

Grief, Grit, and Gratitude: Developing Resilience in the Face of Climate Change

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A Challenging Scenario

Our civilization is built on the assumptions that a stable climate is a given. The current phase of climate stability is regulated by an amazing and not-until-recently understood, interconnected relationship amongst sun, glaciers, seasons, soils, plants, ocean currents, and CO₂. Rising emissions based on human dependence on fossil fuels are destabilizing this balance and thus destabilizing civilization.¹ In the last decade both energy conservation and alternative energy options have become much more efficient and economically viable indicating that technologically speaking, the rise in CO₂ emissions could be curbed if political, social, and economic forces were brought to bear. In fact, clear roadmaps of progressive steps have been developed to significantly slow global warming and nearly eliminate air-pollution mortality in 139 countries.² However, the amount of greenhouse gases already in our atmosphere indicates we will still experience serious disruptions³ and face difficult ethical considerations regarding geoengineering.

Facing the upheaval associated with living through a specific fire or hurricane, or a personal illness can be traumatic. Facing repeating and escalating events associated with climate upheaval that include floods, extreme heat and drought, accompanied by political and economic upheaval, food insecurity, forced migration, loss of the stability of home, community and identity can destabilize the usual personal and institutional coping capacities and amplify already existing mental health issues.⁴ Facing into the even longer-term and compounding implications of a future destined to increasing climate breakdown has the potential of creating an existential angst casting a psycho-social-spiritual shadow over everything with which we are familiar.

According to an assessment done in 2016 by the U.S. Global Change Research Program, the mental health implications of facing climate change can range from relatively minor stress to more debilitating

¹ Diffenbaugh, Noah S., Deepti Singh, and Justin Mankin. "Unprecedented climate events: Historical changes, aspirational targets, and national commitments." *Science Advances*. Vol. 4, no. 2. 2018

² Jacobsen, Mark Z., Delucchi, M., Bauer, Z., Goodman, S., Chapman, W., Cameron, M.A., Bozonnat, C., et al "100% Clean and Renewable Wind, Water, and Sunlight All-Sector Energy Roadmaps for 139 Countries of the World." *Joule* 1, 108–121. 2017.

³ Frölicher, Thomas L. "Continued global warming after CO₂ emissions stoppage." *Nature Climate Change*. Volume 4, pages 40–44. 2014

⁴ Brown, Patrick T. and Caldeira, Ken. "Greater future global warming inferred from Earth's recent energy budget." *Nature*. Volume 552 (7683), pages 45–50. 2017.

disorders such as depression, post-traumatic stress disorder (PTSD) and anxiety attacks.⁵ Extreme weather disasters can have greater impact if people's resilience is already compromised by pre-existing trauma and mental health conditions. For example, rates of suicides have been seen to increase as a result of Hurricane Andrew and Katrina, especially amongst those with pre-existing PTSD.

An Alternative Scenario

Community support however can alter the impact of trauma. A study following the Fukushima nuclear reactor after the 2011 earthquake in Japan discovered that the more tight-knit and trusting the community was before the disaster, the higher their chances were of rebuilding after the disaster. Residents who were most at risk due to pre-existing conditions of vulnerability had a higher survival rate due to having people who already knew them and could act quickly.⁶ Also the significance of community support and heroism has been reported indicating gratitude by residents of both California and British Columbia for support received after devastating fires swept through their communities in 2017.^{7 8}

Another and often less named but positive mental health consequence of facing trauma is an increased sense of personal resilience, appreciation for what was previously taken for granted, and community bonding.⁹ The phrase posttraumatic growth (PTG) is being used to indicate the higher level of functioning that may arise from facing adversity. Shifts in thinking and relating to the world can reflect significant increase in deeper relationships, plus a different set of priorities and possibilities than existed before a period of traumatic suffering.¹⁰ Studies show that creating some way of making sense of loss or trauma facilitates the best recovery and is enhanced by social support, stories and other creative forms of expression.¹¹ Facing climate-related traumas would qualify for what sociologist and adult educator, Jack Mezirow, would call "disorienting dilemmas" that trigger transformative learning and more complex thinking, if adequate support is given.^{12 13}

⁵ Dodgen, D., Donato, D. Kelley, N., La Greca, A., Morganstein, J., Reser, J., Ruzek, J., Schweitzer, S., Shimamoto, M.M., Thigpen Tart, M. and Ursano, R.. "The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment". Ch. 8: Mental Health and Well-Being. U.S. Global Change Research Program, Washington, DC, 217–246. 2016

