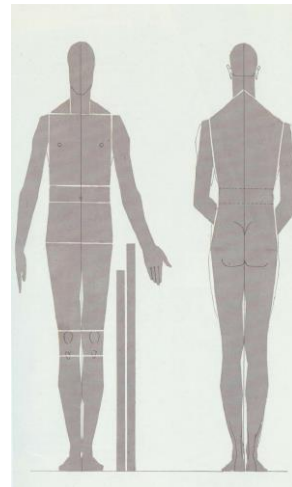
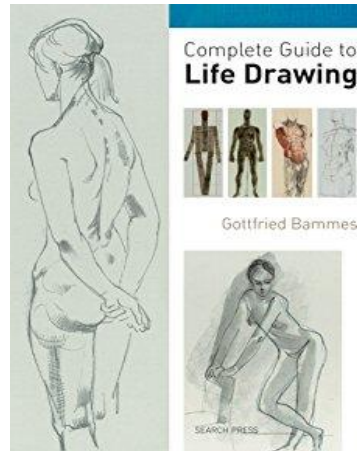


Alberto Lolli, Mauro Zocchetta e Renzo Peretti. They all teach at Venezia Academy of Fine Arts. In the last 15 years they have published three different books, very interesting and useful for Artistic Anatomy.

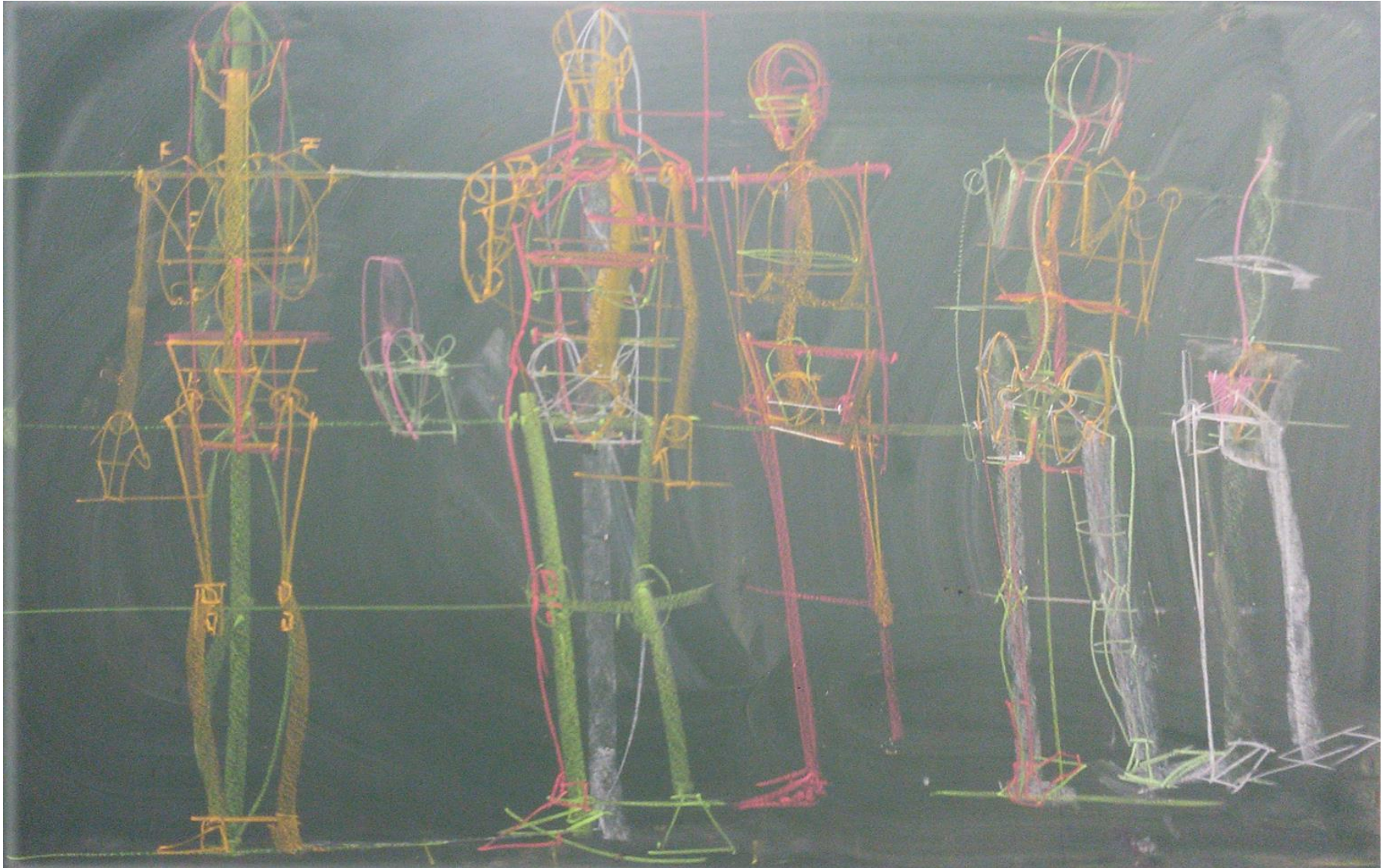


Gottfried Bammes (26 April 1920 – 14 May 2007)

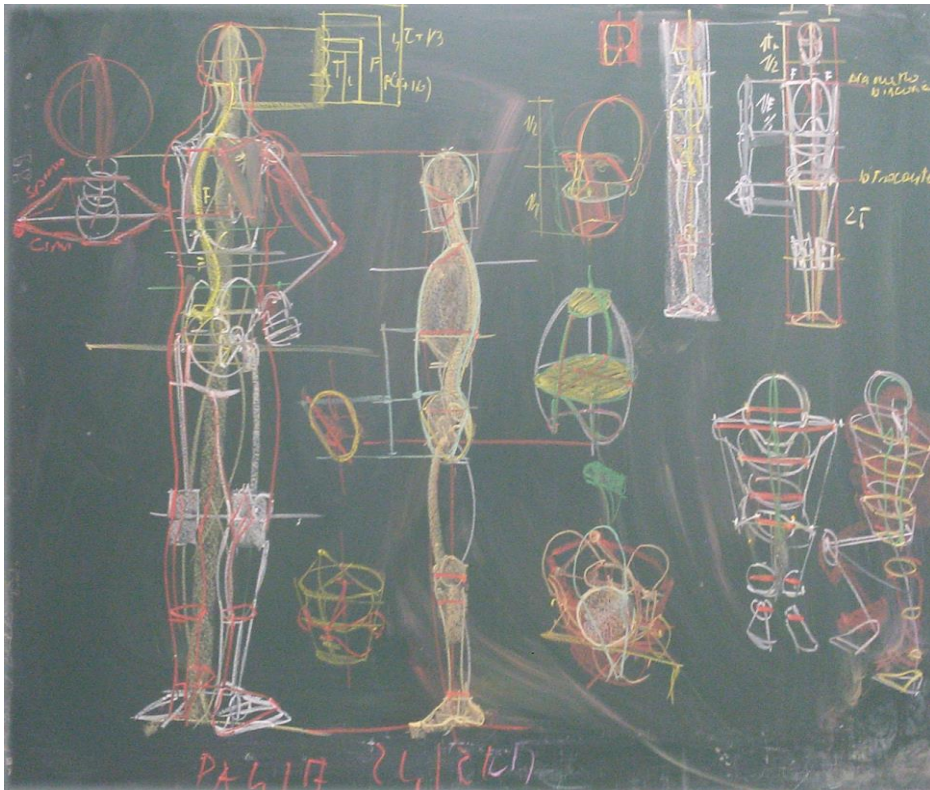
was a professor of art at the Dresden Academy of Fine Arts, Germany. His anatomic drawing textbooks have become standard reference works; several have been translated into English



