Urban Intelligence
After Two Centuries of Industrialization

A seminar to be held on
2–3 July 2018, Salle Triangle – Centre Pompidou

At the initiative of
Institut de recherche et d'innovation (IRI),
the Real Smart Cities EU Programme
and the Digital Studies Network,
with contributions from
Nanjing University and support from Caisse des dépôts
through the Contributive Learning Territory project in Plaine Commune.

Introduction by Bernard Stiegler
Translated by Daniel Ross and Benjamin Herm-Morris.

This seminar, devoted to urban intelligence in the epoch of the automatic city, proposes to reopen the questions raised by Henri Lefebvre in *The Critique of Everyday Life*, *Le droit à la ville*, *Vers le cybernanthrope* and *The Production of Space*, and, in so doing, to revisit the characteristics of industrial urbanity as it emerged in Marx's epoch, with a view to describing contemporary capitalism as bearing within it the program of generalized 'smartification', along with the conditions in which the highly connected city could also become a city of dis-automatization, that is, of the re-invention of urban knowledge in all its forms.

The kind of development promised by Silicon Valley's models of *smartification* is unsustainable: above all, it amounts to a new acceleration of that increase of entropy which has characterized the Anthropocene from the outset – entropy being here at once thermodynamic (climatic and environmental), biological (the destruction of biodiversity) and informational ('post-truth' and the generalized proletarianization of knowledge by artificial unintelligence).

It has often been suggested – through metaphor – that the city is a kind of organism, and that the urban milieu is a kind of connective tissue. Italo Calvino pointed out that it

is possible to have two seemingly-opposed visions of the city: the city as machine and the city as organism[1]. Today, this machinization of the city is no longer metaphorical: it is affected through the implementation of automated functionalities that are deployed via digital urban technologies.

We must go beyond this question of the relationship between the living thing and the machine, and we must do so on the basis of Lotka's work, which, in 1945[2], proposed considering the human living thing as a process of the production of organs (organogenesis) that Lotka referred to as 'exosomatic'. Man is an exosomatic living organism who, living in society, himself constructs and institutes exosomatic organisms of higher dimensions, within which groups of human beings dwell. These exosomatic organisms of higher dimensions are complex exorganisms, while human beings are simple exorganisms.

This seminar will address questions surrounding digital industrial technology by retracing the brief history of the internet, the World Wide Web and its platforms from an epistemic and epistemological point of view. We will thus characterize computational capitalism as a specific type of episteme. This has been one of the core aims of digital studies[3] (études digitales) since 2014, as outlined by the IRI and the Digital Studies Network.

We will contextualize these investigations within the scope of developments which, beyond the marketing term of "smart cities", bring into question the notion of digital urbanity - "connected cities" characterized as a new type of platform (in the sense of "platform capitalism", where proteiform urban metabolisms align and reconfigure themselves).

We will consider the implications for the fields of architecture and urbanity. In an era of RFID-chipped construction materials, of new modelling, production and construction technologies, of new life-cycle and management technologies for organisms and fluxes within exorganisms we now face a new "urban revolution". This revolution will be

---

[1] Calvino: 'The comparison with the living organism in the evolution of the species […] can tell us something important about the city: how in passing from one era to another living species either adapt their organs to new functions or disappear. The same thing happens with the city. And we must not forget that, in evolutionary history, each species retains traits that seem to be the vestiges of other traits, since they no longer correspond to vital necessities. […] Hence the continuity of a city can be based on characters and elements that, in our opinion, no longer seem essential today because they are forgotten or contra-indicated for its current functioning.' [Note: no English translation of the essay from which this is taken seems extant, so the translation here is from the French – *trans*.]

[2] Alfred Lotka, "The law of evolution as a maximal principle", *Human biology*, vol. 17 n°3, p. 167-194.

[3] Cf. Bernard Stiegler et al. Digital studies. Organologie des savoirs et technologies de la connaissance, FYP éditions.

hyper-industrial, profoundly affecting inhabitants, the construction sector and the "production of space" alike - and may become dangerously in-urban.

The themes of the seminar take inspiration from Karl Marx insofar as they follow a logic of technological evolution as was elaborated on in the first volume of Das Kapital. We aim to update this logic for the 21st century by re-interpreting it through the hypotheses of Lotka and the theories deriving from critical analyses of the Anthropocene.

Provisional programme

Each topic will last 45 minutes. The decision regarding how much of that time can be allocated to discussions is left up to each speaker. Each half day will be concluded by an open discussion. Real-time interpretation between English, French and Chinese will be made available.

Monday, July 2nd 2018

Morning

– 9h00 Bernard Stiegler

Éléments de théorie des exorganismes simples et complexes à l'époque de la grammatisation des matériaux de construction

– 9h45 Yibing Zhang

– 10h30 Guanjun Wu

Androids and the Anthropological Machine : Politico-philosophical Reflections on the Rise of the Artificial Intelligence

– 11h15 David Berry

At War With Thought: Infrasomatisation, Algorithms, and Urban Informatics

– 12:00 Open discussion
– 12:30 Lunch

Afternoon

– 14h00 Gerald Moore

From Neuro-to Noodiversity : Re-niching the machine zones

– 14h45 Zhengdong Tang

The Historical Role of "General Intellect": Marx's Perspective of Reading and Its Academic Significance

– 15h30 Andrew Feenberg

Fonctions et avenir de l'internet dans le capitalisme contemporain

– 16h15 Meng Wu

Critique of Digital Capitalism and Critique of Ideology

– 17h00 Eric Cassar

Habiter l'infini : nouveau mode d'habitat dans un smart-building

– 17h45 Discussion générale

– 18h30 Discussion entre Andrew Feenberg, Yuk Hui, Bernard Stiegler et Yibing Zhang

Tuesday, July 3rd 2018

Morning

– 9h00 Alain Renk

L'urbanisme collaboratif, une alternative au paradoxe orwellien des smart cities

– 9h45 Huaiyu Liu

The Marxist Problem Domain in Smart City Times : From Lefebvre to Stiegler

– 10h30 Benjamin Herm-Morris

Le détournement accidentel des réseaux sociaux et la nécessité d'en revenir

– 11h15 Yuk Hui

Des réseaux sociaux intelligents et donc urbains sont-ils possibles ?

– 12:00 Open discussion
– 12:30 Lunch

Afternoon

– 14h00 John Kelleher and Abhijit Mahalunkar*

Using Entropy and Information Theory to Analyse Human Mobility Behavior in a City

– 14h45 Chuanping Zhang

"New Four Great Inventions": Prospects, Problems and Challenges of China's Shared Economy Development

– 15h30 Noel Fitzpatrick and Conor Mc Garrigle

Data Colonialism : Dublin

– 16h15 Pierre Clergue

Building information management, Minecraft et les transformations de l'architecture

– 17h00 Lan Jiang

General data, virtual body, digital capital : three dimensions of digital capitalism

– 17h45 Orit Halpern

The Smartness Mandate (What "smart" means ?)

– 18:30 Open discussion

– 19:30 End of the seminar

** Mr. Mahalunkar's collaborated with Prof. Kelleher but he will not be present for the talk.*