



REVIEW ESSAY

Reason Undone by Passion

Technosystem: The Social Life of Reason by Andrew Feenberg, Harvard University Press, Cambridge, Mass., 2017, ISBN 978-0-674-97178-3, 235 pp, name and subject indexes, price (hardback) £28.95

By Faysal Mikdadi

Alas what wonder! Man's superior part
Uncheck'd may rise, and climb from art to art:
But when his own great work is but begun,
What Reason weaves, by Passion is undone.
[...]
A little learning is a dang'rous thing;
Drink deep, or taste not the Pierian spring:
There shallow draughts intoxicate the brain,
And drinking largely sobers us again.

Alexander Pope, 'An Essay on Man', Epistle II, Lines 39–42 and [...]
'An Essay on Criticism', Lines 215–18

This is a complex and intricately argued work. Nonetheless, it is not a difficult book to read. This is because Feenberg has done a brilliant job of writing it. Whatever arguments he presents, no matter how complex, he starts from the very basics and builds incrementally on them in order to reach the inevitable, eloquently stated conclusion.

Finitude, i.e. recognising one's mortality and, consequently, one's 'natural limits', would lead a wise human being to avoid hubris. Of course,

our lives are surrounded by endless fantasies that often lead us to overreach our 'natural limits' and land us in the ultimately unavoidable hubris. Feenberg argues that 'contemporary technological fantasies are no less extreme' than any of ordinary human beings' endless aspirational fantasies. If technology can do anything, then I, its originator and master, can use it to do anything that I want. Surely this is an incontrovertible reality. Or is it? Just like God. And I am now Icarus. I used my great technological skills which I had learnt from

my father, the great inventor Daedalus, to enable me to fly. I made myself beautiful waxen wings, and, flying too near the hot sun, I met my hubris. Voilà. If I had reasoned correctly and acquainted myself with the available ‘ethics in a technological society’, I would have had the wisdom to identify and avoid my unfortunate and irreversible hubris.

My newly gained wisdom would have benefited from an understanding of ontological finitude (the nature of technology and human beings and epistemological finitude – ‘what we can know’). Eventually, I would arrive at a ‘democratic ethic of technology and a new concept of nature’.

Technology may give the illusion of power and its use without any consequences. However, as logic dictates, any ‘negative side-effects’ of technology will, in time, become impossible to ignore or deny (maybe Greta Thunberg also read Feenberg). Having argued this, one need only look at the way in which technology has changed so much in our lives: I am now defined by the technology that I use. My perception of time has changed dramatically because of the way in which technology has made ‘the instant’ part of the norm: instant communication, instant responses, instant gratification... etc.

If evidence is needed of the impact of technology (both positive and negative), I would cite the nostalgic yearning that I have for those halcyon days before portable technology became the norm. I was a significantly different person who felt largely in control. Now, I feel as if technology were in control of my life, my identity, my perceptions and my very being – especially within a rabidly capitalist society where an anonymous entity’s profit comes before my human well-being. This negative impact is exacerbated by what Feenberg proves to be the applicability of fallibilism to technology being the epistemological finitude. ‘Fallibilism’ is part of our daily lives in so many

ways. It is seen when we know that the truth of a proposition is actually incompatible with the possibility that the proposition is or could be, in the first place, false. Our blind trust in technology precludes the possibility that it is quite fallible. The fallibility can only be diminished or removed through experimentation, research and learning from mistakes.

The more complex the technology, the more difficult it is to waylay its innate fallibility. Stand back and look at, for example, our apparent helplessness in the face of the disaster of our degradation of the environment. We behave like rabbits in the glare of blinding headlights – almost as if much of what happens is beyond our individual control; as we continue to use plastic shopping bags, throw food away, eat unhealthily, drive cars when we could walk... etc. Of course, we are somewhat powerless in the face of omnisciently powerful and huge interest groups whose only motivation is profit to the exclusion of all else.

