



## The Transhumanist Reader P

*Max More (Editor) , Natasha Vita-More*

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**The first authoritative and comprehensive survey of the origins and current state of transhumanist thinking** The rapid pace of emerging technologies is playing an increasingly important role in overcoming fundamental human limitations. Featuring core writings by seminal thinkers in the speculative possibilities of the posthuman condition, essays address key philosophical arguments for and against human enhancement, explore the inevitability of life extension, and consider possible solutions to the growing issues of social and ethical implications and concerns. Edited by the internationally acclaimed founders of the philosophy and social movement of transhumanism, *The Transhumanist Reader* is an indispensable guide to our current state of knowledge of the quest to expand the frontiers of human nature.

## **The Transhumanist Reader P Details**

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## From Reader Review The Transhumanist Reader P for online ebook

### mm says

α - looking for information on brain - silicon interaction.

Ω(?,\*) - found it - Intracellular Silicon Chips in Living Cells (okay that's not brain tissue but its a start.)

Φ(i) - This book is 90% philosophy. The trans-humanist ship has already sailed, but some of these people are total nutters. Mind Uploading is built entirely on wishful thinking & many other topics discussed are irrelevant to, well, damn never everything. Alas, I was hoping for more recent research. Oh well, not a complete waste of time.

? - Jacob von Uexküll, Protocell & its researchers: Hanczyc Lab Takashi Ikegami, opencog, old netmorph new netmorph, neural engineering

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### Wesley Fox says

A upper level college to graduate level text that is largely a philosophical one. Filled with about 40 essays on the fascinating and speculative topic of transhumanism, it is not a book that needs to be read beginning to end. I read about half of the essays but skipped the others because I wasn't interested, I didn't understand it, or the topics seemed redundant. While interesting, the book is more of a survey of transhumanism reaching back to studies and papers of the 20th century rather than presenting cutting edge research in science or technology. For some it may feel a bit dated. However, if you approach it as a philosophy textbook, it is far more satisfying.

Out of the 20 or so essays I read, some of them were very informative, thoughtful, and had some really interesting views on transhumanism, or the use of technology to improve humanity. Nearly all of them were philosophy essays, although they try to claim otherwise. Where the contributor tried to make a scientific, policy, legal, or other case there seemed to be a lack of rigor or lack of evidence. These aren't science papers, largely because most of what they talk about is highly speculative future predictions.

Be prepared for some challenging reading.

The first problem you'll encounter is professorspeak. Academics have a language of their own that is difficult for laypersons to read, even educated ones. It is loaded with new terms with prefixes and suffixes such as biocultural and bioconservatism. Whenever there is a large number of -isms and tons of new terms thrown in without any clear definition or context, I get very suspicious. Usually the author is trying to show off how smart she is by using as many big, archaic words as possible, or she is hiding a lack of detail in her work by using vague or ambiguous words, allowing the reader to insert whatever meaning they like. Politicians, advertisers, and propagandists do this all the time (e.g. how many times do politicians use general terms like freedom, equality, and fair without elaborating on what they mean?).

Another issue for me was the invoking of something called interdisciplinary or multidisciplinary. This is when academics build their work around combining ideas, theories, and work from multiple academic

disciplines. In this case computer science, biology, medicine, physics, education, economics, and law. Problems arise when academics pick and choose theories or ideas from each and claim they are synthesizing them into a new field in which they are the experts. There is often little merit to these kind of semantic tricks.

I agree with many critics who see this as a bit lazy, picking your favorite ideas and theories but avoiding the inconvenient ones. This evades the rigorous standard and empirical data requirements in which scientific inquiry relies. For example, there were two chapters that related to transhumanism and the law that clearly demonstrated a reasonable level of understanding of legal theory but the authors were by no means experts. They would've been better served to collaborate with legal scholars rather than try to pass themselves off as ones.

There is also the problem of building theories on top of theories. Transhumanism is a speculative subject, where the technologies don't exist yet. This is great for sci-fi nerds like myself but doesn't leave many opportunities to do actual empirical research. Academics are forced to use theories as evidence, which is problematic.

For a philosophy text, the speculative aspect isn't an issue. That is why I believe this is dominantly a philosophical text, not scientific or other.

