## Industrialisation and the port cities in a comparative European view

HenkVanDijk

Magda Pinheiro

Although port cities existed already for a very long time, the processes of industrialization and simultaneous changes in technology had a great impact on their structure, position within the urban network and their social and cultural characteristics. In general one can say that within Europe a shift from the southern European ports towards the northern ones took place. In particular during the first phases of industrialization in which coal and iron were the dominating factors the ports situated near to the coal belt of Europe from the UK over France, Belgium and Germany to Poland showed an increase in shipping and loading of goods. Many of those ports had a rather good connection to their hinterland, because waterways could be used and the geographical circumstances were so that it was not so difficult to create railway lines. Such benefits did not or less exist in the Mediterranean or in Spain and Portugal. In particular in the Mediterranean the geographical circumstances obstructed a better use of the hinterland by waterway, which also was the case with the Spanish ports in the north. Liverpool, connected to the English Midlands, Rotterdam, connected to the German Ruhr area, Antwerp, connected to the French and Belgian industrial areas and Hamburg linked to Saxen were the ports which profited mostly of the industrialization process in the heavy industry.

However, not only the industrialization process as such had an impact. New technologies in shipping itself as well as in the shipbuilding industry and in the transfer of goods had their influence. Docks, cranes and elevators contributed importantly to a greater speed in the loading and unloading of goods. Steam was used increasingly for driving and ships were built with iron and later steel instead of wood. In many cases this led to a concentration in the shipbuilding industry, because the greater investments as well as the pressure of national governments (the greater demand for 'modern' navy ships only could be satisfied by selling commercial ships too). Although already during the pre-industrial period the neighborhood of the shipbuilding industry with their rope and sail components could have a specific character (examples could be found in the East of Amsterdam in the 17th. century and in the Arsenale of Venice), the concentration and the use of new technologies had a very specific impact on the structure of the port city during the nineteenth and partially the twentieth centuries. In a nutshell they reflected the developments elsewhere in port cities. Whereas living near to the port and the river was a privilege of the rich before the nineteenth century it became now the 'privilege' of the labourers. In many cases the larger houses of the more well-to-do became offices with clerks now.

Although industrialization changed the urban structure, culture and social character of the port cities (with which we hope to deal with our presentation), some other features did not change so much. The traditional food processing industry stayed and even got a greater impact due to increasing demand for food of the growing European population and the increase of imports from oversea. Sometimes it even gave new opportunities for female labourers to escape the poverty of a marriage with a sailor (with shifting incomes) or work in the houses of the rich.

This all meant that port cities during the nineteenth century showed a rather fast rate of growth of their population (although death rates still could be high). It led to a great influx of inhabitants from the countryside, whereas during the same time sometimes large groups of temporary migrants stayed there waiting for the opportunity to depart. This slowed down during the twentieth century and nearly came to an end at the end of that century due to the deindustrialization and new developments in logistics (containerization).