

GENERATORS OF AN URBAN HISTORY*On how the 17th century Dutch set out a Swedish city dance of today*

47

Björn Klarqvist

Chalmers University of Technology, Göteborg, Sweden

47.1

0 Abstract

The city of Göteborg was laid out by Dutch planners around 1620. The major part of the original orthogonal grid pattern, moats and canals still exist, even though several small modifications have been introduced through history. Consequently, the structure of integration core has shifted affecting the pattern of location and re-location of the main shopping streets. The relationship between shifts in the spatial morphology and changes in the pattern of land use is examined in detail, to establish whether the evolution of the layout precedes and explains the evolution of land use. The analyses of the spatial transformations are correlated to urban history studies, as well as pedestrian counts and observations of the present condition.

The city study is widened to include how the city pattern was connected to the outside areas when the town expanded. This provides an opportunity to discuss how the current city centre (an “internal” shopping centre) can be connected to the periphery, in addition to the interpretation of historic patterns. The aim is to understand the spatial dynamics of a historic process: How and why have the particular pattern emerged from a spatial process of generation?

Key words: urban history, plan pattern, city development, integration core, virtual community, pedestrian flow, shopping centre

*Björn Klarqvist
Department of Urban Design and Planning
Chalmers University of Technology
S-41296 Göteborg, Sweden*

*tel: (46) 31 772 24 23
fax: (46) 31 772 23 94
email: klarq@arch.chalmers.se*

clear differentiation of the by and large orthogonal grid pattern. The long vertical canal street (West shore of Östra Hamngatan) is the outstanding most integrated axial line followed by the two horizontal streets edging the main canal. The main square by the crossing of these streets was the commercial and administrative centre of the town.

Fig 6. Integration core of the 1790, 1860, 1890, 1921, 1960, 1979, and 1998 Gothenburg city.

To make a long story short I present the axial maps to show what has happened to the integration core during the centuries (fig 6). The cores represents really a “jumping majority”. Although, there are some sort of stability; a few of the streets has belonged to the 10% core most of the time. Stable ones are Kungsgatan and Ö Hamngatan. Table 1 summarises.

Table 1. Rank order of the ten most integrated streets in Gothenburg city 1644-1998.

3. The unstable core structure of grid patterns

How can we explain that even small changes of the street pattern in the city centre may have great effects upon the core structure? Visually it is often hard to recognise the differences. One indication can be found in Hillier (1996:349 et seq.) where a pattern of 6x6 square block are manipulated in several ways. Even minor changes of the pattern have sometimes great influence upon location of the integrated core (note especially Plate 4). All-line visibility analysis adapted there is different from the traditional axial analysis adapted here, but the results point into the same direction. In my paper presented to the Space Syntax Symposium I (Klarqvist 1997) it was shown that a grid integration structure was heavily influenced by introducing a slanting street (Broadway) through the pattern compared to through a equivalent tree structure. My hypothesis is that grids are generally more flexible concerning spatial properties and that this might be explained and tested in different ways. Minor changes of the street pattern, especially in or near the integration core, will give great changes of the global spatial properties.

One of the great shifts in the Gothenburg city pattern happened when a new supermarket or rather an in-door mall was created in the North-eastern part by the turn of the 1970's. The old buildings were destroyed. Most of the street pattern was preserved the new complex. A new connection to the South was established and further down this Götgatan/Fredsgatan was pulled through a block to connect one of the W/E main shopping streets, Kungsgatan. Furthermore, many of the other W/E streets were made discontinuous by moving the street crossings a few metres aside and the pedestrian flow driven by new fences and concrete barriers. Compare the details from 1960 and 1979 axial maps, fig 7.

Fig 7. Details from the axial maps of 1960 and 1979 showing some of the plan pattern alterations.