

The Masterstroke 1/3

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Translation
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F1 ITER («The Way» in Latin) is one of the most ambitious energy projects in the world today. In southern France, 35 nations are collaborating to build the world's largest tokamak, a magnetic fusion device that has been designed to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers our sun and stars.

I1 And ITER, in turn, will contribute to the design of the next-generation machine (DEMO) that will bring fusion research to the threshold of a prototype fusion reactor. Construction is foreseen to start in the 2030s, and operation in the 2040s. Beyond DEMO, the final step to producing fusion energy would be the construction of a prototype reactor, fully optimized to produce electricity competitively.

B2 Fusion is the energy source of the sun and stars. In the tremendous heat and gravity at the core of these stellar bodies, hydrogen nuclei collide, fuse into heavier helium atoms and release tremendous amounts of energy in the process.

F3 The immense infrastructures which nuclear power stations (fission and fusion) require are subsidised and necessitate strong engineering skills, which are met by a «supply» of extensive qualifications and research. The companies capitalising on this industry, given the risks, must undergo state supervision. In France, this responsibility lies with the Institute for Radiological Protection and Nuclear Safety (IRSN) and the Nuclear Safety Authority (ASN), as well as the International Atomic Energy Agency (IAEA), which is part of the UN on a global level.

	A	B	C	D	E	F	G	H	I	J
1	The real masterstroke of the scientific project ITER and its planned successors isn't just									
2	to harness fusion to create an electrical energy source which can be industrialised and									
3	commercialised, but to «sell» us, as much in a commercial sense as in a conceptual one i.e.									
4	get us to swallow, a newly produced centralised energy, which would then be distributed									
5	to the consumer population. These are the stakes of such a research programme. The oil									
6	peak, although a controversial topic, has led us to rethink energy sources and to reflect									
7	on the future of production-driven societies. How is it possible to continue with this pro-									
8	gressive societal spree brought about by the industrial revolutions without coal, oil, or									
9	nuclear fission? These three fossil fuels all share the common quality of being extremely									
10	polluting, if not destructive, in their own way and to varying degrees.									

G7 The first Industrial Revolution (1780-1880) revolved around the steam engine; the second (1880-1973) on combustion and jet engines, while the supposed third (1973 -) revolves around computers. Industrial revolutions are intrinsically linked to the ideology of the Enlightenment and the idea that historical advancement is the pursuit of comfort and freedom (progress).

C4 As a population of consumers, we use these pre-established systems without calling them into question for various reasons, or claim that we don't have any option to avoid them. The relationship we have with waste water treatment (mains drainage) and other waste bears testament to our ability to shirk responsibility regarding waste treatment methods. We increasingly delegate managing the water cycle and waste, as well as energy and transport, to multi-nations such as Veolia, thus renouncing any right to decision-making or monitoring.

D5 The International Energy Agency (IEA) acknowledges that we have already reached peak oil. Conventional oil production reached its «historic peak» in 2006 and will «never» increase: this is the bomb which was dropped, and subsequently defused, by the IEA, the organisation based in Paris tasked with advising the rich countries in the OECD.

E6 The ideological foundation of a production-driven society can be expressed in the principle of infinite production-distribution-consumption (with planned obsolescence, waste etc.) without considering the opposition between necessity and excess (or the principle of creating need).

The Masterstroke 2/3

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B1 Renewable energy is energy collected from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat. Renewable energy often provides energy in four important areas: electricity generation, air and water heating/cooling, transportation, and rural (off-grid) energy services.

B3 Collective or individual autonomy over one's own energy production and consumption would have the immediate advantage of not being subject to general network outages and price fluctuations, but also of reducing waste linked to transport and, of course, depending on the sources used, of having zero or even a positive environmental impact.

A5 The governments which have signed the ITER research programme are China, the EU, India, Japan, Korea, Russia, and the USA, all of whom have a highly stable political spectrum. The system of governance remains constant whatever the governing party and internal opposition. In addition, faith in commercial society and in the «economy», imperialism, military force, and a large population unite them to varying degrees.

	A	B	C	D	E	F	G	H	I	J
1	Renewable energy is therefore being embraced. Although useable on a large scale, the risk									
2	is that it can also be decentralised, with sources of various types being found all over the									
3	world. Local production on a small scale would foster the sustainable autonomy of the									
4	consumer-producer as opposed to pre-established private electrical energy networks. So									
5	why is research into fusion desirable? When the governments of greatly differing political									
6	regimes work together to finance and bring together their expertise in the same uncertain									
7	field, what is the objective? Let's hypothesise that they are suggesting mitigating the									
8	decentralised energy system in favour of strategic control. The past few decades have seen									
9	a toning down of social class considerations to the point of them almost being forgotten									
10	completely. However, we still have the opportunity of a place at the table ourselves in terms									
	of an energy circuit in which we would enjoy the freedom of being without guardianship.									