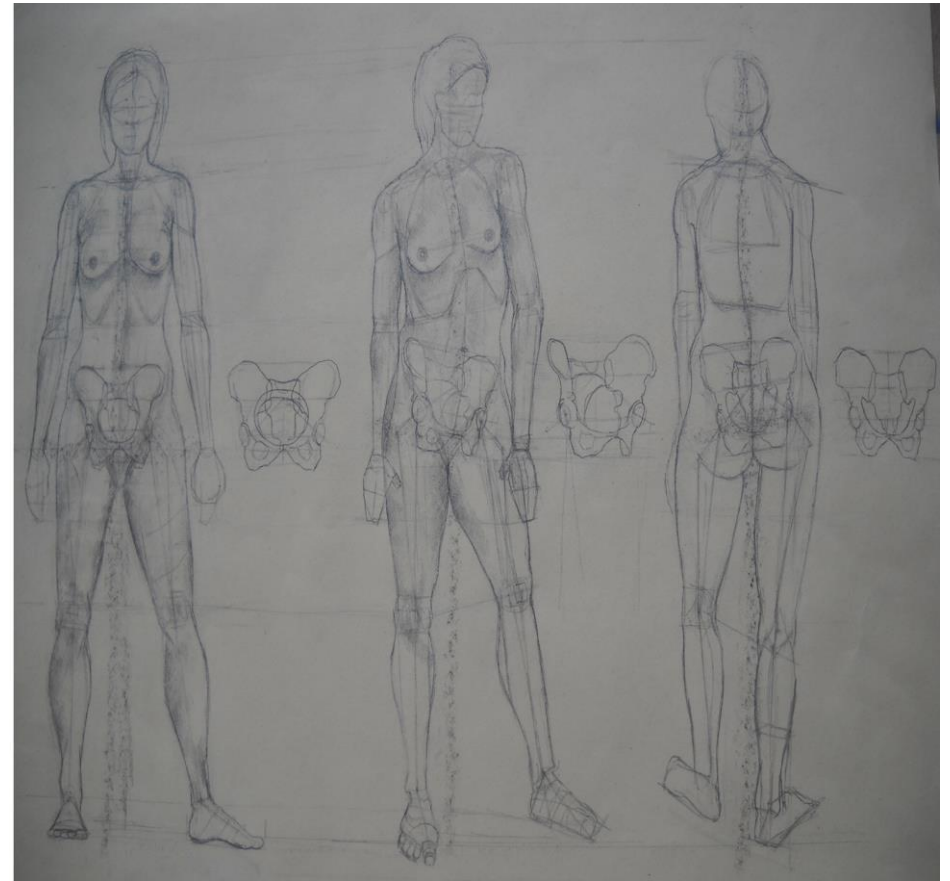
Symmetrical standing stationary



Volumetrical and proportional schemes which indicate the possible resolutions of some perspective views

