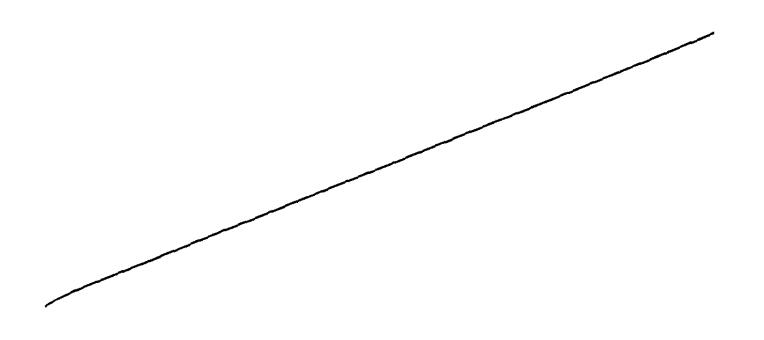
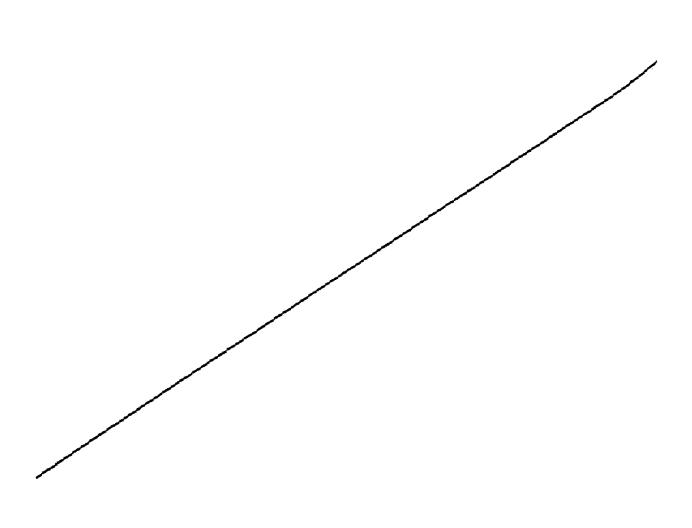
Prometheanism and its Critics

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What does it mean to orient oneself towards the future? Is the future worth investing in? In other words, what sort of investment can we collectively have towards the future, not just as individuals but as a species? This comes down to a very simple question: What shall we do with time? We know that time will do something with us, regardless of what we do or don't do. So should we try to do something with time, or even to time? This is also to ask what we should do about the future, and whether it can retain the pre-eminent status accorded to it in the project of modernity. Should we abandon the future? To abandon the future means to relinquish the intellectual project of Enlightenment. And there is no shortage of thinkers urging us to do just that. Its advocates on the Right promise to rehabilitate ancient hierarchies mirroring an allegedly natural or divine order. But this anti-modernism—and the critique of Enlightenment—has also had many influential advocates on the Left throughout the twentieth century. They have insisted that the best we can hope for, via a radical scaling-down of political and cognitive ambition, is to achieve small-scale rectifications of universal injustice by establishing local, temporally fleeting enclaves of civil justice. This scaling down of political ambition by those who espouse the ideals of justice and emancipation is perhaps the most notable consequence of the collapse of communism as a Promethean project. The best we can hope for, apparently, is to create local enclaves of equality and justice. But the idea of *remaking* the world according to the ideals of equality and justice is routinely denounced as a dangerous totalitarian fantasy. These narratives, whether on the left or the right, draw a direct line from post-Galilean rationalism, and its advocacy of the rationalisation of nature, to the evils of totalitarianism.

I want to critically examine some of the presuppositions underlying this philosophical critique of Enlightenment Prometheanism. And I want to propose that the cardinal epistemic virtue of

Enlightenment consists in recognising the disequilibrium which time introduces into knowing. Knowing takes time, but time impregnates knowing. In this sense, the rationalist legacy of the Enlightenment affirms the disequilibrium of time. The catastrophic logic that is articulated in the best of J.G. Ballard's narratives is precisely about this cognitive appropriation of disequilibrium, which springs time out of joint, restructuring the linear succession of past, present, and future. To affirm this disequilibrium is to engage in what Hegel called 'tarrying with the negative', which, as Žižek helpfully points out, is the virtue that Hegel ascribes to the understanding, the faculty of opposition, rather than reason, the faculty of conciliation. In other words, it is the understanding, the faculty that dismembers, objectifies and discriminates, which first exercises the power of the negative that will be subsequently consummated by reason. This is indispensible to cognition: before we can presume to overcome an opposition, we first have to be capable of articulating it correctly. It is dialectical myopia simply to oppose reason to understanding, or contradiction to judgment, as though they were separate faculties, holding up the former as 'good' while castigating the latter as 'bad'. Only the understanding could oppose reason to the understanding: dialectics affirms their indissociability.

