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Walter Schmid's Atlantic Crossing

Swiss Agronomists exploring American Agriculture in the early 20th Century

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1. Abstract

Numerous agronomists and farmers from Switzerland have travelled to North America to study the agricultural conditions there since the 1870s. Walter Schmid, farm foreman and teacher at the Agricultural College Strickhof in Zürich was the first one who documented his trip on film. Like many of his predecessors, Schmid travelled across the United States. His program took him from New York via Washington DC to Chicago and Minneapolis, and from there to the West Coast. After exploring conditions in California, he returned to New York via Louisiana and Kentucky.

By the end of July 1935, Schmid was back in New York, where he began his return journey. Schmid had arrived in America with the explicit assignment of investigating the use of agricultural machinery. By visiting former Strickhof students on their farms, relatives, university departments, factories and slaughterhouses, he had gained a great variety of insights into American agriculture, industry and society.

Back at the Strickhof he showed his film recordings to every class until his retirement in 1960, commenting on what his students saw with the help of his notes and travel report. His film recordings thus not only familiarized hundreds of students with developments in American agriculture. They also contributed to the fact that in the post-war period quite a number of Strickhof students went to America to gain their own image of what their machine engineering teacher had captured on celluloid in the summer of 1935.

2. Script

00:12

Landwirtschaftliche Schule Strickhof in Zürich, Frühling 1935. Walter Schmid, Werkführer des Gutsbetriebs und Lehrer für Maschinenkunde filmt mit seiner neu erworbenen Kamera. Es ist eine Art Testlauf für Schmid. Agricultural College Zurich, spring 1935. Walter Schmid, farm foreman and teacher, is filming with his newly acquired camera. It is a kind of test run for Schmid. For he intends to document his upcoming trip through the United States of America with this camera.

Since the 1870s, numerous Swiss agronomists and farmers had travelled to North America to study the agricultural conditions there. But none of them had so far documented such a trip on film. Conversely, the Swiss Milk Commission had already used the medium film in 1923, when it presented the Swiss dairy industry in a good light at the World Dairy Congress in Washington.

01:16

Walter Schmid took the train from Zurich to Bremen on May 1, where he boarded a fast steamer. The ship took him to New York in six days. Schmid's luggage contained his film camera as well as the addresses of 20 former Strickhof students and a commission from the Department of Economic Affairs of the Canton of Zurich. According to this order, Schmid was to write a report on the state of mechanization and motorization in North America.

The suggestion for undertaking such a study came from Hans Bernhard, director of the Swiss Association for Interior Colonization and Industrial Agriculture. Hans Bernhard had himself travelled through North America before he was teaching at the Strickhof for a while. Now he was astonished to read in local newspaper reports of a decline in the use of machinery in North American agriculture. Schmid was to find out on his trip whether this was true or not. Were American farmers really using more animal and human labour again instead of tractors in response to the Great Depression?

The corresponding news caused astonishment above all because America was regarded in Switzerland as the epitome of modernity and technical progress. Visitors from Europe were excited by the skylines when they arrived in New York harbour. In agricultural matters, too, the United States had the reputation of being the most advanced nation in the world. At least that's how Gottlieb Lüthi put it after travelling North America in the late 1920s and working on farms for two years.

03:24

Like many of his predecessors, Walter Schmid travelled across the United States. His program took him from New York via Washington DC to Chicago and Minneapolis, and from there to the West Coast. After exploring conditions in California, he returned to New York via Louisiana and Kentucky.

The first place Walter Schmid visited was the Walker Gordon Farm in Princeton. This farm produced drinking milk with Jersey, Guernsey and Holstein cows. The milk was bottled and sterilized for consumption in the city of New York. In view of the milking machines and mechanical filling equipment, Schmid believed to be in a dairy factory rather than on a dairy farm. The high milk yields of individual cows were as remarkable to him as the spread of artificial insemination in cattle breeding. Here, breeding bulls were no longer used for draft work. Instead, they had to exercise in a walking carousel in order to keep their body healthy.

