

# Thinking Critically About Technology, Thinking Christianly About Technology

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# The Challenge of Technology

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- The world:
  - The human condition is humanly correctable, human beings are humanly perfectible.
  - Technology is a primary means of correction and perfection.
- The Bible:
  - “... do not be conformed to this world, but be transformed by the renewing of your mind, that you may prove what the will of God is, that which is good and acceptable and perfect.” Romans 12:2
  - “... examine everything carefully, hold onto that which is good; abstain from every form of evil” I Thessalonians 5:21-22
  - examine = prove = δοκιμάζω (*dokimazo*): prove, test, examine, accredit (certify as meeting a prescribed standard ) → be critical
- Our challenge:
  - Think critically about technology.
  - Think Christianly about technology.

# What does it mean to think critically about something?

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- To engage in careful, exact, principled judgment and evaluation
  - of the object of thought,
  - of human behavior with respect to it.
- Principled in its use of axiological principles:
  - rules, laws, standards
  - of value (goodness, morality).
- Careful, exact in its
  - systematic application of principles,
  - use of precise language.
- Yields a critique
  - Critical Assertions
    - Praise
    - Condemnation
  - Issues to think more critically about

# What is technology?

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- *OED*:
  - “... the scientific study of the practical [as opposed to the speculative, theoretical, or ideal] ... arts.”
- *American Heritage*:
  - “... the application of science, especially to industrial or commercial objectives ...”
- Etymology:
  - τέχνη (techne): art, skill, craft; the way, manner or means by which a thing is gained
    - physical world manipulated
    - value increased
  - λόγος (logos): word, expressed thought, or reason (Latin *ratio*)
  - **technology: the application of rational methods to realize valued states of the physical world**

# What is technology?

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- Important points
  - Inseparable from the people who choose it and use it.
  - Value-based transformation (instrument of human moral agency).
  - Rational nature distinguishes it from other human endeavors.
  - Operates only on the physical: matter, energy, information.
- Dimensions of technology
  - Technological objects: devices, tools, systems, methods ...
  - Technological innovation: R & D
  - Technological knowledge: for R & D, use
  - A technology, technologies: subset of technological objects, knowledge
  - Technological practice: choice and use

# What does it mean to think critically about technology?

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- Careful, exact, principled judgment and evaluation of
  - technology, in all of its dimensions,
  - our relationship to it.
- Yields a critique of technology.

# What does it mean to think Christianly about technology?

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- Thinking critically about technology using distinctly Christian principles.
- Yields a Christian critique of technology.
- Thinking critically and Christianly about technology means
  - examining technology carefully,
  - holding onto that which is good;
  - abstaining from every form of evil.
    - I Thessalonians 5:21-22

**The Most Important Question:**

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**Is technology good or evil?**

# Some Axiological Principles for Thinking Critically and Christianly About Technology

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- Model
  - John Calvin, Institutes of the Christian Religion, Chapter X: “The Right Use of This Present Life and Its Supports”
- The Fundamental Principle
  - **The Hierarchy of the Good:** three *intrinsic* goods
    1. private and corporate communion with God (the *summum bonum*)
      - Matthew 6:33; Mark 10:17-23; Mark 10:26-27; John 17:3; John 14:20; 17:20-23; John 14:20; 17:20-23
    2. human beings and their welfare
      - Genesis 1:27; Matthew 22:39; Matthew 7:12; John 3:16
    3. the natural world and its integrity
      - John 1:14; Genesis 1:29; 2:9, 16; Matthew 6:26-30
  - Technological objects ought to assist – not hinder – realization, preservation.

