

Christian Reflections on Anthropology, Bioethics and Genetic Engineering

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Lesson 2: Technicism and Bioethics – *What is the spiritual background behind the development of science and technology? How does it affect how we treat living things and each other?*

1. Review on the image of God:

- a. According to theologian Louis Berkhof: “To sum up it may be said that the image consists:
 - i. In the soul or spirit of man, that is, in the qualities of simplicity, spirituality, invisibility, and immortality.
 - ii. In the psychical powers or faculties of man as a rational and moral being, namely, the intellect and the will with their functions.
 - iii. In the intellectual and moral integrity of man’s nature, revealing itself in true knowledge, righteousness, and holiness, Eph. 4:24; Col. 3:10.
 - iv. In the body, not as a material substance, but as the fit organ of the soul, sharing its immortality; and as the instrument through which man can exercise dominion over the lower creation.
 - v. In man’s dominion over the earth.”¹
- b. Application: what are the implications for how we understand technology, and particularly bioethics?
 - i. We can’t change our nature, to treat humans as purely material or, at the bottom, the product of their genetics is reductionistic and fails to account for his being *imago Dei*.
 - ii. Inviolability and integrity of every individual.
 - iii. Suffering can only be moderated but not entirely repaired.
 - iv. Its source, and the source of all corruption, is sin, which cannot be remedied by science and technology.²
 - v. Garden-model; technology in the service of life and for the glory of God.
 1. ¹⁵ The Lord God took the man and put him in the garden of Eden to work it and keep it. (Genesis 2:15).

2. Introduction and Relevance:

- a. “*Our culture has more than once been called a technological or scientific-technological culture.* Technology or technological thinking is today the basis, the motor, and the mark of nearly every cultural activity or field. This culture has many advantages in comparison with the past. But the reverse is also true; we are more and more confronted with major problems and threats.”³

¹ Berkhof, *Systematic Theology*, p. 276.

² Schuurman, “Perspectives on Technology and Culture” in *Technology and Christianity*, p. 300.

³ Schuurman, *Philosophical and Ethical Problems of Technicism and Genetic Engineering*, p. 27.

- b. Right from the outset, I want to stress that technology, in and of itself, as the tools we construct to change and manipulate our environment, reflect the fact that we are God’s image bearers.
 - i. The point is that it can be a tool for *service* or *idolatry*! It is not a “value-neutral” endeavor.
- c. Setting the stage – consider these examples:
 - i. Concerning the successful moon landing in 1969, U.S. President Richard Nixon said: “This is the greatest week in the history of the world since the creation.”
 - ii. In the Soviet Union, certain technical accomplishments were commemorated as if they were redemptive events.
 - iii. In 1979 Horace Judson completed a 10-year project about cell and molecular biology’s foundations, unveiling *The Eighth Day of Creation*.
 - iv. At a special general assembly of the United Nations in New York, June 1997, President Clinton—in a speech about our global environmental problems—stressed technology as if it could and should solve all our problems.
 - v. The METAVERSE⁴: “In the metaverse, you’ll be able to do almost anything you can imagine — get together with friends and family, work, learn, play, shop, create — as well as completely new experiences that don’t really fit how we think about computers or phones today. [...] In this future, you will be able to teleport instantly as a hologram to be at the office without a commute, at a concert with friends, or in your parents’ living room to catch up. This will open up more opportunity no matter where you live. You’ll be able to spend more time on what matters to you, cut down time in traffic, and reduce your carbon footprint. Think about how many physical things you have today that could just be holograms in the future. Your TV, your perfect work setup with multiple monitors, your board games and more — instead of physical things assembled in factories, they’ll be holograms designed by creators around the world. You’ll move across these experiences on different devices — augmented reality glasses to stay present in the physical world, virtual reality to be fully immersed, and phones and computers to jump in from existing platforms. This isn’t about spending more time on screens; it’s about making the time we already spend better.
 - vi. “Friend”⁵: https://www.youtube.com/watch?v=O_Q1hoEhfk4

