

The Lester and Sally Entin
Faculty of Humanities

The Cohn Institute for the History
and Philosophy of Science and
Ideas



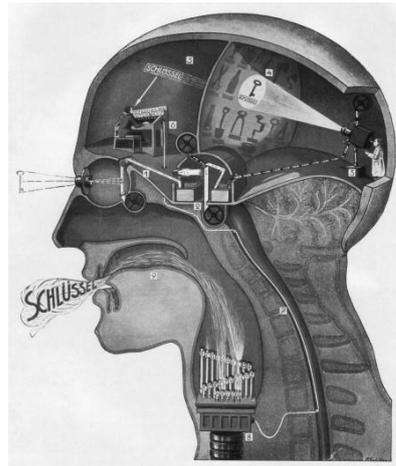
הפקולטה למדעי הרוח
ע"ש לסטר וסאלי אנטין

מכון כהן להיסטוריה ופילוסופיה
של המדעים והרעיונות

In cooperation with

ETH Zürich

Department of Humanities, Social and Political Sciences



Machines, Ideas and Metaphors

International Research Workshop
Tel Aviv, 15 – 16 May 2016
Gilman Building, Room 458

Sunday, 15 May

14:00-16:00

Chair: José Brunner

Daniel Strassberg & Ido Yavetz

Opening Remarks

Olivier Del Fabbro (ETH, Zürich)

Functionalities and Operations: Following the Mode of Existence of Tools, Machines and Technical Systems

During the 20th century, many attempts (Leroi-Gourhan, Lafitte, Simondon, Latour) have been made on various scientific levels to establish methods that allow for technical objects to be assigned to their own specific mode of existence. The first and most important step is based on carefully describing any technical object, such as tools, machines or technical systems, while focusing mainly on their specific mode of operation. In a second step this approach can be used to deepen philosophical thoughts ranging from anthropological, cultural-political, historical to normative realms.

16:00-16:30

Coffee Break

16:30-18:30

Chair: Daniel Strassberg

Nea Ehrlich, (Van Leer Institute)
Envisioning 21st Century Techno-Vision

The presentation will discuss how contemporary technologies of image production shape the aesthetics, authenticity and ethics of non-fiction works. Due to the proliferation of technologies of representation such as computer animation, scientific imaging, algorithmic visualizations, drones and satellites, many questions arise about contemporary visual culture and information technologies. The result is that whereas the camera used to be seen as an extension of the human eye, capturing imagery that reflects what the present viewer would have seen, machine-vision does not necessarily resemble human vision. Drawing from Paul Virilio's *The Vision Machine*, which describes the proliferation of images created by machine viewpoints, the presentation will discuss how contemporary visualizations change scopic regimes, lead to epistemological shifts and changes in viewer reception of information accepted as believable.

Hagi Kenaan (Tel Aviv University)
The Selfie and the Face-Machine

To say that a selfie is a photographic self-portrait is correct, but does not begin to capture the specificity of this contemporary widespread phenomenon whose inner form needs to be accounted for on, at least, two intersecting levels:

(1) the logic of the selfie as a specific kind of technical image, one that is embedded in a digital, high-speed communication machine that belongs a “post-photographic” condition.

(2) the logic of the selfie as an act/event of self-presentation that while continuing a tradition of self-portraiture, can no longer be explained only in terms of traditional accounts of self-representation and, particularly, not in terms of the distinct visuality ascribed by portraiture to the human face.

My analysis will ultimately be directed at opening a question with an ethical edge. This is the question about the place and predicament of the face – of its humanistic meaningfulness and value -- in our contemporary life-world. With the selfie, I shall argue, the common paradigms for conceptualizing the visuality of the face are no longer enough for attending to the concrete setting in which the “contemporary” face tends to singularize itself. I shall thus explain why and how this calls for a rethinking.

Monday, 16 May

9:30-10:00 Morning Coffee

10:00-12:00 Chair: Shaul Katzir

Ido Yavetz (Tel Aviv University)

Clocks, Images of Time, and Concepts of Government

The mechanical clock is regarded as one of the most influential inventions of the European Middle Ages, if not *the* most influential of them. During the Middle Ages, it has become an iconic metaphor for temperance, for the universe, and for the healthy human body. Later it also came to symbolize concepts of regulated authoritarian government. In some ways, however, the mechanical clock's greatest social effect came about in the wake of the Industrial Revolution, while a different invention – the steam engine – replaced it as a symbol of modernity. Mass production around a production line does not necessarily require a steam engine. Water power can do just as well, as indeed it has, throughout most of the 19th century. Without synchronization, however, the modern production line is unthinkable, and mechanical time keeping of some form is always a critical component of all such lines. All of the above leaves certain open questions, to wit: did the mechanical clock serve as the linchpin that guided shifts in human perceptions, or was it drafted in order to exemplify – advertise if you will – pre-existing perceptions that emphasized some of its properties at the expense of others according to convenience? This lecture aims to look at some of these themes in greater detail, in order to examine whether the clock dictated concepts of time, or whether concepts of time dictated clock-design; and whether the essential properties of the mechanical clock turn it into a natural metaphor for concepts of authoritarian regimes while making it unsuitable to serve in a similar role for liberal governments.