# Axiological Principles

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- Principles Concerning God
  - **Sovereignty of God** – not technology
    - Job 41:11; Psalm 83:18, 95:4; I Corinthians 10:31; Ephesians 6:5-8; Proverbs 3:5, 7, 13; Isaiah 31:1; Proverbs 27:1; Matthew 5:3, 5; etc.
  - **Supreme Love for God** – undiminished by technology
    - Matthew 22:37-38; Mark 12:28-30; Ephesians 6:5-8; I Thessalonians 5:17; Exodus 20:3

# Axiological Principles

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- Principles Concerning People, Including Ourselves
  - **The Great Commission** – enabled by technological objects
    - Matthew 28:19-20
  - **The Golden Rule** – considering effects of technological practice
    - Matthew 7:12, 22:39; I Thessalonians 5:15
  - **Humility** – in the use of technological objects
    - Matthew 5:3, 5
  - **Community** – facilitated, not eroded, by technological practice
    - Genesis 2:18; John 17:21
  - **Patience and Moderation** – exercised in spite of technology
    - Proverbs 22:2, 25:16, 37:16; Ecclesiastes 4:13; Matthew 5:3,5, 19:23; etc.
  - **Technological Vocation** – in technological innovation
    - I Corinthians 10:31; Ephesians 6:5-8; Colossians 3:17, 23
  - **Order, Peace, and Tranquility** – because, in spite of technological objects
    - John 1:1; I Corinthians 14:23; I Timothy 2:1-2; Matthew 6:25; Luke 10:41; etc.
  - **No Indulgence of Lust** – in technological practice
    - Romans 13:14

# Axiological Principles

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- Principles Concerning the World and Technology Itself
  - **The Cultural Mandate** – manifested in technology
    - Genesis 1:28, 9:1, 7; Revelation 21:24
  - **Stewardly Dominion** – by means of technology
    - Genesis 1:26, 28; Psalms 8:6; Genesis 2:15; Matthew 25:1-13, 14-30; Luke 15:11-32, 19:22-27
  - **Necessity and Delight** – through technological practice
    - Genesis 2:9; Ecclesiastes 2:24-25, 3:22; John 2:1-11
  - **Treasures** – in heaven, not through earthly technology
    - Matthew 6:19-24; Luke 12:15-21; John 6:27; II Peter 3:10-12; I John 1:15; Revelation 18:22
  - **Indifference and Contempt** – for technological objects
    - Luke 12:16-21; I Corinthians 7:29-31

# Applications of the Principles: Praise for Technology

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- Preservation of the creation
  - Alternative fuels, fuel-efficient vehicles, recycling technologies, reforestation, restocking of plants and animals
    - by The Hierarchy of the Good – 3
- Enhancement of human welfare
  - Medical technologies, tools and equipment, transportation technologies, communication technologies, etc.
    - The Hierarchy of the Good – 2, The Golden Rule
- Spread of the Gospel
  - Transportation, communication technologies
    - The Great Commission
- All of the above
  - The Cultural Mandate
  - Stewardly Dominion

# Applications of the Principles: Condemnation of Technology

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- Pollution, waste, harm to God's creation
  - by The Hierarchy of the Good - 3
- Human suffering, pain, death
  - Unintentional: Adverse drug reactions, medical errors, environmental illnesses, occupational injuries and deaths, transportation fatalities,
  - Intentional: The Holocaust, September 11
    - The Hierarchy of the Good – 2
    - The Golden Rule
- Spread of messages hostile to the Gospel
  - The Hierarchy of the Good - 1
- All of the above
  - The Cultural Mandate, Stewardly Dominion

# Some Issues

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- Obvious good needs no correction .
- Obvious evil is easy to see (if not avoid).
- More about technology to condemn: potential problems that are
  - more subtle.
  - more far-reaching.
  - more dangerous.
  - more difficult to verify.
- Posed as issues (points of contention).
- Hypotheses to be tested by thinking more critically and Christianly about them.

