

PAUL RICHER AND ARTISTIC ANATOMY

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Summary

The science that studies the ratios and proportions on the human body is named Artistic anatomy in art. It is mentioned as a science branch till 19th century. At these stages the France school leadership is accepted by the scientists. Early in the 20th century the best studies which were made by the painter and doctor Paul Richer were the study named "Nouvelle Anatomie artistique du corpus humain-l'Homme" (new artistic anatomy about human body-man) published in 1906 and the study named "Nouvelle Anatomie artistique- la Femme" (new artistic anatomy-woman) published in 1920. Richer described the human beings by using scientific measurements without looking for an ideal beauty. He described both the man and woman figures in detail. He chose head height as a module and he announced the ratio of head height to body height as 1:7,5. He made his descriptions by using anterior and posterior views of the body; moreover he added medial and lateral views of extremities. By using anthropometric and statistical research methods Richer converted the artistic anatomy to the science. He found major data about the body proportions of average European human.

In European Renaissance, which is in search of something, there is coherence and cooperation between **science** symbolizing thought and **art** reflecting humanistic feelings. **Anatomy** and **visual arts** are the prettiest examples of this. Eventually, the concept of "**Artistic Anatomy**", commenting magnificent shape and excellent structure of human body as a whole, emerged.

Human body was constantly scrutinized by the artists and scientists from the ancient ages until today. The artists, who used the human body as a means of narration, examined human anatomy from the perspective of artistic value [1].

Paul Richer, a French doctor and painter-sculptor, carried out the most comprehensive and scientific study of the period after Renaissance in the first years of the 20th century. Paul Richer also created a practical 'workshop canon' like "Gerdy". His canon is valid for "middle-sized, European" people. Richer described real, alive people by performing scientific measurements without seeking for ideal beauty. Richer, who depicted both male and female figures in a detailed way, integrated anthropology with artistic anatomy [2, 3].

He chose "head height" as a module and declared its rate as 1:7,5 based on the height. He made his descriptions as front and back view and also added medial and lateral views even in extremities (Figure 1).

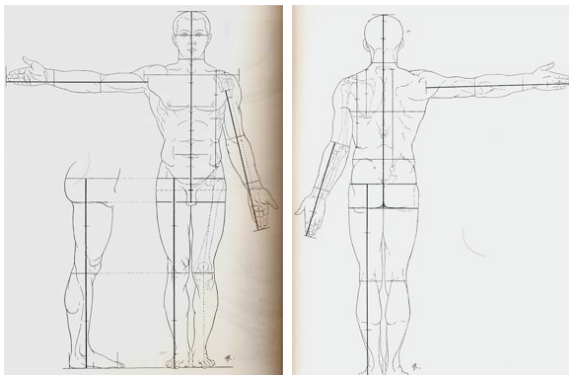


Figure 1. Anterior and posterior aspect by Paul Richer

According to Richer, “head-neck-body” equal to 4 modules all together both from front and back: From the front (beginning from vertex): the first module comes to the bottom side of mandible; the second module - to mamilla; the third module - to navel level; the fourth module, on the other hand, comes to the bottom point of sexual organ. From the back (beginning from vertex): the first module comes to a bit upper part of spinal process in the seventh cervical vertebra; the second module - to angulus inferior scapula; the third module - to the top side of buttock bulk; the fourth module - to plica glutealis. Module borders from the back are not certain. Only the last one is more stable [1,4] (Figure 2).

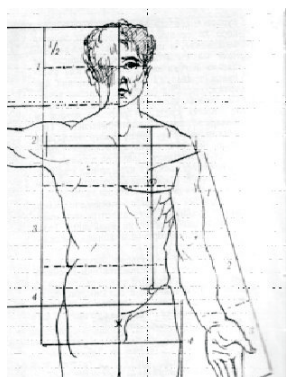


Figure 2. “Head-neck-trunk”: anterior and posterior aspect

Lower extremity exactly composes 4 modules. However, $\frac{1}{2}$ module at the top is superposed with the lowest $\frac{1}{2}$ module of the body. That is, the upper limit of lower extremity goes down to the middle of plica inguinalis (the centre of hip joint). Therefore, body height corresponds to $7\frac{1}{2}$ module. According to this point of view, “the midpoint of body height” should hit any point between the lower limit of the body and upper limit of lower extremity. Module number of lower extremity starts as from below: basis- knee joint (tibiale) comprises two modules, from here to the “midinguinal” point above (or over one finger of trochanterion) also comprises two modules. Lower extremity is $3\frac{1}{2}$ module from the back view (till plica glutealis); also $3\frac{1}{2}$ module from the medial view [1, 5, 6] (Figure 3).

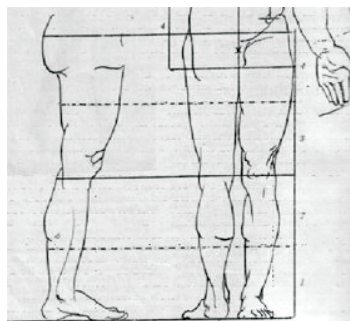


Figure 3. “Lower extremity”: anterior, posterior and lateral aspect

The length of upper extremity (axilla - the third finger tip) is at a valuation of 3 modules; on the other hand, olecranon- the third finger tip is of 2 modules (Figure 4).

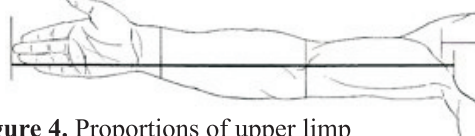


Figure 4. Proportions of upper limb

According to Paul Richer, maximal width of the shoulders (bideltoid) comprises 2 modules; maximal width of the hip, on the other hand, is of $1\frac{1}{2}$ module. He presented criteria about the neck: Gnathion-Suprasternale is $\frac{1}{3}$ module; however, Gnathion-Clavicula level is $\frac{1}{4}$ module [1, 3] (Figure 5).

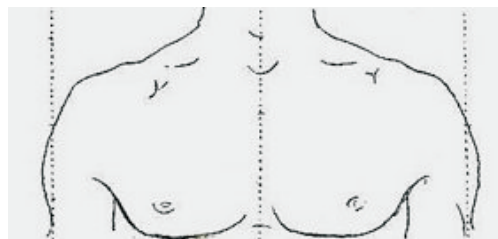


Figure 5. Bideltoid diameter

Paul Richer integrating science and art described a number of proportions in the human body by making use of scientific measurement techniques without looking for any ideal beauty. Thanks to this characteristic, he formed the most comprehensive canon known in the history.

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