I also think a couple essays didn't belong at all. They were underdeveloped, putting up obvious straw man arguments, and throwing together conclusions unrelated to the body of the essay. These are basic, remedial mistakes that don't belong.

Overall, there is enough in this book of interest but I would caution readers to pick and choose essays and don't bother reading beginning to end. Be prepared to give up on essays that are clearly underdeveloped and move on to the next.

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### **Katy Stauber says**

This is a great overview of transhumanist philosophy and thought as it stands today. I found it very informative. At times I was unsatisfied with the depth or progress reported on transhumanism in the book, but that is frustration should be aimed at the field, not the book. I had hoped to see a little more in-depth discussion of the science of transhumanism, preferably with some chapters from research scientists actually working on projects that could lead to transhumanism, but I realize there is only so much that can be done in one book.

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### **Jonathan says**

Good overview of the philosophy and its current debates, but it presents a utopian vision that assumes a virtuous human nature that history argues against.

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### **Miles says**

Max More and Natasha Vita-More's *The Transhumanist Reader* is probably the single best source for

readers interested in a crash course in transhumanist philosophy. It presents more than forty essays addressing myriad aspects of transhumanist theory, with a good mixture of classic (i.e. pre-21st-century) papers and contemporary ones. It is a dense text containing a lot of terminological inconsistencies and conceptual redundancies, so prospective readers should have a basic level of preexisting knowledge about the ideas and research fields relevant to transhumanist endeavors. The quality and length of essays varies significantly, and several of the articles were too specialized and/or mathematically advanced for an amateur like me to fully grasp. In general, however, the essays should be accessible to those willing to put in the time and effort.

As defined by the Transhumanist FAQ, transhumanism is:

"The intellectual and cultural movement that affirms the possibility of desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities...The study of the ramifications, promises, and potential dangers of technologies that will enable us to overcome fundamental human limitations, and the related study of the ethical matters involved in developing and using such technologies." (3)

I have considered myself a transhumanist almost as long as I have been aware of the movement, and it seems to me that most people are actually sympathetic to transhumanist aspirations, even if they are unfamiliar with the label. But, like any ideological faction, the health of transhumanist thought requires constant analysis and critique. My review will focus, therefore, not on the many ways I concur with the transhumanist worldview, but on the areas where I feel the movement lacks perspective and/or requires revision. This is a difficult task since transhumanists openly admit that their philosophy contains no central dogma or specific prescriptive behaviors, but I will nevertheless do my best to track some worrisome threads in their discourse, hopefully with the result of exposing weaknesses and proposing ways to improve transhumanist thought moving forward.

One of the central features of the transhumanist perspective is summed up in Max More's "Proactionary Principle," which he defines with three interrelated imperatives:

"Progress should not bow to fear, but should proceed with eyes wide open.  
Protect the freedom to innovate and progress while thinking and planning intelligently for collateral effects.  
Encourage innovation that is bold and proactive; manage innovation for maximum human benefit; think about innovation comprehensively, objectively, and with balance." (264-5)

The Proactionary Principle is a direct response to the Precautionary Principle, an intellectual product of the late 20th-century environmental movement: "When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically" (260). Transhumanist authors such as Ted Chu have argued that the Precautionary Principle "essentially prohibits any new technology or activity unless it can be scientifically proven that there will be no resulting harm to health or environment" (*Human Purpose and Transhuman Potential*, 304). But, when compared to the above definition, Chu's position is clearly a straw man argument. The Precautionary Principle *does not* require absolute proof that no harm will occur, nor does it endorse technology bans or relinquishment of cutting-edge research. When possible harms of new technologies are analyzed, it is (and should be) a live question as to what constitutes a "precautionary measure," especially in cases involving hypercomplex systems, where our understandings of all the salient "cause and effect relationships" may be inadequate. Such measures can easily be designed to minimize (not completely obviate) risk—a goal also shared by proactionary thinkers.

It's important to envision ways that the Precautionary and Proactionary Principles might coexist, rather than contradict, one another. Progress, when defined as increases in human flourishing that don't cause unacceptable damage to human communities or the greater biosphere, requires a complex interplay between precaution and proaction. Whether one principle should be favored over the other is largely dependent on context—in some situations/environments/communities, proaction is more desirable than precaution, and vice versa.

