

Donway Covenant United Church, Toronto, Earth Day, April 22, 2018. Harold Wells.

OUR HUMAN DOMINION ON THE EARTH

Psalm 8, Genesis 1: 1-5, 28-31

So this is Earth Day! A good time to reflect on God's creation, and at the same time to consider the ecological crisis that is facing us in our time.

But first, let's be cheerful. Let's pay attention to our beautiful biblical text that we've just read from Genesis 1. This text is very ancient, coming to us from six centuries before Christ.

It's a poetic text, not, of course, to be taken as science or history, not to be read in competition with modern scientific accounts of the beginning of the universe or the origin of humanity.

It is a magnificent expression of ancient Hebrew faith. We read it as poetry, for wisdom and inspiration.

Keep in mind the context out of which this text comes. It's the 6th century B.C.E., and our Hebrew spiritual forebears have been defeated and invaded by the Babylonian empire. Thousands have been slaughtered, the city and its holy temple destroyed, and many carried off in chains as slaves.

It's astounding that, after all that horror and disaster, the Hebrew people in exile held on to their faith, and even deepened their belief in the one God as the universal Creator of all things.

The poet depicts God creating and ordering "the heavens and the earth." The Creator overcomes chaos and darkness, brings one thing after another into existence, divides the day from the night, the land from the sea, all in orderly fashion.

In a kind of poetic chorus, the text reiterates again and again: "God saw that it was good..." "God saw that it was good."

And finally, "God saw everything that he had made and behold, it was very good."

It's a remarkable affirmation of faith. It teaches us that, in spite of all the misery and hardships of life, God's creation is good and beautiful, life is precious, and human life is full of meaning and purpose.

Moreover, human beings are created in God's image. According to the poet, this means that we resemble the Creator in our capacity to create, to order the chaos and overcome darkness, and indeed to share God's dominion on the earth.

What, according to Genesis 1, is our task, as human? To "be fruitful and multiply, and subdue the earth, and have dominion."

Well, we have multiplied enthusiastically. There are about 7 billion of us now.

But we are also to "subdue the earth and have dominion." Now these Hebrew verbs are very powerful. They indicate rule, conquest and control.

Interesting, though, that in the next chapter, Genesis chapter 2, we have a contrasting idea of the human task. There we are to "cultivate and protect the garden." It's a gentler image of humans nurturing and caring for the earth.

But Genesis 1, rather than chapter 2, is the text that has most captured the imagination of the Christian world.

To "be fruitful and multiply, to subdue the earth and have dominion" is one Biblical text that we have obeyed without hesitation.

Some historians say it's no accident that the new modern technologies of the industrial revolution occurred first on Christian soil, even Protestant soil, originally in Great Britain.

Especially from the 16th century on, the Bible, newly translated into the languages of the people, and this text in particular, were taken very seriously, and shaped European attitudes to the physical world. This text taught us to see the natural world as something to be conquered and controlled.

And that's what we did.

But this text from Genesis 1 has become notorious among people concerned with the environment.

“Subdue the earth?” “Have dominion?” Haven’t we been doing far too much of that?

Aren’t we human beings obsessed with conquering and controlling nature, gouging it for every last drop of prosperity and comfort? Exercising dominion over the animals, often with cruelty, and driving countless other species to extinction?

We have taken the text as encouragement to see ourselves as sitting up above the natural world, exercising our power to dominate it, rather than seeing ourselves as integral to it. We ARE the natural world, and the natural world is us!

Haven’t we forgotten about the command of Genesis chapter 2 – to “cultivate and protect” the world, to live in harmony with nature, to love and revere the intricate, delicate ecosystems of the earth?

In subduing and having dominion, we have actually devised more and more ingenious ways of killing, not only other species, but each other, even to the point where we could destroy all life on the planet with nuclear weapons.

And now it turns out that our pursuit of wealth and comfort will also lead us to vast ecological destruction.

