## PhD RESEARCH

## PIETER RAYMAEKERS

## Engineering a New World. The socioprofessional history of engineers in Belgium (1850-1914) - [Original Title :

Makers van een nieuwe wereld. De scoioprofessionele geschiedenis van ingenieurs in België (1850-1914)]

KU Leuven, Kadoc, 2013. Supervisor : Jan De Maeyer.

The engineer was a symbol as well as a driving force of the transition from a pre-industrial, agrarian society into the industrial, capitalist and modern world. New technical possibilities and professional developments turned him into an emblematic person of change and progress, indispensable in the eyes and plans of government, industry and bourgeoisie. It is not surprising therefore that, since the 1980s, both the historical and sociological research on the modern engineer has multiplied. Our research has an international and comparative dimension, yet we focus mainly on the Belgian case during the second half of the so-called long nineteenth century : the period between 1850 and 1914.

The two-fold process of professionalisation and segmentation, two concepts closely linked to the sociology of professions, provide the theoretical background of the research. Professionalisation refers to the development by which a professional group gradually acquires a set of fundamental attributes like their own system of higher education, their own network of representative associations, a well-defined professional practice and specific social ideas.

Segmentation explains the way a professional group is subdivided into different groups or "segments". The term "engineer" implies a whole range of interpretations, both on an international scale and within national boundaries. American sociology even makes mention of a profession without a community. Accordingly, the engineering profession was faced with heterogeneity, fragmentation and even rivalry. Belgium too was a melting pot of engineering cultures.

The thesis covers three chronological periods : the genesis (until 1850), the emergence (1850-75) and the breakthrough (1875-1914) of the modern engineer, or in other words: the awakening in, the construction of and finally the conquest of a new world. In each of these periods we systematically shed light on three main aspects : the engineering education, the engineering associations and the social role of engineers.