Fulcrum
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scientific conversation.

p.morel

Fulcrum: *You have outlined an urban theory that, for the first time, accounts for the Internet as a powerful territorial/urban agent, could you expand on the idea of oceanic/porous urbanism?*

Philippe Morel: I began to be interested in such an evolution of the world while working on my Master's thesis ('00-02). The title, *Living in the Ice Age*, came from the fact I considered contemporary changes associated with the advent of computation not simply as "another media-based revolution" but as a "geological" shift, a kind of a global earthquake produced by "computational drifts"; drifts that are opening a new age in human (post)history.

I was speaking about a more extreme coldness than that theorised by Andrea Branzi in *Cold Metropolis*: the coldness of the liquid nitrogen used in supercomputer cooling or sperm cryopreservation, as well as the coldness of extreme abstractions produced by computational processes and formal languages.

In fact, the freezing of any kind of social life. In the introduction I wrote "what our civilisation gave birth to after unreasonable efforts is a new kind of compound, something like the summation of dynamite and nuclear energy, of the intrinsic capacities of the human brain for conceptual abstraction, of the raw power of computers for calculation, and of the sensory performances of the human body." I added "my work would only be about trying to unveil the genesis of such a compound". Actually it is still about that: establishing the "history" and theory of this new, man-made, Ice Age. I call this theory "Computationalism". It has nothing to do with any other "-ism" we experienced in the 20th century, including the most recent ones. It is not about art, style, vanguards, etc. It is about the replacement of Rationalism and the next 500 years. In Computationalism, the raw power of computers and the "constructive" power of the algorithms come before everything. Quantity and quality are always associated, as with the algorithmic.

The computer is the new petroleum: a source of energy and raw power, a resource for chemical engineering, and a complex raw material with strong "constructive" potential. Like petroleum, the computer also produces its own geopolitics.

At the moment companies like Facebook and Google are building data centres as close as possible to the North Pole for better and cheaper cooling. Google is also patenting floating platforms drifting on the oceans, producing their own electricity and relocating according to the constantly changing topology of the global network... Computer scientists are using methods and mathematical tools stemming from the natural sciences in order to understand the complex and non-deterministic nature of massive computational phenomena, and material scientists are building up new materials out of atoms. Therefore, Computationalism is a new Neolithic-like anthropological bifurcation. It is a new state of matter, a new state of the machine, a new state of knowledge, all asking for a specific theory that I outlined, within the context of Integral Capitalism, as "Biocapitalism", "Technocapitalism" and "Infocapitalism". Computationalism is not a paradigm shift within western rationalism but a drift out of Rationalism. Rationalism, that destroyed itself thanks to its own knowledge and tools, is now replaced by Computationalism. That one is the social context that corresponds to the realisation of a century-old prediction by Nietzsche who said "the scientific man is the ulterior development of the artistic man". All political models based on the Ratio (including the occidental) are failing because no human mind can deal with the complexity of our technological societies. As Friedrich Hayek demonstrated, the limits of politics are epistemological, they are defined in any Western society by the state of its knowledge.

SEARCH ENGINE ALGORITHMS REPLACED LIBRARIANS; IT WOULD BE MORE THAN LOGICAL, AND NECESSARY, TO SEE THEM REPLACE TRADITIONAL POLITICIANS TOO.

F: *The popularisation of free software like SketchUp, Grasshopper or Processing has increasingly resulted in the production of architecture by nonprofessionals. Does architecture, like journalism, have a problem of authorship or authority?*

PM: L'Isle-Adam envisioned the crisis 130 years ago when he stated that the machine is the replacement of multiple intelligences by one great Intelligence. In art, unlike science (architecture and journalism are closer to art than to any kind of science) the lack of such an intelligence is not compensated by multiple intelligences. Thousands of Koolhaas followers are not equivalent to one Rem. (Should I say that it is worse than no followers?)

Historically, this problem was solved by the very nature of vernacular architecture, which is about sharing common rules and cultural values. Today the common visual or nonvisual language is more likely found within iPad and Facebook apps.