Some climate scientists are warning us that, if we continue to “subdue the earth,” by our use of coal, oil and natural gas, if we continue with endless “economic growth,” we will bring “an end to civilization as we know it.” (Sounds extreme, but that is a direct quote from a serious climate scientist.)

Now I am no scientist, but there’s one basic bit of science that I have learned from my reading. That is, that carbon dioxide traps heat.

And when we burn fossil fuels – coal, oil and natural gas, we release carbon dioxide into the atmosphere. It rises and, together with certain other gases, forms a kind of ‘greenhouse ceiling’ preventing the exit of heat into outer space.

It’s like putting a thick, invisible blanket over the planet.

Thus, the planet gradually warms up as we continue to dump billions of tons of carbon into the atmosphere every year.

Now this opinion is not a Chinese hoax, as the American president thinks.

Every major nation in the world (including Canada, and at that time the United States), meeting at Paris in 2015, agreed that this is real, and urgent, and all agreed to begin to cut back their carbon emissions.

So it's not extremist, wild-eyed radicals, or tree hugging romantics, who have invented climate change.

No, the perpetrators of this opinion are somber, cautious, scholarly types, who have never hugged a tree in their lives.

Consider a young woman marine biologist; her name is Susan. She measures the levels of the seawater, records water temperatures, meticulously discerns the levels of acid in the seas, investigates various kinds of marine creatures and how they are surviving.

Susan is shocked to confirm that the water level of the sea is actually growing by about 3 mm. each year. That's because water expands when it's warmed, and also, of course, the melting polar regions are pouring liquid water into the sea.

Susan also learns that the level of acid in seawater has increased by 30% over pre-industrial levels, and that, for that reason, the coral reefs are dying off, that shell fish and other marine animals are in trouble, because the oceans are absorbing ever higher levels of carbon dioxide from our industrial world.

Or consider a young man, Steve, a glaciologist, who clambers over glaciers in the Arctic and elsewhere, and measures precisely how rapidly they are melting, and is grief-stricken to realize that, by the time he is an old man, the glaciers will probably have disappeared completely.

Or consider Bill, a bespectacled senior climate scientist, who labors in a university laboratory, analyzing the ice cores to measure the growing levels of carbon emissions found in Arctic ice. Then he writes careful scientific reports in refereed scientific journals.

Hundreds of these kinds of people are quietly gathering and analyzing precise data all over the planet.

These scholarly men and women are not popular PR people, and certainly not populist politicians or propagandists. But some of them do write books that non-scientists like me can read and understand.

Climate scientists from all over the world have come together under the auspices of the United Nations, and produced very careful reports on the state of climate change. You can find them on the internet. United Nations Intergovernmental Panel on Climate Change (IPCC).

They tell us that the evidence is “unequivocal”: Planet Earth is warming up dangerously, and it is mainly human-caused by greenhouse gases.

A basic piece of data is that the global average temperature is increasing rapidly, and is now more than 1 degree centigrade warmer than in the pre-industrial age.

One degree centigrade warmer, you say? In 200 years? Big deal! The temperature can change that much in five minutes. But this is a global average, of both land and sea. It means that our planet has a fever.

Rather like when your child has a temperature of 100 degrees Fahrenheit, or 39 degrees centigrade, while it should be only 98.6F., or 37 centigrade. If her temperature is up by 1 degree centigrade and rising, you know she’s getting sick.

If her temperature is up by 2 degrees Centigrade, you’re alarmed, and know that something must be done about it. A fever of three or four degrees centigrade, and it’s life threatening.

Now the planet can be compared to a person. One senior geo-physicist, James Lovelock, has given our planet a name: “Gaia” (a term taken from Greek mythology), expressing the idea that our planet Earth is one single organism. Everything is connected to everything else.

When Gaia’s global average temperature is up by 1 degree Centigrade, and rising, we know she has a fever; Gaia is becoming distressed and angry, and we are in trouble.

It was generally agreed, by the international conferences at Copenhagen, and then at Paris, that when global average temperature has increased by 2 degrees, that could be the tipping point when all hell breaks loose with our weather. We are moving rather rapidly toward 2 degrees now.

