A ROADMAP FOR LIVING IN THE ERA OF GLOBAL WARMING

SESSION V

LARRY R. CHURCHILL, PHD VANDERBILT OLLI, FEBRUARY 9, 2023 LARRY.CHURCHILL@VUMC.ORG

AGENDA FOR TODAY

Climate News

Collecting Ways to Make a Difference

Roman Krznaric's The Good Ancestor

> Schenck & Churchill, "Six Maxims for a Marginally Inhabitable Planet"

CLIMATE NEWS: "FAKE MEAT FAD HITS THE CHOPPING BLOCK" MEGAN HERNBROTH, FEB. 4, 2023 AXIOS

- Impossible Foods and Beyond Meat each laying off 20% of their workforce
- Future of the Impossible Whopper?



"NEBRASKANS ARE SITTING ON STRATEGIC METALS. IS MINING A PATRIOTIC DUTY?" DIONNE SEARCEY, *NYT*, FEB. 2 2023

• While there are moratoriums on solar farms, many residents of rural Nebraska feel a patriotic duty to allow mines to retrieve metals such as niobium, scandium, titanium, and other rare minerals to power renewable energy, plus fighter jets and cell phone batteries. China and Brazil are the largest producers of these metals.



BP BACKS OFF CLIMATE PLEDGE AMID RECORD PROFITS

- BP--2022 Record profits of 27.7 billion, doubling last year's profits
- BP- drops commitment to reduce emissions from 35-40%. New commitment is 20-30%
- Shareholders are suing Shell for failing to live up to prior climate pledges





1. EAT PLANT-BASED FOOD

- Producing beef is 100 times as land intensive as cultivating potatoes
- Livestock use 80% of all arable land, but produce only 20% of needed calories
- Americans average 3 beef burgers a week
- Livestock are a substantial producer of methane gas, which is 80 times more toxic to the environment than carbon dioxide
- Cattle are the No. 1 reason for clearing the Amazon rain forests

2. REDUCE OR ELIMINATE AIR TRAVEL

 In the year 2019, flights produced over 915 million metric tons of CO2 out of the 43 billion metric tons of CO2 collectively produced by humans. This accounted for about 2.1% of all human-induced carbon emissions on the planet.



3. BUY LOCALLY, TAKE REUSABLE BAGS, WASTE LESS FOOD

- Reduces the carbon footprint for transportation
- Reduces plastic that goes to landfills
- 1/3 of all food produced world-wide is lost or tossed
- Compost if possible



4. GET A HYBRID OR ELECTRIC CAR

- Electric vehicles (EVs) have initially heavy carbon footprint from battery production and recycling, and source of the electricity to run them. Break even point is at roughly 10-13,000 miles.
- Hybrids may be better in 2023 but with efficiencies in battery production and changes to electrical grid, the future is EVs.



ROMAN KRZNARIC, THE GOOD ANCESTOR: A RADICAL PRESCRIPTION FOR LONG-TERM THINKING, 2020

Six good ancestor conversations1. Deep time humility2. Intergenerational justice3. Legacy mindset

4. Transcendent goal

5. Holistic forecasting

6. Cathedral thinking



DEEP TIME HUMILITY

Our time on earth, as humans, is a blip

• "Consider the earth's history as the old measure of an English yard, the distance from the king's nose to the tip of his outstretched hand. One stroke of a nail file on his middle finger erases human history."

--Roman Krznaric

• In a full-length motion picture (2 hours) of the universe, the history of our species would flicker by in the last fraction of a second.

--Michael Polanyi

DEEP-TIME HUMILITY HUMAN LIFE ON EARTH AS ONE PASS OF THE EAGLE OVER MT. EVEREST

- Kalpa—a unity of time in Hindu mythology; the length of a single cycle of the cosmos; a "day of Brahma"; roughly 4,320,000,000 years
- Time period it would take an eagle, flying over Mt. Everest and brushing the top, to wear down the mountain



INTERGENERATIONAL JUSTICE

Weighing future lives as equally valuable to our own, if for no other reason because futures lives will far outnumber present ones.

