## Why We Must Cooperate

A homily by Giles Slade
August 30, 2015


This summer, forests are on fire across North America, and our terrible drought has moved into a fourth, crushing year.

Until recently even here on the Raincoast, levels in our reservoirs were as low as they have ever been…

In a massive El Niño, water for drinking, washing and agriculture has literally evaporated.

This year wheat and corn production in North America's breadbasket has shrunk by 20 to 30 percent.

As global warming increasingly threatens the habitability of our earth, humanity's most unique talent may become the only virtue that can save our children and grandchildren…

Humanity is unique in the spectrum of behavioral choices that evolved with us.

We can choose to act as individuals out of self-interest or to cooperate as a collective to achieve a shared goal that contributes to group well-being.

Cooperation is our most unique behavior. No other animal shares the human ability to choose to cooperate to achieve a shared goal.

This is how we build cities, roads, power stations, schools and churches.

Today our biggest challenge is to cooperate without reserve in the fight against global warming.

We must cooperate now.

Tomorrow it will be too late.

Modern human cultures were made possible by an early evolutionary step…

“Individuals made a living with others in relatively simple acts of [cooperative] foraging.” [**Tomasello, Natural History of Human Thinking (Harvard, 2014): X]**

Cooperatively, we hunted together; we gathered together; we moved on to greener pastures…

…in doing so we “created socially shared joint goals and joint attention.”

A second major step in the evolution of cooperation came as human communities began growing in size and competing with one another…

“Intertribal competition [and the wars that ensued] meant that all lives in a group contributed to one big collaborative activity. This created a much larger and more permanent shared world.

”What we now call culture.” **[t, n, (2014: 5)]**

Shared culture gave rise to collectively known cultural conventions, social institutions, and the norms or rules by which we enforce and promote membership.

These include hazing, gossip, ranking, scapegoating, ostracism, harassment, iconoclastic behavior and collegiality, strict policies against harassment and iconoclastic behavior.

So long ago, as we became increasing upright, our hands were freed so we could fill them from the bounty of the African savannah….

As we moved into the savannah, the size of our brains and the heads that contained them became larger and larger.

We succeeded in accumulating large amounts of new foods.

Simultaneously we learned to control fire and we really began to cook.

Sharing the bounty of nature creates new social and interpersonal bonds.

Wedding feasts for example, unite two extended family groups.

Inviting a coworker or acquaintance to lunch can create new friendships…

As we learned cookery, energy was diverted from our complex and large digestive tracks. **[Richard Wrangham, Catching Fire: How Cooking Made Us Human (2013).]**

Our appendix shrank while our brains grew in size, and the neural activity that the human brain produced ramped up…

We became smarter. Our judgments and decisions became faster.

We moved slowly to the top of the food chain as we taught ourselves how to become mega-predators…

Unfortunately, early hominid pelvises couldn't accommodate larger and larger baby's heads, so more surviving infants were born prematurely before their craniums grew too large for safe births.

This started a hominid trend toward the helplessness of babies.

This trend may actually continue today in the rising number of autistic births….

Giraffes, zebras and bears are born ready to run and to follow their moms.

Human babies on the other hand need years of support.

Sometimes we support them all the way through graduate school as they learn the endless intricacies of human culture.

(Of course, if they are nerds, boffins or autistics, we support them even longer).

When two dedicated partners cooperate in raising their children, such extended support is fairly easy to sustain.

If one partner fails or falls, the children do not go untended as they do in bear families for example.

Also, at the same time as we were becoming confirmed in monogamy, we developed explicitly verbal ways of bonding.

Unlike our primate cousins, a mother who walks upright must use one or two hands to hold her baby.

Primate babies ride on moms' backs because primate moms walk on all fours and offer a flat, warm surface to hang onto.

For primate babies, mom is a pickup truck and they ride in the back.

Things are different for human mothers.

In order to forage effectively, human moms put their babies down and then used their hands to gather food.

Over time, early human mothers found that if they made soothing sounds to their children as they worked, the child was comforted.

This is because human voices (especially mom's voice) release the trust hormone, oxytocin.

If we could release oxytocin into this sanctuary at this minute you would irresistibly be inclined to lend more money or invest in riskier ventures upon request.

Sometimes I wonder if releasing oxytocin into Harperman's office would give us a more trusting and representational democracy…

Well, the soothing sounds that moms made to their babies eventually became melodies and music. And music too releases the hormone oxytocin among its human listeners.

Perhaps informative-communicative language developed out of the widespread practice of sharing these socially bonding and soothing sounds.

Perhaps, too, we begin to incorporate information in the warm wave of oxytocin emanating from our mothers' songs.

Let's try an experiment.

These are the lyrics of the first verse of George Gershwin's lovely lullaby 'Summertime.'