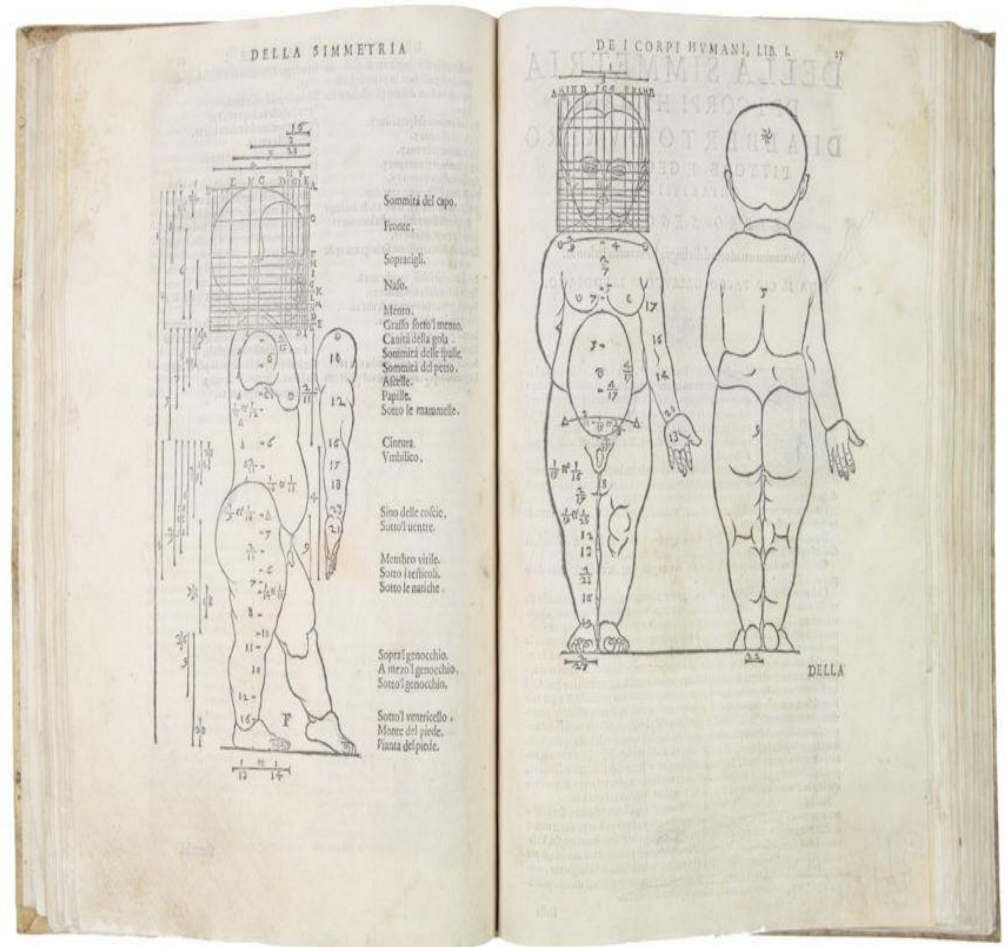
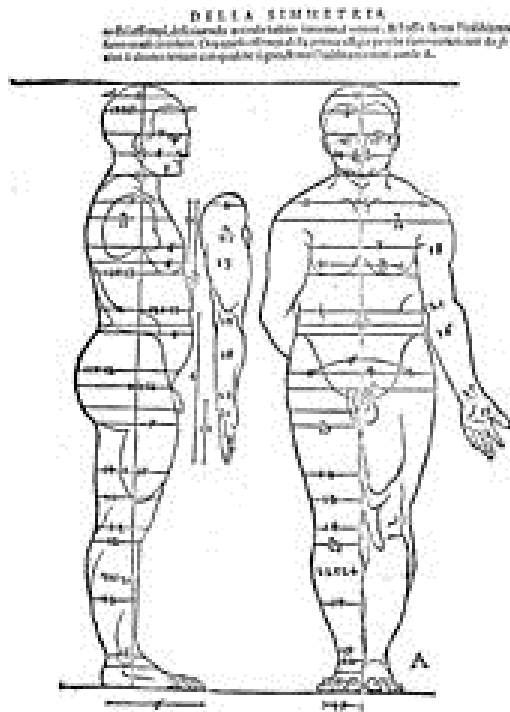


Asymmetrical station: examples of contrapposto



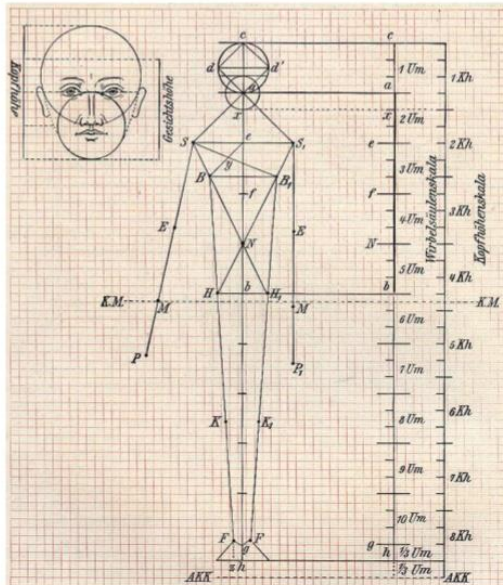


According to Dürer, the beauty of the human body was not based on abstract concepts and calculations, but it was something to be sought through an empirical calculation. For this reason he dedicated himself to the measurement of a large number of individuals, without however succeeding at a definitive and ideal model.