If disequilibrium is an enabling condition of cognitive progress, then we have to find a way of defending the normative grounds that allow us to make sense of this very assertion. We have to defend the normative status of the claim that things are not as they should be, and that things ought to be understood and reorganized. And doing this requires that we be able to defend the intelligibility of the question 'What can we make of ourselves?' In this regard, Prometheanism is simply the claim that there is no reason to assume a predetermined limit to what we can achieve or to the ways in which we can transform ourselves and our world. But of course, this is precisely what

theological propriety and empiricist good sense jointly denounce as dangerous hubris.

What follows is a sketch outlining the beginning of a project that is going to be devoted to Prometheanism. It is obviously incomplete. All I want to do for now is try to lay out some of the basic problems that I think need to be addressed by any philosophical appraisal of the legacy of Enlightenment. The fundamental questions at the heart of such an appraisal are: What can we make of ourselves? Must we relinquish our ambitions and learn to be modest, as everyone seems to be enjoining us to do?

I want to propose that Prometheanism requires the reassertion of subjectivism, but a subjectivism without selfhood, which articulates an autonomy without voluntarism. The critique of Prometheanism in the philosophical literature of the twentieth century is tied to a critique of metaphysical voluntarism whose most significant representative is Martin Heidegger.

Heidegger's critique of subjectivist voluntarism is echoed by Jean-Pierre Dupuy in his essay 'Some Pitfalls in the Philosophical Foundations of Nanoethics', in which he lays out what he thinks is wrong with debates about human enhancement and so-called transhumanism. The link connecting Dupuy's critique of technoscientific Prometheanism to Heidegger's critique of subjectivism is Hannah Arendt, who is Dupuy's chief inspiration, and whose thinking is directly indebted to Heidegger. It is this philosophical genealogy that I want to examine.

^{1.} Journal of Medicine and Philosophy 32 (April 2007), 237-61.

^{2.} Dupuy is notably the author of *On the Origins of Cognitive Science* (Cambridge, MA: MIT Press, 2009), *Pour un catastrophisme éclairé* [Towards an Enlightened Catastrophism] (Paris: Seuil, 2002), and more recently *La marque du sacré* [The Mark of the Sacred] (Paris: Carnets Nord 2009).

Why, then, argue that Prometheanism is not simply an antiquated metaphysical fantasy? Because it is very much alive in the form of the so-called *NBIC convergence*. Dupuy quotes from the US Government's National Science Foundation June 2002 report, entitled 'Converging Technologies for Improving Human Performance', which claims that the convergence of nanotechnology, biotechnology, information technology and cognitive science (NBIC) will bring about a veritable 'transformation of civilization'. The Prometheanism espoused here is a Prometheanism of the right: its advocates are champions of neoliberal capitalism, which they claim has emerged as the victor in the war of competing narratives about the possibilities of human history. So, why does NBIC technology have this radical transformational capacity? Because according to its advocates it renders possible the technological re-engineering of human nature.

Dupuy sets out a sophisticated philosophical critique of the fallacies and confusions that he detects in this claim. For Dupuy, the utilitarian prejudices of contemporary bioethical discourse prevent it from grasping the properly *ontological* dimension of the problem of the uses and misuses of NBIC. He argues that the advocates of NBIC, and of human enhancement more generally, systematically conflate ontological indetermination with epistemic uncertainty. They convert what is in fact an ontological problem about the structure of reality into an epistemic problem about the limits of our knowledge. As Dupuy puts it, 'human creative activity and the conquest of knowledge proves to be a double-edged sword [...but] it is not that we *do not know* whether the use of such a sword is a good or a bad thing—it is that it is good and bad at once.'4

^{3.} Cited in Dupuy, 'Some Pitfalls', 239.

^{4.} Ibid., 241.

