

## **From Scarcity to Abundance: A Mennonite Technophile's Hope for Environmental and Economic Justice**

**Dr. Allan Rogalsky, Delivered to Erb St Mennonite Church, April 3rd 2022**

This is the season of lent, a time for reflection on what right relationships with God, with each other, and with creation look like. We are asked to consider if we, both individually and corporately are achieving our goals in this respect. When asked to speak on "From scarcity to abundance" what immediately came to mind was the scarcity of trust between members at Erb St due to both historical and recent ministerial misconduct, the scarcity of in-person interaction under COVID isolation protocols, and the scarcity of action on climate change that has recently been thrown into sharp relief by the sacristry of fossil fuels stemming indirectly from the war in Ukraine.

Of the three challenges I feel most qualified to speak to COVID and climate change given my technical background, however I think any speaker should state their own personal biases before giving advice. This leads me, via what I think it means to be Mennonite, to some thoughts on how I think people at Erb St Mennonite church should be relating to each other.

As such, this sermon is structured in 3 parts. Part one, which ended up being two thirds of my talk, discusses who are we at Erb St Mennonite church and how historical Anabaptist doctrines say we should relate and make decisions. Part two very briefly touches on the current COVID situation and how I think we should be reacting based on our Mennonite identity, and part three (the final third) addresses both hopes and fears regarding climate change. I hope and pray that all three meditations will be useful and are appropriately informed by today's scriptures.

### **Part 1: Who am I, who do I think we are and why do I think you should listen to me?**

Similar to Paul's litany of Jewishness at the beginning of the Philippians passage I could expound on my Mennonite heritage: Russian Mennonite as far as I can trace. Mother from the Mennonite Brethren. Paternal grandfather from the General Conference. Paternal Grandmother from the Kleine Gemeinde in Manitoba. Child of Mennonite pastor.

Similar to Paul this is not what I think matters in a member of the church. I think we spend too much time talking about Mennonite ethnicity at the risk of becoming a cultural club. What matters is a member's commitment to a shared set of Christian teachings as interpreted through the lens of the Anabaptist doctrines. Paul speaks of "not having a righteousness of [his] own that comes from the law, but ... the righteousness that comes from God on the basis of faith."

This begs the question: What is righteousness and in what do we have faith? By the time of the early Anabaptists, and continuing to the present day, there are those who teach that getting into heaven is the important thing and it is as simple as believing Jesus is God's son and a few other facts as summarized by one of the creeds. No need to pay attention to challenging teachings or actually worry about how you behave. This is not the belief of the early Anabaptists. In his summary of early Mennonite consensus teachings "From Anabaptist Seed" Arnold Snyder provides an excerpt from an early catechism.

Question. How many kinds of faith are there?

Answer. Two Kinds, namely a dead one and a living one.

Question. What is a dead faith?

Answer. One that is unfruitful and without the works of love, James 2

Question. What is a living faith?

Answer. One that produces the fruits of the Spirit and works through love, Galatians 5.

So our understanding of what Paul is exhorting us to is to have faith in the truth of Jesus's teachings and to do our utmost to exhibit righteousness through an honest attempt to put them into practice. This is the commitment that a member makes when they voluntarily join the Mennonite church.

At the heart of the matter this is why I think you should listen to me – because many of you have been baptized and made a commitment – all of you have shown up at a Mennonite church on a Sunday morning to participate in the community of faith.

I as a baptized member am one of the “priesthood of all believers”. Any member might be inspired by God to lead regardless of their credentials. It is my duty as a baptized member to encourage and teach. Baptism as outward sign of an inward transformation –the baptism of the spirit in which God regenerates believers and gives them the spiritual power to be obedient disciples of Jesus.

Having come to this conclusion that all member's perspectives were possibly equally valid early Anabaptists had problems with people standing up and spouting nonsense they honestly thought came from God. For this reason, Mennonites cannot be properly Mennonite apart from community. Unless there are others who are listening and reflecting on what Jesus teachings say we should be doing in a given circumstance we are too easily lead astray by our own biases. It is your role as the community of faith to listen skeptically and challenge me where and when you think this may be the case.

