The Spilling Quiver: Sunshine, the Commons, and the Temple of the Lord

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Overview

Psalm 127:3-5
Behold, children are a gift of the LORD
The fruit of the womb is a reward.
Like arrows in the hand of a warrior,
So are the children of one’s youth.
How blessed is the man whose quiver is full of them;
They shall not be ashamed when they speak with their enemies in the gate.

• The Movement
• Critiques
  – Malthus
  – Hardin
  – Jeremiah
• Conclusion
The Movement’s Core Ideas

- God directly controls conception; it is not a result of natural biological function
- Birth-control is attempting to thwart God’s divine will (at best) and, depending on the method, murder (at worst)
- More Christians are needed in the Battle Against Satan
- Complementarian view of gender roles; Feminism is the mother of all evils.
Quiverful Characteristics

- Quickly growing, grass-roots movement; exact numbers unknown (perhaps 1 million)
- Spreads: homeschool networks, local churches, workshops, and the blogosphere
- Idealize a Puritanical state: Father is lord over family; mother obeys without question, producing lots of children; male children are liberally and vocationally educated, while female children are taught how to be “good” wives. (Little House on the Prairie is a little too Feminist for the most staunch.)
Thomas Malthus (1766 – 1834)

An Essay on the Principle of Population (1798)

“[T]he great question is now at issue, whether man shall henceforth start forwards with accelerated velocity towards illimitable, and hitherto unconceived improvement, or be condemned to a perpetual oscillation between happiness and misery…”

Two postulates (quoted):
1) That food is necessary to the existence of man.
2) That the passion between the sexes is necessary and will remain nearly in its present state.
Thomas Malthus (1766 – 1834)

“...[P]opulation, when unchecked, increase[s] in a geometrical ratio, and subsistence for man in an arithmetical ratio.”

- Often maligned by his own contemporaries proposing their own utopian ideas for humanity
- Generally despised because of negativity
- Data unclear; green revolution and technology thought to “trump” his ideas
When Populations Collapse

- See works by Meadows and Catton
Malthus and Quiver-folk


- They quote calculations from various sources suggesting, for example, that the entire population of the world could comfortably fit in Texas. (No consideration given to resource production – or the rights of Texans.)

- Promote ideas of 2008 documentary, “Demographic Winter: The Decline of the Human Family,” featuring the decline of Caucasian populations in Europe, and tying economic prosperity to increasing population. (www.demographicwinter.com)
Limits of Sustainable Food Production

• Essentially all energy utilized on Earth is solar in origin.
• Since the amount of solar energy incident on the planet is fixed, no population—human or otherwise—can endure perpetual growth.
• No technological development can trump this ultimate limitation.
Limits of Sustainable Food Production

1. My energy needs are 2400 kcal/day.
2. An insolation value of 6.0 kWh/m²/day, yields an absorption area of 0.47.
3. Correcting for growing increases absorption area to 1.4 m².
4. Correcting for trophic level and photosynthetic losses increases area to 1400 m².
5. Applying the vegan-carne split, my collection area increases to 5200 m².
6. The total amount of arable land is 17.3 million km², which means there is enough farm land to feed 3.3 billion clones of me.
Limits of Sustainable Food Production

- A word of caution:
  - Calculation intended for illustrative purposes only
  - Individual food consumption patterns vary greatly
  - Does not include free-range or open ocean/lake protein

- But we learn...
  - Eating lower on the food chain would accommodate more people
  - A simple calculation powerfully illustrates limits

- Of note: The amount of arable land has decreased significantly in the last ten years
Testing the Limits (Data Taken from the United Nations)
Testing the Limits (Data Taken from the United Nations)

Global *Per Capita* Cereal Production

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<tr>
<th>Year</th>
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<tr>
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Ecological Footprints

- Mathis Wackernagel and the Global Footprint Network (www.footprintnetwork.org)
The Tragedy of the Commons

• Garret Hardin (1915 – 2003)
  – Science, 162, 1243-1248 (1968)
• Private gain vs. common loss
  – Open pasture, fisheries, pollution
• Example: Pasture can sustain 25 animals from 4 herdsman; suppose 1 of them cheats, having 26 animals.
  – Herd gain is reduced by 1% for “fair” players, but “cheater” actually sees an overall herd gain increase of 3%
  – All have incentive to increase herd numbers, leading to overgrazing and pasture damage
  – Everyone loses if situation left unchecked
The Tragedy of the Commons

• What to do when the commons is earth and the herd is humans?