04:43

On this poultry farm, 5'000 hens and 15'000 pullets were kept; they were looked after by two poultry farmers and temporary workers. It was comprehensible that Schmid was interested in poultry farming since the first poultry control station in Switzerland had been set up at the Strickhof at the end of the 1920s. At the time, poultry keeping was neither an issue at the Swiss Institute of Technology in Zurich nor the research stations around the country. Franz Müller, a pioneer of poultry farming in Switzerland, had already travelled through North America with the "Swiss Mission for Economic Studies" in the summer of 1919. During this trip, Müller became convinced that the Americans had succeeded in breeding the productive chicken which, due to its high laying performance and low feed consumption, yielded the greatest return. He decided to bring back home with him a flock of these chickens.

Franz Müller was one of the founders of the Swiss Egg Collecting Cooperative SEG, in which the poultry farmer Eugen Lenggenhager too was involved. Lenggenhager went to the United States as a teenager to learn the trade of poultry farming. After a sojourn of several years, he returned to Switzerland before the First World War and opened a poultry farm near Zurich which was based on the American model. In addition, he taught the subject of chicken husbandry at the Strickhof College from 1920 onwards.

06:34

In the United States, Chicago was the city where the influence of technology and industry on agriculture was particularly visible. Here were the big "Packing Houses" and the famous "Stock Yards". However, the camera was of no use to Schmid here, because he was not allowed to film in the slaughterhouses. The American writer Upton Sinclair described what actually happened behind the walls filmed by Schmid: "It was all so very businesslike that one watched it fascinated. It was porkmaking by machinery, pork-making by applied mathematics. Now and then a visitor wept; but this slaughtering machine ran on. It was like some horrible crime committed in a dungeon, all unseen and unheeded, buried out of sight and of memory."

Most visitors from Switzerland found it harder than Sinclair to put into words what they saw. Franz Müller wrote: "It takes strong nerves to follow the whole process in the slaughterhouse. As large as this facility is, as great is the cruelty to animals here. It is impossible to describe the torture that the calves, sheep and pigs in particular have to endure until death finally redeems them. The pigs, for example, are pulled up one by one, but the sheep and calves are pulled up alive in bunches by one leg by means of a turntable."

The architectural theorist Siegfried Giedion also saw in Chicago the city where the dominance of mechanization and motorization in agriculture became strikingly visible. No other company symbolized this more vividly than the International Harvester Company, the largest tractor factory in the world at the time. Here, 12,000 workers assembled Farmall tractors, mowers, crawler tractors and binding mowers. Many of these were exported to Europe and used in Switzerland as well.

09:10

Like numerous visitors from Europe, Walter Schmid had relatives in America. In Minneapolis he spent 14 days with his uncle Theodor Wirth. Theodor Wirth was superintendent of the Minneapolis Park and Recreation Board. He was considered a pioneer in urban landscape architecture and promoted the development of parks. He showed Schmid the landscape around Minneapolis in a small plane. Walter Schmid

was astonished to learn that people in North America were trying to preserve nature in the national parks, while in agriculture it was being overexploited.

Machines and equipment were also hardly cared for after use - a practice that was frowned upon among the farming community in Switzerland. Schmid wrote in his report: "It should not go unmentioned here that, in my opinion, great losses are caused in America in the invested machine capital, by poor maintenance and especially by storing the machines outdoors. Costly machines stand open-air year and day."

10:35

Anyone visiting America in the mid-1930s also encountered President Franklin D. Roosevelt's policies, which became known as the New Deal. The New Deal left a profound mark on American society, for example in the form of the Civilian Conservation Corps labor camps. The voluntary job creation program played a central role in coming to terms with the economic crisis. These camps primarily employed single young men between the ages of 18 and 25. They built roads, bridges and embankments, and in the parks wooden huts. They were also involved in the prevention of soil erosion.

By the mid-1930s, soil erosion had become a major problem leading to devastating dust storms that swept across the Great Plains. The soil erosion caused widespread poverty in rural areas and massive migration within the United States. John Steinbeck's novel "Grapes of Wrath" and the photographs of Dorothea Lange are still impressive testimonies to this ecological, social and economic calamity.

12:00

In California, Walter Schmid visited the University in Davis where he hoped to meet Max Kleiber, professor for animal husbandry since 1929. Kleiber, like Schmid, had previously taught at the Strickhof college in Zurich. At the time of Schmid's arrival, however, Kleiber was on a trip to Europe, which he combined with a visit to the International Congress of Physiologists in Moscow.