⁴ <https://about.fb.com/news/2021/10/founders-letter/>

⁵ <https://friend.com>

3. Technicism – Definition and History^{6,7}:
- a. Schuurman has claimed that the spiritual background of modern technology and of our technological culture is *technicism*.
 - i. “*Technicism is the pretension of humans, as self-declared lords and masters using the scientific-technical method of control, to bend all of reality to their will in order to solve all problems, old and new, and to guarantee increasing material prosperity and progress.*”⁸
 - b. It is first and foremost a spiritual/religious attitude, a *false gospel* or a *rival eschatology*:
 - i. Pretense of human autonomy to control the whole of reality.
 1. Human mastery seeks victory over the future.
 2. Humans are to have everything their way.
 - ii. Technicism obeys two fundamental norms, as if they are the two main commandments: technical perfection (or effectiveness) and efficiency.
 1. Goals must be reached as directly and efficiently as possible.
 2. Narrow framework: everything outside of the scientific-technical sphere is denied recognition.
 - a. Machine model: appreciation, care, love, harmony, justice, and so forth, are disregarded.
 - c. Historically, *technicism* is a very ancient pretension:
 - i. Schuurman mentions the episode of the Tower of Babel (Genesis 11:1-9):
 1. Now the whole earth had one language and the same words. ² And as people migrated from the east, they found a plain in the land of Shinar and settled there. ³ And they said to one another, “*Come, let us make bricks, and burn them thoroughly.*” *And they had brick for stone, and bitumen for mortar.*⁴ Then they said, “*Come, let us build ourselves a city and a tower with its top in the heavens, and let us make a name for ourselves, lest we be dispersed over the face of the whole earth.*”⁵ And the Lord came down to see the city and the tower, which the children of man had built. ⁶ And the Lord said, “*Behold, they are one people, and they have all one language, and this is only the beginning of what they will do. And nothing that they propose to do will now be impossible for them.*”
 2. “*Humans, viewing themselves as gods, want to storm the heavens*”⁹.
 - ii. The same mentality arises after the Middle Ages when the development of natural sciences gains momentum and is united with a philosophy from

⁶ Schuurman, *Philosophical and Ethical Problems of Technicism and Genetic Engineering*, pp. 27-33.

⁷ Schuurman, “Technicism and the Meaning of Technology” in *Technology and Christianity*, pp. 430-434.

⁸ Schuurman, “Technicism and the Meaning of Technology” in *Technology and Christianity*, p. 433.

⁹ Schuurman, “Technicism and the Meaning of Technology” in *Technology and Christianity*, p. 432.

which God has disappeared [or is in the background] and in which man is enthroned.

1. “Technicist control of reality really began to burgeon during the Renaissance, a movement which then bequeathed its version of technicism to modern philosophy (rationalism) and to the Enlightenment, then later to Positivism, Marxism, and especially Pragmatism. Today's cultural manifestations of technicism trace back through these modern philosophical movements. From the first proclamation of human autonomy, it should be clear that technicism contains a religious conviction whose nature should not escape our attention”¹⁰.
2. Nature is now regarded as a mechanism to be controlled.
- iii. The idea of technical control has been the fundamental dynamic of Western philosophy, of scientific thought, and of our cultural actions:
 1. “This interpretation is more profound because it addresses the fundamental intention of autonomous thought as it seeks to determine the origin, existence, and destiny of all things. The intent of autonomous thought is to structure everything according to human thought and action. And this intent includes attempts to reduce reality as given to its smallest components in order to recombine them in agreement with the insights of autonomous humanity”¹¹.
 2. This is true because technology is historically, in the sense of classical technology, and ontologically prior to modern science¹².
- iv. In modern Western cultures, technicism came under the influence of pragmatism: “the characteristic of pragmatism is a more individualistic technicism. The individual should use science and technology for a better life, for more utility”.
- d. “In brief, *technicism is the absolutization of scientific-technological control.*”
4. Technicism – Problems and Threats¹³:
 - a. God is the Creator, Sustainer and “Giver-of-meaning”. This reality in which we exist as God’s image bearers is original and primary; it is incomprehensible, complex, concrete, diverse, highly differentiated and profoundly inscrutable. Every human activity, together with its meaning, belong to that world, including science and technology.
 - i. An example: a glass of water and Rubik’s cube.

¹⁰ Schuurman, *Philosophical and Ethical Problems of Technicism and Genetic Engineering*, pp. 27-28.

¹¹ Schuurman, *Philosophical and Ethical Problems of Technicism and Genetic Engineering*, pp. 27-28.

¹² Schuurman, “Perspectives on Technology and Culture” in *Technology and Christianity*, p. 311.

¹³ The content in this section is adapted from Schuurman, *Philosophical and Ethical Problems of Technicism and Genetic Engineering*, pp. 32-36.