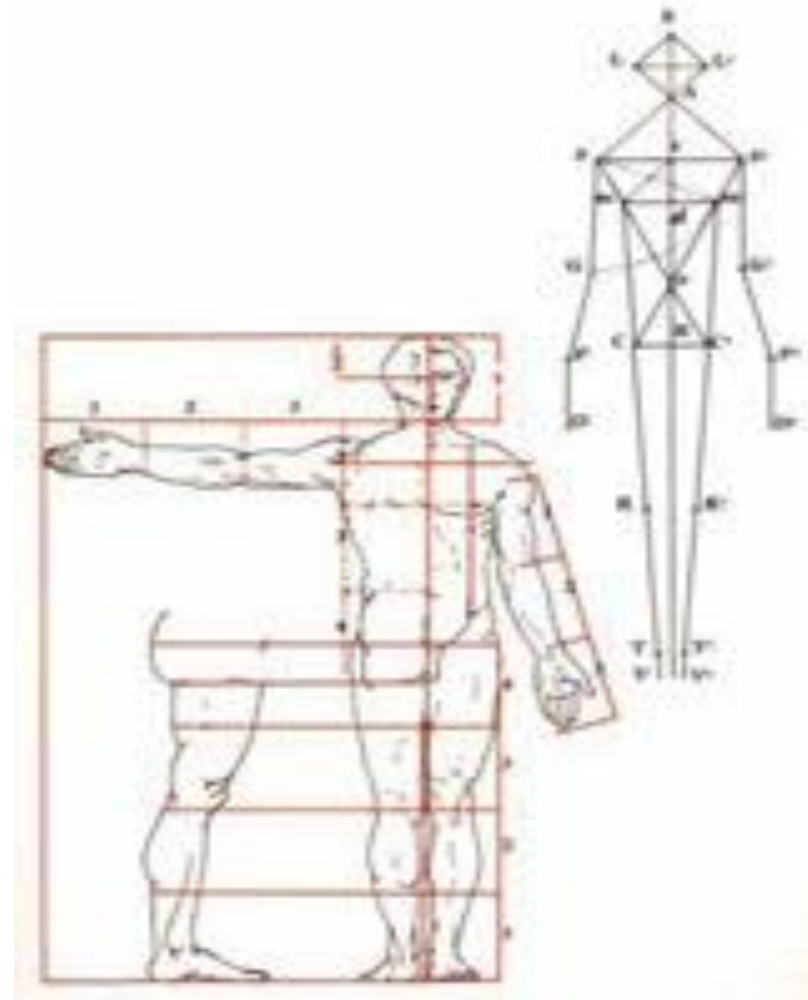


The CANON OF FRITSCH (1895) is original and practical, because it allows to find the proportions of a human figure using a section of the body: the distance between the base of the nose and the upper margin of the symphysis of the pubis. Paul Richer as a professor of anatomy at the Ecole des Beaux Arts, photographs and draws hundreds of men and women, measures them and completes the cards with descriptions of habits with scientific clinical precision.

