

6.8. Reproduction and Production: Sex and Gender in Rural Economies

Panel organiser: Bächli, Beat, Archives of Rural History, Bern, Switzerland

Breeding, heredity, and (re)production are key concepts and practices in-between economy and the life sciences. Hence, animal and plant breeding are crucial for the history of “biotechnologies”. Whereas reproduction has become separated from production in industrial life, it is hard to imagine animal and plant production without reproduction in rural economies. There is still no milk without calves (regardless of their fate). Hence there were a lot of attempts to bring the logics of life in line with industrial ways of production. The utopia of industrial farming since the middle of the 19th century is to produce standardised organisms and reproductive substances that are liberated from the restrictions of season cycles. Practices and discourses in agricultural, industrial, political, and scientific communities are tightly connected. Not only disputes regarding the origins of female and male behaviour and sexuality circulated between different spheres, but also the development of animal, plant, and human reproductive technologies intermingled in many ways. A closer look into the history of animal breeding for example brings to light changing economies of attention relating to the female and the male part in (re)production. In cattle breeding, the technology of artificial insemination was more concerned with sires, today embryo transfer has directed more attention towards cows. The sex ratio is another crucial point in animal production. In the field of poultry farming, the sex ratio fundamentally differs from the ones in the production of other animals. Furthermore, chickens’ shorter reproduction cycle facilitated their industrialisation. Also regarding work organisation chicken belonged to another sphere than cows; they often used to be a women’s domain until the industrialisation of poultry farming progressed. Crucial questions in the panel will be: Who owned, marketised, and commodified organisms and reproductive substances? What attempts were there to separate production from reproduction in rural economies? What role did sex and gender play in these processes of disentanglement? Or to put it bluntly: Does it make sense, beside talking of animal’s and plant’s agency, to analyse animal and plant production in the frame of gender studies? Especially welcome are contributions taking as starting point archival sources and analysing them from a gender perspective.

Chair: Joris, Elisabeth, Independent scholar, Switzerland

Tuesday, 20 August 2013 // 1515 – 1645 // Session 6 – Room A 024

6.8.1. A women’s domain? Sex and gender in poultry breeding

Heitholt, Ulrike, University of Bielefeld, Germany

The issue of gender is of existential importance in contemporary commercial poultry breeding: The sex of the animals decides over life and death. Modern hybrid chickens are highly specialized to serve either for laying eggs or for providing meat. The male brothers of the laying hens, for example, are killed shortly after hatching as raising them as broilers is economically unviable. A precondition for this specialization in breeding is a method to determine the animals’ sex early on. The introduction of this method was a milestone in economic poultry breeding and eventually contributed to the commercial success since the 1960s. From a historical perspective, another dimension of gender in poultry breeding becomes the focus of interest: the gender of the breeders. In the early days of organized breeding in the mid-19th century, the sex of the animals was not as decisive as it is today. The chickens of one breed took care of both: hens laid eggs and roosters provided meat. Not enough, however, to be economically attractive for the farmers. Poultry was considered economically unviable, it served mainly as self-supply and was the domain of women on farms. What this meant for the poultry and what consequences this had on the development of commercial breeding is the focus of this contribution. First of all, the assignment of poultry to the sphere of women’s work points to a low appreciation: it was not taken seriously as an economic good. Thus, the initiatives for enhancing poultry breeding did not originate in agriculture but from the citizenry, merchants, entrepreneurs and the nobility.

6.8.2. From Numan to Texel: A century of science in Dutch sheep breeding

Oldenburger, Jesper, University of Utrecht, Netherlands

During the nineteenth century, the selective breeding of sheep in the Netherlands, especially when compared with neighboring countries, got off to a rather shaky and uncertain start. Early attempts to improve the Dutch indigenous herds with the famous Spanish Merino sheep all failed miserably and the Netherlands were miles away from being considered internationally important breeders of sheep. The Dutch Professor Alexander Numan (1780-1852) started, partly in response to these failed attempts, partly as a direct result of the policy of the Dutch King William I and partly from a personal moral conviction, with a large-scaled experiment to determine exactly how the indigenous sheep could and should be improved. Numan’s comparative approach, his thorough knowledge of the international literature and the fact that Numan during this time produced *De Veredelde Schaaпsteelt* (The Selective

Breeding of Sheep), a book which remained popular well into the early 20th century, make that these experiments are the start of a more scientific approach to the breeding of sheep. Furthermore, due to Numan’s preference for the international highly successful English breeds, these experiments also mark the beginning of a century of English influence on the Dutch indigenous sheep. This will eventually accumulate in the creation of the *Verbeterde Texelaar* (The Improved Texel) around 1912, which would become, and still is, an internationally highly influential and successful breed. Within this context I will, in line with the focus of this panel, pay particular attention to the changing ideas on the sex-based heredity of certain characteristics.