- Cumulative generations of the dead throughout history = 100 billion
- Currently living account = 7.7 billion
- Future generations, even on the most modest predictions = tens of trillions.

We who are currently alive are a fleck of dust on the population apple.



LEGACY MINDSET

What will my legacy be?

- How will my grandchildren and great grandchildren look at my time, and stewardship of the Earth?
- My parents' generation is often called the greatest American generation, having survived the Great Depression and fought WWII. Are we on track to be the most reviled generation?

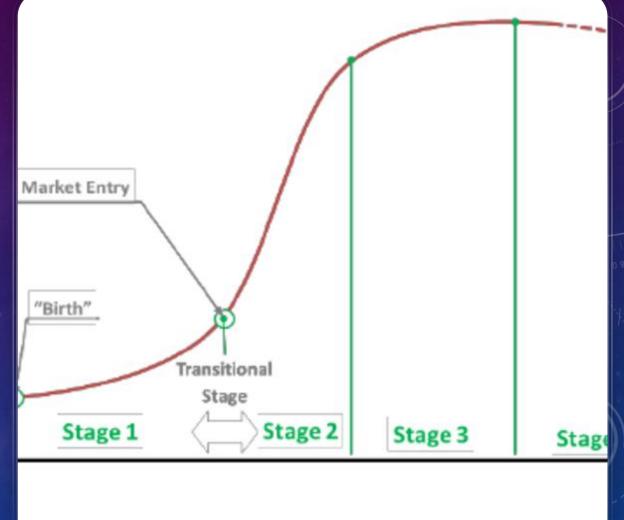
TRANSCENDENT GOAL

- Setting realistic goals that can be accomplished only in the future, transcending my personal lifespan, goals whose value will be recognized and taken up by those who survive me.
- What are we now working on that will be carried into the future by others?



HOLISTIC FORECASTING

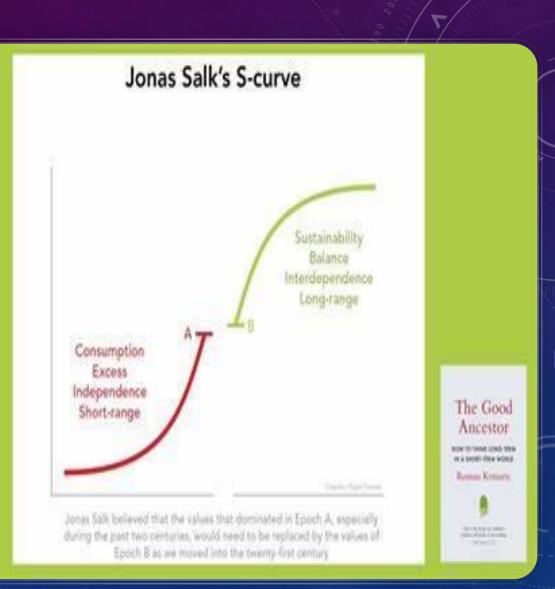
- Forecasting the future is very unreliable; even experts fail, e.g., 2008 crash, Covid, election of Trump
- One reliable general way: "the Wisdom of the S curve," everything that grows, reaches a peak and declines, rapidly or slowly



HOLISTIC FORECASTING

Staying on the red curve is "like a child who believes they can continue to blow up the balloon, bigger and bigger," without ever expecting it to burst.

The Good Ancestor, 124

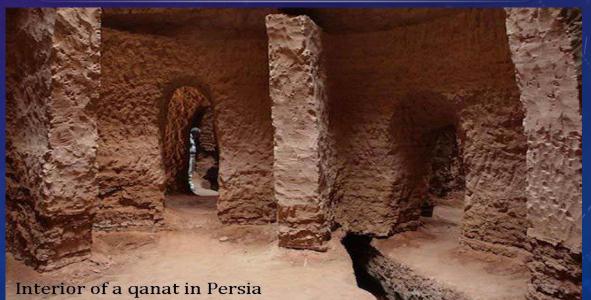


CATHEDRAL THINKING

The great cathedrals of Europe were built over many generations. Those who lay the cornerstones could only imagine the completion of their work in a distant future.