Too many preachers talk about righteousness and following the teachings of Jesus and assume everyone knows what they mean. This can become another form of “righteousness by law”, a secret jargonistic code that separates the “in” group from the “others”. To avoid this, I am about to give a practical summary of what I mean by Jesus teachings. So you can properly judge where my own biases may have crept in I will again go over my background, but with hopefully a more useful lens, as is best practice scientifically for any observer in the murky study of humans and how we interact.

As already mentioned I am the product of three Russian Mennonite faith traditions, but I grew up in the historically most radical Amish Mennonite church (Pool – first to build a building), attended the extremely urban Toronto United Mennonite Church for 8 months while in university, and now for the past twenty or so years have been a member here a primarily urban, historically Swiss Mennonite church, that consists of close to equal number of ethnic and non-ethnic Mennonite members.

I also have and still hold many leadership roles, once chair of CE and member of counsel here, father of two children, Senior Researcher, safety officer and Operations manager at a University lab, 3 years as board secretary and now half a year as board president (think mayor of small village) at the Brighton yards housing co-op where I live.

These are the perspectives and baggage I bring to any discussion, and today to my thoughts on God's teachings which we are called by Paul and our own commitments to follow:

I think there is wisdom in the Islamic statement that we are “People of the book”. Drawing on Sir Terry Pratchett’s science of disk world, my role as safety officer at the university, and Anabaptist experience that not all that people think comes from God actually has, I think it is wisest to treat the bible as a Standard Operating Procedure on how to be good humans. It was written by humans for humans. In each generation the authors were trying to be faithful to Gods leading, but in each generation they interpreted this through the culture and basis of the day.

Note I have expanded out from Jesus’s teachings to the whole bible. This is because to understand the first century context of those who recorded his words and guess at what impact their cultural bias may have had, we need to understand where they came from. Paul as he so eloquently notes, was very heavily steeped in the Jewish scholarship of his day as an adherent to the Pharicritical school.

As a scientist I like repeatable results to separate the signal from the noise. Given Gods word comes to us filtered through human minds, I find it unwise to pick and choose favorite passages. There is too much risk if a topic is only covered by one writer that their perspective will lead us wrong. In this context I note it is my view that the very few texts on homosexuality appear to be very heavily culturally influenced and make an uncertain guide, while the many-many texts on economic justice, which often fly in the face of the standard practices in the culture that recorded them, seem a much more reliable pointer to what is important.

For those who do not have the time to become biblical scholars in their own right there is wisdom in following the lectionary. This is a three-year cycle of recommended readings (often used to set the scripture passages for Sunday services) which was negotiated and designed by theologians across Christen denominations to highlight a representative subset of the bibles teachings. This is one reason I thought it was important to have all four recommended passages read this morning.

Summarizing who I think we are as Mennonites, I think we are a democratic and voluntary community of faith. (See “Priesthood of all believers” and “believer’s baptism”.) Who have the responsibilities to encourage and challenge each other in faith, to tell the truth at all times, to live simply and share economically with others, and to not participate in or encourage violence.

Out of this summary comes my only thoughts on the conflict of the past two years. Drawing on Patrick Lencioni’s “The Five Dysfunctions of a Team” I note that the foundation of the team is trust which in the Mennonite church is founded in our tradition of truthfulness. On this foundation rests a layer of accountability which in the Mennonite church is provided by the challenge of other believers. When an outspoken individual starts down a path on their own, violating trust and ignoring the challenge of other believers it is highly likely that they are listening to their own biases even if they think they are following God.

**Part 2: How should we be reacting to COVID?** – Those who zoned out during all the religious philosophy may want to pay attention again now.

I note I come from the perspective of someone who did their PhD in tissue engineering and has been working as the safety officer in a university lab for the past 5 years. As such I have had the background and the job requirement to pay attention to the COVID situation and provide leadership to the research group where I work.

When it comes to assessing safety you run a risk matrix rating the probability of an outcome against its severity. In coming to Erb St this morning I weighed the difficulty I would have taking an active role in the service from offsite against the probability I would catch and spread COVID to a high risk contact (someone with a weakened immune system) before the chain of transmission could be broken. As all my direct contacts are fully vaccinated and not likely to become seriously ill, and it would be hard to lead from offsite I felt that in this case the risk was manageable.

