

THE VISUAL TURN IN BUSINESS MANAGEMENT: FILM, GRAPHICAL DEVICES AND THE CONSULTING INDUSTRY

Florian Hoof / Ph.D. Thesis Project¹

Ruhr – Universität Bochum

This project analyses how visual devices such as film, photography and graphical calculation applications affected the sedimentation process of modern management theory and practice between 1880 and 1930. It is argued that a visual turn took place in business communications, which not only enhanced the capacity of industrial management but also altered the very structure of managerial practices. It changed the configuration of time and space within procedures of business planning and control and thus the very basis of business knowledge itself.

Beginning in the 1880s, a fundamental shift occurred in industrial management. In the aftermath of the so-called crisis of control² existing practices of industrial management came under pressure. Prevailing modes of management and control could no longer cope with the new complexity of business unleashed by the industrial revolution. The industry itself, academic disciplines such as applied engineering, psychology or cameralism as well as new players and institutions including business schools and the evolving consulting industry tried to come up with better ways to operate business in a stable and predictable way. Consequently, business management was characterized for many years by innovations, experiments, failures and doubts. At the same time, media technologies evolved, primarily film, photography and graphical visualization tools including charting-systems and nomography. They provided new options to visualize, store and process business knowledge, thereby promising a technological advanced way to solve the managerial problems, which had occurred due to the crisis of control. Because of the precarious situation in industrial management, these media technologies became crucial for business. Already at the end of the 1920s most executive boards of large-scale corporations solely relied on visualization practices to keep industrial production manageable. These changes will be the topic of two case studies in order to exemplify specific patterns associated with the usage of media technology in the sphere of industrial production and business.

The first case focuses on Frank B. Gilbreth, a film pioneer and at the same time engineering consultant for industrial rationalization. He extensively utilized film and photography to analyze and document the working cycles on the factory floor. I suggest that he predominantly utilized film to establish a unique selling proposition for his engineering consulting enterprises. Film was part of a branding strategy to establish his “original method” as the one best way in engineering consultancy. He thereby popularized a management approach that was heavily based on centralized corporate structures such as planning departments, “betterman-rooms” and motion study laboratories. This demonstrates that media technology was not only utilized as a scientific offspring of physiology but also worked as a focal point for modern management theory and practice. Media technology in this respect set the epistemological framework for implementing and popularizing the concept of modern business management.

The second case study takes a more general view of the growing numbers of visual devices used in scientific disciplines closely associated with business enterprises, such as material and mechanical engineering. The personnel of pre-modern management mainly consisted of engineers. Along with the growth of industrial corporations, they were confronted with organizational issues including knowledge transfer and shop control concerns that had nothing to do with their original profession. In this situation, they began to rely on new devices to simplify communication between factory departments and to foster control on the level of the factory floors. Visualization devices such as “nomography” and “charting-systems” facilitated access to in-house knowledge and helped them to create a sphere of communication between different factory departments. It created knowledge that was easily accessible and thus crucial for the new management personnel, which was no longer specialized in distinct disciplines but trained to make general steering decisions without having the skills to understand every detail of the manufacturing process.

Both cases are part of an epistemological approach to analyze the combination of media devices and managerial practice in conjunction with a newly developed rationality and visibility in management theory. By excluding the practical abilities of the workers as well as the specific knowledge of diverse scientific disciplines from this new form of visual in-house operations, the basis for a self-contained epistemic system of management knowledge was established. Moreover the whole idea of controlling industrial production changed: traditional and implicit schemes were substituted by new methods and categories adopted from scientific and medial procedures. I am going to suggest that the visual turn set the stage for two fundamental shifts in industrial leadership. It provided the medial conditions to establish management theory both as an external and intervening cultural practice; a concept that stood in sharp contrast to the preceding approach deeply embedded in the manufacturing process.

- 1 Supervisor: Prof. Dr. Vinzenz Hediger. Co-Supervisor: Prof. Dr. Dirk Baecker, Zeppelin University.
- 2 James R. Beniger, *The Control Revolution*, Harvard University Press, Cambridge MA 1986.