

## 10.1. Knowledge networks in rural Europe, 1700-2000. Part II

**Panel organiser: Segers, Yves, Interfaculty Centre for Agrarian History, University of Leuven, Belgium**

The diffusion of various forms of knowledge and know-how in the countryside, both to increase agricultural production and food quality and to improve the quality of rural life, was without any doubt one of the most striking processes of change in the rural areas of Europe during the last three centuries. However, regions, farming communities and farming families had unequal access to locally and externally generated knowledge, as well as unequal abilities to produce and acquire new knowledge through formal and informal networks such as learning by doing, schooling, extension programmes, media, etc. These two sessions, organised under the same umbrella, aim at unravelling the development of what can be called “agricultural and rural knowledge networks” in Europe. Both sessions will address the production and diffusion of agricultural science and agricultural technology. Changing agricultural knowledge and techniques were one of the principal reasons for the increases in agricultural output that occurred since the eighteenth century. Many of the technical changes resulted from the activities of governments, scientists and commercial firms outside the agricultural industry itself. Others came from pioneering farmers. Guiding questions for these sessions are: How did these knowledge networks operate: top-down, bottom-up or two-way communication? What was the role of public and private actors (government, state agronomists, farmers’ organisations, commercial firms, media, the church, etc.)? Who had access to which knowledge? To whom was the available information addressed (men, women, youth; professional farmers or rural dwellers)? Which knowledge was adopted or rejected and why? How efficient was the degree of agricultural extension initiatives? Did inclusion or exclusion from knowledge networks influence power structures? Which channels were used to diffuse knowledge (education, newspapers, radio, films, television, journals, books, lectures, advertisements, expositions, agricultural shows, etc.)? To what extent was knowledge, generated outside Europe, imported in Europe, for instance from the U.S. and European colonies? Or vice versa? To what extent did knowledge networks globalise? These sessions are organised by Paul Brassley (University of Exeter), Yves Segers and Leen Van Molle (University of Leuven), Daniel Lanero and Lourenzo Fernandez Prieto (University of Santiago de Compostella), in cooperation with the CORN network.

**Chair: Brassley, Paul, University of Exeter, UK**

Thursday, 22 August 2013 // 1000 – 1200 // Session 10 – Room A-126

### 10.1.1. Agricultural literature in Scandinavia and Anglo-Saxon countries c. 1700-1800

**Myrdal, Janken, Section of Agrarian History, Swedish University of Agricultural Sciences, Sweden**

This paper presents statistics on the annual publication of agricultural literature in Scandinavia (Schleswig-Holstein, Denmark, Norway, Sweden-Finland, Iceland) and in Anglo-Saxon countries (England, Scotland, Wales, Ireland, North America) during the 18th century. Two different types of databases are used. One includes every article based on two bibliographies for the Danish and Swedish kingdoms of the 18th century. These bibliographies are among the most extensive on this subject that we have from Europe. The second Database covers books on agriculture: the English Short Title Catalogue compared with the catalogue of the Swedish Royal Library. The number of articles (in Sweden) is ten times as large as the number of books, and the distribution according to subjects and over time somewhat different. Theoretically this investigation will be related to Jan Luiten van Zanden’s concept “knowledge economy” (Zanden: *The Long Road to the Industrial Revolution*, 2009). Van Zanden uses overall numbers for literature. The intention here is to go much more into detail for one of the most important genres in economic literature of the 18th century. The topics that are discussed in these publications will be analyzed: when was plowing on the agenda; when did manure come into the focus of the discussion, etc? A preliminary discussion about the writers will also be made, and if possible which audience they tried to reach. As much of the literature was produced in learned societies, the question of “knowledge networks” is essential.

### 10.1.2. Julien Gabriel Sugy’s agrarian knowledge

**Herment, Laurent, EHESS-CRH, France**

The aim of this paper is to define the different levels of knowledge of a farmer of the Bassin Parisien in the first half of the nineteenth century. Julien Gabriel Sugy was born in Videlles at the end of 1806. He was married to Hortense Séverine Chartier on June, 21, 1830. After his marriage, he kept a diary for almost 30 years. The material is quite confusing and reflects the poor level of knowledge of Julien Gabriel. Despite this poor level, the diary is very interesting for two reasons. First, there are very few sources like this in the North of France during the first half of the nineteenth century. Second, Julien reported a lot of information at a variety of

levels. Some of these levels could reveal links with “savant knowledge” while others were linked with “popular knowledge”, etc. It seems that Julien quoted in his diary the information he collected from various sources as he read them. Furthermore, it is not possible to know exactly the schooling of Julien. In the first part of the paper we will try to better understand the social and economic background of Julien. In the second part we will determine the type of sources (religious, schooling, agronomic, popular, etc.) from which Julien gained his knowledge, and we will show that this diary is probably a way by which his knowledge has been spread.

