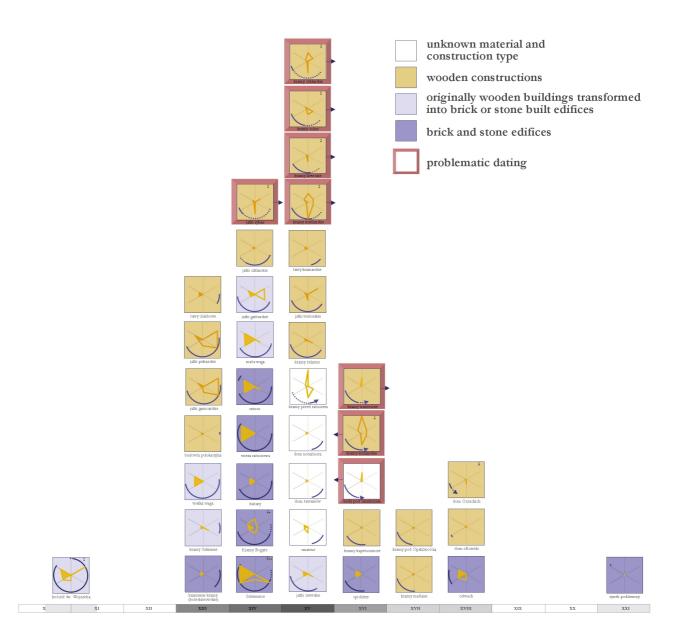
How do construction techniques overlap in time?

In this visualisation each edifice is represented by a square icon, with a background colour indicating the construction technique used:

- deep-blue squares represents brick and stone edifices,
- light blue squares are buildings, that originally were wood structures later on were transformed into brick or stone built edifices,
- brownish squares are wooden construction,
- white squares are those edifices for which nothing can be said in terms of morphology or of construction technique.

Icons are then clustered along a timeline, century by century, at positions corresponding to their construction date. Thick pinkish outlines and black arrows point out problematic dating.

Fig. 25 Time distribution of construction techniques, using multidimensional icons.



These icons are so-called *multidimensional icons*, meaning that they pull together a variety of information, here including time (Fig. 26).

This visualisation shows clear patterns:

- the most important building activity on the Market Square in Krakow takes place in the 14th century,
- brick and stone edifices tend to be built earlier, wooden structures appear as harder to date, and come in a second row,
- the majority four out of five of edifices constructed in 13th century did not last for a long time (Fig. 25).

In other words, what we can read here is a gradual process of densification of the Market Square, with key brick and stone major edifices *erected first* (two exceptions), and then little by little accompanied by minor trading facilities built of wood.

Yet one should not jump to conclusions too fast. The amount of uncertain information can significantly influence the interpretation of the data. Besides, the visualisation's structure of time (*discrete time* – one century clusters) may overemphasise construction works during the 14th century due to source effects. Figure 27, with a different time step, shows a slightly different picture for the same period (brick and stone major edifices erected successively, over time).

In fact, rather unsurprisingly, both visualisations (Fig. 25 and 27) show that construction techniques have more to do with the role, size and impact of the edifice than with the historic period.

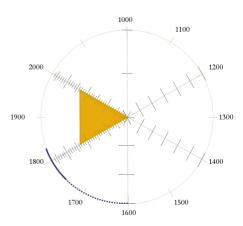


Fig. 26 Encoding of the time duration inside each multidimensional icon: the length of the deep blue arc indicates the object's duration of life (i.e. its presence on the Market Square).

Dotted lines point out doubts

concerning the dating (construction or destruction).

In this example construction is likely to have happened between 1600 and 1750, and the object lasted until ι 1830.

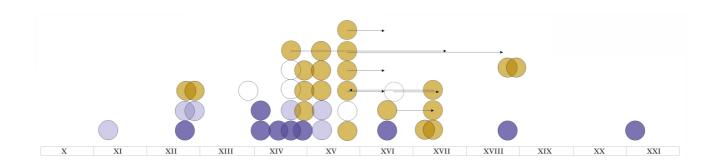


Fig. 27 A visualisation on which the information encoded is reduced to the edifice's construction material and dating (colour codes for materials are the same than in the previous visualisation). Note that a switch in the time granularity – from one century to 25 years - sheds a different light on the building activities during the 14th century.