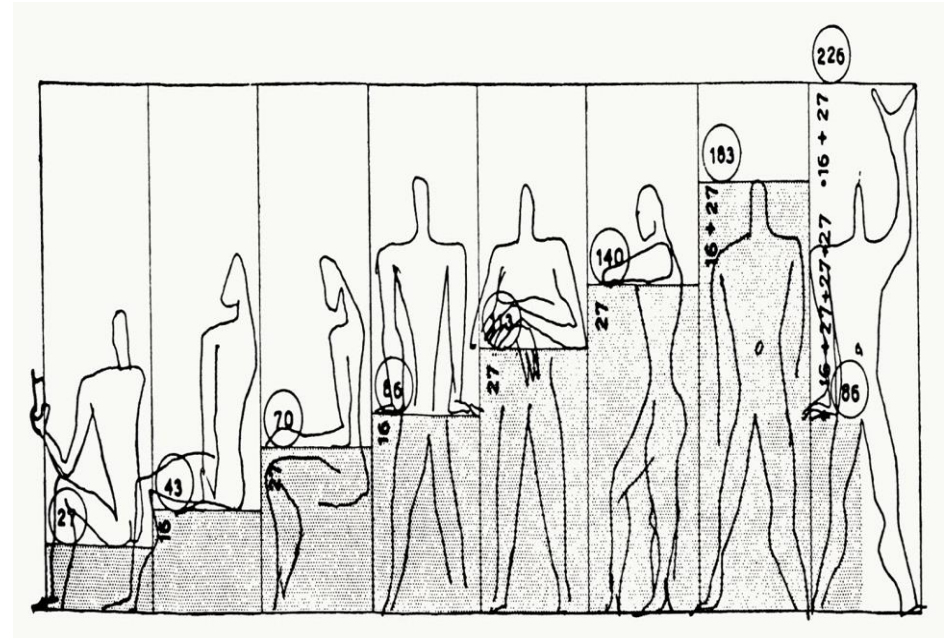
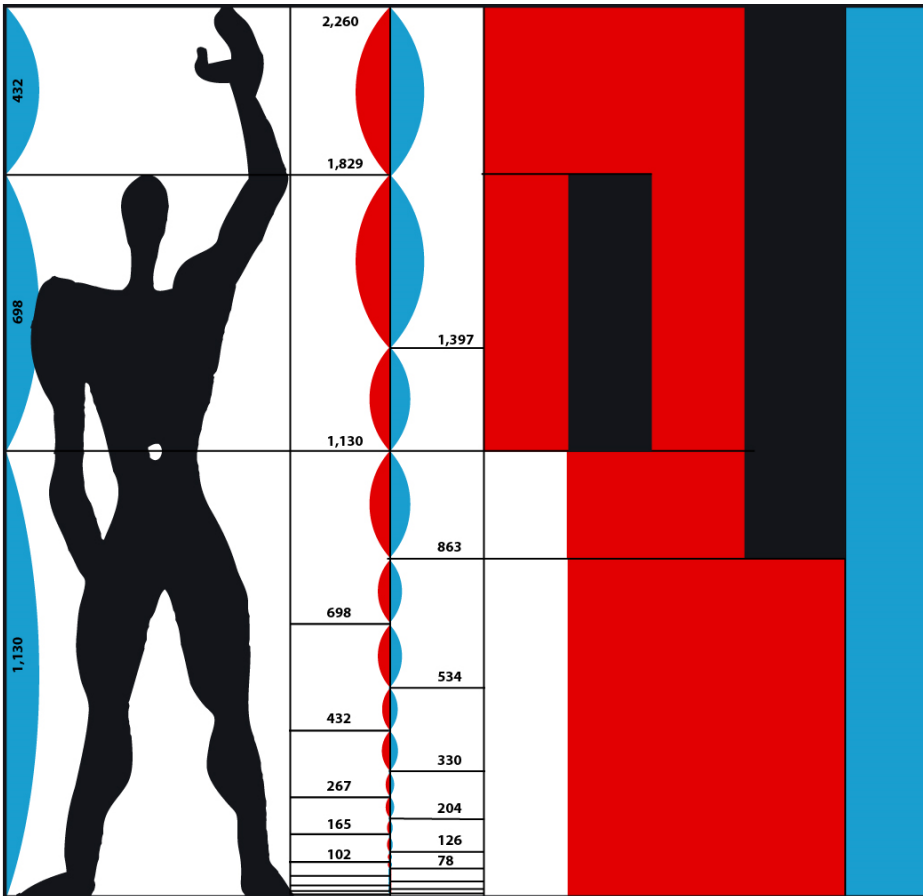
CANON DE 7 $\frac{3}{4}$
 canon de Frisch y Merkel
 Modelo geometrizado