If it reaches 3 or 4 degrees, we have an unrecognizable world, and a huge planetary catastrophe.

But this whole thing can be very confusing. Because, while the global average is rising, sometimes in some places the weather is colder than we would expect.

Sometimes we see snow in Florida for goodness sakes! This encourages the American Republicans to deny that global warming is real at all.

Last week, when it was freezing cold, with snow and ice, in the middle of April, I walked, shivering, into a Tim Horton's, and one guy said, "So much for global warming."

What we notice is not so much warmer weather, as weather disruption, chaotic weather, sometimes dreadfully hot, sometimes colder than ever. What we experience is weird weather, and often, violent weather.

Sometimes it's colder because the warming Arctic is de-stabilized, its air currents, the so-called 'polar vortex', is loaded with heat energy, and pushes cold air down from the north.

The basic fact, though, is that the polar regions, especially the Arctic, are warming up more dramatically than the rest of the planet. At some places in the Arctic, the average temperature is up by 7 degrees, and at one point this year the temperature at the North Pole was 30 degrees above normal!

So, by emissions of greenhouse gases, we are melting away the planetary air conditioner, and the seas are rising ominously.

That's what we've been doing massively since the Industrial Revolution began about 200 years ago, with the growth of industrialization, shipping, automobile and airplane transportation, heating and air conditioning, and so on.

This is common knowledge now. It's not seriously debated any more.

Just as it's common knowledge that smoking tobacco is a source of cancer and heart disease. The oil and gas industry want to deny, or downplay the fact of climate change. It's against their financial interests, of course.

Just as the tobacco industry denied, for years, that tobacco had anything to do with cancer.

The oil and gas industry, until recently, have been trying to deny the reality of climate change, and, while they now admit it, they downplay it as not that urgent.

However, the climate scientists, hundreds of them all over the world, tell us that climate change is already here.

We are already seeing its effects in more and greater forest fires, widespread drought, together with great downpours of rain fall, disastrous flooding, and more and stronger hurricanes.

We've all seen what happened in New Orleans, New York City, the Caribbean, and at Calgary, Fort McMurray, California, and on and on. It seems as though every time we turn around there's another news item about a weather disaster somewhere in the world.

This is a hard reality to face. I don't want to believe it; nobody does. If we begin to take it seriously we find ourselves in a state of grief.

And then there's the question of guilt. Are we supposed to feel guilty for heating our homes, staying warm in winter? Are we supposed to feel sinful every time we drive our car or turn on the electric lights?

After all, our energy sources – coal, oil and natural gas – are the rock bottom foundation of our modern world. We have little choice but to use them.

They have given us so much freedom, mobility, relief from drudgery, so much comfort; they've fueled not only industry and transportation, but also the medical sciences and hospitals, and educational systems. Our general prosperity is built upon these fossil fuels.

Fossil fuels have been a huge blessing. Surely it has not been sinful that we clever humans learned to use them to our great benefit. We've been exercising our God-given dominion on the earth, have we not?

So there's no point in feeling guilty about having used them, and having developed modern civilization out of them.

And obviously, we cannot immediately, suddenly, close down our use of oil and gas overnight. We cannot turn civilization around on a dime.

However, now that we know about this, it would be foolish, and even sinful, to be in denial, and not to take urgent action against oncoming disaster.

But what can we do? We feel helpless. The problem is so huge. It's a global problem.

But you know, as Christians, we're not allowed to be hopeless. We are a people of hope.

Our faith tradition tells us this. Like our ancient spiritual ancestors, when their nation experienced a great crisis of defeat and exile, they didn't give up hope.

They held on. Their faith in God deepened and broadened. They survived, and eventually returned to their country and rebuilt their city.

There's a positive meaning to Genesis 1:28. The poet spoke the truth. We really are God's image. We really do have dominion. We human beings are truly powerful and creative.

But because we are powerful and creative, we are also responsible.

