PERTICA NOVA

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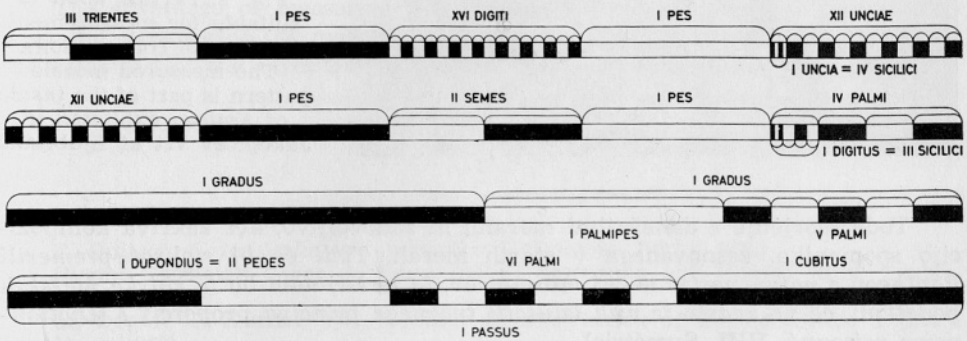
... da bi posneli in razumeli grške spomenike, jih je treba meriti z grškimi čevlji (Viollet-le-Duc, *Dictionnaire raisonné*, VII, Symétrie)

Stare zgradbe običajno merijo z merili, ki so pač takrat v rabi. Palladio je meril rimske spomenike z vičentinskim čevljem; nemška arheološka šola je poznala pruski čevelj; danes sta najbolj v rabi meter in angleški (Imperialni) merski sistem, pa naj gre za meritve grških, rimskih, egiptovskih ali pa kakih drugih spomenikov.



Sl. 1. Štiri strani nove pertike, ki meri 1 *passus*, so razdeljene (od zgoraj navzdol) na:
— 5 čevljev; 1′ meri 3 triente, ali 16 prstov; ali 12 palcev; 1 palec je 4 sicilike dolg;
— 5 čevljev; 1′ meri 2 *semes*, ali 4 dlani; dlan velja 4 prste, katerih vsak je 3 sicilike dolg;
— 2 gradusa; 1 *gradus* je za dva mala komolca; 1 mali komolec meri 5 dlani;
— 2 čevlja + 2 komolca; 1 komolec meri 6 dlani

Fig. 1. The four sides of *pertica nova*, which is 1 passus long, are subdivided in (from top to bottom):
— 5 *pedes;* one *pes* equals 3 *trientes*, or 16 *digiti*, or 12 *unciae;* one *unicia* being equal to 4 *sicilici;*
— 5 *pedes;* one *pes* equals 2 *semes*, or 4 *palmi;* a *palmus* is 4 *digiti*, each of which is 3 *sicilici;*
— 2 *gradus;* one *gradus* makes 2 *palmipedes;* one *palmipes* is 5 *palmi;*
— 2 *pedes* + 2 *cubiti;* one *cubitus* is equal to 6 *palmi*

Sl. 2. Nova pertika je kar primerna za merjenje rimskih kompozicij. Na sliki meri študent arhitekture mozaični vzorec z novo pertiko na Jakopičevem vrtu v Ljubljani

Fig. 2. *Pertica nova is* suitable for measurement of Roman compositions. The measured mosaic pattern is part of the *insula* of *Emona,* exhibited in Jakopičev vrt at Ljubljana

Toda merjenje z današnjimi merami ni zadovoljivo, ker zakriva kompozicijo spomenika, zasnovanega v starih merah. *Tudi če bi stokrat premerili Pantheon z natančnostjo nekaj milimetrov, le za kaj nam bo ta zbirka merskih podatkov, če ne znamo iz njih izluščiti tvornega principa proporcij ?* (*Dictionnaire raisonné,* VIII, Symétrie)

Ker je moderna metrologija zanesljiva v določanju različnih merskih sistemov, res ni ovire, razen v vztrajnosti, da ne bi merili starih spomenikov s starimi merami.

Zdi se, da je predvsem rimsko obdobje poznalo standardizacijo v gradnji mest, zgradb, v oblikovanju gradbenih elementov, orožja in orodja, posod in drugih gospodinjskih predmetov, vozil in celo nakita. Da bi ga bolje razumeli, smo na Šoli za arhitekturo Ljubljanske univerze oblikovali mersko palico, razdeljeno na različne rimske merske enote. Rimljani so za merjenje uporabljali 10 čevljev dolgo pertiko; naša nova pertika pa meri le 5 čevljev.

Prednost merjenja rimskih monumentov z rimskimi merami je v razkrivanju modularnega ritma arhitektonskih mer in v razumevanju ponavljanja stalnih razmerij, kar tvori proporcije.

Pertica nova

...pour relever et compredre les monuments grècs, c'est avec le pied grèc qu'il les faut mesurer. (Viollet-le-Duc, *Dictionnaire raisonné,* VIII, Symétrie)

The measurement of ancient buildings is usually done with the system of sizes contemporary to the measurer. Palladio has measured Roman buildings with *piede vicentino;* German school of archaeologists knew the Prussian foot; metre and Imperial system of sizes are used by modern archaeologists, regardless if the monument to be delineated is Greek, Roman, Egyptian, or of any other period.

The measurement with modern sizes is not satisfying because it obscures the compositional conception of the monument in its contemporary sizes. *Mesurent cent fois le Panthéon avec des differences des quelques millimètres à quoi nous servira cette compilation des documents, si nous n'en savons pas déduire le principe génetateur des proportions?* (*Dictionnaire raisonné,* VIII, Symétrie)

Since modern metrology is quite reliable in the relation of various systems, there is no obstacle, with the exception of inertia, in using contemporary sizes for measurement of old forms.

Especially the Roman period seems to have standardized their town-planning, building, building components, weapons, tools, pottery and other household objects, vehicles, and even their glyptic. To understand them better, a measuring stick with subdivision in smaller units of Roman standard sizes has been devized at the University of Ljubljana, Yugoslavia. For measurement Romans used a 10 *pedes* long *pertica;* our *pertica nova* is only 5 *pedes.*

The advantage of measuring Roman monuments with standard Roman sizes is in the evidence of the modular rhythm in architectural dimensions and in the understanding of the repetition of constant ratios, forming proportions.

BIBLIOGRAFIJA — BIBLIOGRAPHY

F. Hultsch, *Griechische und römische Metrologie* (Berlin 1862).

Hygini Gromatici *Liber de munitionibus castrorum* (ed. Gemoll, Bibl. Teubn., 1879).

M. Detoni, T. Kurent, *The Modular Reconstruction of Emona* (Situla 1 [in4°], Ljubljana 1963).

T. Kurent, *The Basic Law of Modular Composition* (The Modular Quarterly, London 1963).

T. Kurent, *The Modular Composition of Roman Water-wheels* (Archaeometry, vol. 10, Oxford 1967).

T. Kurent, *La legge fondamentale della composizione modulare* (Edizione Quaderni di studio, Politechnico di Torino, 1968).

T. Kurent, *The Modular Analogy of the Roman Palaces in Split and Fishbourne* (Archaeometry, vol. 12, Oxford 1970).

T. Kurent, *The Modular Eurythmia of Aediculae in Šempeter* (Catalogi et monographiae 4, Ljubljana 1970).

T. Kurent, *The Modular Composition of Diocletian Palace in Split* (Živa Antika 20, 1970).

T. Kurent, *The Roman Modular Way* (Official Architecture and Planning, London, December 1971).