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# English Summaries

Page 6 | Ebbe Nielsen

## Trade and transport in the Neolithic and Bronze Age in Switzerland

The transition to agriculture in the Neolithic and the beginnings of metallurgy in the Bronze Age were seminal events that continue to shape our society even today. These two "cultural leaps" were, as will be shown, inconceivable without long-range contacts. Each phase in prehistoric periods is accompanied by changes in the material culture, which are usually driven by external factors. The origin of these factors can be demonstrated primarily by archeological finds of imported goods or by imitations of foreign objects. The cultural differences between Western and Eastern Switzerland reflect influences from different regions. The fact that this is not apparent from the illustration for the Bronze Age is an artefact of the research tradition.

Page 18 | Hans Rudolf Fuhrer

## "La Battaglia dei Giganti"

The Battle of Marignano in 1515: was superior French artillery the decisive factor? The military-history perspective

The Battle of Marignano in 1515 is thought to exemplify the irresistible rise of technology in warfare and the deployment of integrated weaponry – i.e. infantry, artillery and cavalry – in battle. The Swiss and the French were about evenly matched, each with 30 000 soldiers, but the French were better supplied, had strong defenses, and their artillery was optimally positioned. For this analysis we ask the question: Did François I prevail because he was able to bring superior military resources to bear at the right place and the right time ("just in time") in mid-September 1515? In order to answer this question, we have to briefly compare the two sides, taking into account in particular logistics, weaponry and tactics, and then decide whether this oft repeated narrative is in fact correct. The result will come as no surprise: it's all far more complex.

Page 28 | Mark Häberlein

## Carters, sumpters, raftsmen and shippers

Logistic problems and practices of the Augsburg Welser and Fugger families in the 16<sup>th</sup> century

In the early 16<sup>th</sup> century, the Augsburg merchant families Welser and Fugger established far-flung trading and distribution networks that placed significant demands on logistic capabilities. This paper will show that independent hauliers – carters, sumpters, raftsmen and shippers – handled this business efficiently. To safeguard their goods, the merchants concluded maritime insurance coverage and customs treaties and secured letters of free passage. As private companies evolved and family relations shifted in the late 16<sup>th</sup> century, logistic demands also underwent change. Merchants now focused on the procurement and transport of "high-end" luxury and consumer goods for their own households and their noble friends.

Page 38 | Paul van Heesvelde

## "What do we talk about when we talk about logistics?"

Logistics, transport and the problems of the last mile in the Belgian army 1870–1918

The new transport modes of the 19<sup>th</sup> century changed the logistic concepts of the armies dramatically. The main effects although were not perceived in the early years: armies used rail transport in the same way as they moved by road or waterway. It took years before planning and organizing of rail transport was internalized. The Franco-Prussian war formed a turning point for the Belgian army. All in a sudden was discovered that troops and freight moved at different speed. The general staff was confronted to the problems of the last mile to bring supplies from the rear with the troops. The logistic concept, rooted in the Napoleonic tradition was adapted in the ongoing years, but the organization of the services of the rear started only in 1904.

## “A logistician’s dream?”

### Logistics on the Western Front in World War One

Three factors characterized logistics on the Western Front during the Great War: a railway link, the dominant influence of horse-based transport, and the spread of motorization, which had already begun before the War. As fighting became bogged down in the trenches, infrastructure and logistics became increasingly important to the conduct of the War, and this affected operations, too. The armies promoted road-building, designed all-terrain vehicles, and experimented with supplying the front from the air, while the French provisioning of Verdun by means of trucks heralded the development of modern road logistics. Despite their military importance, transport soldiers lacked the prestige that surrounded soldiers at the front. Logistics had implications for the debates about Germany’s defeat in the War and also influenced politics in the Weimar Republic.

## Lloyd’s List

### The basis of maritime logistics in the 19<sup>th</sup> century?

Lloyd’s List is a highly specialized commercial journal that grew out of the news circulating in Lloyd’s Coffee House in London in the early 18<sup>th</sup> century. It contained information about world shipping and reports on shipwrecks and accidents at sea. Shipowners, merchants and insurance underwriters read Lloyd’s List to keep up to date on the condition of their vessels and their merchandise. Precise information about the ships’ position, route and cargo was of utmost importance to Lloyd’s List readers. “The List” reflects the complex interconnections of a global maritime trading network.