Gideon Freudenthal (Tel Aviv University)

The Treadle and the Calculus. On Giovanni Battista Benedetti

In a small case study, I present Giambattista Benedetti's (1530-1590) refutation of an important argument of Aristotle's theory of motion. I argue that the refutation is logically flawed, but that it can be salvaged on experiential grounds. The case shows that Benedetti's experience was different from Aristotle's. Benedetti's world included a "second nature", a technology that didn't exist in Aristotle's time, and whose place in society has fundamentally changed.

12:00-13:15

Lunch Break

13:15-15:15

Chair: Yossi Schwartz

Michael Pfister (Entresol, Zürich)

The Machinery of Lust and Imagination: Marquis de Sades' Overcoming the Impasses of 18th Century Materialism

French enlightenment materialism is not as reductionist as one might expect. La Mettrie's „homme machine“ is highly ironic, and the pornosophical works of Marquis de Sade carry atheist and determinist naturalism to the extremes in order to overturn it. Endless choreographies of pleasure machines and purely mechanical bodies make it quite clear that the machine is man's metaphor just as man is the machine's metaphor. Describing the clockwork of human lust as we find it in Sade's work doesn't necessarily mean dismissing the hardcore values of romantic humanism such as nature, soul or emotion. On the contrary, the machine turns out to be the beating heart of artistic imagination.

Daniel Strassberg (ETH, Zürich)

Reframing Life: Body Heat and the Steam Engine

The origin and function of the body heat was one of the riddles the mechanistic science could not solve. Thus the secret of life – of which the body heat was the main expression – remained outside the realm of ordinary science and was one of the powerful weapons of the vitalists. The steam engine returned heat into the realm of science and – as Helmholtz pointed out – defeated vitalism. But did it really?

15:15-15:30

Coffee Break

15:30-17:30

Chair: Ido Yavetz

Israel Belfer (Bar Ilan University)

From the Clockwork to the Informational Universe

A formative metaphor for the human mind as well as of Nature writ large – those structures at the pinnacle of complexity and beyond it - has traditionally been correlated with the state of the contemporary technological art: from waterwheels to clockworks and of course the computer. I will suggest an Informational turn in which this mechanical metaphor, as well as the gap between mechanical and organic or cosmic are reconsidered. In this new framework, the conventionally separate categories are of a kind, cut from the same new cloth.

In order to introduce this new metaphoric framework, it will be necessary to recognize a techno-scientific revolution: The Informational turn over the past century. With Claude Shannon and Alan Turing's work at its center – the Informational turn represents a shift in a Style of Reasoning (in the terminology of Ian Hacking), denoting the rise of a new semantic field, scope of sense-carrying questions and relevant answers. It even boasts a new ontology, with a new range of Information-laden objects of study and claims to make about them. This shift spans the scientific and social, across disciplines and scales of research.

From black-hole thermodynamics to bio-informatics, from systems theories and complexity theory, the constitutive elements and loci of promising research are the information structures and its dynamics. The classical disciplines are also increasingly dependent on information processing, simulation and analysis in terms of computation and information theory (i.e. the vocabulary of the bit).

Cybernetics, as a field of congruence of science and humanity based on information processing, has over the past half century used information processing and transfer as a leading metaphor for the workings of society, the human brain or the cosmos. This does not only go further than the popular image of computation machinery; it is an attempt to merge the new metaphor with an actual research program. That is, the enthusiasm following Information-Theory's success produced a vision (which has evolved over the years) of academic bridging and social-personal salvation.

I will adumbrate this brand of hopeful striving from the days of Norbert Wiener and the J.H Macy foundation meetings in the 1950 to current information-oriented analysis such as deacon's *Incomplete Nature*. Aside for its success (or lack thereof), there are residues of cybernetic modes of thinking in the current version of man-machine relation.

Carmel L. Vaisman (Tel Aviv University)

A Web of What? Unpacking Online Ethics through the Lens of a 'Metaphor Collapse'

Metaphors are central to how we understand the world, producing cognitive frames and contexts that are not merely conceptual structures, but operational models actively influencing choices and policies. Internet technologies invoke several metaphors simultaneously since they are situated between a variety of different tensions such as orality and textuality, corporeality and spatiality, practice and artifact. This talk will frame some of the main ethical challenges associated with the internet in terms of a 'metaphor collapse', unpacking the diverse settings that are collapsed into one online context, practice or artifact. I will use my ethnographic study of Israeli blogs as a case study, to demonstrate how metaphors actively

shape the nature of what technology is, and point to the ramifications of forcing a multifaceted digital construct into the framework of a single metaphor

17:30-18:00

Coffee Break

18:00-19:30

Myles Jackson (New York University)
Machines, Music, and Aesthetics in the 20th Century
(Keynote address, also research seminar of the Cohn Institute)

The early twentieth century witnessed the creation of new sounds generated by novel musical instruments creating a unique musical aesthetic with the assistance of physics and engineering. Engineers and physicists often collaborated with composers throughout the century with a view to broaden the musical landscape. This talk will start by discussing the human-machine relationship from the telharmonium in the early twentieth century and continue with the trautonium of the 1930s. It will conclude with the new aesthetic of the Moog Synthesizer, which revolutionized an entire genre of music.