If the outcome of human creative activity is ontologically indeterminate, rather than merely uncertain, this is because it is conditioned by the structure of human existence, which is a structure of transcendence. This characterization of human existence in terms of transcendence is primarily associated with Heidegger's Being and Time. Humans are unlike other entities in the world because their way of being is characterized by a structure of temporal projection in which the past, the present, and the future are reciprocally articulated. The conflation between epistemic uncertainty and ontological indeterminacy is based on confusing the human condition, which is existential in Heidegger's sense, and hence devoid of any fixed essence, with human nature, whose essence can be defined by its specific difference from that of other entities. Thus, the traditional metaphysical conception of the human is that of a creature belonging to the genus 'animal', but differentiated from other animals by a specific predicate, whether it be 'rational', 'political', or 'talking'. For Heidegger however, humans are not simply different in kind from other entities, they are constituted by an other kind of difference. Heidegger calls this other kind of difference existence. And for Dupuy, it is precisely the failure to register the ontological difference between existence and essence, or between humanity as condition and humanity as nature, that encourages the belief that we can modify the properties of human nature using the same techniques that have proven so successful in allowing us to manipulate the properties of other entities. The levelling of human existence onto a fixed catalogue of empirical properties blinds us to the existential difference between what is proper and improper for human beings to become (which Heidegger called 'authenticity' and 'inauthenticity'). It is this levelling that underlies claims about the radical malleability of human nature.

Dupuy deploys the distinction between existential condition and essential nature in tandem with Hannah Arendt's account of the

interplay between what is *given* to human beings and what is *made* by them. Arendt writes:

In addition to the conditions under which life is given to man on earth, and partly out of them, men constantly create their own, self-made conditions, which, their human origin and their variability notwithstanding, possess the same conditioning power as natural things.⁵

It follows, then, for Dupuy, who is a disciple of Arendt in this debate, that the human condition is an inextricable mixture of things given and things made: of the things that humans generate and produce through their own resources, and of the constraints upon human making which transcend their practical and cognitive abilities. The interplay between these factors means, in Dupuy's words, that:

[M]an, to a great extent, can shape that which shapes him, condition that which conditions him, while still respecting the fragile equilibrium between the given and the made.⁶

Now, I take this claim that we *ought* to respect the 'fragile equilibrium' between what is made and what is given to be fundamental for the philosophical critique of Prometheanism. It is this precarious equilibrium between human shaping, and that which shapes this shaping—whether given by God or Nature—that Prometheanism threatens.

^{5.} H. Arendt, The Human Condition (Chicago: University of Chicago Press, 2013).

^{6.} Dupuy, 'Some Pitfalls', 246.

Another passage from Arendt is particularly relevant here:

The problem of human nature, the Augustinian *quaestio mihi factus sum* ('a question have I become for myself'), seems unanswerable in both its individual psychological sense and its general philosophical sense. It is highly unlikely that we, who can know, determine, and define the natural essences of all things surrounding us, which we are not, should ever be able to do the same for ourselves—this would be like jumping over our own shadows. Moreover, nothing entitles us to assume that man has a nature or essence in the same sense as other things.⁷

The claim that humans cannot objectify themselves because they do not have a nature or essence in the same sense as other things is obviously Heideggerean. Heidegger radicalizes Kant's account of the intrinsic finitude of human cognition. What does this mean? For Kant, we are precluded in principle from being able to know the world in the way in which God, who created the world, knows it, because, unlike God, we are not endowed with the faculty of intellectual intuition, which creates the object that it knows. God possesses intuitive knowledge of each and every particular thing because his thought about that thing creates it. His is an infinite generative intelligence whose making is unconstrained by any given. Thus God's knowledge of the world is absolute, immediate, and incorrigible. Since we do not have intellectual intuition, and since our knowledge of reality is partly conditioned by the information about it we receive through our senses, we can only know things insofar as what our minds make is combined with what the world gives. What transcends human cognition is simply the created nature of things as they are in themselves. This is the infinite complexity of each and every thing as understood

by its divine creator. But because our minds are finite, we can only represent things partially and incompletely.