Building to last: Water tunnel in Gonabad, Iran, built in 700-500 B.C.E., still in use.





"SIX MAXIMS FOR A MARGINALLY INHABITABLE PLANET"

Perspectives in Biology and Medicine, vol. 64, no. 4 (autumn 2021): 494–510.





MITIGATION & ADAPTATION

Mitigation -- lessening the effects of carbon burning through changes in living patterns and technology

Adaptation -- accommodating to a new human experience through moral, social, economic, and political adjustments.

- Clearly these are not sequential, but simultaneous activities. Yet time for mitigation is rapidly slipping away . . . we must be in adaptive transition now
- The quicker the transition the less severe the collapse of social, economic, and political structures world-wide

WHY MAXIMS?

When times of crisis or catastrophe come, "maxims can help us accept such events, which are, after all, part of the course of nature; we will thus have these maxims "at hand." What we need are persuasive formulae . . . which we can repeat to ourselves in difficult circumstances, to check movements of fear, anger, or sadness. The exercise of meditation [on maxims] is an attempt to control inner discourse, in an effort to render it coherent." --Pierre Hadot, *Philosophy as a Way of Life* (1995)

MAXIMS

- "Maxims present means for living one's life in a coherent and honorable way in the midst of troubles, great and small."
- Like Mantras: What mantras do you have that you say to yourself in times of trouble?
- "Do the best you can, and take what comes"

SOURCES FOR THE SIX MAXIMS

- Work in ethics consultations services at large academic medical centers
- Work in ICUs and hospices
- Patient and physician interviews

MAXIM 1: WORK HARD TO GRASP THE IMMENSITY

- Source scenarios: the young mother dying of late undetected cancer, leaving three kids behind; the star athlete dying of heat stroke through the neglect of his coaches; the healthy middle-aged man born with a Berry aneurysm that suddenly ruptures and kills him. Senseless events. How can the world be like this?
- Application to the Anthropocene: How can humans have had this much impact on the natural order itself? Can we possibly unknowingly have perpetrated the extinction of thousands upon thousands of other species, and untold suffering of our own species? Threats to our sense of moral order and coherence...which lead to moral paralysis or nihilism...

MAXIM 2: CULTIVATE RADICAL HOPE

Synonyms

- Judith Andre (2015) talks about "open hope";
- Joanna Macy speaks of "active hope" (Macy and Johnstone 2012);
- Gabriel Marcel (1978) speaks of the hope that can arise when "hope for" is released.
- Emily Dickinson, "Hope is the thing with feathers..."

"The kind of hope that can appear after optimism has died"

RADICAL HOPE

- Source scenarios: a formerly homeless patient saying to us, "Well, if it weren't for AIDS, I'd be dead"—meaning that in coming to terms with AIDS, he had gotten himself off the street and had broken his addictions. Survival rates for certain kinds of cancers are better for patients in hospice than out. By accepting a terminal diagnosis and redefining what counts as healing, unexpected paths for extended life open up.
- Application to the Anthropocene: Hope when no good outcome seems available, being open to whatever good can emerge; e.g., ordinary kindness, not abandoning people, behaving with integrity. The key is knowing that there is almost always room for something positive to be done. There are always openings, always gaps in the gloom

MAXIM 3: HAVE A LINE IN THE SAND

- Knowing that there are some things you will not do, some modes of living you will not embrace. Know that there are things worse than death.
- This maxim is the core insight behind the practice of formulating advance directives.

LINE IN THE SAND

Source scenario: Memorial Hospital in New Orleans after Hurricane Katrina

As floodwaters rose in the days after the storm, the hospital lost power when the grid failed, and then lost backup power when their generators were swamped. With no power, the ventilators and other life-supporting machines stopped working. There were no functioning monitors. Without air conditioning, temperatures in the sealed units rose rapidly. As the days went by, shortages of food and medicine developed. Gunfire was heard in the streets; police withdrew from the area because of the danger. Under these conditions, impossible triage decisions were made, and finally, over a dozen critically ill patients were injected with lethal doses of morphine and sedatives rather than abandoning them or leaving them to die in septic shock.

