

28 C FINAL ULTIMATE CONCLUSIONS

PERSPECTIVE

Most major questions in the Philosophy of Engineering literature really have theological answers-

What is engineering?

Who is an engineer?

Why do engineering?

What is the nature of engineering artifacts?

What are the principles of engineering ethics?

It does make sense to approach the from a theological perspective.

WORLDVIEW NARRATIVES

Most worldview derivatives also have an accompanying “narrative.”

The narrative that accompanies Science (Scientism) goes like this:

- The prior age was one of superstition and mythology.
- The Scientific Revolution brought truth and freed people.
- Today we understand the mysteries and have wonderful lives.

The narrative that accompanies Technology (Technicism) tells us this:

- The prior age had minimum technology, and people suffered.
- Technology will save us.

The Grand Narrative of Scripture tells us God’s perspective:

- God created a world in which mankind could know Him and flourish.
- The Fall destroyed our relationship with Him and ushered in decay, disease, and death.
- Christ’s death and resurrection have made full restoration possible.

VISIONS OF THE FUTURE

Depending on one’s starting point, people are arriving at vastly different ideas about what the future looks like:

Silicon Valley – We live in a technological utopia.

Silicon Valley- AI subjugates human society.

Nick Bostrom – We discover we are living in a simulation.

Ray Kurzweil – The singularity occurs, and we upload our brains to computers.

Brain Greene – We discover alternative universes and ways to interact with them.

Teilhard de Chardin – We merge into the Omega Point.

Howard Isaacson – Aliens contact us, giving us survival secrets.

New Age – We merge our individual consciousness with Cosmic Consciousness.

U.N. Scientists – Earth is rendered uninhabitable due to warming, pollution, or nuclear war.

Bible – Short-term: conflicts continue, but missions continues; Long-term: Jesus returns/
Judgment of humanity/eternal life with God or separation from God forever

IDOL SMASHERS

It is very easy to fall into some form of idolatry. We need to avoid idolatry at every point:

Science (scientism) -Science can explain everything.

Design- Worshipping the works of our hands.

Technology (technicism) - Technology can solve all our problems.

Education- Worshipping intellect and knowledge.

Workplace- Work itself as the highest good.

DUALISM

Here's the basic problem with philosophical-lifestyle dualism:

If we define worship, prayer, and evangelism as valuable, “spiritual” parts of life, what do we do with everything else, with all the hundreds of “non-spiritual” parts of life (like work)?

We could sluff them off and do a crummy job on them, saving all our best efforts for “spiritual” stuff.

We could treat them as evil and avoid as many as possible, eventually becoming something less than human.

We could use them for personal gain, seeing work as a means to personal wealth.

Or we could use them as a gift to the Lord and others (in which case there is no sacred/secular divide).

SEVEN DEADLY SINS REDEFINED

John Koessler has written an insightful book (*Dangerous Virtues*) [1], looking at how the medieval “seven deadly sins” have been redefined to appear as normal or even as virtues:

- Pride becomes a good self-image
- Sloth becomes leisure
- Greed becomes prosperity
- Lust becomes desire
- Envy becomes getting what’s coming to them
- Gluttony is simply hunger
- Anger/rage is simply justice

Today these would be considered our “deadly sins”:

- Inflexibility
- Intolerance
- Hypocrisy
- Independence
- Questioning the “elite”
- Upholding the traditional family
- Failure to recycle

TECHNOLOGY AND HUMANITY

When am I acting less than fully human?

- When I’m disconnected from other people (often due to technology).
- When I’m disconnected from the natural world (often due to technology).
- When I see other people primarily as objects or as data (homo binaricus).
- When I see my technology as an extension of me.
- When I derive algorithms to understand or manipulate others.
- When I refuse to accept natural human limitations.

Egbert Schuurmann has written: [2]

As God’s image-bearers, people received at creation the command to be stewards of God’s completed work of creation and to disclose that work. Contained in this calling is the task of technology as the disclosure of the nature side of creation and as the realization of its technological side. The final purpose of all this activity is the service and honor of God: This is the path along which humanity must unfold and fulfill its life.