So far we have the basic premise of this powerfully influential book. Once established in a way that is accessible to the reader, Feenberg goes on to analyse his various theses in an amazingly elegant way. He gives us a re-reading of Karl Marx based on the challenge posed by Michel Foucault and constructivism – especially in science and technology studies.

This analysis brings ‘the question of social rationality to the fore’ and, as a result, reinterprets Marx in a way that uses constructivist approaches. Consequently, Marx’s critiques, concepts, dialectics and working-class consciousness and socialism all take on new meanings. The analysis explains why Marxism appears to have failed whilst capitalism, with all its seeming irrationality, has thrived. Given what we know about the failure of Soviet Marxism, Feenberg successfully and convincingly argues that Marx had been misinterpreted, thus leading

to social engineering, severe economic planning and forced industrialisation.

Michel Foucault has shown how power/knowledge are used to create certain procedures and behaviours which, in themselves, constrain rather than liberate the individual. In its simplest form, my actions as a teacher are determined by so many power/knowledge constructs from intrusive and damaging OfSTED demands, Department for Education often politically motivated imperatives, irrational expectations of a multiplicity of interested parties, including terrifyingly limited school leaders... and so on. So much so that the clearly rational constructivist approach to learning becomes well-nigh impossible, if not outright anathema, because of what Foucault deems to be 'constraints'.

Feenberg rightly argues that 'whenever rationality is reduced to a non-rational origin such as Western or patriarchal ideology, or mere power relations, its special characteristics *qua* rational are overlooked'. This leads to the regrettable situation so well described by Jean-Jacques Rousseau when he bemoans the loss of real 'citizens' because of society's focus on knowledge (and, by implication, its close relation to power). Feenberg's argument brings to mind Edward Saïd's fourth 1993 Reith Lecture: 'Professionals and amateurs' (overall title, *Representations of an Intellectual*, published as a book in 1996), where he asks 'whether there is or can be anything like an independent, autonomously functioning intellectual'. This question is more pertinent than ever in a world regulated by a ubiquitous and substantially biased technosystem erroneously parading itself as pure and unadulterated evidence-based unbiased uninfluenced knowledge – which, of course, it is not in the least.

Like Edward Saïd, I am concerned only with the individual whose education should have the

primary, indeed the only, aim of developing an independent mind, i.e. a true intellectual. Instead, our education system is predicated on embedding students in a Prussian military style training where, sitting in serried ranks, schools produce allegedly skilled, in the narrowest sense, so-called experts, rather than a constant ready-to-learn intellectual who thinks independently, values having an independent voice and eschews blind acceptance of what is there just because it has always been there.

Feenberg argues that the primary responsibility of each individual is to question and, where needed, to protest through rational/reasoned argument. If this does not happen, then the status quo will continue despite the fact that our human social development is built incrementally on endless false premises buried deep in the genealogical mists of time. The only way forward is our ability to engage in the critique of rationality rather than slavishly reacting to the status quo which dictates, say, that the British Government being heavily in debt is all right because all governments operate on debt – and the future consequences can be damned.

Ludwig Wittgenstein, as a rationalist, suggested that any communication devoid of meaning is not really communication. Consequently, it behoves each individual to search for new ways of seeing things in order to become a critical ('divergent') thinker. Feenberg, rather delightfully, paraphrases Marx to show the 'hermeneutic ambiguity' of modern technology: 'The Internet is a machine for transmitting data. Only in certain circumstances does it become capital or alternatively a democratic medium, a sex machine, etc.'

In our current education system, control is exerted upon the student through a metaphor miming a panopticon: students' behaviours are regulated by the perception of omniscience rather than its actuality. In these circumstances,

learning is highly unlikely to take place. Training emanates from petty tyrannies surrounding the students' lives. Real education through learning comes from being liberated so as to be free to think rationally through critical constructivism, which, if I have understood Feenberg, accommodates Piaget's cognitive constructivism and Vygotsky's social constructivism. Feenberg stipulates that 'critical constructivism is concerned with the threat to human agency posed by the technosystem'.