I9 Fledglings await the regurgitated food of their parents and are dependent of it in order to survive their first few weeks of life. When human children become autonomous, the educational and protective parental authority slowly fades away. Voluntary respect is maintained through the wisdom of elders' experiences.

F6 Strategic energy control operates according to the infrastructure required and, more still, the complexity of production, but also according to potential consequences of military usage. Faced with this, the only possible approach as a population is fearful submission and a state of numbness.

A8 The importance of the Nation-State, where land border and dominant culture interlock (think about the place of sport in the collective imagination), and liberating and protective communitarianism, where individuals define themselves along lines of gender, sexuality, religion, ethnic origins, and skin colour, have replaced the hierarchical considerations of the exploitative dominant/dominated power relationship. Class struggles and class identity have been greatly diminished.

The Masterstroke 3/3

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B1 The senior leadership encompasses those who write laws and regulations and who enforce them (by force or the threat of it), as well as knowledge and truths (in the shared education system), and those who hold resources and means of production and large amounts of capital and leverage them for power (accumulating and monopolising goods at the expense of collectivity, as well as interfering with decision-making through lobbying and defending private interests). Finally, it includes those with arbitrary privilege such as royalty. This «class»* is, of course, not homogenous, and on occasion has strongly antagonistic interests. That said, it can be identified by the percentage of wealth and advantages held compared with the rest of the population, and the desire to remain in power through support (educational and media propaganda) or force (army, military, industry).

* The new French societal structure born from the 1789 French Revolution - abolished privileges and moving towards a meritocracy - gave rise to a new kind of hierarchical transmission via genetics, whereby the status of an individual is more or less guaranteed to be the same as that of their parents, as described by Sociologist Pierre Bourdieu. Thus, we cannot give much credit to the idea of merit, a new word for birth privilege. The Inequality Observatory published an article on their website (data from 22nd June 2018) stating that 75% of the «representative» French National Assembly is made up of executives and elite intellectual professions which otherwise represent 18% of the working population, while labourers (20% of the working population) are represented in the Assembly by...0%.

D3 The climate challenge is a euphemism which includes global warming, the exhausting of resources, infertile land, water pollution, air contamination, and the mass extinction of animal and plant species.

E4 Environmental science studies the symbiotic relationships sustained between life forms and with their environment.

G6 The term «senior leadership» is interchangeable with «senior management», but it underlines the sacrilege of the expression, as managers who mismanage can be said to have no foresight.

A9 Today, there is already an array of available and functioning «renewable» technologies, in domestic and waste-treatment spheres as much as electricity and food production. Some of these admittedly require a costly installation and shared responsibility, but others are efficient on an individual and household scale. Small gestures, not just large-scale choices, are ready to be popularised. That said, both require just as much commitment and time as any new concept or overview without commercial or monopolistic qualities. These large-scale choices are indeed incompatible with any lucrative centralised programme (however renewable) at the heart of known derivations and dependencies. Of course, if renewables are given coverage and encouraged, it's because they fit into the capitalist desire for growth. Therefore, the opposite is appropriate i.e. sharing, «degrowth», autonomy, and symbiosis.

E9 Commonly sharing technical knowledge and knowledge of physics and metaphysics, combined with the cult of private property and infinite growth has driven us to destructive technology and the legitimisation of a new kind of tutelary power. In response, we can teach what would break this cycle. The master being surpassed by the student on occasion, we can't even imagine what we can invent together with a new educational paradigm.

D9 Why do alcoholics come together if not to mutually support each other, to feel less alone, and share tips on resisting temptation? In the same vein, let's imagine «consumers anonymous». Likewise, stopping smoking is torturous; never starting and learning rationally to live without is preferable. The same can be said of the car. What looks like a joke is in fact the miraculous solution. Acquired habits and instilled learning are the watchwords of a civilisational reversal.

	A	B	C	D	E	F	G
1	The «senior leadership» and civilisational decisions legit-						
2	mised by our more-or-less conscious and willing support are						
3	the source of the «climate challenge» which concerns us all,						
4	driving us to reconsider energy production, its usage and the						
5	«lifestyle» of people in their environment.						
6	The idea, therefore, of decentralised energy as a common and						
7	shared responsibility can frighten the «senior leadership»,						
8	those whose right to «run the world» is based on the opposite						
9	paradigm. To successfully invert these roles, we must pro-						
10	gressively, together, wean ourselves off dependency and find						
	alternatives alongside the younger generations, rather than						
	initiating them into this bewitching cult.						