⁶ Aldrich, D. P. *Building Resilience: Social Capital in Post-Disaster Recovery*. University of Chicago Press. Chicago. 2012

⁷ Britten, Liam. "After devastating B.C. wildfires, Interior residents thankful for community strength." CBC news. <http://www.cbc.ca/news/canada/british-columbia/b-c-wildfires-canada-thanksgiving-1.4346932>

⁸ McEvoy, Julia. "Man Who Alerted Neighbors to Wildfire Hailed as 'Tremendous Hero'". KQED News. <https://ww2.kqed.org/news/2017/10/22/in-time-of-darkness-a-real-life-hero/>

⁹ Seppala, E. "How the Stress of Disaster Brings People Together." Scientific American. <https://www.scientificamerican.com/article/how-the-stress-of-disaster-brings-people-together/>

¹⁰ Tedeshi, R.G., and Calhoun, L.G. "Posttraumatic Growth: Conceptual Foundation and Empirical Evidence." *Psychological Inquiry*, 15(1), 1-18. 2004.

¹¹ Tyson, June. "Turning a tragedy into a tribute: A literature review of creating meaning after loss of a loved one". *Illness, Crisis, & Loss*. 21 (4): 325–340. 2013

¹² Mezirow, Jack. "Learning to Think Like an Adult." In *Learning as Transformation: Critical Perspectives on a Theory in Progress*. Edited by Jack Mezirow and Associates. San Francisco: Jossey Basee, 2000.

As further proof, studies are showing that those who are actively involved in climate change mitigation or adaptation have an improved sense of health and well-being as a result of these activities. This does not mean that the problem has gone away but indicates that the chance to shift from being inactive consumers of scary news reports, into being active agents of change, helps people manage their stress and adjust to the changed context.^{14 15} Agency, or the power for individuals as well as societies to act purposely to their advantage, is key to the biological evolution of organisms and to the social evolution of civilization. Certainly responding to climate change is an evolutionary challenge for all species.^{16 17} Agency means taking substantive actions, not just engaging in distractions or feel good busy-work. Taking action to make a difference in the climate situation indicates people are not resigning to being passive victims. Taking action can be an antidote to the soul destroying option of just resigning to passive complicity with the damage incurred by our collective, and in general, unintentional, daily activities.

Citizens' Climate Lobby (CCL) is an international grassroots environmental group that trains and supports volunteers to build relationships with their elected representatives in order to influence climate policy. Elli Sparks, Director of Field Development, said their members are educated and very aware of the dire situation society faces but focus their efforts on solutions. By consistently plugging away at doable tasks and learning how to understand and address roadblocks, they are finding success in their efforts. One of the most significant means of keeping up motivation is through always tabulating and celebrating any actions big or small that that have been taken and reflecting these back to their membership and community at large. She said volunteers understandably go through cycles of feeling despair. The organization has learned that when grief and discouragement are expressed, people are less likely to get energetically stuck in that phase.¹⁸ This is refreshing to hear as often climate activists conflate expressing grief with giving up. They may be so afraid of being accused of spreading doom and gloom that they feel they must quickly jump to offering the reassurance 'but there are things we can do.' In the urgency of rallying people to act while the vital window of opportunity for creating change is still open, there can be fear that even the acknowledgement of concern means everyone is going to drop out of action and into the swamp of endless despair. However, grief is not the enemy of hope. That is a limited binary argument. Both can exist, alongside many other emotions, all indicators of our concern for things

¹³ Inglis, Jan. and Steele, Margaret. "Complexity intelligence and cultural coaching: navigating the gap between our societal challenges and our capacities." *Integral Review*, 1: 35–46. 2005

¹⁴ Reser, J.P., G.L. Bradley, and M.C. Ellul. "Coping with climate change: Bringing psychological adaptation in from the cold." In *Handbook of the Psychology of Coping: Psychology of Emotions, Motivations and Actions*. Edited by Molinelli, B. and V. Grimaldo. Nova Science Publishers, New York. 1-34. 2012

¹⁵ Bradley, Graham L., Reser, Joseph P., Glendon, Ian, and Ellul, Michelle C., "Distress and coping in response to climate change." In *Stress and Anxiety: Applications to Social and Environmental Threats, Psychological Wellbeing, Occupational Challenges, and Developmental Psychology*. Edited by Kaniasty, Krzysztof, Moore, Kathleen A., Howard, Siobhan, and Buchwald, Petra. Logos Verlag, Berlin, 33-42. 2014.