This being said COVID numbers are not good, even fully vaccinated individuals are becoming sick (though generally not life-threateningly so), and a more cautious approach than is currently being advocated by provincial politicians is recommended by the scientific community. This is because vaccination is not fully suppressing spread, meaning people with weakened immune systems who can become life-threatening ill (even if fully vaccinated) will inevitably be exposed if measures are not taken to keep COVID numbers down.

As much as we would like to get back to everyone in person, that milestone should not be too actively encouraged due to an imminent new wave. A word of hope is that the head of the Ontario science advisory table expects the upcoming wave to be lower than the last and does expect the current level of restrictions will be in line with the science by later this summer.

In the interim I suggest Erb St Members do our part locally. We should wear masks even though people call us strange such that we slow down the chain of transmission. We should get our first second and third doses of vaccine, despite the small personal risk for such a medical procedure, to protect the even more vulnerable around us. We need to continue holding each other, politicians and the medical system accountable to a high standard of truthfulness, even when this is uncomfortable, such that trust in the vaccination system is not further eroded. And finally we need to encourage our government to do more to provide vaccines to other parts of the world and not just sit back in our own safe bubble of immunity.

### **Part 3: Climate change as an ethical issue – fears and hopes.**

The Issa passage looks forward to and the Psalm celebrates the return of the Israelites from the Babylonian exile. Bear with me a moment though the view of darkness to some visions of hope for our return from the brink of environmental exile.

We hear a lot of doom and gloom on the climate. With reason. The situation is serious enough and we have procrastinated long enough that there will be serious consequences in my lifetime. I would critique any leader who advocates for more fossil fuel use as leading us astray, either by deceiving themselves, or by actively advocating for selfishness. Advocating that resources should be taken from the poor and from future generations and given to the privileged few. They are like Judas where fine words about jobs and the economy hide selfish motivations tied to personal gain.

Much of the fear around the transition is based on a fear of a loss of a way of life. Those advocating for an end to greenhouse gas emissions have often let their message be colored with cultural biases. In the way we will always have the poor among us, there will always be some who drive cars. Cars do not make a lot of sense in the city, as much because of the space they take up, the number of people who die on the roads, and the scarce resources required to produce them, as the greenhouse gases they emit. They are the poster child for western conspicuous consumption, the opposite of the Anabaptist

value of living simply, when viewed within the lens of the city. In rural areas they represent freedom, the ability to run errands and to get to work, and are a necessity of life.

The way out of the environmental trap we find ourselves in is not via perfect individual environmental righteousness, (what has been tried and failed for about 30 years), but via collective political action. Action to provide for those who naïvely bet the house on fossil fuel extraction, lest their fear of poverty harm us all via their commitment to dead end technologies, action currently being taken to phase out the production of greenhouse gas emitting cars by 2030 such that those who rely on them do not need to harm the environment to live, and action to develop resource efficient clean technologies that have the potential to support a high standard of living for many generations to come.

I close therefor with some technological visions of hope:

Sunlight has about 1 kW per square meter. At the current 22 to 25% efficacy of solar panels there is enough power in sunlight to provide for all of our civilizations energy needs by solar power alone. Solar power technology has been steadily decreasing in price to the point where solar generation is actually less expensive than the greenhouse gas emitting alternatives. Germany (which is further north than us) produces 10% of its electricity via solar power. Solar technology has reached a practical level of technological readiness without even getting close to its full potential (proof of concept has been shown for inexpensive carbon based flexible solar panels with theoretically achievable efficacies as high as 70%).

Hear in Ontario already less than 10% of electricity, and this primarily during peak demand, is produced via greenhouse gas emitting generation options, mostly high efficacy natural gas plants (the best of the bad options). 35% of Ontario's electricity generation is from renewables.

