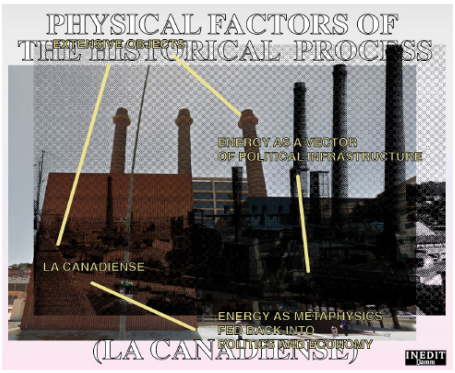


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Physical factors of the historical process (La canadiense)

Pedro Moraes

A group exhibition organised by resident Pedro Moraes, following his interest in the 'Huelga de La Canadiense' a massive strike in the biggest power plant in Barcelona that took place in 1919. By coopting the organisational structure of the residency the artist invites other artists to occupy the exhibition space. The works displayed relate to the "Huelga' insofar as they are all centred around energy — it's production, distribution and circulation. Energy understood not only as the way in which we power our electrical devices, but also resources which can be redistributed according to a particularly desired pragmatic outcome — namely this show.

Intro

To conceive of an object through a multi modal approach it is a task hard enough if this object that we are conceiving is a concrete one, but it is even harder if the object that we are conceiving is an abstraction and that is which i intend to do through the writing of this text. This particular object of enquiry — energy — is all encompassing if we think about it, through it's multitudes of applications and incarnations, from new age syncretism to material conditions of life.

There is a particularly interesting sculptural dimension to energy considering our current apparatuses that generate it — I will used the word energy quite liberally here, but hope that the context will provide enough information into which particular application i will be referring to — thermoelectrical, hydroelectric and nuclear plants, each of these forms of harvesting energy have their advantages and disadvantages but that is not what this conversation is about. It is rather about the physical process in which a material object is distributed through a technical device. All of these modalities of energy production perform similar actions, but the thermoelectric is the most clear as far as examples go.

I wouldn't consider myself a physicist or an engineer, so this is going to be rather simplified; the coal that it's burned in a furnace inside a particular geographic location, produces heat that is converted into electrical energy which is distributed by a power grid that in turn feeds sub stations that allow me to write this text in my computer and you to read it. A physical object is disassembled through whatever means and distributed through a network, what existed in a solid form is transmuted into a transient one.

Complexity

To be quite blunt, the main vectors of our current historical unravelling are beyond our cognitive capabilities. These vectors are what we deem — complex — although, our understanding or definition of complexity is still insufficient. A general description of complexity for the purposes of this text are related to what are conventionally called systems — a series of interlocking agents that produce a higher order of behaviour than what each of these agents is capable by itself, therefore the task at hand is to briefly describe what is a complex system, in order to be able to name what are these vectors. A complex system is a physical system 'an ensemble of many elements which are interacting in a disordered way, resulting in robust organisation and memory.' or a data driven 'A system is complex if it can generate data series with high statistical Complexity.' The global economy is a good example of this. In simple terms, the economy is not an object which we engage with directly, it is distributed across time and space (you will never see 'the economy'); it incorporates a wide array of elements, from property laws to biological needs, natural resources to technological infrastructures, market stalls and supercomputers; and it involves an enormous and intricately interacting set of feedback loops, all of which produce emergent effects that are irreducible to its individual components. In other words, the interaction of an economy's parts produces effects that cannot be understood just by knowing how those parts work in isolation – it is only in grasping the relations between them.

Próximos eventos homesession:

10 de junio Arranz Bravo: > STONGHOLD, en colaboración con Fundación **Invited: Carlos Valverde**

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La Canadiense

This project takes as its starting point the strike at La Canadiense — a power plant — in the Poble Sec neighbourhood of Barcelona. Engaging with the history of the specific site of La Canadiense, not in its literal conception — the site of the factory — but rather, abstracting what a site might mean in regards to both what is generic and specific to it, leading to the production of a series of works which propose a multi modal engagement with Energy as a concept.