¹⁶ Welzel, C., & Inglehart, R. "Agency, Values, and Well-Being: A Human Development Model." *Social Indicators Research*, 97(1), 43–63. 2010.

¹⁷ Sih, Andrew, Maud C. O. Ferrari, and David J. Harris. "Evolution and behavioural responses to human-induced rapid environmental change." *Evolutionary Applications*, 4(2), 367–387. 2011

¹⁸ Sparks, Elli. Personal communications with Jan Inglis via telephone. December 2017

we care about. Resiliency requires we flexibly dance amongst the many naturally-occurring emotions as we respond to the shifting ground of changing identities and assumed securities.

Talking About “It”

Expressing grief and vulnerability can be difficult in a culture focused on success, happiness and control. Being happy can be associated with being a winner, whereas grief can be associated with being a loser, a failure and lead to shame and hiding. Although upsetting, death or illness is common, a natural part of living. According to psychotherapist Francis Weller, loss, if approached with deep attention, can lead to personal maturity and community nourishment.¹⁹ To these personal losses we are now adding a less common planetary grief: mourning for accumulative loss of polar bears, elephants, songbirds, familiar forests, social justice, democracy and certainty of the future. Climate change is an issue that impacts us all and will increasingly do so, but according to a survey by the Yale Program on Climate Change Communication, more than half of Americans who claim climate change is personally important to them rarely or never discuss the topic with family or friends.²⁰ Silence creates isolation and paralysis which then creates less personal and societal resiliency.²¹ We cannot work together to change things we do not talk about together. Citizens who do not discuss climate destabilization are less likely to give their governments a mandate to be proactive and spend the money needed for climate adaptation and mitigation. Putting a price on carbon, re-organizing transportation and building infrastructure to reduce carbon emissions, or building dikes are costly now but will become much more costly as steadily-increasing greenhouse gas emissions create increasing destruction. Faced with the popularity contest involved in re-election every few years, the risk of making this investment becomes a tin can that governments may prefer to kick down the road for future generations to deal with rather than having the grit needed to face up to the situation now.

So this raises the question: how do we break this pattern of impotent silence? Ordinary conversations do not seem to support this kind of discussion, and we are left in sort of a crazy-making silence- we may be facing extinction of so much we hold dear but aren't going to mention it! It is an understandable survival technique to push away that which is overwhelming, but there are other healthier options that may increase our chances at survival and greater dignity. Joanna Macy, a scholar of systems thinking, deep ecology, and Buddhism has seen the inaction that results from socially unexpressed grief, fear and anger. For decades she and her colleagues have effectively assisted people to transform the psychological and spiritual despair of facing nuclear and environmental trauma and injustice.²² Around

¹⁹ Weller, Francis. *The Wild Edge of Sorrow: Rituals of Renewal and the Sacred Work of Grief*. North Atlantic Books. Berkely, California. 2015.

²⁰ Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., and Howe, P. *Climate Change in the American Mind* Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. 2015

²¹ Noorgard, Kari Marie. *Living in Denial: Climate Change, Emotions, and Everyday Life*. The MIT Press. Cambridge, MA. 2011

²² Macy, Joanna, and Molly, Brown. *Coming Back to Life: The Updated Guide to the Work That Reconnects*. New Society Publishers. Gabriola Island. 2016

the world, her work has made sharing gratitude and grief the basis for a profound sense of connection with each other and the earth that leads to action. According to Macy, hope is not a “thing” we get when things turn out well, it is a practice. It is a choice we make when engaging in the world. It involves a clear view of reality, an articulation of a vision and values for how we want to live, and active steps for how we will support that vision to emerge.

In workshops I have led, based in part on Joanna Macy’s work, *Facing a Changing World*, participants speaking in paired exercises name their gratitude, fears, grief, and anger. Only then from this shared truth-telling do they move to naming the actions they would take to create a world they want. With issues associated with climate change being so new, complex, and intertwined with issues of population growth and technology, it can be helpful to have methods of communication other than words to express meaning. Therefore I have incorporated movement, collage and poetry into my workshops. One participant said they appreciated finally being able to speak of climate trauma: “I noticed I leaned forward and had a hunger to hear where other people were at in facing this trauma.” Other participants said: “What I assumed I would dread saying and acknowledging, is actually life giving,” and “I notice that I am feeling lighter and maybe a little more brave about the future we are facing.” These reflections indicate that there is a “good grief” that bonds us with each other and the earth and releases energy previously used for repressing feelings. Instead of creating paralysis, this form of connective grief allows us to find the strength together to be present in our witnessing instead of turning away. It motivates us to keep seeking actions to create a way of we morally and ethically want.