### 10.1.3. Learning to farm: the diffusion of the agronomical knowledge in the Eastern Lombardy from the Napoleonic age to the WWI

**Tedeschi, Paolo, University of Milan Bicocca, Italy**

The paper illustrates how the diffusion of agrarian knowledge in the Eastern Lombard during the first half of the 19th century helped the development of production and yields in the countryside. Initially the diffusion of knowledge in agronomics and the improvement of agricultural sciences and technologies were based on the results of new experiments and studies made moreover by nobles and priests. Then new agrarian schools were founded for training of a new class of peasants having the knowledge to grow the yields of land through the use of the modern innovations (as agrarian machines, chemical fertilizers and hybrid seeds). At the end of the 19th century the Cattedra Ambulante was created too: it organized lectures, courses, evening classes, trainings and also some special itinerant offices where farmers and breeders received information and advices about all innovations in agronomics and zootechnology. The knowledge network concerning these innovations also promoted the relevance of the creation and diffusion of cooperatives in the countryside. The assemblies and conferences organized for their members were the occasion for illustrating the new productive system and agrarian machines. Furthermore, the cooperatives allowed peasants to buy seeds and fertilizers at a cheap price and they had the money for buying or renting new seeders, reapers, ploughing machines, etc. The knowledge network concerning agronomics gave information on innovations and it created the conditions for a better agronomical knowledge in the countryside: learning to improve farming and so crops and the quality of rural life.

### 10.1.4. The contribution of human capital to agricultural growth in Germany, 1870-1939. Research strategy

**Albers, Hakon, Humboldt-Universität zu Berlin, Germany**

This research explores the importance of human capital for agricultural growth in Germany 1870-1939, and aims at contributing to the discussion on the shift to sustained growth. During 1800-1850, agricultural production grew 77%, and labor productivity in agriculture almost 30%. Kopsidis and Hockmann (2010) provide regional evidence. Grant (2009) finds a labor productivity growth of 1.5% per annum for 1880-1909. Human capital has not been considered as explanation, although agricultural winter schools (landwirtschaftliche Winterschulen) provide good reason to believe in human capital driven growth, which was possibly based on, or complemented by an Agricultural Enlightenment (I coined this term with reference to the Industrial Enlightenment according to Mokyr). There is a rise in people reached by agriculture specific knowledge, and the importance of winter schools in absolute numbers. Since the end of the nineteenth century Haushaltungsschulen existed, which focused on education of young women. Competing explanations focus market integration. Kopsidis doubts the relevance of institutions, namely the liberalization of serfdom (Bauernbefreiung) and trade liberalization. As production function estimation might be a limited approach in quantifying the contribution of knowledge, a qualitative analysis, which focuses on the quality of knowledge complements this exercise. A variable measuring human capital, e.g. number of pupils per county, shall be refined using weights deduced from analysis of taught knowledge.

#### Participants

##### Albers, Hakon

MSc candidate Agricultural Economics, Humboldt-University Berlin; Title of thesis: “Climate in production functions: an application to regional wheat yields in Germany”; 2009: BA History / Economics, University of Münster; May 2009 - December 2011 and May - September 2012: Student research assistant at the Institute of Social and Economic History, University of Münster.

##### Brassley, Paul

Paul Brassley is a visiting Senior Research Fellow in the Centre for Rural Policy Research at the University of Exeter, UK. Since 2009 he has been working there on a project to investigate the process of technical change in English agriculture between 1935 and 1985. He has previously produced studies on rural issues in the Second World War, the interwar period, and the late nineteenth century. His most recent book (edited with Yves Segers and Leen Van Molle) is *War, Agriculture and Food: rural Europe from the 1930s to the 1950s* (Routledge, 2012).

##### Herment, Laurent

Ph.D. 2009: Prix de thèse d’histoire économique 2011: l’Association Française d’Histoire Economique et BNP-Paribas. Book: *Les fruits du partage. Petits paysans du Bassin Parisien au XIXe siècle*, 2012. He published on the economics of French agricultural development during the nineteenth century. More recently his interests have turned to agricultural economic history of the North-West of Europe (nineteenth century and first half of twentieth century), with a particular focus on land use, and productivity and market.

##### Myrdal, Janken

Janken Myrdal is professor in agrarian history in Uppsala, Sweden. He has published on medieval history in general and agrarian history from the early medieval period until the nineteenth century. A main interest is the history of technology (cows and ploughs - but in a theoretical context). He also has written on economic cycles (as the crisis of the Late Medieval period). He was main editor for the five-volume *The Agrarian History of Sweden*, condensed into one volume in English in 2011. Currently he is working on a project about agricultural systems in Eurasia.

##### Segers, Yves

Yves Segers is professor of rural history and director of the Interfaculty Centre for Agrarian History at the University of Leuven, and professor of Economic History at Hogeschool-Universiteit Brussel (HUB). His research focuses on agricultural and rural history in Belgium and Europe since 1750 and the development of food systems.

##### Tedeschi, Paolo

Paolo Tedeschi is Assistant Professor at the University of Milan-Bicocca where he teaches Economic History and European Integration History. He also collaborates with the IACCHOS (Université Catholique de Louvain) and with the FLSHASE (University of Luxembourg). His recent research and publications concern: the economic history of the Lombardy (18th-20th centuries) and in particular the development of the agriculture and the changes in the economy of Alpine valleys: the role of the European economic institutions and policies (particularly the CAP) from the sixties to the eighties.