Summertime, and the livin' is easy
Fish are jumpin', and the cotton is high.
Your daddy's rich and your momma's good looking
So hush little baby, don't you cry…

Dubose Heyward (lyrics)/George Gershwin (music); **Porgy and Bess** (1935).

Please sing it with me now….

[they sing…]

I wonder if anyone experienced warmth or fun as we sang that verse collectively? That's oxytocin at work…

Please ask yourself now why you complied with my request.

Please also ask yourself why you stood to sing.

**➔Cooperation is based on a near telepathic understanding of what is expected of us in social situations.**

Autistic humans do not naturally share this understanding, yet many of them are demonstrably hypercreative and can concentrate on single tasks for very long periods of time.

[Simon Baron Cohen. **Science of Evil: On Empathy and the Origins of Cruelty** (2012);
**____. Autism and Asperger Syndrome** (2008);
**____ MIndblindness: An Essay on Autism and Theory of mind (**1997)]

…But to return to my main topic of cooperation…

as soon as we could share information explicitly through language, the development of human 'culture' went into overdrive.

We began to teach our children advanced techniques of survival.

Human children are wired by evolution to receive and imitate instruction from a very early age.

They can participate in joint goals within their first year, and will often point out the location of objects a parent is looking for…

Autism is most often represented as an impairment of this ability

…Autistic children seem to be wired differently from the majority of human infants.

In fact, they are.

And unfortunately some children are socially isolated on the far spectrum of autistic behaviors.

Others, however, are much more modestly impaired.

We call autistic people who become scientists, doctors, artists or actors ‘high-functioning autistics.’

Sometimes we use an old-fashioned [1944] word saying that he or she ‘suffers from Asperger’s syndrome’.

I have Asperger’s syndrome.

I believe I am a third-generation Asperger’s deviant.

It has made my life very complicated, but also very interesting.

It was very hard to find a suitably compassionate partner. I looked for love in several wrong places…

Fortunately, I am naturally very lucky.

My Asperger’s makes single, prolonged tasks like getting a PhD or writing books very possible.

But, as some of you may have noticed, I don’t integrate into groups very well.

It is far too easy for me to walk away from a mildly irritating, annoying, or difficult person and never speak to them again. As Ella Fitzgerald says: “I can’t be bothered with people I hate…”

Fortunately, this does not include any Unitarians.

These days, I recognize this faulty wiring as an abnormality that prevents me from becoming fully sociable, and I recognize this as an intergenerational theme on one side of my family…

…for this reason, I am now investigating the possibilities of improvement and change.

My friend George Atherton introduced me to an Adult Religious Exploration group that opened some interesting perspectives to me.

This group meets in the Fireside Room on Wednesday mornings and is now open to new membership.

I think I'm a different person today than when I began the workshop on Unitarian Principles and Practices…

So, thank you, George.

But back to cooperation again…

Human culture is a vast and unique repertoire that preserves and transmits techniques of adaptation, including emotional responses to beauty and to stories that organize natural experience.

Please now take a look around the Sanctuary at Jeannette Roback's lovely images.

Some human beings give themselves entirely to a lifetime's pursuit of a craft or art.

The respect we give to such people reflects the importance of their role in our fundamentally collaborative culture.

A favorite writer suggests that paintings and prints are emotionally didactic: they teach us new ways of feeling as perhaps music does also.

Alain de Botton* also believes that images connect us with a timeless, more objective sphere not usually encountered by mortal beings. [*AdeB: **Art As Therapy** (2013)]

Arts and crafts, paintings and prints are names for areas of collaboratively constructed culture. There are many other areas, of course: drama, music, dance, figure skating, team sports, science, medicine, technology….

These activities soon become institutions, and institutions extend continuous human activity beyond individual lifespans.

In this way we have adapted to our own mortality.

We do not lose the discoveries, experiences or efforts of previous generations. Neither do our own contributions disappear when we finally leave the party.

And in art we experience a respite that is difficult to achieve in the everyday world.

Art and other forms of cultural beauty are like techniques of meditation.

They free us momentarily from our ego and our existence.

Culture therefore is useful – very useful – because it takes evolutionary adaptation several steps further and speeds up the process of human adaptation remarkably.

**➔So far, through the ages, culture has enabled us – just barely – to keep one step ahead of climate change**…

**And this – of course – is the real significance of my topic of cooperation.**

Without exaggeration, we are confronted today with the greatest danger that has ever faced humanity.

We are rushing toward a crisis that – unchecked – may end most of the biosphere for millennia to come.

Lack of cooperation fueled by ignorance and greed has put us in greater environmental debt than the financial deficit of contemporary Greece.

A long process of environmental restoration must begin very soon or our children and grandchildren will not survive.

Since the Industrial Revolution, we have attacked the biosphere relentlessly.