Beyond working with individuals navigating their personal reactions, it is important to develop institutional readiness. Bob Doppelt and The Resource Innovation Group (TRIG), which is affiliated with the Sustainability Institute at Willamette University in Oregon, have in the last two years begun running workshops online and in person to build transformational resilience at community and organizational levels. They are offering skills to help non-profits, public and private sectors and civil society understand and prepare for the implications of psycho-social-spiritual trauma resulting from a drastically changing climate. Frontline workers in social, medical and emergency services, already challenged with addressing increasing mental health issues, are being supported to look ahead and anticipate the stress related to climate trauma. It is anticipated that this preparation will reduce their own as well as their clients’ reactivity, and improve their resiliency.

Weighing Out the Odds

Although 97% of climate scientists agree that climate change is human caused, denial still exists within certain social groups.²³ However, even amongst those who agree with climate science and also believe that the impacts of growing fossil fuel emissions may lead us to the 6th mass extinction, there is another argument. Whether spoken or unspoken, there exists a lurking question amongst many regarding whether it is too late to take remedial action or not. This is another binary argument that attempts to

²³ Do scientists agree about climate change? National Park Services, U.S. Department of the Interior. <https://www.nps.gov/articles/climatequestion02.htm>

reduce our current complex and unfamiliar situation to fit into an overly simplified deterministic either/or response. In a culture dominated by investment strategies based on assurance of good returns, it is understandable, even though somewhat bizarre, that people are trying to figure out the certainty of climate predictions before committing to taking action. Both the “I don’t know anything about it” or the flip side, “I can’t do anything about it,” stances can provide ways to evade the challenging task of turning the ship around. Some, such as “collapse coach” Carolyn Baker, present a case for facing reality and acknowledging that efforts to avert near-term extinction are unsubstantiated hopes that only distract and delay us from getting prepared for the worst.²⁴ While others, such as the “practical utopian” Guy Dauncey, though acknowledging the severity of our situation, still presents a rallying call to engage.²⁵ He states that since there are so many indications that humanity is rising to the occasion and creating change, why not focus on those, bringing the best of ourselves forward to change the course of this situation.

Many climate activists could be seen as incorporating the positive psychological technique of ‘acting as if.’ This does not mean deception or chirping platitudes. It does mean making choices to move forward regardless of the odds. It entails superseding logical constructs about what currently exists and tapping instead into the power of what is desired, possible and dynamic rather than fixed, thereby releasing yet unknown creative potential. It takes grit to keep moving ahead without a road map, through a mine-field, knowing we have made so many mistakes in the past and that it might require periods of sacrifice without knowing if these efforts make any difference at all. As author Rebecca Solnit states in an article by the same name, “The most important thing we can do to fight climate change is try: The future will follow an unpredictable route, but we must still follow a compass called hope.”²⁶

Offering further rationale for this approach, University of California Berkeley psychologist Rick Hanson indicates focusing on the positive is a good tool for resilience as it is proven to have lasting impact on neural structures and functions.²⁷ Therefore one way of facing of climate trauma and disaster thinking is to develop conscious methods to rewire neural pathways so as to think differently. We cannot be resilient if we get stuck for long periods acting like deer in headlights—rigid, silent, avoidant, isolated and detached.

The issue of how to avoid the doom and gloom reactions when discussing climate change is particularly a dilemma for educators trying to find a message that is not apocalyptic or Pollyannaish. When I was doing public education regarding climate change in the late 1980s the field was influenced by an assumption that imparting data-filled knowledge regarding the severity of increasing greenhouse gases (GHG) was enough to motivate social-political change. At that time the situation was still abstract, predicted to happen somewhere else many decades in the future. Since then the number and severity of

²⁴ Baker, Carolyn and McPherson, Guy. *Extinction Dialogs: How To Live With Death In Mind*. Next Revelation Press. San Francisco. 2014

²⁵ Dauncey, Guy. *Journey To The Future: A Better World Is Possible*. Agio Publishing House. Victoria , B.C 2015

²⁶ Solnit, Rebecca. “The Most Important Thing We Can Do to Fight Climate Change Is Try.” *The Nation*, www.thenation.com/article/198537/unpredictable-weather.