Heidegger radicalizes Kant by ontologizing finitude. As existence, human being transcends every objective determination of its essence. This ontological transcendence lies at the root of finitude. For Heidegger, the finitude of human existence is an ontological datum, rather than an epistemic condition. Heidegger accepts Kant's claim that we have no transcendent knowledge of things-in-themselves, as they are known by their Creator. But for Heidegger human existence is the locus of a new kind of transcendence: one that is finite and human, as opposed to infinite and divine. And because existence constitutes a finite transcendence, it conditions the cognizability of objects. Since cognitive objectivation is conditioned by human existence, human beings cannot know themselves in the same way in which they know other objects. Doing so would require objectivating the condition of objectivation, which would be, as Arendt says, like trying to jump over our own shadow. Because of this prohibition on self-objectivation, human existence transcends every attempt to limn its core via a series of objective determinations. Indeed, every positive characterization of human nature, whether psychological, historical, anthropological or sociological, is ultimately determined by unavowed metaphysical—and for Heidegger this also means theological—prejudices. Hence the Heideggerian preoccupation with exposing science's latent metaphysical prejudices: the metaphysical presuppositions which determine its basic concepts, but which science itself is incapable of articulating.

From this Heideggerean vantage, philosophers who have attributed an essential plasticity to human being, or who have claimed that human beings can radically reengineer themselves can be denounced as metaphysicians reifying the transcendence of existence. Consider the young Marx's claim that 'man is a species being [....] and free

conscious activity constitutes the species character of man'.8 From Dupuy's Heideggerian perspective, Marx's identification of human species being with 'free conscious activity'—an activity that allows human beings to refashion themselves and their world—is itself a reification of the transcendence that constitutes the human: it reifies transcendence as *production* without paying proper attention to the sedimented metaphysical assumptions encoded in this term. Thus, for Heideggereans, the claim that man is an agent, a maker, or a producer of things, can be characterized as a metaphysical reification of human existence, which is properly understood as finite transcendence. Similarly, Sartre's claim that 'man is nothing but what he makes of himself'9 can be charged with reifying transcendence by reducing it to the nihilating power of self-consciousness, which Sartre calls the 'for-itself'. Heideggereans have made careers sniffing out these and other metaphysical reifications of what is, in Heidegger, characterised as an unobjectifiable transcendence: the transcendence of Dasein.

The link between the transcendence of existence and the transcendence of life is made explicit in another significant quote from Arendt:

The human artifice of the world separates human existence from all mere animal environment, but life itself is outside this artificial world, and through life man remains related to all other living organisms.¹⁰

'Life', in the early Heidegger, is a term for *Dasein* or existence. So it is plausible to construe Arendt's reference to 'life' here as another way

^{8.} K. Marx, Economic and Philosophical Manuscripts: Early Writings, trans. R. Livingstone (Harmondsworth: Penguin Books, 1975), 327–8.

^{9.} J.-P. Sartre, *Existentialism and Humanism*, trans. P. Mairet (London: Eyre Methuen, 1973), 22.

^{10.} Arendt. 2.

of emphasizing the transcendence of existence, which cannot be turned into an object of scientific study. Arendt continues:

This future man, whom the scientists tell us they will produce in no more than a hundred years, seems to be possessed by a rebellion against human existence as it has been given, a free gift from nowhere (secularly speaking), which he wishes to exchange, as it were, for something he has made himself.¹¹

The sin of Prometheanism then consists in destroying the equilibrium between the made and the given—between what human beings generate through their own resources, both cognitive and practical, and the way the world is, whether characterised cosmologically, biologically, or historically. The Promethean trespass resides in *making the given*. By insisting on the possibility of bridging the ontological hiatus separating the given from the made, Prometheanism denies the ontologisation of finitude. This is the root of the Promethean pathology for both Arendt and Dupuy.

But how are we to identify the proper point of equilibrium between the made and the given? How are we supposed to know when we have disrupted this delicate balance? For Ivan Illich, whom Dupuy cites approvingly, there is a clear-cut criterion for doing so: it consists in recognizing birth, suffering, and death as ineliminable constants of the human condition. Illich writes:

- · we will never eliminate pain;
- · we will not cure all disorders:
- · we will certainly die.

