

THURSDAY SOCIOLOGICAL SEMINARS

26/5/2022, 16:00
room 207, Jilská 1, Praha 1

HANNAH LANDECKER

The Industrialization of Metabolism: Histories and Consequences

In 1934, nutrition scientist Clive McCay warned that children were being raised with an attitude to growth that he called “the butcher’s philosophy”: the desire to bring animals to market weight quickly and efficiently. This talk excavates the butcher’s philosophy of the twentieth century and its consequences for the chemical landscapes of life in the twenty-first. While there has been some appreciation of the addition of antibiotics and hormones to feed as growth promoters, given worries about these as adulterations of the end-product that is milk and meat for human consumption, the systematic remaking of animal feed since the turn of the twentieth century has gone under-appreciated. This paper traces the science of the “animal as converter,” with metabolism and feed efficiency as work objects in the effort to make more with less. Vitamins, minerals, amino acids, fungal enzymes, short chain fatty acids, arsenical medicines, anti-oxidants, and many other substances are part of this story, many of which were also then used in human food fortification and engineering. As a result of the focus on feed efficiency in the science-industrial effort to promote growth, what we know about many of these elements is confined to how they affect growth, a positive knowledge that has obscured the many other questions one might ask about how these nutritional components affect animals, microbiota, environments, and humans. This paper argues that a more systematic history of agricultural feeding points not toward the industrialization of discrete foodstuffs or activities (cows, farming), but toward the industrialization of metabolism: a major re-articulation of the metabolic interrelations of bacteria, fungi, plants, animals, and humans, in which flows of matter between organisms changed profoundly. The industrialization of metabolism has produced what we might call the anthropocene of, or in, the cell, a set of consequences that now register in terms of genome instability, gut dysbiology, and metabolic dysregulation. Both philosophically and practically, this perspective allows us to ask what constitutes flourishing in the legacy chemical landscapes of growth, and to think through experimental and epidemiological approaches better equipped to take account of the historically-specific metabolic landscapes of human development and health.

Hannah Landecker uses the tools of history and social science to study contemporary developments in the life sciences, and their historical taproots in the twentieth century. She has taught and researched in the fields of history of science, anthropology and sociology. At UC Los Angeles she is cross-appointed between the Institute for Society and Genetics, and the Sociology Department. Landecker’s work focuses on the social and historical study of biotechnology and life science, from 1900 to now. She is interested in the intersections of biology and technology, with a particular focus on cells, and the in vitro conditions of life in research settings.

The seminar will take place in English in person in the meeting room, there is no need to register in advance.