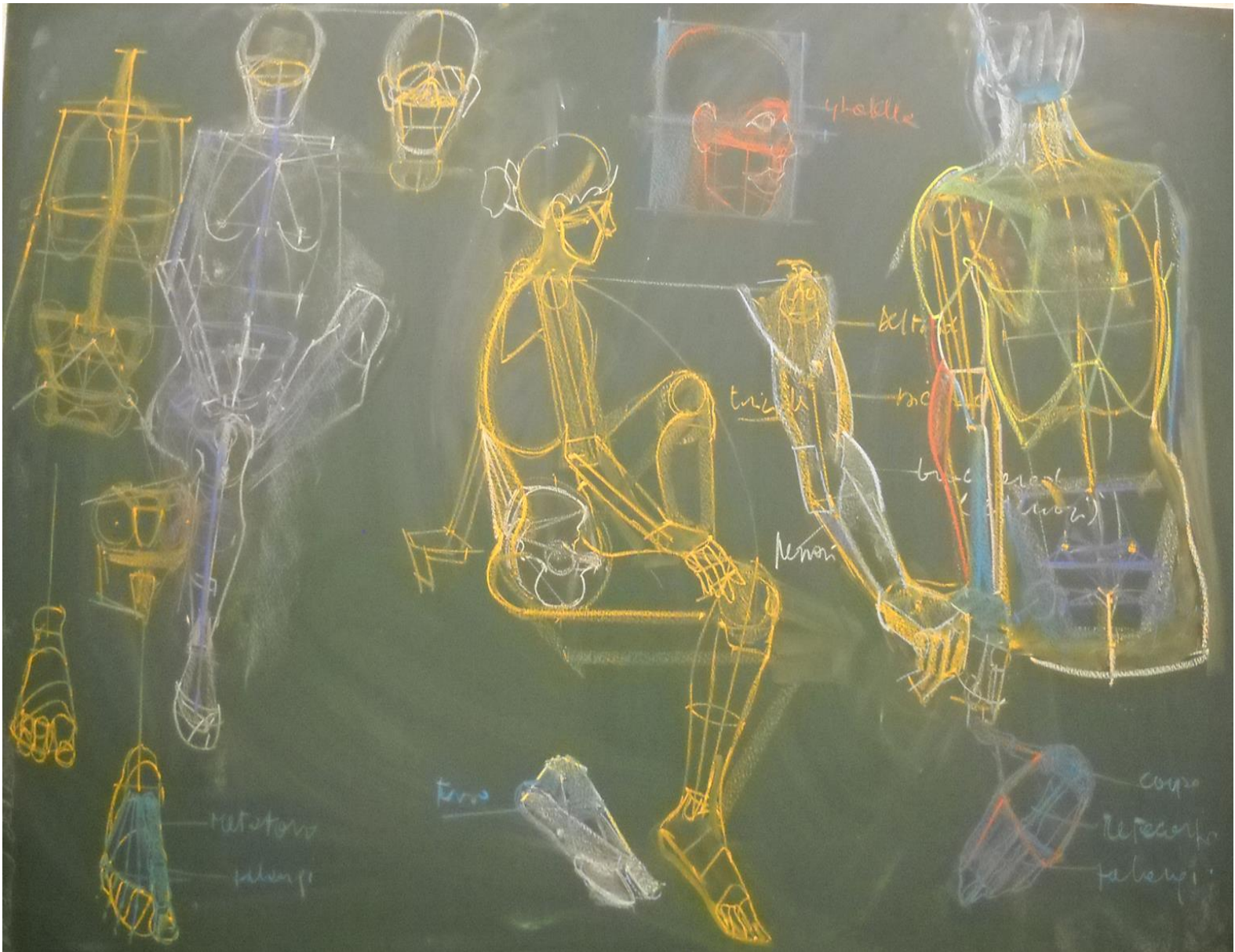


La altura de la cabeza es igual a la distancia entre los pezones
 El centro de la figura es la equidistancia entre B B1(pezones)
 En las extremidades el módulo ((ab) = columna vertebral) coincide con las articulaciones
 En la mano pm* = borde superior de los huesos del carpo
 En la rodilla pm = borde inferior de la rótula
 En el pie pm = Superficie superior del astrágalo
 Pm* = punto de medición

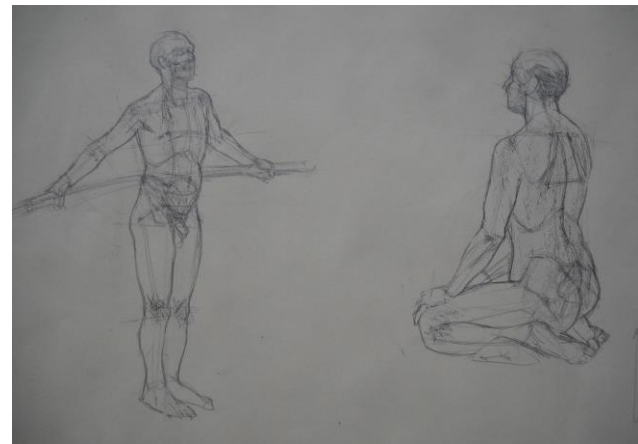
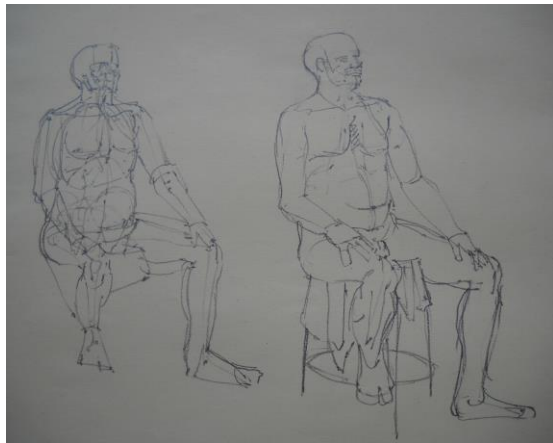
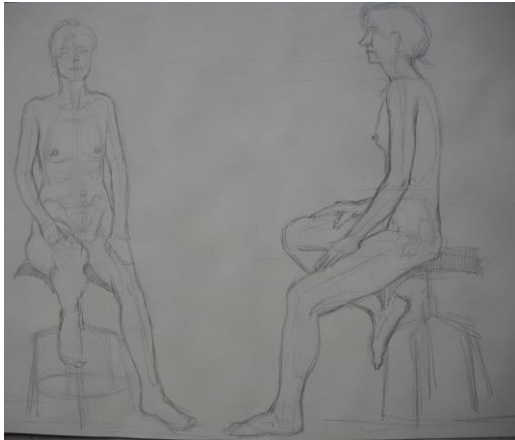