After reading this conclusion, I stopped reading and stared at a beautiful fig tree in the sunny autumnal garden, reflecting on examples of this 'threat'. As often happens, fortuitous coincidence supplied a perfect example. A young man, slowly clearing fallen leaves to make the right-of-way path less hazardous to passing pedestrians, repeatedly and loudly whistled a familiar short tune. Butterfly-like, this reviewer forgot 'critical constructivism' and tried to identify the increasingly intensely irritating tune. Out of nowhere appeared the image of the giant yellow 'M' instantly evoking the ubiquitous 'I'm Lovin' It' jingle for McDonald's. This young man, innocently going about his daily chores, inadvertently explained why the technosystem surrounding the reviewer's daily diet of watching the news on commercial television was a real threat to his 'critical constructivism'.

There are many quite serious implications in Feenberg's analysis of critical constructivism. Expertise has become tyrannical almost to the exclusion of the so-called cherished individual emerging after the Second World War. What is really cherished above the individual is clearly his/her pocket. Consequently, determinism has become much more powerful than the fantasy going by the name of free will in the chaos of rabid corporate capitalism. As a result our behaviours are dictated by an assumption of critical constructivism and false rationality. The reality is that we live by invented 'mantras'

passed on from generation to generation. Just because it has always been so, it must be right.

Technology has gone a long way in reifying these essentially dishonest and corporately, as well as politically, self-seeking constructs. What Feenberg calls 'the joys of private consumption' have become virtually instinctive. To further this end, humanity has created endless so-called experts to lead us forward without reference to real human communication, critical thinking in decision making, and contrary to the much-needed skills of self-reliance and independence, which become curtailed. How else could one explain our readiness to spend 1.75 trillion British Pounds on fashion (second only to the global 2.3 trillion British Pounds spent on armaments)? Presumably we need to look our best when we shoot each other. How do we explain wearing a highly expensive item of clothing made by a child earning the equivalent of barely 20 British pence a day? Rationality and reason hold hands with empathy and look the other way, paying the occasional disapproving lip-service whenever a scandal erupts.

Technology has also had a tremendous positive impact on peoples' lives: it has opened communication as had never been seen before. Consequently, it has given a pseudo-power to the individual. As a result many movements have emerged aimed at improving human existence, e.g. human rights, environmental issues, equalising opportunities, improving health, holding politicians to account... etc. Surely, this development must mean that human beings now eschew deterministic behaviours in favour of embracing constructivism.

Or do they?

They would like to believe that they do. Individual reification gives the semblance of normalising individual impacts by, and through, choice. The reality, of course, is that technology

is pre-determined to condition the many to expend much energy and money on enriching the very few, who suppress much that causes the individual to improve his/her life through free will. Real freedom can only come about through 'the application of critical constructivism' to the Internet. Individuals may often wish for this to happen. They have a difficult struggle with increasingly powerful business groups, aided and abetted by less powerful and self-seeking politicians and by a vast army of colluding and unthinking consumers. This contradiction (Feenberg calls them 'ambiguities') needs critical constructivism to explain it (which Feenberg does in a memorable way).

There is a truly nightmarishly dystopian scenario when scrutinising 'the emancipatory promise of communicative freedom'. In reality, the Internet works 'on the model of an individual user's obsessive-compulsive neurosis'. The user repeats the performance in search of an unattainable desire deriving satisfaction from the lack of attaining that desire – which is, in itself, unattainable (see Slavoj Žižek's Lacanian psychoanalysis). As a regular visitor to schools, the reviewer is fully familiar with the apparently zombie-like obsessive-compulsive neuroses of checking the I-Phone, of watching endless YouTube clips of others living apparently meaningless lives, of clicking on seemingly endless so-called 'influencers' whose power lies entirely in the compliant inadequacies of their apparently unthinking followers... etc. Indeed, this is so powerful a warning that, once the realisation was gleaned, this reviewer's I-Phone was turned off each evening at 18.00 and not turned back on again until 09.00 the next morning. During the intervening nine hours, e-mails are only checked once a day, unidentified callers blocked and all advertisements of any kind instantly junked. The students' repetitive behaviours drive the technical engine that has, in the first place, enslaved them. The Internet is sufficiently multi-layered and eclectically

