Does an edifice last longer when it is bigger?

Considering the cost of dismantling large edifices, one could think so. But considering the maintenance cost of large edifices, one could think the opposite. We clearly do not have enough data, especially on early stages of evolution of the edifices located on the Market Square, to propose a robust visual analysis. But we do have some indications that may help us try to spot a possible trend, and to give a provisional answer. Inspired by C.J Minard's ***tableaux graphiques***, the following visualisation is an attempt to measure the *space-and-time impact* of edifices.

On the *x-axis* we report the surface of edifices as they appear in Dominik Puck's 1787 plan (overall surfaces, all levels inclusive, and not only floor space, see for instance in (*a*) the surface of the town hall). Naturally, since surfaces of edifices changed over time, the visualisation does introduce a bias. On the *y-axis* we report the duration of life of edifices – with a dotted line when it is approximate (*b*).

The visualisation, tested here on the elements of the town hall's ensemble [10] and three other edifices [11], confirms that parameters such as function, quality of construction, localisation, symbolic aspects or strategic and cultural importance play a major role in whether or not the edifice lasts long (most often a far greater role that the actual size of the edifice). For instance, rectangle (*c*) (corresponding to the Grand Scales) is higher than rectangle *d* (the granary), although *d* is much wider: the granary was larger than Grand Scales, but it did not last as long. [12]

Note 10. *i.e.* the town hall, the belfry, the granary, the dungeon and the guardhouse

Note 11. *i.e.* St. Adalbert church, the Grand Scales and the Small Scales

Note 12. In addition, the visualisation helps comparing how beneficial edifices have been in the development of the Market Square. The surface of rectangles represents a time-and-surface ratio corresponding to a concept that can be verbalised as "availability of square meters". A wide and flat rectangle is a large building that lasted not long – very useful when available, but not available long. A high and narrow rectangle is a smaller building that lasted longer – not a lot of space available but numerous generations benefited from it. In other words, the surface of rectangles measures the practical impact of the artefact.

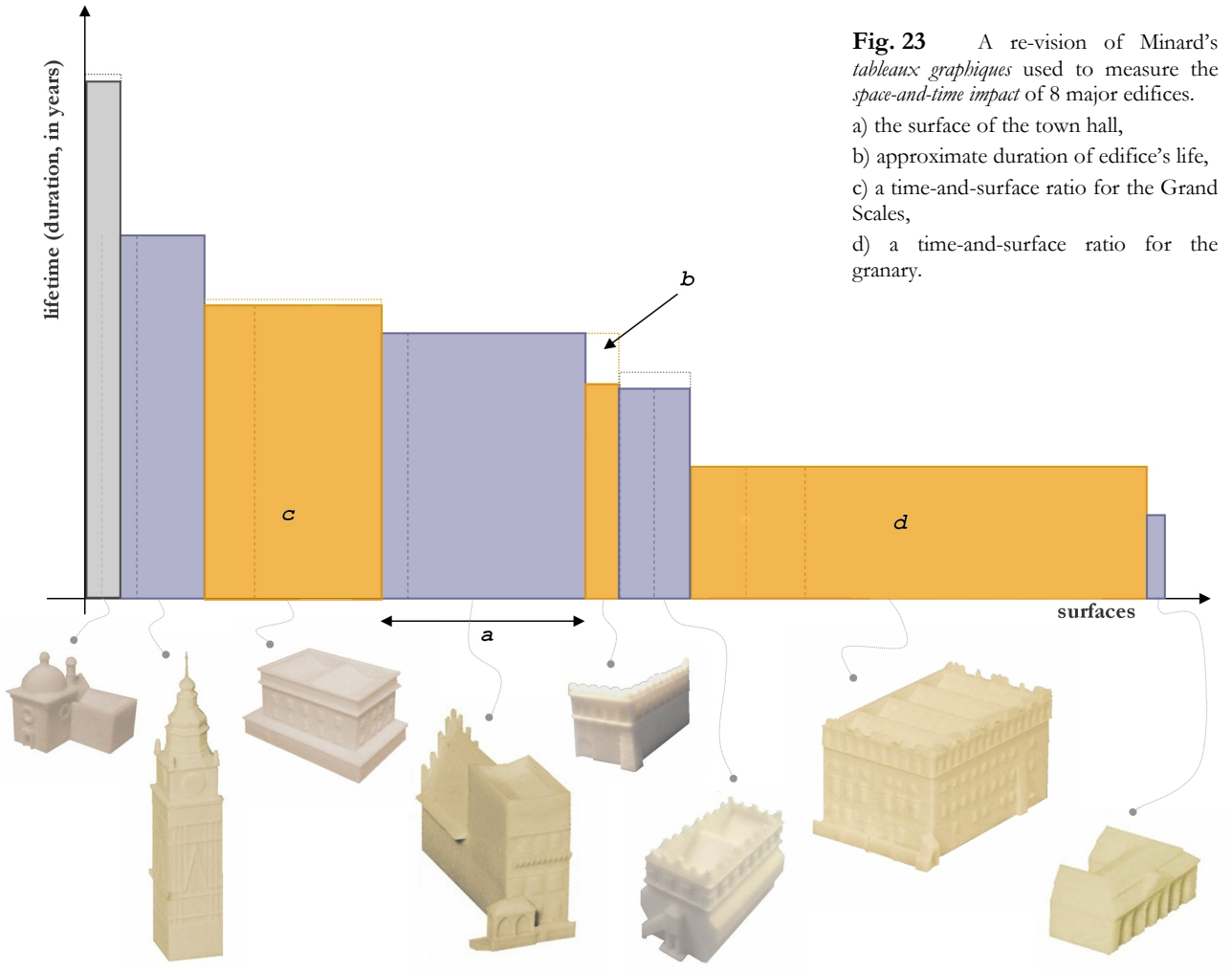

Fig. 23 A re-vision of Minard's *tableaux graphiques* used to measure the *space-and-time impact* of 8 major edifices.
a) the surface of the town hall,
b) approximate duration of edifice's life,
c) a time-and-surface ratio for the Grand Scales,
d) a time-and-surface ratio for the granary.