11. Arendt, 2-3.

Therefore, as sensible creatures, we must face the fact that the pursuit of health may be a sickening disorder. There are no scientific, technological solutions. There is the daily task of accepting the fragility and contingency of the human situation. There are reasonable limits which must be placed on conventional 'health' care. ¹²

According to Illich then, it is 'unreasonable' to want to extend life or improve health beyond certain pre-determined limits. Significantly, these limits are at once empirical, which is to say biological, and transcendental, which is to say existential. The rationality that is heedless of this empirico-transcendental limit in seeking to diminish suffering and death is a 'sickening disorder'. Reason is unreasonable—this is the fundamental objection raised against Promethean rationalism. Rationalism is deemed pathological because it is unreasonable according to a standard of reasonableness whose yardstick is recognizing the existential necessity of birth, suffering, and death. But what exactly is reasonable about accepting birth, suffering, and death as ineluctable facts, which is to say, givens? And by what criterion are we to discriminate between evitable and inevitable suffering? Much suffering that was once unavoidable has been greatly diminished, if not wholly eradicated. Of course, there are new and different forms of suffering. But our understanding of birth and death have been transformed to such an extent that there is something dubious, to say the least, about treating them as unquestionable biological absolutes. Moreover, the claim about the inevitability of suffering raises two basic questions: How much suffering are we supposed to accept as an ineliminable feature of the human condition? And what kinds of suffering qualify as inevitable? History teaches that there has been considerable variation not just in the quantity but also in

^{12.} Quoted by Dupuy, 'Some Pitfalls', 248.

the kinds of suffering considered tolerable. We need only consider the suffering alleviated by developments in medicine to appreciate the problematic nature of the relation between quantity and quality in Illich's ontologization of biological facts.

The theological overtones of Illich's message are rendered explicit by one of his disciples, whom Dupuy also cites:

What Jesus calls the Kingdom of God stands above and beyond any ethical rule and can disrupt the everyday world in completely unpredictable ways. But Illich also recognizes in this declaration of freedom from limits an extreme volatility. For should this freedom ever itself become the subject of a rule, then the limit-less would invade human life in a truly terrifying way.¹³

Here we have another telling formulation of the alleged pathology of Prometheanism: the Promethean error is to formulate a rule for what is without rule. What is without rule is the transcendence of the given in its irreducibility to the immanence of making. The Promethean fault lies in trying to conceptualise or organise that which is unconceptualizable and beyond every register of organisation; in other words, that which has been divinely dispensed or given. Dupuy provides perhaps the most eloquent formulation of this theological stricture when he writes:

Man's 'symbolic health' lies in his ability to cope consciously and autonomously not only with the dangers of his milieu, but also with a series of profoundly intimate threats that all men face and always will face, namely pain, disease, and death. This ability is something that in traditional societies came to man from his culture, which allowed him to make sense of his mortal condition.

^{13.} Caley, quoted in Dupuy, 'Some Pitfalls', 253.

The sacred played a fundamental role in this. The modern world was born on the ruins of traditional symbolic systems, in which it could see nothing but arbitrariness and irrationality. In its enterprise of demystification, it did not understand the way these systems fixed limits to the human condition while conferring meaning upon them. When it replaced the sacred with reason and science, it not only lost all sense of limits, it sacrificed the very capacity to make sense. Medical expansion goes hand in hand with the myth according to which the elimination of pain and disability and the indefinite deferral of death are objectives both desirable and achievable thanks to the indefinite development of the medical system and the progress of technology. One cannot make sense of what one seeks only to extirpate. If the naturally unavoidable finiteness of the human condition is perceived as an alienation and not as a source of meaning, do we not lose something infinitely precious in exchange for the pursuit of a puerile dream?¹⁴

What is 'infinitely precious' here is the fact that the finitude of human existence obliges us to make sense of suffering, disease, and death. At the root of all religion lies the claim that suffering is *meaningful*—not just in the sense that it occurs for a reason—religion is not just about rationalizing suffering—but in the sense that suffering is something to be interpreted and rendered significant.

Now, we should be very wary of anyone telling us our suffering means something. And the fact that we have learnt to extract meaning from our susceptibility to suffering, illness, and death, does not license the claim that suffering, illness, and death are the prerequisites for a meaningful existence. That finitude is the horizon of our meaning-making does not entail that finitude is the condition of meaning tout court.

This short-circuit between finitude as meaningful condition and finitude as condition of meaning—of sense, purpose, orientation, etc—is the fatal conflation underwriting the religious deprecation of Prometheanism.