Le Corbusier and The modulator





Drawings by students of the first year Standing and sitting positions

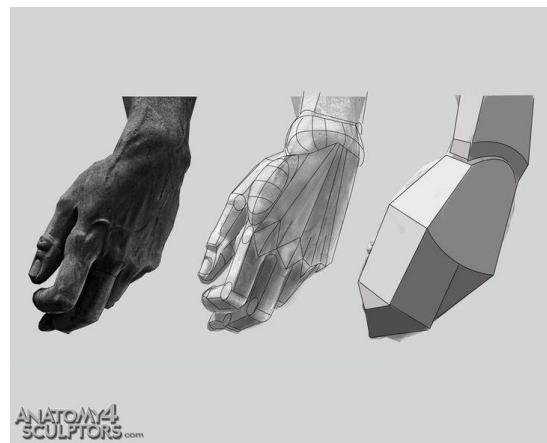
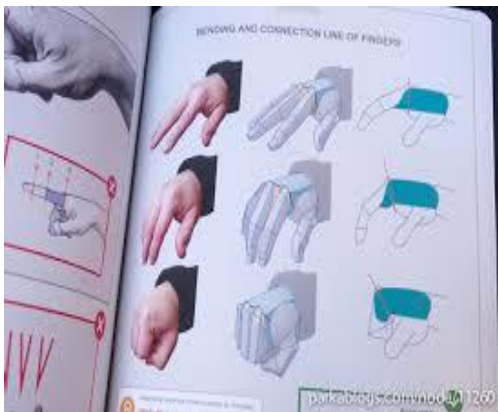
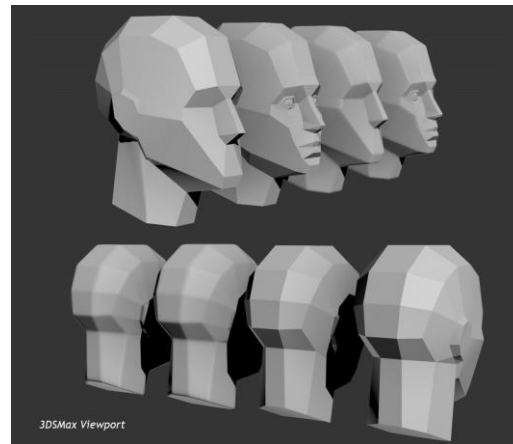
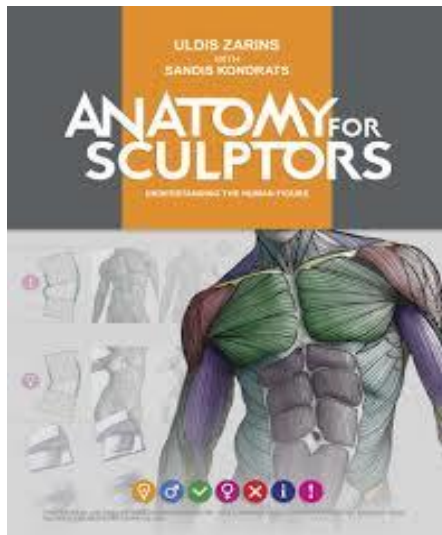








Uldis Zarins, Sandis Kondrats, Monika Hanley (Editor),
Sabina Grams (Photographer)
Anatomy for Sculptors, Understanding the Human Figure





Federico Montesano «Structures IV», 2018
pencil, black ink, inks, watercolor on prepared paper

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Dotti Marco, Mascheri Carlo, Mineo Federica, Montesano Federico, Lenini Natalia,
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