## The rise of logistics in the mass consumer society

The emergence of a mass consumer society in the 20<sup>th</sup> century gave birth to the systems of retail merchandise distribution and the supply of goods to the upstream consumer goods industries. The term used to describe these systems is “logistics”. This term, which originated in the military sector, was imported to the German-speaking world from the USA only in the 1960s and became the standard concept in the civilian sector to describe merchandise distribution for trading companies and procurement activities for industrial corporations.

## The history of postal logistics in Switzerland

Is sending letters and packages straightforward? What is postal logistics? A complex system of logistics (i.e. “postal logistics”) underlies the dispatch of any letter or package to its recipient. It involves both transport logistics and processing logistics – the handling of letters and packages, which is postal companies’ traditional business. The article addresses and studies two crucial events in the history of Swiss postal logistics: the launch of railway post in 1857 and the introduction of the postal code in 1964, both of which marked profound changes in postal logistics. The changes were far-reaching not only because of their technical and structural impact but also for their implications for postal workers.

## Touristic mobilities and their interfaces

Tourism destinations are integrated in cross-regional mobility infrastructure networks. Both at the access points to these networks and locally, various types of mobility have to be synchronized and transitions have to be organized – say between motorized individual traffic, motorized public transport, and individual non-motorized mobility. This makes tourism destinations ideal for studying the infrastructure that was (and is) provided to achieve this organizational effectiveness. The paper addresses the analytical category of critical interfaces in touristic mobility, using the example of Alpine tourism and based on a case study in the Vorarlberg commune of Mittelberg. The overall goal is to evaluate the economic and socio-ecological sustainability of touristic transformation at the regional level in a historical perspective.



### Logistics in Germany's coal mining industry

A means of efficiently controlling the phase-out process?

Although the historiography of mining has recently focused increasingly on the period after World War Two, analyses – mainly devoted to the history of technology – concentrate primarily on developments in the areas of mechanization and automation. To date, hardly any notice has been taken of logistics. Starting from the theoretical discussion in the 1980s, therefore, this paper aims to take a closer look at the various stages in the introduction of logistic principles in German coal mining over the past three decades.

### The origin of lean production in the automotive industry and just-in-time logistics at Ford in Cologne

The Ford vehicle factory in Cologne is among the world's most efficient automotive plants. Every day 1700 Ford Fiestas come off the assembly line. The key to this efficiency is the Ford Production System (FPS), in which material flows and production processes are closely intertwined. Materials for about two and a half days are kept on hand, while material for one day is stored right in the production plant so that the production lines can be fed quickly as needed with new supplies. Larger parts that Ford doesn't manufacture itself are produced at a nearby automotive supplier park and delivered to the appropriate work stations at exactly the moment they have to be installed in a particular vehicle – in line with the principles of "just in time" and "just in sequence".

### Flexible future-oriented logistics creates competitive advantages at GF Piping Systems

The GF Piping Systems division of the Swiss industrial corporation Georg Fischer can look back on very gratifying and profitable growth of 50 percent over the past seven years. And yet GF Piping Systems has the broadest product range of any company in the industry: 220 000 articles in a wide range of materials and dimensions, of which 70 000 are always in stock. The prerequisite for success in a global bulk business is establishing highly efficient logistic processes, which ensure that the products are readily available and very quickly deliverable, thereby contributing to increasing the company's profitability and competitiveness.

### Premodern water 'know-how' in the Iron Library (III)

Knowledge about water quality in the works of Pierre-Joseph Macquer and William Thomas Brande

The third part in the series on water 'know-how' collected at the Iron Library broadens the perspective on chemical literature, which was also the subject of the second part. Following a brief summary of the main points in the first two parts of the series, the article focuses on the "Dictionnaire de chimie" of the French chemist Pierre-Joseph Macquer and the knowledge about water in his work. The second source of chemical literature presented is the "Manual of Chemistry", by the London chemist William Thomas Brande. These two works were selected because they can be assumed to have received widespread attention and interest and are representative of premodern knowledge about water prior to the radical change in the middle of the 19<sup>th</sup> century.

### "Tidying up Switzerland"

The Federal Scrap Metal Commission and its procurement logistics in World War Two

During World War Two, procurement of raw materials for Swiss industry became increasingly precarious as imports dwindled. In 1941, the Iron and Machinery Section of the KIAA (War Industry and Labor Office) responded to the crisis by setting up the Scrap Metal Commission, whose Chairman was the GF Director Ernst Müller. The Commission was tasked with procuring and distributing the scrap metal that Swiss foundries and steel works needed. This article discusses two initiatives to show how the "scrap fanatics" collected 900 000 tons of scrap metal by the end of the War and returned it to the production cycle.