ambiguous that it obfuscates an apparent need for critical responses, and denies any real autonomy by pretending that the user is actually making choices. Interest groups have successfully used the Internet to distribute 'entertainment' and to ensure full surveillance of users for commercial purposes. [See and compare the contributions by Johansson, Davis and Halewood in this issue – Ed.]

As a teacher, I have always felt that the most successful form of learning takes place through dialogic and experiential opportunities. I urged students to question, to question again and to keep questioning. By doing so, students would continue to create genuine dialectical approaches to learning, to engaging with others and with ideas, to be mindful of self and of others, to discover, to innovate and, by far most importantly, to become self-reliant and confident *critical thinkers*. I used literature – in recent years especially, great poetry – as the route towards creative dialogic engagement.

Feenberg rightly asseverates that 'the rationality of capitalism is both social and instrumental in the sense that it is inseparable from biased institutional decisions even as it aims at technical control'. He continues, 'Modernity is characterised by the hegemony of this type of rationality. It replaces religious and traditional worldviews in organising major social institutions.' And it has done so for centuries, with the inadequate school curriculum creating unquestioning automatons who quietly fitted into the status quo and went with the flow. Added to this deplorable development, the culture of acquisition at any cost still prevails. The development of technology, especially its concomitant Internet and endless online shopping opportunities, have led to an added culture of instant gratification and the acceptance as a norm of the increased credit-card debt. Needless to say, this bubble periodically bursts and the market wobbles dramatically – until, that

is, matters stabilise and the unthinking online shopper resumes the unthinking and harmful behaviours as if nothing had happened.

Who is holding the strings that control the huge multiplicity of individuals cheerfully jogging along? Instrumental rationality – ‘a rationality [that] enters the social world socially and as enlightenment’. To do something about this, there is an urgent need for a new dialogue in every sphere of life. However, most are not equipped to be critical thinkers. Without the ability to, or the skill of being able to, question at every juncture of one’s life, this quest for a new Enlightenment is no more than the pot of gold at the end of the rainbow. To paraphrase Thomas Hardy (*The Trumpet-Major*, Chapter 5) – All together now:

‘When law’-yers strive’ to heal’ a breach’,
And par’-sons prac’-tise what’ they
preach’;
Then you ‘n I’ll become fashionable,
And do all by being rational!’
Chorus: ‘Rol’-li-cum ro’-rum, tol’-lol-lo’-
rum,
Rol’-li-cum ro’-rum, tol’-lol-lay.

‘When pol’-iticians with truths never fail’,
‘And tax dodgers are on’-ly found’ in jail’;
Then we shall be happily rid of technicity.
And wave it away as it leaves the big city!
Chorus.

‘When corpor’ations find their wealth’ a
curse!
And fill ‘there-with’ the poor’ man’s
purse’;
We shall know the triumph of constructivist
theses’
And know real techno from his verbal
faeces!’
Chorus.

‘Modernity theories generally deplore the organisation of modern societies around instrumental rationality’ presumably because of

Theodor Adorno’s ‘ominous conclusion that experience in advanced capitalism [has been] so corrupted by commodification and the mass media that it could no longer provide a touchstone of alternative values’. Those who may not be convinced by these critical points may carry out an unscientific experiment in the safety and comfort of their front room. They could spend an evening watching a commercial television channel. By the end of the evening, through conscious constructive critical viewing, they would realise how the entire evening was propelled by unashamed corporate greed (repetitive hyperbolic and often mendacious advertisements), trivia (mind bogglingly cretinous, so-called entertainment), opinions (masquerading as political commentary), technicity (predicated on artificially created human needs), structural affirmation of the status quo and the reification of such abstract concepts as happiness, satisfaction, love, pleasure, self-absorption and so much else.