Precaution and proaction share a common goal, which is to preserve and promote human safety and wellbeing. Max More rightly points out that the Precautionary Principle can lead to “being obsessively preoccupied with a *single* value—safety,” but does not admit that the Proactionary Principle has equal potential to result in obsessive preoccupation with a *different* but no less singular value—progress (261, emphasis his). Progress and safety are not mutually exclusive, and their definitions vary depending on cultural priorities and assumptions.

As I will argue later, I think it is a fundamental mistake to draw a sharp distinction between people and organizations focused on precaution and those favoring proaction; too much common ground is ignored. Groups that ought to unite on multiple fronts end up squabbling over ideology, even as concrete problems go neglected. There are huge risks related to transhumanist objectives—extinction, ecosystem collapse, and dystopian social stratification, to name a few. But there are also potentially huge payoffs—immortality (or massively improved longevity), post-scarcity lifestyles, and vast improvements/expansions of conscious experience. It seems foolish to think we can get by with either proaction or precaution as a dominant guiding principle, when in fact both perspectives are necessary. This appears to be precisely what More is suggesting when he urges us to “think about innovation comprehensively, objectively, and with balance” and to “plan intelligently for collateral effects.” I seriously doubt that such an approach would always preclude reasonable invocations of the Precautionary Principle.

How societies choose to apply and/or privilege proactionary and precautionary methods will have serious consequences for Earth in the 21st century. One of the most germane questions for contemporary transhumansists is whether human enhancement—including but not limited to genetic manipulation (conscious evolution), pharmaceutical and dietary supplementation, physical augmentation, development of increasingly complex and realistic virtual environments, and the creation of human- or superhuman-level AI—can be pursued with a sincere and realizable commitment to egalitarian access. Although some transhumanists are quick to dismiss worries about sharp increases in inequality and social stratification, several authors in *The Transhumanist Reader* offer perceptive recommendations about how to parse and address this critical issue.

Gregory Stock identifies enhancement as the “next frontier” of human exploration:

“The next frontier is not outer space but ourselves. Exploring human biology and facing the truths we uncover in the process will be the most gripping adventure in all our history...What emerges from this penetration into our inner space will change us all: those who stay home, those who oppose the endeavor, those tarrying at its rear, and those pushing ahead at its vanguard.” (312)

Stock is right to emphasize that enhancement is *everyone's* concern, including those who plan nonparticipation or active resistance. The potential benefits of successful, safe genetic sculpting are too great to justify banning research and experimentation outright, so we will have to manage risks, costs, and distribution in order to minimize harmful socioeconomic tension. Michael H. Shapiro explains:

“If you could generate major changes in mental and physical ability only through very expensive

technological applications, you may sharply and irreversibly increase social *partitioning* to the point of true “lock-in”...Enhancement technologies aren’t free, and future development and economies of scale may still leave them beyond the means of many persons...If we decide that enhancement is tolerable, permissible, good, or even obligatory when distribution is not at issue, distributional effects—such as drastically exacerbated and irreversible social stratification—may render the moral price of enhancement unacceptable in some eyes, on some theories. *If the partitioning is linked to race, ethnicity, gender, religion, or other problematic classifications, the price may be that much higher.*” (287-8, emphasis his)

Shapiro is describing dangers that are very real and potentially costly, both in economic and ethical terms. Though I am receptive to historical arguments demonstrating that the cost of technological innovations tends to fall over time, eventually leading to easy universal access, there is no guarantee that this will be the case with genetic and other forms of enhancement.

If small numbers of wealthy individuals gain exclusive access to enhancement, even for a short time, the risks of exacerbating already existing inequities are significant. This is because we don’t know how quickly certain enhancements might lead to further ones, especially if they are being researched/implemented with the help of AGI or ASI (artificial general or superintelligence). Granted, these early adopters (which Peter Watts has cleverly called the “bleeding edge”) will assume quite a lot of risk by volunteering for experimental treatments. I think the best case scenario here is that the bleeding edge discovers and corrects the most harmful blunders using trial and error, with successful individuals and groups gaining a competitive advantage. The precise character of this advantage is difficult to foresee.