• Appeals to conscience?
  – “[If] fertility varies in a population that is offered options in fertility, ... the pronatalist elements in the population will, in time, displace the ones who conscientiously limit their fertility.”
  – http://www.garretthardinsociety.org/info/quotes.html

• Some technological fix?
  – “No technical solution can rescue us from the misery of overpopulation. Freedom to breed will bring ruin to all.”

• Mutually agreed upon mutual coercion
  – Requires recognition of the issue and acceptance of penalties/incentives for compliance
A Warning from Jeremiah

• Quiverful not the only anti-birth-control/large-family group
  – Catholicism, Islam, Mormonism, for example
  – Quiverful also opposes abstinence because...

• ... they are on a mission: making arrows for God
  – Hess, pg 171: “If the Body of Christ had been reproducing as we were designed and told to, we would not be in the mess we are today. ...none of the social problems mentioned about would have surfaced...”
  – Hess, pg 173: “The truth is that a believer who, after studying this issue, still opts to engineer his own family, cannot say he is seriously concerned with world evangelism, especially since the most obvious way to raise more missionaries is to raise more godly children.”
A Warning from Jeremiah

• I Samuel 4 – Taking God to war
  – “Why has the LORD defeated us today before the Philistines? Let us take to ourselves from Shiloh the ark of the covenant of the LORD and deliver us from the power of our enemies.” (v. 3)
  – Same rhetoric used by Quiverful advocates, only substitute “womb” for “ark” as the talisman of God’s power.
  – 30,000 Israel foot soldiers died (v. 9)

• Jeremiah 7 – Taking cover
  – People of Judah denied that the conquest and exile which had visited their northern kin could not touch them because of the temple in Jerusalem: “Do not trust in deceptive words, saying, ‘This is the temple of the LORD...’” (v. 4)
  – Quiverful folk deny any possibility of overpopulation trouble
  – “God won’t let that happen.”
Conclusion

• Overproduction of humans is only a symptom of much deeper issues.

• World Views Colliding
  • They want to overthrow Western society almost as badly as any Islamic extremists
    – Too much evil and suffering; generally interpreted as the direct result of feminist thought, contraception and legalized abortion
    – They want to resurrect the puritanical model of family
    – Revoke women’s voting rights and other gender-equality measures

• Babies are a primary weapon
  – Mutually Assured Destruction: Womb Edition
Conclusion

- Too much for a poor Physicist to grasp.
  - Mathematics and Science have no authoritative voice.
  - By sheer reproductive force, they will likely be a strong political voice in the coming decades.
- What lies at the root of worldviews?
  - Interpretation of scripture and what scripture is.
- A warning to non-Quiverful Christians
  - Quiverful folk are genuinely God-seeking; most have come to this pharisaical movement by desiring more holy living, and to be with others desiring more holiness. They did not find the holiness they desired in “regular” churches.
References/Bibliography


- Extensive information about solar energy values can be found in several places on the world-wide-web. I like to use the National Renewable Energy Laboratories’ Information, which can be found at [http://www.nrel.gov/gis/maps.html](http://www.nrel.gov/gis/maps.html). From June through August, an approximate insolation average across the farm belt of the Midwest is 6 kW-hr/m²/day. (For the “liberal arts” physics students, I give them the value of 5160 kcal/m²/day.)

- According to the Central Intelligence Agency's *The World Factbook* ([https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html](https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html)) the total amount of land area on the planet is 148.94 million km². Of this, 10.57% is arable, and another 1.04% is permanent cropland.

- Information about ecological footprints: [www.footprintnetwork.org](http://www.footprintnetwork.org)
- Cereal production values from Food and Agriculture organization of the United Nations: [www.fao.org](http://www.fao.org)
- Information about Thomas Malthus from The International Society of Malthus: [desp.org/malthus](http://desp.org/malthus)
- Information about Garrett Hardin from The Garrett Hardin Society: [www.garretthardinsociety.org](http://www.garretthardinsociety.org)
- Miscellaneous links to Quiverful Info on the web (pro and con):
  - [www.quiverfull.com](http://www.quiverfull.com)
  - [www.salon.com/mwt/feature/2009/03/14/joyce_quiverful](http://www.salon.com/mwt/feature/2009/03/14/joyce_quiverful)
  - [www.newsweek.com/id/189763](http://www.newsweek.com/id/189763)
  - [www.aboverubies.org](http://www.aboverubies.org)
  - [www.visionforum.com](http://www.visionforum.com)
  - [2spb.blogspot.com](http://2spb.blogspot.com)