# The Ambivalence of Technology

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- Examples
  - Airlines
    - Good: fast, safe, comfortable transportation
    - Unintentional evil: noise, pollution, accidents
    - Intentional evil: September 11
  - Chemical fertilizers
    - Good: food for the world
    - Unintentional evil: pollution
    - Intentional evil: Oklahoma City bombing
- **Issue: Every technology developed to bring good also brings evil.**
  - unintentional evil (anticipated and unanticipated)
  - intentional evil
    - Principles violated: The Hierarchy of the Good – 1, 2, 3 and others

# The Illusion of Human Sovereignty

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- Technology gives us power over
  - Our own bodies
    - Medicines, medical procedures defeat illnesses.
    - Cosmetics, medicines, surgeries postpone effects of aging.
    - Genetic engineering, nanotechnology, robotics may defeat death.
  - Others who mean us harm
    - Nuclear weapons deterred large-scale conventional war.
    - “Smart” munitions won the (first) Gulf War.
    - Anti-theft systems foil thieves.
  - Nature
    - Agricultural technologies provide food and fiber.
    - Construction technologies let us build anywhere.
- So long as things go well, God’s sovereignty seems irrelevant.
- **Issue: Technology creates and perpetuates the illusion of human sovereignty.**
  - Principle violated: Sovereignty of God

# Technological Distraction

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- Luke 10:38-42
  - Mary: sitting at Jesus' feet, listening.
  - Martha: distracted by preparations.
  - Jesus: "... Mary has chosen the good part ..."
  - Leibniz: "... a lesser good is a kind of evil if it stands in the way of a greater good ..." (*Theodicy*)
- Technology
  - Technological objects facilitate the realization of many goods.
  - Technological objects require time and attention to learn about, acquire, use, maintain, and dispose of them.
  - Technological objects are ubiquitous and salient.
  - Technological objects and practice distract us from the "good part".
- **Issue: Technology distracts us from the higher good, especially the *summum bonum*, communion with God.**
  - Principle violated: The Hierarchy of the Good – 1, 2

# Promotion of Subsidiary Goods

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- Common pattern:
  1. Capacity to realize a primary good established by a new technology (e.g., digital photographs by digital cameras).
  2. Subsidiary goods come to our attention: speed, efficiency, small size, versatility, economy, ...
  3. We devote more and more time and resources to augmenting the subsidiary goods.
  4. A disproportionate share of time and resources is devoted to increasing the subsidiary goods.
  5. Subsidiary goods achieve a kind of prominence over the primary good: faster, smaller, cheaper, better.
- **Issue: Technology promotes subsidiary goods to primary importance.**
  - Principle violated: The Hierarchy of the Good - 1

# More Issues

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- “Busy-ness”
- Amplification of evil
- Irresponsible innovation
- Commodification of life
- Technological idolatry
- Technological dissatisfaction
- Materialism
- Moral dilemmas
- Obviation of grace
- Technology pride
- Prodigality
- Self-indulgence
- Tyranny over nature

# Conclusion

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- Technology is good.
- Technology is evil.
  
- The tendency of technology is ... ???

# Conclusion

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- Technology is good.
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- The tendency of technology is ... ???
  - Consider:
    - Sinful human nature.
    - Human fallibilities in
      - use of technological objects.
      - design of technological objects.
    - Universe tends to disorder and death.

# Conclusion

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- Technology is good.
- Technology is evil.
  
- **The tendency of technology is for evil.**

# Recommendations

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- Pious and prudent
  - Technological practice:
    - Driven by biblical principles, not cultural norms.
    - Prayerful.
    - Characterized by principled
      - reduction,
      - reuse,
      - repair,
      - relinquishment,
      - rejection.
  - Technological innovation:
    - Driven by principled need – not market.
    - Prayerful.
    - Facilitated by technical (!) tools to anticipate, avoid evil (e.g., FMEA).

# Closing Thoughts: Christians should

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- have an attitude towards technology significantly different from that of the world.
- examine technology carefully.
- transform the way we think about technology.
- prove what the will of God is, with respect to technology.
  
- **think critically about technology.**
- **think Christianly about technology.**
  
- **act accordingly.**