EDUCATION – INTEGRATION

Engineering from a Christian perspective involves “the integration of faith and learning.” This is really nothing other than “one-pot thinking” (chapter 7) in our discipline and approach. Ethics and the consideration of social impact of our designs are an inherent part of our approach, rather than add-ons.[3]

ULTIMATE TECHNOLOGICAL HUMANISM

Marc Andreesson is a pioneer in computer software, a co-founder of Netscape, a board member at Facebook, and a technology investor. In 2023 he wrote what may be the ultimate declaration of technicism or technological humanism, “The Techno-Optimist Manifesto.” [4] Here are a few lines from his document:

Our civilization was built on technology.

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Technology is the glory of human ambition and achievement, the spearhead of progress, and the realization of our potential...

The only perpetual source of growth is technology.

In fact, technology – new knowledge, new tools, what the Greeks called techne – has always been the main source of growth, and perhaps the only cause of growth, as technology made both population growth and natural resource utilization possible.

We believe technology is a lever on the world – the way to make more with less...

We believe that there is no material problem – whether created by nature or by technology – that cannot be solved with more technology.

We had a problem of starvation, so we invented the Green Revolution.

We had a problem of darkness, so we invented electric lighting.

We had a problem of cold, so we invented indoor heating.

We had a problem of heat, so we invented air conditioning.

We had a problem of isolation, so we invented the Internet.

We had a problem of pandemics, so we invented vaccines.

We have a problem of poverty, so we invent technology to create abundance.

Give us a real world problem, and we can invent technology that will solve it...

We believe in accelerationism – the conscious and deliberate propulsion of technological development – to ensure the fulfillment of the Law of Accelerating Returns. To ensure the techno-capital upward spiral continues forever.

We believe the techno-capital machine is not anti-human – in fact, it may be the most pro-human thing there is. It serves us. The techno-capital machine works for us. All the machines work for us.

We believe the cornerstone resources of the techno-capital upward spiral are intelligence and energy – ideas, and the power to make them real...

We believe technology is liberatory. Liberatory of human potential. Liberatory of the human soul, the human spirit. Expanding what it can mean to be free, to be fulfilled, to be alive.

We believe technology opens the space of what it can mean to be human.

While he is correct that technology has been a valuable tool for humanity, Andreessen's manifesto is pure unbridled humanism. I expected to see Henley's "I am the master of my fate-I am the captain of my soul." I did see "We are not victims, we are conquerors."

Andreessen loves the idea of techno-fix for every problem. Every technology, however, has a downside or an unintended consequence. The problem with a/c and heating is power losses in ice storms and overloads on the grid.

Andreessen adds:

We believe the ultimate moral defense of markets is that they divert people who otherwise would raise armies and start religions into peacefully productive pursuits...

We believe that if we make both intelligence and energy "too cheap to meter", the ultimate result will be that all physical goods become as cheap as pencils...

We believe the ultimate mission of technology is to advance life both on Earth and in the stars...

We believe in competition, because we believe in evolution. We believe in evolution, because we believe in life...

We are materially focused, for a reason – to open the aperture on how we may choose to live amid material abundance. [5]

There are many questions prompted by the Manifesto-

- Is money the key motivator?
- Will AI win everything?
- Is intelligence the ultimate engine of progress?
- Is AI the "modern alchemy"?
- What place does God have?
- How will technology begin to solve the problems of hatred, deception, exploitation, or theft?

Andreessen addresses only two problems – (1) Lack of material abundance, related to (2) Lack of technology.