Dupuy's enmity towards the Promethean hubris he detects in the NBIC programme is rooted in the post-Heideggerean critique of the mechanistic philosophy birthed by Cartesian rationalism. The latter's contemporary philosophical extension is the attempted mechanization of the mind, about which Dupuy has written illuminatingly. Given a sufficiently liberal understanding of 'mechanism', together with a sufficiently sophisticated account of mechanical causation, which views nature itself as a single labyrinthine mechanism, it becomes possible to integrate the mind into a mechanised nature by viewing it through the lens of the computational paradigm. The computational paradigm has been subjected to numerous philosophical critiques. Dupuy is aware of these critiques, but seems to view alternatives to classic computationalism, such as connectionism, as conceding too much to the computational paradigm. For Dupuy, the mechanization of mind generates the following paradox:

[T]he mind that carries out the mechanization and the one that is the object of it are two distinct (albeit closely related) entities, like the two ends of a seesaw, the one rising ever higher into the heavens of metaphysical humanism [because it says that human beings can understand everything, including themselves—RB] as the other descends further into the depths of its deconstruction [the reduction of the human from condition to mechanism destroys the privileges of the human as traditionally conceived—RB]. [...]

^{15.} Dupuy, On the Origins of Cognitive Science.

One may nevertheless regard this triumph of the subject as simultaneously coinciding with his demise. For man to be able, as subject, to exercise a power of this sort over himself, it is first necessary that he be reduced to the rank of an object, able to be reshaped to suit any purpose. No raising up can occur without a concomitant lowering, and vice versa. ¹⁶

It this see-sawing from the extreme of subjectivism to the extreme of objectivation that threatens the precarious equilibrium between the made and the given. According to Dupuy, the more we understand ourselves as part of nature, having successfully objectified ourselves as complicated mechanisms, the less able we are to determine ends or purposes for ourselves. Once being human is no longer an other kind of difference—existence—but just another kind of being, a particularly complicated natural mechanism, then the danger is that we will lose the meaning-making resources through which we were able to project a point or purpose orienting our attempt to explain and understand ourselves. What is the point of understanding ourselves if by doing so we understand that the purposes through which we traditionally oriented ourselves towards the future are themselves pointless—meaningless mechanisms, rather than meaningful purposes? For the more we understand ourselves as just another contingently generated natural phenomenon, the less able we are to define what we should be. Our self-objectification deprives us of the normative resources we need to be able to say that we ought to be this way rather than that.

What is elided in the disruption of the equilibrium between the given and the made is the distinction between what is true for human beings in so far as they can control and manipulate it, i.e. what is

^{16.} Dupuy, 'Some Pitfalls', 254, 255.

useful, and what is true by virtue of having being created as the unique thing that it is—that which is the way it is by virtue of its essence. The difference between man-made or factual truth, and divine or essential truth is jeopardised. The true and the made become convertible at the point when only what has been (humanly) made can be truly known. This is the way Marxism—a philosophy that espouses the primacy of practice and that views cognition as a kind of practice—can be deemed guilty of eliding the difference between what is made and what is known. Only what is humanly made is humanly knowable.

Dupuy proposes that what is genuinely valuable in Judeo-Christian theology is the parallel it establishes between divine and human creativity. What is objectionable about Prometheanism is not humanity arrogantly claiming to be able to do what God does. On the contrary, Dupuy insists, Judeo-Christianity teaches that there is a positive analogy between human creativity and divine creativity. Humans might well be able to produce life: a living creature, a Golem. But in the version of the fable cited by Dupuy, the Golem responds to the magician who has made him by immediately enjoining him to *unmake* him. By creating me, the Golem says to his creator, you have introduced a radical disorder into creation. By making what can only be given, i.e. life, you have violated the distribution of essences. There are now two living beings, one man-made, one God-given, whose essence is indiscernible. So the Golem immediately enjoins his creator to destroy him in order to restore the balance between the man-made and the God-given. Implicit in the parallelism between divine and human creativity is the claim that everything that is must have a unique, distinct essence, whose ultimate source can only be divine.