If intelligent laws and/or social norms can be adopted that retard (not restrict) the pace at which certain kinds of enhancement can progress, this will provide time for costs to come down and for less privileged members of society to reap the rewards of those who came before. The bleeding edge will have its hard-won head start, but will not be so far ahead that they can stop others from following or exert undue influence on future events. Thus, slowly and carefully, enhancement is democratized. Protections would also need to be put in place for the “new Amish”—those who choose not to enhance, whether for religious, ideological, or personal reasons.

Do I think this rosy picture is possible? Yes. Do I find it probable? I’m not sure, and I wouldn’t trust anyone who was too certain one way or the other. The general trend may be attainable, but the transitory details could be quite messy. But I don’t think it’s outrageous to suggest that, in the long term, human enhancement will contribute far more to human flourishing than to conflict and discrimination.

Damien Broderick gives a clear picture of what our failure to achieve egalitarian access would look like:

“One could imagine a future world in which extended life is allowed only to a few—the very wealthy, the political elite and their chosen followers, Mafia, military, scientists, sports heroes, movies stars. This is not the transhumanist objective—far from it. It is up to all of us to ensure that this segmented future never happens. We will not best prevent it by denouncing technical advances and trying to blockade them, but in thinking hard, feeling deeply and wisely, debating the issues together, and acting as free men and women.” (436).

I applaud Broderick’s sentiment, but would like to add that our thoughts, emotions, debates, and free actions will be meaningless without the social, political, and monetary clout necessary to manage the advent of enhancement in a (trans)humane fashion. The current political sphere, at least in the USA, is not intellectually or structurally equipped for this challenge. Politicians and policies are easily purchased, huge amounts of private money and public time are wasted on opulent campaigns, and scientific sensibilities are

steamrolled by corporate interests. It should be among our highest priorities to fix, or at least ameliorate, these barriers to progress *before* experimentation with enhancement goes too far. Though our political system is surely in need of reform, a radically free market for enhancements is not the right path. Smart, informed regulations, as well as well-allocated public funding for the best and most accessible enhancements, will be essential. Otherwise, the most prudent forecast would seem to be that enhancement will contribute to, rather than reverse, existing forms of systematic inequity and injustice.

My last point is to voice my continuing fascination at the ability of people who are tirelessly interested in humanity's future to all but ignore the growing threat of climate change. In *The Transhumanist Reader's* entire 460 pages, the closest thing to a direct reference to climate change comes from transhumanist front-man Ray Kurzweil:

"Ubiquitous nanotechnology, now about two decades away, will...create extraordinary wealth, thereby eliminating poverty, and enabling us to provide for all of our material needs by transforming inexpensive raw materials and information into virtually any type of product. Lingering problems from our waning industrial age will be overcome. We will be able to reverse remaining environmental destruction." (451)

It is my fervent hope that Kurzweil's statement becomes reality. However, I'm baffled that he and other futurists can be so consistently sanguine about the ability of future technology to revive collapsed ecosystems and lessen (or halt) the worst effects of climate change. Can Kurzweil explain precisely how nanotechnology will reverse the melting of the Antarctic, prevent desertification, rebound exhausted fishstocks, or revitalize coral reefs and other endangered ecosystems? How do we program nanomachines to restore hypercomplex systems we don't fully understand?

In the coming century, the effects of climate change (superstorms, drought, famine, sea level rise, desertification-induced migration, and the international conflicts that result from these pressures) will most probably cause volatility in global markets and disruption of supply chains. This not only has the potential to compromise the manufacturing and distribution of transhumanist technologies, but could also quell research by cutting off access to essential resources. Economies of scale might not be as reliable in the near future as they are now, and there's no guarantee that the technologies we need to lessen climate damage will be invented and mass-produced before these networks become untenable. I'm not betting one way or the other, but it surprises me that Kurzweil and other futurists don't appear to view the climate situation as threatening to transhumanist values and goals. (One exception is Jeremy Rifkin, whose excellent book *The Zero Marginal Cost Society* identifies climate change as one of the two major threats (along with cybercrime) to 21st-century global stability.)