6.8.3. The Organization of Pig Breeding: from women’s towards men’s business

van der Laan, Steven, University of Utrecht, Netherlands

Until about 1850, no serious attempts were made to improve upon the Dutch pig breed. After 1850 things changed when wealthy landowners started to import foreign breeds, most notably English ones, to “ennoble” the Dutch native race. Instead of consistently improving the Dutch pigs, though, most pig-farmers enjoyed the short-term gains from the hybrid vigor obtained by crossbreeding the foreign breeds with the native race. In the early 1880s, farmers started to notice that the Dutch native pig had disappeared and was replaced by a mishmash of different crossbreeds. Yet, due to the agricultural crisis, pig farming was booming and large commercial slaughterhouses were created, which led farmers to sell their pigs for standardized prizes, without regard towards the quality of the meat. It is thus no surprise that these slaughterhouses were the first to take action by distributing purebred boars throughout the provinces of the Netherlands. Furthermore, they began paying more for pigs that yielded higher quality pork and threatened to cease their operations in regions in which farmers notoriously delivered inferior quality. This stimulated farmers enough to also take action. 1900 can be marked, more or less, as a start towards organized breeding. First, the creation of breeding-stations that kept a line of purebred pigs to crossbreed with whatever race or crossbreed farmers in the region held. Further, the establishment of the herd-books, which in part were a logical next step from the bookkeeping of the breeding-stations.

6.8.4. Sex, Gender, and Cattle Breeding. An Outline for a Symmetrical Anthropology of Animal (Re-)Production.

Bächli, Beat, Archives of Rural History, Bern, Switzerland

The role of sex is obvious for cattle (re-)production. As the breeders say “The sire is half the herd”. But why hasn’t yet anybody told us something about gender in animal breeding? Is it just because it doesn’t make sense to discriminate between biological sex and (cultural) gender in the realm of animals? In my presentation I will sketch the importance of sex and gender in animal (re-)production taking the example of cattle breeding in Switzerland. First, the study of sex hormones and the transplantation of glands – in human and veterinary medicine – served in the 1920s as an interface for debates about human and animal sexuality and reproduction. Did homosexuality or intersexuality (also) exist in the animal kingdom? Could only cows be infertile or also sires? Second, the reproductive technology of artificial insemination not only triggered discussions about sexually transmissible diseases and the importance of the male and the female part in cattle breeding, but also initiated discussions regarding the domestic animals’ “psychosexuality” in the 1950s. Third, the embryonic transfer developed in-between the farm and the clinic in the 1970s was important for the development of (human) in-vitro-fertilisation techniques and it was seen as a means to bring more “gender equality” to the cowhouse. In close interaction with this, the cow’s agency in the act of progeny was perceived as more important for fecundation than before.

Participants

Bächli, Beat

Beat Bächli studied history, sociology, and philosophy at the University of Zurich and holds a Ph.D. from the Swiss Federal Institute of Technology. After stays in Paris and Berlin, he was post-doc at Bielefeld University and leader of a junior research group at the centre for interdisciplinary research, Bielefeld. Today he is Research Associate at the Archives of Rural History in Bern, Switzerland, where he works on the scientisation and industrialisation of cattle breeding since the middle of the 19th century. He has published in the history of technology, the history of medicine, and the history of knowledge.

Heitholt, Ulrike

Ulrike Heitholt received a Master of Arts degree in literature, German literature studies and sociology from the University of Bielefeld where she also completed a Master’s degree in interdisciplinary media studies. After this, she worked as a research assistant at the Institute for Science and Technology Studies (IWT) at the University of Bielefeld. Ulrike Heitholt currently works at the Department of History at the University of Bielefeld, among other things on a project on the history of poultry breeding in the 19th/20th centuries.

Joris, Elisabeth

Elisabeth Joris received her doctorate from the University of Zurich. She was a co-founder of the group Critical Upper Valais and the opposition Valais publication *The*

Red Anneliese, as well as a co-editor of the feminist magazine *Olympe*. She has published numerous articles on women’s and gender history in Switzerland. In 1986, with Heidi Witzig, Dr. Joris published a pioneering collection of sources on women’s history in Switzerland.

Oldenburger, Jesper

Jesper Oldenburger is a Phd candidate in the NWO-project Scientific Innovation in Livestock Breeding in the Netherlands, 1900-2000. I started my Phd in September 2012 at the University of Utrecht in the Netherlands and I am supervised by Prof. Bert Theunissen. My dissertation will focus on the Dutch history of sheep breeding; on the origins and use of knowledge within this specific subculture and how change and innovation hopelessly failed or came to be.

van der Laan, Steven

I wrote my master thesis on the historical development of a nineteenth century atomic theory. While completing this story, I grasped the opportunity to apply for my current Phd on the history of pig breeding which is part of a larger NWO-project (Dutch Organization for Scientific Research). My research started in January 2013, therefore the results I have are still premature but I feel that I already have acquired several pieces to a fascinating story to tell.