Lukács’s critique of ‘modern rationalised society’ shows how the world has been ‘functionalised’. Consequently, autonomy is mythical because our technosystem attains strong and immovable control over our ‘independent’ choices. This, in itself, poses a serious threat to democracy (‘What democracy?’, one asks, in which case one may be one of the few happy band of mavericks who iconoclastically eschew the status quo almost at any cost).

Feenberg suggests using ‘instrumentalisation theory’ in order ‘*to open up the imagination to a possible transformation of industrial society*’ (reviewer’s italics). I aver that we should start in the field of child-rearing, development and education. I would strongly suggest an Enlightenment Curriculum that seeks, first and foremost, to inculcate an innate urge to question as a primer to driving progress. By questioning the status quo, the growing citizen will learn the

undeniable value of reason, of eschewing injurious relativism, of embracing the need to change the underlying systems that predicate our current failures, and of espousing inclusiveness and of developing innate capacities for independence and self-reliance. In terms of the current education system, the nearest to this ideal approach is the curriculum/methodology used in Waldorf Steiner schools which, according to OfSTED, causes ‘common failures’. But then, the primary duty of all those involved in education is to ignore ‘all matters OfSTED’, as one would any pernicious goblin.

Feenberg, for example, suggests that the Black Lives Matter protests have shown evidentially the existence of racism. He continues:

...given the difficulty of changing attitudes towards race, racism cannot be the primary focus of reform. At issue are technical and administrative measures such as body cameras, training in the use of lethal force, and effective disciplinary procedures. The system must be redesigned under public pressure regardless of the attitudes of individual officers.

Feenberg powerfully concludes, ‘Against the conservative defense of the established system on the grounds that it represents the unsurpassable facts of life, Critical Theory affirmed long before constructivism that “the facts are *made*, mediated by Subjectivity”.’ To attain a state of Enlightenment (rather than remain in ignorance manipulated by powerful groups), individuals must take part in the dialectic that takes place between ‘official rationality and the informal everyday rationality of protest’. In order to do this, each of us needs, in Kant’s words, to emerge ‘from his [or her] self-imposed immaturity [...] and be free in order to be able to use our faculties purposely in freedom [and] ripen for reason through our *own* efforts, which we can make when we are free’. We need to do this at a local level in creating a new local narrative that ‘will free imagination’.

This is reminiscent of Descartes’ advice on the use of reason:

‘... qu’il lui en reste la meilleure partie pour pratiquer les bonnes actions, qui lui devraient être enseignées par sa propre raison, s’il n’apprenait rien que d’elle seule.’ (‘...in order to do good, the best thing to do would be to be guided by one’s reason, even to the point of learning nothing but that which derives from the faculty of reason’.)

*La Recherche de la vérité
par la lumière naturelle –
René Descartes*

Andrew Feenberg’s *Technosystem* is a life-changing book. It stands alongside seminal words by greats like Jean-Jacques Rousseau, Adam Smith, Karl Marx, Sigmund Freud and Charles Darwin. It is a superbly argued academic treatise. However, it is not a difficult book to read. This is because Feenberg has a wonderfully conversational style devoid of the customary pompous, mystifying, inaccessible and self-publicising academic discourse. Whenever Feenberg uses an abstruse term or concept, he explains it briefly, thus allowing the general reader to continue engaging with the book. Apart from frequently nodding in agreement with Feenberg’s analyses, the reader finds a need to hold a real dialogue with the arguments and analyses.

As a final note, those who would like a good précis of *Technosystem* may wish to read an excellent and wonderfully accessible earlier piece by Feenberg: ‘Critical theory of technology: an overview’, *Tailoring Biotechnologies*, 1 (1), Winter 2005, pp. 47–64.

About the contributor

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