Davis was considered a stronghold of agricultural livestock research. Here, intensive attention was paid to the feeding, breeding, husbandry and physiology of animals - including poultry. Many travellers were amazed that poultry breeding was taught at universities and that the study of this subject could lead to prestige and wealth in America.

12:56

What was the situation regarding the mechanization and motorization of agricultural production, the development trends Schmid was actually supposed to investigate? Schmid stated in his report: "Newspaper notes in Switzerland gave rise to the opinion that in recent years in North America a retrograde movement in the use of agricultural machinery had occurred, in the sense that more human and animal power was again being called in to help, caused by the crisis. However, I believe that my observations are correct when I state that such a shift has absolutely not occurred. Tractors, trucks and automobiles are displacing the horses and the electric motors, the gas engines and windmills. In America there can be absolutely no question of a regression of agricultural machinery. On the contrary, modern technology is draining more and more human as well as animal power from agriculture."

This finding, however, is only partially documented in Schmid's film footage. Rather, his footage shows that draft animals were still indispensable labourers and prime movers in North American agriculture. As Schmid himself noted, the displacement of animals by engines depended on soil and climate conditions as well as on the crops grown. He documented with his camera a complex history of human, animal, and motor power. But like many contemporary observers, he was firmly convinced that the future of agriculture would be shaped by motors rather than by draft animals.

14:52

This certainty about the future was often confirmed by what travellers to America saw in the 1920s and 1930s. The signs of the dawning age of oil were more visible here than elsewhere. Drilling rigs marked entire swaths of the country, the automobilization of society progressed rapidly, and petroleum powered tractors, combines and other machinery on farms. Schmid wrote: "With the decrease in working animals on farms and the growth of mechanical power sources went hand in hand an increase in fuel requirements and a decrease in forage consumption." The decline in horses and mules released forage land for grain crops. Conversely, the demand for fuel on the farms rose significantly.

While horses lost their relevance as draft animals in agriculture, they became more and more important as sport and leisure animals. During a visit to a horse stud in Kentucky, Schmid was surprised to learn that there was not only more money to be made in the sport and leisure sector than in agriculture. The social prestige of keeping horses also found completely different forms of expression here: While statues were erected for successful racehorses who were kept in luxurious stables, working horses in agriculture became increasingly regarded as a symbol of a backward world.

16:29

By the end of July 1935, Schmid was back in New York, where he began his return journey on the steamer "Europa". Schmid had arrived in America three months earlier with the assignment of investigating the use of agricultural machinery. In the intervening time, he had learned far more about American society. At the Strickhof, Schmid showed his film recordings to every class until his retirement in 1960, commenting on what his students saw with the help of his notes. His film recordings thus not only familiarized hundreds of students at the Strickhof with developments in American agriculture. They also contributed to the fact that quite a number of Strickhof students went to America to gain their own image of what their machine engineering teacher had captured on celluloid in the summer of 1935.

3. References and Credits

3.1 Filmography

All films are accessible via the Online Portal of the European Rural History Film Association (ERHFA, <https://ruralfilms.eu/filmdatabaseOnline/>). Meta data can be found by following the links.

- Amerikafilm (Schmid), Reference Number: AfA 0312, https://ruralfilms.eu/filmdatabaseOnline/index.php?tablename=films&function=details&where_field=ID_films&where_value=830
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3.2 Images

The images used in this video essay are accessible via the following institutions:

- Archiv für Agrargeschichte, Bern
- Schweizerisches Bundesarchiv, Bern
- Schweizerische Nationalbibliothek, Bern
- Eidgenössische Technische Hochschule (ETH), Zürich
- Library of Congress, Washington DC
- National Archives, Washington DC
- Minneapolis Park and Recreation Board, Minneapolis
- Peter S. Shields Library, Special Collections, University of California, Davis
- Calisphere, California Digital Library, University of California, Davis
- Special Collections and University Archives, University of Massachusetts, Amherst
- Los Angeles Public Library Photo Collection, Los Angeles
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3.4 Acknowledgements

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4. Further Reading

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- Rodgers Daniel T., *Atlantic Crossings. Social Politics in a Progressive Age*, Cambridge (MA) 1998.