The worst part of this problem is the apparently mutual enmity between transhumanists and the environmental movement. Transhumanists are fond of criticizing environmental activists, most notably Bill McKibben, whose 2003 book *Enough* explicitly rejects practices that transhumanists see as indispensable, such as genetic modification of plants and animals.

There are legitimate and fundamental disagreements between transhumanists and environmentalists, but in a time of rapid technological advancement and equally rapid environmental degradation, these groups would be better off playing for the same team. Each should consult scientific consensus to discover the flaws in their positions: Transhumanists should acknowledge that climate change poses a significant and imminent threat that may require more than a future-tech fix, and environmentalists should admit that genetic modification is not the evil Pandora's Box they've made it out to be. Precautionary and proactive approaches both have a role to play in the coming era, so they would be well-advised to acknowledge one another's legitimacy and seek nonzero-sum opportunities for practical compromise. Such attitudinal shifts would sow

seeds of scientifically-informed goodwill and stake out common ground for collaborative efforts between technologists and naturalists, potentially resulting in tremendous flourishing for the whole biosphere.

“Transhumanism has an intellectual core,” writes Russell Blackford. “It makes large claims—large enough and clear enough to provoke anxieties. One core of idea is of human beings in *transition*... Transition, then, from what to what?” (421, emphasis his). Here is the inkling of a rallying point—the idea of humans in transition. We have always been moving, always adapting, but now we are moving faster than ever toward unmapped horizons. As we accelerate, we do well to remind ourselves that it might not be good enough to simply enjoy the ride. We must champion forms of transition that not only serve our interests, but that also align with our ethical and ideological aspirations. We don’t just want transition; we want a *just* transition. This is the true transhumanist challenge.

This review was originally published on my blog, words&dirt.

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## **Medardo says**

### **Post-Reality**

The book goes into wide distinctive area's into Transhumanism. And it's effects in to many different disciplines. On the other hand I thought the book would be a little more radical. The essay about politics kinda turned me off. Put if you want to learn about Transhumanism as a whole, you should start with this book.

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## **Mark O'Kennon says**

Don't know if I can get through this book.

Is it worth my time ? Anybody ?

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## **Ryan says**

Felt like an emphatic but feverish attempt to convince us that 'posthumanity' is the way to go and why it's awesome. The style of writing initially comes off as trying to be unbiased and academic, but in actuality is an almost totally one-sided attempt to convince of us of all the pros of transhumanity on one hand, and knocking down straw-man on the other.

And, full-disclosure, as someone who is very partial to the idea of finding ways to improve what it means to be human (artificial hearts, 3D-printed organs, different ways to augment the human experience, etc), this Reader was a huge let down, because I assumed it would offer a more balanced and sober perspective--but then, I've also had no experience consuming Transhumanist literature, so that could have been a naive assumption on my part.

With all that being said, if you feel compelled to learn more about the sphere of ideology that is Transhumanism--this could be useful if you plan on going into the Biomedical field, for instance--the initial essay by Max More does a solid job of clarifying the jargon and viewpoints of the point of view he and his

contributors take, and is well-worth reading if you're initially aware of his strong bias and lack of even-handedness. (But then, in retrospect, it seems hard not to realize that, considering he apparently coined the term and runs a 'cryo-preservation' lab.)

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### **Janine says**

Not a quick read, this book offers philosophical, tech and scientific views about the human species' future. Dense, thought-provoking, and academic, I skimmed passages that lacked focus or offered only substantiating evidence--the equivalent of professorial namedropping unless you're a researcher. In the end this inclusive collection of essays expanded my mind and kicked me into 'what if' mode--a gift to any writer.

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### **philosovamp says**

There's basically three kinds of essays here: proposals of how the (utopian) future will be thanks to technological advancement; arguments for the social necessity of transhumanist development; and explanations of how various transhumanist technologies work on a basic level. I enjoyed the first and last kind of essay the most and think Moravec's "Pigs in Cyberspace" and Sandberg's "An Overview of Models of Technological Singularity" were standout examples of them respectively.

The social and ethical arguments desperately lacked any bite or radicalism and, in my opinion, the kind of logic-chopping arguing "maybe some enhancement is not necessarily bad" such as in Bostrom's "Why I Want to be a Posthuman When I Grow Up" is pointless and anemic. They betray a lack of any political-economic imagination or understanding of the social, ethical and political trajectory the West is on. But if I'm any kind of transhumanist, I'm not a utopian one.