The so called "Vaga de la Canadiense" (this name comes from the fact that the main stockholder of the company was the Canadian bank of commerce from Toronto) was a strike that lasted 44 days becoming a generalised strike paralysing 70% of the Catalan industry. Eventually, it was the event responsible for instituting the 8 hours workday in Spain. We can understand the infrastructural aspect of energy as a vector of technological and by extension

social and cultural change, but in this particular case there is a lapse, is not so much the production distribution and circulation that is the vector of change but it's stoppage, which reveals a more complex schema, where are our common conceptions of a how particular object functions in the world are transformed because of it's social and political context.

Energy as a vector of technological change

The word energy has its roots in ancient greek as most of our abstract concepts — it originally meant both activity and operation. In the abstract for his article 'on the inevitability and the possible structures of super-civilisations' Russian astronomer Nicolai Kardashev states that 'since civilisations face always problems that require continuously greater activity, it is likely that super- civilisations will undertake activities and construct structures of a very large scale. Properties and means of detections of such superstructures and activities are discussed. We also examine six possible scenarios on the evolution of civilisations.' This article goes on into theorising both what the energy harvesting possibilities of these civilisations would be, and how us through our current instruments would be able to perceive them. In effect his article establishes a sort of Moore law (Moore's law is the observation that the number of transistors in a dense integrated circuit doubles approximately every two years) for the production of energy, correlating civilisational complexity with energy requirements. While this article is largely speculative it's specificity is derived from a very concrete set of generic assumptions, the history and evolution of our own capacity to harvest energy. In the same article he establishes the Kardashev scale which classifies civilisations according to how they extract their energy. Divided in three, the scale presents type 1 A civilisation that is capable of harnessing the total energy of its home planet. type 2 An interstellar civilisation, capable of harnessing the total energy output of a star. Type 3 A galactic civilisation, capable of inhabiting and harnessing the energy of an entire galaxy.

Energy as a vector of political infrastructure

In a world before our own, before data centres, before the internet, before solar plants storing energy in molten salt, power used to be representative, bestowed by god, by the people, by the workers. Power now lies in capital and it's physical infrastructure, banks, stock markets, companies and such. The euro bills design back that up, instead of portraying presidents, kings or prime ministers of past or present, they portray generic architectural devices — doors, windows, hallways, aqueducts, buildings — essential pieces of urban infrastructure. The message that is embedded in this seemingly naive and accommodating gesture (after all the euro is not supposed to convey local narratives), is one of a recasting of the political order: instead of representative governance where the face of power is easily recognisable, what we have is something else, a power structure that seems to be governed by the built environment (so to speak) and how it's deployed. The political stake of this gesture is covert not because the infrastructural devices are covert — in the sense of being hidden — is quite the opposite, they are so clearly in front of us that they might as well be irrelevant, except that this is not the case. Power lines, highways, a roundabout, supermarkets, computer programs. Power is present in how all of these shape our lives, in how they dictate course of possible action for us.

Energy as ontology fed back into politics and economy

After you die, your body's atoms will disperse and find new venues, making their way into oceans, trees and other bodies. But according to the laws of quantum mechanics, all of the information about your body's build and function will prevail. The relations between the atoms, the uncountable particulars that made you you, will remain forever preserved, albeit in unrecognisably scrambled form – lost in practice, but immortal in principle.

That is until our sun grows older, gets hotter and grows in size, it will envelop Mercury and Venus. It is possible it will stop just short of Earth, the authors say, but the conditions still would make this a most-inhospitable planet. More likely, though, the sun will consume Earth as well, severing all the chemical bonds between molecules and sending its individual atoms out into space, eventually to form new planets.

amb la col·laboració de:

Generalitat de Catalunya
Departament de Cultura

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amb el suport de:

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