Thus even if we have acquired the power to create life, we shouldn't do it. The prospect of synthetic life jeopardises the meta-physical principle of the identity of indiscernibles precisely insofar as the difference between the living and the non-living is taken to be

essential in the most radical sense: not just a difference in kind, but another kind of difference. This is what is disturbing about Prometheanism: the manufacturing of life, of another kind of difference, would be the generation of a rule for the rule-less. Interestingly however, we are not told why the disruption of equilibrium is inherently destructive. In the parable cited by Dupuy, disturbing the divinely ordained equilibrium is taken to be objectionable per se: you have introduced a disequilibrium into existence. But this is already to presuppose that there is a natural, which is to say, transcendently ordained, equilibrium. Yet we are never told precisely what the equilibrium is supposed to be. What I want to suggest is that it is precisely this assumption of equilibrium that is theological: it is the claim that there is a 'way of the world', a ready-made world whose order is simply to be accepted as an ultimately unintelligible, brute given, that is objectionably theological. This is the idea that the world was made, and that we should not presume to ask why it was made this way and not some other way. But the world was not made: it is simply there, uncreated, without reason or purpose. And it is precisely this realization that invites us not to simply accept the world as we find it. Prometheanism is the attempt to participate in the creation of the world without having to defer to a divine blueprint. It follows from the realization that the disequilibrium weintroduce into the world through our desire to know is no more or less objectionable than the disequilibrium that is already there in the world.

Of course, from the perspective of Heidegger's critique of rationality, Prometheanism is the most dangerous form of metaphysical voluntarism. But Prometheanism stands to be rehabilitated from the vantage of an understanding of rationality which views it not as a supernatural faculty but simply as a rule-governed activity—rationality is simply the faculty of generating and being bound by rules. This is precisely the account of rationality set out by Kant. These rules

are not fixed in advance, they are historically mutable. But this fact does not make them contingent in the same sense in which other historical phenomena are said to be contingent. So, rather than trying to preserve the theological equilibrium between the made and the given, which is to say, between immanence and transcendence, the challenge for rationality consists in grasping the stratification of immanence, together with the involution of structures within the natural order through which rules can arise out of physical patterns. According to this conception of rationality, rules are means of coordinating and subsuming heterogeneous phenomena, but means that are themselves historically mutable. The ways in which we understand the world, and the ways in which we change the world on the basis of our understanding, are perpetually being redetermined. What unfolds is a dynamic process which is not about re-establishing equilibrium, but superseding the opposition between order and disorder, and recognizing that the catastrophic overturning of intention, and the often disturbing consequences of our technological ingenuity, constitute no objection to the compulsion to foresee and control.

Ballard declares that 'all progress is savage and violent'. And indeed, the psychic and cognitive transformations undergone by Ballard's protagonists are nothing if not savage and violent. But the fact that progress is savage and violent does not necessarily disqualify it as progress. There is indeed a savagery recapitulated in rationality. But there is a kind of sentimentalism implicit in the insistence that all savageries are equivalent, that it is impossible to discriminate between them. Conversely, it is not sentimental to think that some savageries are better than others and that it is not only possible but necessary to discriminate between modes of instrumentalisation and insist that some are preferable to others. The frequently reiterated claim that every attempt to circumscribe, delimit, or manipulate phenomena is intrinsically pathological is precisely the kind of sentimentalism that

perpetuates the most objectionable characteristics of our existence. We can choose to resign ourselves to these characteristics and accept the way the world is. Alternatively, and more interestingly, we can try to reexamine the philosophical foundations of a Promethean project that is implicit in Marx—the project of re-engineering ourselves and our world on a more rational basis. Among Badiou's signal virtues is to have dared to challenge the facile postmodern doxa which has been used for so long to castigate Prometheanism. Even if one disagrees with the philosophical details of Badiou's account of the relation between event and subjectivity, as I do, there is something to be gained by trying to reconnect his account of the necessity of this subjectivation to an analysis of the biological, economic, and historical processes that condition rational subjectivation. This is obviously a huge task. But it is in the first instance a research programme whose philosophical legitimacy needs to be defended, because it has for too long been dismissed as a dangerous fantasy. The presuppositions fuelling this dismissal are ultimately theological. Moreover, even if Prometheanism does harbour undeniable phantasmatic residues, these can be diagnosed, analysed, and perhaps transformed on the basis of further analysis. Everything is more or less phantasmatic. One cannot reproach a rational project for its phantasmatic residues unless one is secretly dreaming of a rationality that would be wholly devoid of imaginary influences. Prometheanism promises an overcoming of the opposition between reason and imagination: reason is fuelled by imagination, but it can also remake the limits of the imagination.