Sodium ion battery technology has been shown to be commercially viable – while not achieving the same energy density for transportation as lithium ion batteries, they are safer (they do not catch fire), cheaper and less resource intensive (they use plentiful sodium and do not require cobalt, which has the potential to be the limiting resource for lithium ion batteries) and with scale up are likely to be both cheaper per unit energy and have better performance than lead acid batteries (potentially displacing this toxic alternative). This sets the stage for grid scale storage to smooth out the bumps in our electricity supply from renewables (something that was being actively pursued commercially with lithium ion batteries in Ontario prior to the last provincial election).

I could go on – talking about recycling the cement in concrete (the chemical reaction used to produce cement emits CO<sub>2</sub>), talking about shallow cycle carbon (where long haul flights that are hard to run off of electric power are fueled using synthetic aviation fuel that is produced using inexpensive solar power and the waste carbon from biomass plants) – but I think you get the picture.

The challenge at this point is not technological so much as political. So go out and make wise choices. Listen to many sources and avoid a righteousness based on cultural bias and legalistic rule following. Encourage and challenge each other in faith, tell the truth at all times, avoid participating in violence, to share economically with others and live simply so that others can afford to live.

## Scriptures:

Isaiah 43:16-21; Psalm 126; John 12:1-8; Philippians 3:4b-14.

## Other References:

S.A. Snyder "From Anabaptist Seed" ISBN 0-9685543-0-X

Richard J. Foster "Celebration of Discipline: The Path to Spiritual Growth" ISBN 0-06-062831-6

Patrick Lencioni "The Five Dysfunctions of a Team" ISBN 0-7879-6075-6

Terry Pratchett, Ian Steward, Jack Cohen "The Science of Discworld II: The Globe" ISBN 0-09-188805-0

Ontario Today <https://www.cbc.ca/listen/live-radio/1-45-ontario-today/clip/15904273-dr.-peter-juni-takes-questions-6th-wave> [Accessed 2022-04-01]

Scott Manly "How Does The Sun Power Spacecraft? Things Kerbal Space Program Doesn't Teach You" <https://www.youtube.com/watch?v=VBIVIE0Kd1M> [Accessed 2022-03-29]

"German Net Electricity Generation in First Half of 2020: Renewables Reach Record Share of 55.8 Percent" [https://energy-charts.info/post.html?l=en&c=DE&q=german\\_net\\_electricity\\_generation\\_in\\_first\\_half\\_of\\_2020\\_renewables\\_reach\\_record\\_share\\_of\\_558\\_percent\\_1cac2269-bbde](https://energy-charts.info/post.html?l=en&c=DE&q=german_net_electricity_generation_in_first_half_of_2020_renewables_reach_record_share_of_558_percent_1cac2269-bbde) [Accessed 2022-04-02]

"UConn Professor's Patented Technique Key to New Solar Power Technology" <https://today.uconn.edu/2013/02/uconn-professors-patented-technique-key-to-new-solar-power-technology/#>[Accessed 2022-04-02]

Provincial and Territorial Energy Profiles – Ontario <https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-ontario.html> [Accessed 2022-04-02]

Tech for Luddites "Why Sodium-Ion Batteries Are The Next Big Thing" <https://www.youtube.com/watch?v=18mJNhF61ho> [Accessed 2022-04-02]

"Utility Scale Electricity Storage Demonstration Using New and Re-purposed Lithium Ion Automotive Batteries" <https://www.nrcan.gc.ca/science-and-data/funding-partnerships/funding-opportunities/current-investments/utility-scale-electricity-storage-demonstration-using-new-and-re-purposed-lithium-ion/4973> [Accessed 2022-04-02]

"Building from old buildings: demolition waste is being turned into new concrete" <https://ec.europa.eu/research-and-innovation/en/horizon-magazine/building-old-buildings-demolition-waste-being-turned-new-concrete> [Accessed 2022-04-02]

"Aviation: Germany opens world's first plant for clean jet fuel" <https://www.dw.com/en/sustainable-aviation-fuel-power-to-liquid/a-59398405> [Accessed 2022-04-02]

"What is sustainable aviation fuel (SAF)?" <https://www.bp.com/en/global/air-bp/news-and-views/what-is-sustainable-aviation-fuel-saf-and-why-is-it-important.html> [Accessed 2022-04-02]