Skip those sort of essays and I do recommend *The Transhumanist Reader*.

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### **Alexander Curran says**

*"Art in the twenty-first century may come to constitute a form of mediation between human and post-human consciousness, just as in past cultures it has been used to mediate between mankind and the gods."*

Max More outlines and describes the core tenets to transhumanism, while philosophically exploring the collective and individual nature of human existence. (Past & present while shifting onto futuristic horizons with the beneficiary possibilities that this infers...)

*"Progress should not bow to fear, but should proceed with eyes wide open.*

*Protect the freedom to innovate and progress while thinking and planning intelligently for collateral effects. Encourage innovation that is bold and proactive; manage innovation for maximum human benefit; think about innovation comprehensively, objectively, and with balance." (264-5)*

The highest ideals and utopian aspirations rally against the historical narrative humans have largely always been subject to... Whether caught between war, which seen in European, Middle Eastern and Asian civilisations, have ultimately perfected their arts of war where past scenarios harnessed their advanced technology and weaponry as a means to compliment their strategies through "force" and "numbers." The other negatives, seen from a transhumanist lens, is the slow decay of time and physical death, with some

examples being famine or diseases, on an epidemic scale resulting in large scale fatalities. Transhumanism views all these aspects as evil yet runs into the risk of peaceful domestication which is constantly challenged by more aggressive schools of thought. Technology and medical advances do not necessarily belong to transhumanists but they are valued by them all the same.

Max More also explores the philosophical nature of the human being, by giving an aversion and negation of what numerous thinkers would regard as the self and subsequently the ego:

*“The “I” is a grammatical fiction (Nietzsche). There are bundles of impressions but no underlying self (Hume). There is no survival because there is no person (Buddha, Parfit).”*

Whether completely absorbed within certain transhumanists, mainly the ones who view the human being in a more extreme "physical" or "materialist" manner, where the religiosity is mostly stripped away, in some ways a more neuroscience-based view in the vein of Dennett but also Darwinian or perhaps Marxist in the historicity sense, where we also saw Hume whom subtracts value from the individual and focuses on a collective demonstration, with a model favouring a collaborative mode. Simply put, it is similar to the Hindu equivalent for supernatural or illusory: **Maya**... Yet this also could translate as **power** and **wisdom**. While acknowledging the importance of the *Self* More also reaches a paradoxical crossroad where he echoes the self is not real. Yet how do we provide substantial results from positive nihilism and negative nihilism while synthesising them to a transhumanist model? The type of answer constituted from the realistic avenues take us away from the Utopian and seemingly hellish existence of Eternity if it were to lack knowledge or purpose. Enter the more extremities between transhuman camps who shy away from the impotence and sterility of denying the harshness of history yet rightly keeping the bolder notion that a struggle still remains if there is to be any continual development from competitive challenges that strengthen positions.

Overall, More is asking us not to bow to fear and I would say that embracing or conquering any fears, which come with that danger and enticement makes life have an exciting adventure-styled quality. Obviously humans want to live longer, spend more time with loved ones, family and friends, make children, write books or make wonderful art, get involved with debates and projects that make the World better for humanity and the Environment, safeguard all other life we share this home with, and Transhumanism in this essence, has an honesty and desire to accomplish such a task. Yet it certainly at times falls prey or a type of victimisation with that idealistic grandiosity and sometimes insane elements (certainly comes with more radical followers...) that come with packaging humanity into a foiled wrapper of a static existence.

Yet the dangers and good intentions of any Utopic vision, that results in a boring and dull prison, has always been met with overwhelming resistance for anyone rallying against such an outcome.

Criticism aside it is a very thought-provoking technologist meets humanist reader that undergoes the quest and search for what is best for humans as a species.

*“For a moment, at the frontier, the bonds of custom are broken and unrestraint is triumphant ... Each frontier did indeed furnish a new field of opportunity, a gate of escape from the bondage of the past; and freshness, and confidence, and scorn of older society, impatience of its restraints and its ideas, and indifference to its lessons, have accompanied the frontier.”*

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