- b. When we look at a part of the world from a scientific and technical point of view, we *abstract* from full reality to make models, which are inherently simplified reductions.
 - i. The scientist analyzes one aspect or function of the many sides of reality. His research properly involves removing, or abstracting, one of these functions or aspects from its coherence with other aspects or functions. Through the process of abstraction, science removes itself from full reality and full meaning.
 - 1. Back to the examples above.
 - 2. Another example: from a strictly scientific point of view, man is a composition of fats, carbohydrates, and proteins. This may be correct, but it's not *ultimately* true. After all, the statement says nothing about the true nature of man as responsible, or as free, or that he is made in the image of God.
- c. Under the spiritual influence of *scientistic-technicism*, the abstraction is reified, and the full reality is discarded, reduced.
 - 1. Back to the examples again. "In technicism, an individual is usually seen as a cog functioning in a society interpreted as a big machine. There everyone is the same, interchangeable, calculable, and manipulable. A true view of human nature is missing."
- d. The application of technicism will result in a society built on a technological model. This process is aided by powerful materialistic inclinations. And as this process intensifies, its perils will become more ominous.
- e. Technicism's definition of reality is really alien to reality.
 - i. Reality is an entity with an origin, existence, and destiny given to it by God. If this is denied, distortions and destruction ensue.
 - 1. Actually, the technical world cannot be made independent from creation, but presupposes it!
- f. Everything that does not fit the parameters of technicism is misjudged or disregarded. Technicism has drawn nature into a reduction, and so destroyed it.
 - i. Environmental problems, the pollution of living nature, acid rain, the contamination of oceans and seas, the pollution of soil, water, and air clearly show that technicism means exploitation.
 - ii. Attempts to make the technical world independent clash with the limited availability of energy and mineral resources.
- g. The technological process betrays internal tension as well:
 - i. The paradox of information and communication technology (as they increase, people become more isolated and alienated).
 - ii. The uniqueness of human beings and the individual and creative responsibility of humankind are eliminated in that process.

- h. Connect with introductory examples.
5. Application – Technicism and Bioethics:
- a. Technological development is idolized as a source of hope and salvation from the problems created by sin.
 - i. Overcoming disease, suffering, death...
 - b. Technological development is seen a way of transcending our God-given limitations, even if they don't have to do with sin:
 - i. God intended for us to be *bodily creatures*, limited in time and space, and to be dependent on Him and on each other.
 - ii. Under technicism, technology is seen as a tool to acquire “God-like” features.
 - c. The consequence is a neglect of organisms and humans’ dignity or integrity and, in the end, even the destruction of life.
 - i. In other words, *technicism relates to living organisms as a dictator does to people*. They are recognized only to the extent that they can be manipulated.
 - d. The result is a view that implies *dehumanization*, because materialism has degraded human beings to things to be manipulated!
 - i. Human life is not inviolable.
 - ii. Because the purpose of technology is to obtain the highest possible quality, the focus is shifted toward the *quality* of life. This becomes the measure of the worth of an individual.
 - 1. Consider how this pervades our culture’s discussions on abortion and euthanasia, for example.
 - 2. Genetic engineering, for instance, then will have to guarantee the quality of its product. A poor product is not acceptable and must therefore be discarded.
 - 3. Because the “product” must meet certain criteria of “quality”, often the people applying it will have to make selections between products “that are likely to be successful” and those that are not.
 - a. “Is it up to us to make such judgements and take decisive action? This can happen only if the individual is no longer seen as *unique in the eyes of God* and when human beings arbitrarily decide which human life meets current standards and which does not.”¹⁴
6. Conclusion: a way forward, as proposed by Dr. Schuurman¹⁵:

“I have pointed out in various ways the need to approach the question of responsibility differently from the way that is currently fashionable. In many respects, we will once again have

¹⁴ Schuurman, “Perspectives on Technology and Culture” in *Technology and Christianity*, pp. 300-301.

¹⁵ Schuurman, “Perspectives on Technology and Culture” in *Technology and Christianity*, p. 304.

to pose authentic questions, such as ones about the origin and meaning of things, about the coherence and diversity of everything, and especially questions about normativity for all creation. Christianity must accept this challenge. This means that the materialistic inclination, which in its diverse forms has reduced and sealed up a view of the world as a world without God, must make way for a profound, resolute, spiritual conviction. This conviction will attest to our dependency on Christ, our Redeemer from sin, guilt and evil. It will also confess our relationship to God, the Creator of the whole of reality. This renewal will offer a new direction to scientific and technological opportunities as it rejects autonomous, atheistic, and materialistic world-and-life views. In the latter, man remains the measure of all things, while in the Christian view, the law of God, as manifestation of God's will and summed up in the two love commandments, continues to provide direction to all things. Through it we can be liberated from the menacing super-force of science and technology.”

Bibliography

1. Berkhof, Louis. *Systematic Theology*. Grand Rapids, MI: Eerdmans, 1996.
2. Schuurman, Egbert. “Philosophical and Ethical Problems of Technicism and Genetic Engineering.” *Philosophy and Technology* 3, no. 1 (Fall 1997): 27–40.
3. Schuurman, Egbert. *Technology and Christianity: Essays on the Interface*. WordBridge Publishing and Paideia Press, 2024. <https://wordbridge.net/books/schuurman/technology-and-christianity>.

Suggested Video: “Derek Schuurman¹⁶: Technology and the Biblical Story” (https://www.youtube.com/watch?v=_u6jdFKkWKs)

¹⁶ He is not related to Egbert Schuurman!