

Stoffwechsel. Histories of metabolism

Workshop

Technische Universität Berlin

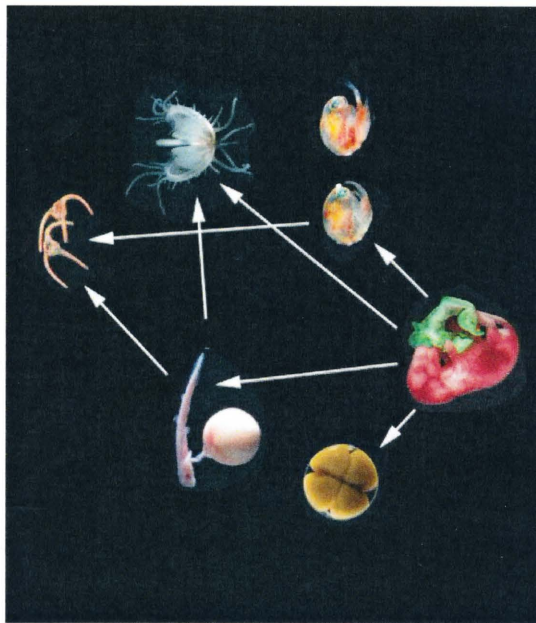
28.-29.11.2014

organized by Mathias Grote

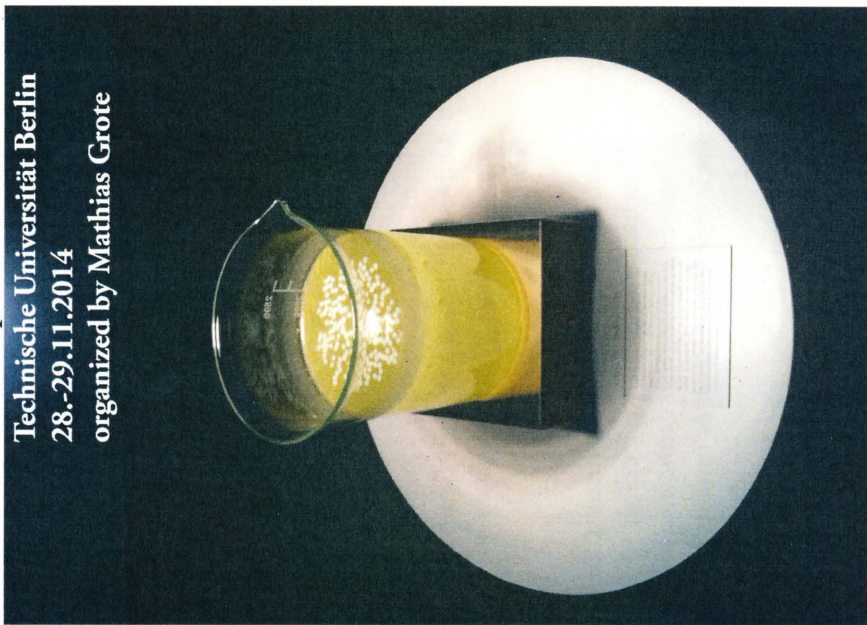
From entire landscapes serving the production of biofuels to traces of radioactive isotopes in organisms and foodwebs, or to factory-made genes, thinking of life in terms of metabolism permeates boundaries. At stake are the delineations of organisms and their environments, that of the natural and the synthetic, and not least, limits of and within science. In this workshop, we will explore the history of metabolic research in the 20th century life sciences more broadly construed, from e.g. fermentation technologies or catalytic chemistry to photosynthesis. Our aim will be to fathom what taking into account the 'metabolic dimensions of life' may imply for the history and philosophy of the life sciences.

If you are interested, please register:
mathias.grote@tu-berlin.de

Venue: R. H2051
Straße des 17. Juni 135
10623 Berlin



Pinar Yoldas: An Ecosystem of Excess, installation view
Ernst Schering Foundation's Project Space, 2014



Pinar Yoldas: An Ecosystem of Excess, installation view
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Friday, November 28th Venue: R. H2051

- 14:00 Welcome – Mathias Grote/Friedrich Steinle
- 14:30 Introduction - Mathias Grote
- 15:00 Hannah Landecker (University of California at Los Angeles), *Cracked Ontologies: Before and after metabolism and genetics*
- 16:00 Refreshments
- 16:30 Heiko Stoff (Technische Universität Braunschweig), *Catabytic Causality. Alwin Mittasch's theory of metabolism*
- 17:30 Victoria Lee (Max-Planck-Institut für Wissenschaftsgeschichte, Berlin), *Metabolic Engineering: amino acid and nucleotide fermentation in postwar Japan*
- 19:00 Reception Geodätenstand TU Berlin
Dinner

Saturday, November 29th

- 09:00 Angela Creager (Princeton University), *Tracers and Temporalities in Metabolic Pathways*
- 10:00 María Jesús Santemas (Consejo Superior de Investigaciones Científicas Madrid), *The cell wall: its composition and synthesis in the antibiotic era*
- 11:00 Refreshments
- 11:30 Karin Nickelsen (Ludwig-Maximilians-Universität München), *Unity in metabolism – or not? Pitfalls and potential of analogical reasoning in 20th century photosynthesis research*
- 12:30 Hans-Jörg Rheinberger (Max-Planck-Institut für Wissenschaftsgeschichte, Berlin) *Comments*
General Discussion
- 14:00 Lunch

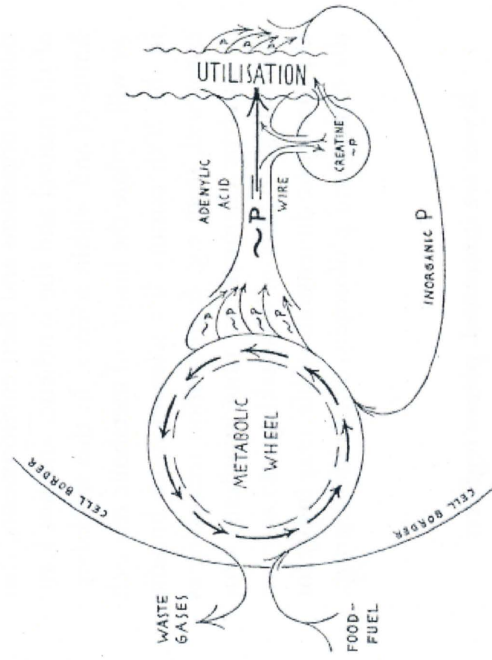


Fig. 1.—The metabolic dynamo generates $\sim P$ -current. This is brushed off by adenylyc acid, which likewise functions as the wiring system, distributing the current. Creatine $\sim P$, when present, serves as P-accumulator.

F. Lipmann (1941), Metabolic energy generation and utilization of phosphate bond energy. *Advances in Enzymology*, 1, 99-162. Reproduced with permission.