We now must work like fiends to preserve and restore it…

WWII required a global mobilization that lasted four years… ['41-45] **[Maury Klein: Mobilizing the Army for WWII (2013)]**

Climate change and global warming will require a global mobilization that will last 20 to 40 years…perhaps longer…

But defeating climate change will only be possible if we have this time and are capable of organizing ourselves well enough…

In addition, defeating it will only be possible if we force ourselves to cooperate by refusing to become mired in pettiness and profit.

If we succeed, we will be changed as a species during the next several decades.

➔**Still, I believe strongly that our survival is still a coin toss**…

➔**I am deeply frightened for the lives of my children and my unborn grandchildren**…

But this is not to say that human survival is a matter that should concern only breeders, although it is immediately obvious that parents and grandparents have the most skin in this game.

Anyone who currently loves a child must now be concerned for his or her well-being and future.

Your younger siblings, cousins, nieces, and friends' babies all deserve their futures.

The issue of group survival (even future group survival) concerns the whole group.

We call this group humanity.

My conceptual group is now a bit larger than this.

After speaking with David Suzuki – a favorite trouble maker – I now think of myself as a node on the tree of life.

The tree of life is a vast experimental enterprise that includes all biota. Recently, scientists all over the world cooperated to complete this exhaustive diagram of terrestrial life.

This complete tree of life includes 2.3 million interrelated species.

We all have skin in the game, so…

Every field of human achievement must contribute to the struggle against global warming.

The crisis is already upon us.

The most obvious contributors will be the fields of science and technology.

Ironically, the disciplines that got us into this mess might provide the best opportunities to survive it.

That is why I write about technology and human culture.

Technology is the clearest example of the expansion of a survival imperative in human culture:

Stone age. Bronze age. Space age. Information age.

These names derived from dominant technologies in different epochs of the human past.

To say technology is to say ‘human culture.’

But also, to say technology is to say ‘human survival imperative.’

Human technology and human culture expand organically like a coral reef meeting the survival demands of every new environmental change.

But there is one environmental change coral reefs cannot overcome…

Global Warming.

Only human beings are left to assume the stewardship of this planet and defeat the monster we have unwittingly unleashed.

The current battle to rescue the earth could give us to tools to modify planetary habitats.

Currently we call this nonexistent, imagined science geoengineering.

When used to describe human modifications to other planets, we call the same ability terraforming.

These are early names for things we do not yet have any idea how to accomplish.

Today increasing the human habitability of an entire planet is still science fiction.

If we survive, however, we may yet be able to modify the habitability of other planets. Mars for example.

We imagine Matt Damon in **The Martian** (2015) sitting out his exile alone on a hostile planet as an expression of our new survival imperative.

Our survival imperative demands we turn the imaginative ability of human culture toward a new enterprise quickly in order to invent a path to follow to a survivable future.

At the same time, collaborative projects of research that will turn fiction into fact are ongoing by the world's best boffins.

A man in Florida has discovered a way to extract carbon from the atmosphere, and then build carbon nanofibres from it to insure its profitability so that it will provide its own funding…

He estimates that if we dedicated a million square kilometres – an area about a tenth the size of the Sahara – to such carbon extraction, we would reduce atmospheric carbon to preindustrial levels [350ppm] within a decade.

In a second example, scientists in France have developed wind turbines that power heat exchangers lowering the air temperature to its condensation point and extracting 7000 liters of water per day out of thin air.

We could use these in the breadbasket to continue feeding the world.

We could place these strategically throughout the boreal forest to water the trees during droughts and put out fires quickly whenever they start.

**➔Now, imagine what might happen if we all stopped producing new cellphones and better televisions for 10 years.**

**➔Imagine what might happen if we put every drop of human energy and creativity into returning our atmosphere to 350 ppm of carbon dioxide.**

We will still lose most of the wild animals.

We will still lose most of the birds and fish.

The boreal forests will burn away.

Our icecaps will disappear and may never come back.

Nonetheless, our interesting human journey could continue, and we would become

the generation that looked to the future,
the generation that saved the world,
the generation that passed the torch.

Unfortunately, today our success is not guaranteed,

and…right now…at the moment of our deepest uncertainty, we must make a simple choice.

We must either begin to cooperate totally without reservation or simply resign ourselves to disappearing from the universe.

We must act cooperatively without any certainty at all that we will succeed or we have to resign ourselves to dying out – certainly – in the late decades of this century.

My own feeling is that – once again – greatness is upon us, but as always at such moments, our total destruction is close upon its heels.

It would be horrible, I think, to be responsible for the sixth planetary extinction if we ourselves do not survive.

Surely some good should come from our long journey from the irresponsibility of individual greed and selfishness to the planetary awareness and responsibility we will need to survive into the next century.

It is now time to choose.

Thank you.

Giles Slade