LINE IN THE SAND

- Application to the Anthropocene: In the west, resolving not to kill others for water, or in food shortages, committing not to steal food from children or elders, or abandon poor communities for my own comfort and convenience.
- Acting on awareness of the consequences of my actions; reaching a point where I say: "Here I stand; I can do no other."
- Every one of us must realize the possibility of finding him/herself at some time in that position.

MAXIM 4: APPRECIATE THIS ASTONISHING AND UNIQUE OPPORTUNITY WE ARE PRESENT FOR A SHIFT LIKE NO OTHER IN HUMAN HISTORY

Source scenarios:

- At the end of his account of his long dying of AIDS, Harold Brodkey says: "Peace? There was never any in the world. But in the pliable water, under the sky, unmoored, I am traveling now and hearing myself laugh, at first with nerves and then with genuine amazement. It is all around me."
- Arthur Frank summarizes his reflections on his own illnesses, and illness in general, this way: "The ultimate value of illness is that it teaches us the value of being alive; this is why the ill are not just charity cases, but a presence to be valued Illness restores the sense of proportion that is lost when we take life for granted."
- This leads to cultivation of gratitude

APPRECIATE THIS UNIQUE OPPORTUNITY

Application to the Anthropocene: Finding beauty in the midst of catastrophe and suffering

- "Some evenings there—the light is special, and the air—the air was like you could touch it, and the smell of those linden trees, and the sound of the birds singing." ---An account of a prisoner in a Soviet Gulag
- A woman we interviewed who years ago who had lost fingers in a textile mill, but whose main memory of work, the memory she stressed in her account, was of how beautiful the afternoon sunlight was as it shone on and through the running threads in the very spinning looms that had taken her fingers.

MAXIM 5: TRAIN YOUR BODY AND YOUR MIND.

- Source Scenarios: Moral distress and burnout are familiar in healthcare workers, for example, Covid 19 care. Bodily practices to mitigate and eventually assimilate trauma of all kinds are important. For example, mindfulness, yoga, cognitive-behavioral therapy, trauma release exercises, and wellness programs (nutrition, exercise, sleep patterns).
- Application to the Anthropocene: Physical, psychological, and spiritual trauma are likely to become widespread as the climate worsens. Training body and mind to cope will be essential to survival and to whatever sort of human flourishing is possible on a vastly depleted planet.

BOOK RECOMMENDATION

David Schenck, Into the Field of Suffering: Finding the Other Side of Burnout, Oxford, 2023

ENCK SCOTT INTO THE FIELD OF SUFFERING FINDING THE OTHER SIDE OF BURNOUT

MAXIM 6: ACT FOR THE FUTURE GENERATIONS OF ALL SPECIES.

- Speak for those without voice: the poor, future generations, other species. Speak for the forests, the seas, the mountains.
- Act, personally and politically, to limit the damage being done to the biosphere. Every 0.5° C increase avoided is a major victory and achievement. The difference between 1.5 and 2 degree Celsius rise in temperature is 150 million human lives, the equivalent of 25 Holocausts.

MAXIM 6: ACT FOR THE FUTURE GENERATIONS OF ALL SPECIES

- Source scenario: The way we responded, and failed to respond, to Covid 19.
- Application to the Anthropocene: We are all in this together, all tied together, all forming a multiplex unity. Acting with a sense of solidarity, involving mutuality and reciprocity, the development and maintenance of trust, is essential for decent survival

SIX MAXIMS

Work Hard to Grasp the Immensity
Cultivate Radical Hope
Have a Line in the Sand
Appreciate this Astonishing and Unique Opportunity
Prepare your Body and Mind
Work for the Future Generations of All Species

PREVIEW OF NEXT WEEK, SESSION VI

- Some clarifications about Peak Experiences
- More practical things we can do to mitigate and adapt to global warming—send in your suggestions
- Unfinished business -- send in your topics and questions