## Surfaces of individual stalls inside poorly documented commercial edifices were certainly all the same, or linked by a simple ratio.

Quite often, in virtual reconstructions, simple commercial edifices are represented as regular rows of stalls, evenly distributed, all the same in size - or at least linked by simple ratios. Yet the correct answer to the question is actually no, and betting on regularity is certainly not a good choice here.
Surfaces of stalls shown below are absolutely not regular, and neither surfaces nor dimensions can be systematically linked by a simple ratio. A simple and provisional conclusion can be drawn : we probably deal here with erratic groups of temporary constructions that mostly share a common name. But an interesting pattern can also be spotted: the surface of a majority of stalls differs only in a small proportion from a sort of medium value - and what is more from a medium value that can be observed across several different edifices. The answer remains no, but a door opens on further investigations about the medium value observation.
These remarks can be made thanks to a 1760 inventory of commercial facilities [14], inside which the surfaces of each individual stall is reported, along with its tax level before and after that date. This data set is used to build a visualisation inspired by Charles de Fourcroy's $18^{\text {th }}$ century tableaux poléométriques, a diagram invented to compare visually populations of various European towns.
The surfaces of stalls are represented by squares of a size corresponding to the surface of the stall (Fig. 35a). Squares are then drawn one on top of the other, and their dimensions/owners available interactively (Fig. 35-c, d). Colours have no other role than helping to better distinguish squares from one another. When two stalls have the same surface, the square is divided in two right triangles.
Each edifice can then be represented by a tableau poléométrique, and comparisons made. The following example shows four edifices of very different overall sizes. On each of them it appears quite clearly that surfaces of stalls inside each edifice widely differ - and in a way that could even be seen as totally chaotic. However, a closer look reveals that, in all of those four edifices, the majority of surfaces are grouped around the green line's value (more or less 3 square meters, or more or less 9 squares elks). Also noticeable, in each of the four edifices one stall stands out significantly as bigger in surface than the rest. Finally, the left tableau (Fig. 36a) - corresponding to the 'Lithuanian' stalls, shows a wider range of surfaces, which is quite understandable when knowing their overall number (33, far more than the others) and its approximate localisation, in the south and the east part of the Market Square (meaning most likely an edifice composed of several, spatially independent, groups of stalls).


Fig. 35 The tableau poleométrique for 'Litbuanian' stalls.
Each stall (a) inside the tableau is interactively connected to a diagram showing its length/width proportions (b) and its owner (c). Stalls for which indications of surface or tax lack are also taken into consideration (d).

Note 14. of. Wymiary rabudowy handlowej i wysokości csynszów w 1760 r., [in] Źródta do driejón zabudony zwiazanej z bandlem we wschodniej creści Rynku Gtównego w Krakowie (XIV-XIX w.) ze zbiorów Archiwum Państwowego w Krakowie, FOLLPRECHT K., JELONEKLITEWKA K., wyd. Pracownia Archeologiczno-Architektoniczna
„Niegoda", Kraków 2007, pp. 75-78

Fig. 36 Four tableaux poléométriques used to compare surfaces of individual stalls inside and across artefacts.
A green line in the background is used to underline a sort of "medium value", corresponding to approximately 9 square elks.
a) 'Litbuanian' stalls
b) stalls near the minor traders hall
c) cookshops
d) stalls near the Town Hall