Todd Steen, reviewing *Andy Crouch's The Life We're Looking For* [6], writes:

Humanity is designed for love and to be loved. We are “wired” and are most alive when we are in relationships of empathy, recognition, trust, and dependence. We intuitively know this to be true, but technology deceives us. Crouch states that technology promises us “superpowers” that will provide us “effortless power.” Instead, we find that we lose a significant part of our personhood when the “magic” of our devices removes the need for personal engagement in our daily lives. [7]

THE CHRISTIAN ENGINEER

I struggle with the idea I’ve sometimes heard expressed, that “We are Christians disguised as engineers.” That suggests that we’re deceiving our employers and that we’re not really engineers. Instead, we are absolutely Christ’s people, with a calling He Himself has given us. We are engineers in whom Christ lives, doing real engineering for the Lord and for others.

For the Christian working in engineering, he or she

- Is using the physical laws and materials of God’s world.
- Is using the skills and abilities God gave them.
- Can be doing their every task to God’s glory.
- Is fitting into a larger, ongoing story.
- Can be a blessing and encouragement to co-workers.
- Is earning money that can meet needs and bless others.
- Can be producing something that society needs.
- Can be pointing others to Christ.
- Can advance the engineering profession.
- Can see God’s answered prayers to work problems.

Scott Anson writes:

“Engineering is not merely a career choice, but rather a divine calling from God who loves us and will empower us to use the material resources that He has provided in such a way as to improve the lives of people (all of whom He loves) and bring Him glory.” [8]

RESPONDING TO TODAY’S WORLD

How did we get to where we are today?

Rod Dreher discusses the loss of idea of “metaphysical realism,” the principle that all things exist and have a God-given essential nature independent of human thought. This led to three pillars, rejected by many today although still important to Christians:

- *The world and everything in it is part of a harmonious whole ordered by God and filled with meaning –and all these things are signs pointing to God.*
- *Society is grounded in that higher reality.*
- *The world is charged with spiritual force.*

These three pillars had to crumble before the modern world could arise from the rubble, (philosopher Charles) Taylor says. And crumble they did. It did not happen all at once, and it did not happen straightforwardly. But it happened. [9]

When we lose God, we lose the basis for meaning, purpose, and morality.

Carl Trueman [10] suggests that our thought leaders have merged the ideas of Darwin, Marx, and Freud: no personal Creator, a universal struggle for existence, oppressed classes of people in every setting, the importance of human cravings. The result is unsettling:

- No fixed truth or standard
- No authority higher than me
- No place for self-control or restraint
- My feelings trump reality

(If there is no God, then, by default, I'm God.)

The solution, then is a clear restatement of the truths of the Bible.

Why aren't American Christians more effective in impacting society?

We are

- Misled by dualism: Sacred/secular divide
- Blinded by materialism- desire for more stuff
- Lacking in confession and humility
- Distracted by entertainment and technology
- Hung up in legalism of any sort
- Focused only on the Rapture -driven by an "escape mentality" -a short-timers mindset
- Separated from non-believers
- Separated from other believers by politics or eschatology
- Biblical illiterate
- Lacking spiritual goals

How must we respond?

Get back to basics: The Bible, prayer, the Gospel.

2 Timothy 1:7 tells us that "God has not given us a spirit of fear, but of power and of love and of a sound mind." I'm convinced that these are God-given means to change the world.

Power- supernatural power by God's Holy Spirit –for miraculous answers to prayer

Love- the primary fruit of the Spirit - to respond to others as Christ responds

Sound mind – wise, Biblically-based thinking; honest answers to honest questions.

We need: perspective, attitude, commitment, and resolve

Perspective

- Life is larger than my work.
- People are more important than things.
- God is Creator and Sustainer of all.
- Technical things are tools to be used.
- I am in control of my technology.

Attitude

- Humility
- Service

Commitment

To the Lord, to my family, to my employer (in that order)

Resolve

- To handle personal life honestly
- To handle work ethically
- To commit all aspects of life to the Lord

“Love the Lord your God with all your heart, soul, mind and strength.” and “Love your neighbor as yourself.” (Matt. 22:38-39)

References

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4. Andreesen, M., “The Techno-Optimist Manifesto,”
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