God is not going to reach down and rescue us from climate disaster by some supernatural miracle. The Creator will not set aside the laws of the universe to accommodate our foolishness.

As our biblical texts tell us, we, as humans, created in God's image, have dominion, and are called to cultivate and protect the earth.

OK, what can we do? I can speak about this only very briefly.

First of all, be informed. There are lots of good books on climate science which are accessible to ordinary intelligent people.

Then, let's be realistic: we cannot turn it around completely. Carbon dioxide stays in the atmosphere for centuries. And we're locked into existing technologies and infrastructures, for quite some time. There's no quick fix to this.

But it is possible to mitigate the effects of climate disaster. If we can limit the global planetary fever to 2 degrees centigrade, rather than three or four, or six, there's a possibility that our grandchildren will survive.

Concerning Action: We have to distinguish between private, personal actions, and communal, systemic action.

I suggest that the personal life style changes we may make, while good in themselves, will not solve this problem.

Changing our light bulbs, driving a hybrid car, turning down the heat or the air conditioner, cutting out plastic bags, plastic water bottles and straws – all good things – but if just a few of us do these things, that won't make a dent on the problem.

It will take major systemic, political change.

What we need is a gradual but major cutback in all fossil fuel production and use, to be replaced by massive development of renewable energy.

Even if there were no such thing as climate change, we would eventually run out of fossil fuels anyway. There's plenty right now, but they are finite resources, and eventually they will be gone. We have no choice but to develop renewable energy.

So we need huge investment and research in solar, wind, geo-thermal, biomass, and methods of energy storage, and whatever other ingenious technologies can be devised.

We have reason for some optimism, because creative, inventive people are working on this all over the world, and renewable energies are progressing rapidly.

If we could produce most of our electricity by renewables, that would mean widespread replacement of gasoline engines with electric vehicles. Now that would make a dent!

If we could heat our houses with electricity, or geothermal, or solar, or some combination of these, that would make a dent!

But none of this will happen without a groundswell of public awareness. It will take the power of government – to impose carbon taxes, to offer tax incentives for research and development.

It will take laws and regulations that no politician will dare to enact without large, significant public support.

We're nowhere near ready for that, certainly not in this country or this province. Right now, any government that acted radically in these ways would very soon be out of office.

So this requires a major cultural shift.

This is the where individual action and lifestyle can be relevant. By doing small things, as individuals and families, making small changes in our lifestyle, we can contribute to the spread of an ecological culture.

In an ecological culture, some things will become socially unacceptable; other things will become fashionable.

For example, small cars and electric cars need to become fashionable; gas guzzling large vehicles need to be laughed at, even frowned upon. That would be a cultural shift.

It needs to become fashionable to use public transit, rather than private cars. Maybe some of us should start campaigning for better public transportation.

And yes, plastic bags, plastic water bottles and straws, which are made partly from oil, and which clog up our waste systems and oceans, should become socially unacceptable. That would be a cultural shift.

Maybe, if you have money to invest, you can put it into renewable energy companies, which are growing rapidly and offering good profits right here in Canada. And then brag about how much money you're making while helping to protect the planet. That would be a cultural shift.

Now if we're concerned about this, it will make a difference how you vote. So far, in Canada and Ontario, climate change is not a ballot box question for very many of us.

Most people vote on personalities, or maybe taxes, but do we vote on the carbon emission policies of the candidates? Some of us may decide to become politically active on this issue.

The systemic problems will not be dealt with by governments or industry until individual citizens and voters make climate a priority, and begin to make their own lifestyle shifts.

Finally now, I refer back to Genesis 1: To exercise our dominion in this way is our calling as Christians and as citizens.

God will not solve this problem for us in some supernatural way. But “God works in us and others by the Spirit.” We live in God’s world. Marvellous things are possible!

God has given us a good and beautiful creation, and we have great power within it. How will we exercise our dominion on this good earth? How will we “cultivate and protect the earth?”

Now, to God our Creator, and to our Lord Jesus Christ, and to the Holy Spirit, be all praise, glory and dominion forever! Amen.

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