Twenty years ago, a "Corbusier House" app wouldn't have designed a building as well as a pupil of Le Corbusier. Today, such an application would probably provide a better architectural solution. Against all the evidence of the state of architecture in European suburbs, people still believe that architecture made by isolated architects following "cultural values" is better than something a computer would do... It is deeply wrong. Architecture is about producing new concepts of construction (Maison Domino, etc) just as computer science is about new concepts of computation (quantum computing, etc). We must not confuse the workings of a computer chip with the design of laptop computers.

F: *Like Doxiadis, you've spoken of a universal architecture.*

PM: Doxiadis, whose thought was too abstract for many of his contemporaries, was one of the most amazing theoreticians of his time.

He proposed a theory in which architecture was related to the deep structures of industrial production, a theory that is global. This is precisely what I am interested in, since Computationalism has to be a global theory in order to become a social theory. But Architecture is only one of the dimensions of any social theory.

It allows me to develop a local theory of knowledge in connection with other local epistemologies. Architecture should neither be about social realism with a touch of western aesthetics, as Team X practised, nor about idealism. Architecture should always try to embed radically different social rules into each construction, which means it can be absolute but never autonomous, since obviously the technical means associated with any construction are always socially defined. In the words of Meyer "the goal of architecture is not to embellish life it is to organise it". If in my architectural work I favour the universal over the generic, it is because universality seems to me more associated with structures, very much like in the mathematics of the Universal Turing Machine.

F: *In the 60s many held hopes computers would liberate the worker; have they today eliminated the very idea of free time?*

PM: If you want to address the relationship between society and technology in a creative way you cannot keep thinking within old categories. You need to conceptualise an inversion of many things. There is no reasonably attractive technological future in which technology would be anything else than a sole knowledge, constantly for its own end.

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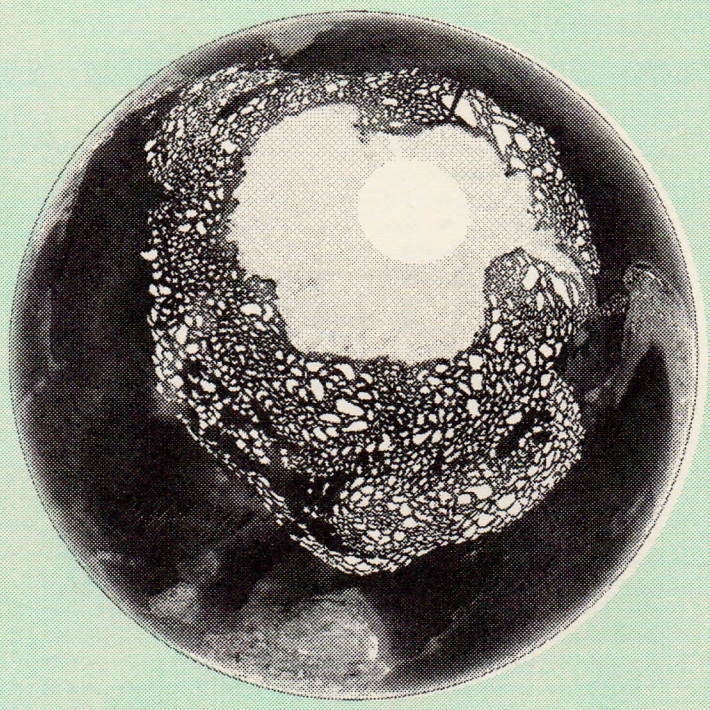

We must remember that another and a higher science, itself still more boundless, is also advancing with a giant's stride, and having grasped the mightier masses of the universe, and reduced their wanderings to laws, has given to us in its own condensed language, expressions, which are to the past as history, to the future as prophecy. It is the same science which is now preparing its fetters for the minutest atoms that nature has created: already it has nearly chained the ethereal fluid, and bound in one harmonious system all the intricate and splendid phenomena of light. It is the science of calculation - which becomes continually more necessary at each step of our progress, and which must ultimately govern.

Perhaps to the sober eye of inductive philosophy, these anticipations of the future may appear too faintly connected with the history of the past. When time shall have revealed the future progress of our race, those laws which are now obscurely indicated, will then become distinctly apparent; and it may possibly be found that the dominion of mind over the material world advances with an ever accelerating force.

Charles Babbage, 1832