²⁷ Hanson, Rick. *Hardwiring happiness: The new brain science of contentment, calm, and confidence*. Harmony: New York. 2011

disturbingly concrete experiences is closer to home. Thankfully, there has also been a much more nuanced approach to education that involves understanding the social science of adult learning, public perception and motivation including a deeper analysis of global market forces and vested interests.

In this new era of climate education, how to talk with youth about these realities in a manner that is both honest and yet not overwhelming is an issue. Dr. Martha McMahon, director of the program Human Dimensions of Climate Change at the University of Victoria, said she certainly never speaks to her students in terms such as 'being past the tipping point' or other such absolutist frameworks. She focused instead on creating possibilities and supported students to find their own creative ways of engaging fellow students, family, or community. As an example, one sociology student took on the challenge of hard-to-talk-about topics by developing a fascinating PowerPoint presentation which she plans on making into a book called "Learning about Climate Change with Baby Animals." Seemingly simplistic, lightness and humour however work to get beyond the build-up of cynicism and boredom often encountered when raising this topic. Dr. McMahon said many of her students felt they were alone in their awareness of climate change because their peers either did not know of it, did not talk about it, or considered it in an abstract or distant manner. We also discussed the impact that student-debt can have on the capacity for students to focus on anything in their future beyond just getting through school. In general, higher education is not taking the leadership its status in society would suggest, addressing climate change more in terms of supporting campus operations to reduce emissions and less in terms of funding integrated curriculum.²⁸ The impact of climate change on youth and the issue of intergenerational justice are fueling a demand for a moral compass to direct climate policy both at university and federal levels.

For some, the ethics of intergenerational, international and interspecies justice motivate their engagement. Many in technologically-advanced areas are just too busy balancing work, family, debt and career pressure to engage with the reflection needed to understand and address these injustices. For others when occupied with the immediate concrete tasks of survival due to the already increasing heat, flooding, or fires, these concepts are of less immediate relevance. In some less technologically-advanced areas, where the link between earth systems, atmosphere, emissions and economic power has not been made, the hardship resulting from climate-induced droughts may be interpreted as god punishing them.²⁹ This diversity of experiences and perceptions partially underlines why it is difficult to achieve global consensus on actions. It could be said that the responsibility for averting the worst of the climate destruction significantly lies with those who still have the stable life conditions that allow for a long view, the ability to work with ambiguous outcomes, and the resources that foster creation and implementation of specific actions.

The Long View for the Long Haul

²⁸ Henderson, Joseph. "Climate Change and the Canadian Higher Education System: An Institutional Policy Analysis." in *Canadian Journal of Higher Education*. Volume 47, No. 1, pages 1 – 26. 2017

²⁹ Saifullah, Masood. "For Afghan farmers, climate change is 'god's will'." <http://www.dw.com/en/for-afghan-farmers-climate-change-is-gods-will/a-41253973>

Physical impacts of climate change and the resulting ethical dilemmas will be with us for a very long time. Committing to live with the long view can take a toll if not recognized and addressed. It is professionally recognized amongst therapists who work with clients that express pain of trauma that they should “do their own work” to be present with clients. Through reflective and expressive personal or group practices, therapists are more likely to become conscious and articulate of their own history of painful experiences and embrace the ambiguity of living with diverse and ever-changing feelings. These practices support therapists to sustain their own self-care, and not be unexpectedly triggered by client’s stories. However for leaders in climate activism there is not yet such an overt social recognition of the need for them to “do their own work.” If these activists have not spent time recognizing how the daily and ever-increasing news of climate destruction can trigger them personally, they may be less able to be authentically present with the public they wish to speak to. Intellectualizing the topic, splitting off from feelings, blaming, descending into futility and withdrawal may result.

Some suggestions for self-care for climate-concerned citizens are:

1. Take time to ground into daily gratitude...possibly at night before going to sleep you can list the things that you appreciated that day. The experience of gratitude may be as simple as remembering how the sun felt on your face, appreciating the humour of the checkout clerk, or the sight of a flower opening. Gratitude means being present in your body, using all your senses and taking time to notice the miniscule.
2. Have some form of self-reflective practice...this might be journaling, meditation, art, nature walks, or debriefing with a trusted peer. Create a circular pie chart to acknowledge the natural range of feelings such as gratitude, grief, anger, fear, excitement, cynicism, guilt or love. Notice how your feelings may shift around the pie each week or each day. Do some self-inquiry and reflection if feelings seem stuck in one section.
3. Be mindful of the sneaky erosion of cynicism—do not let the frustration of what is happening but shouldn’t, and what could happen but isn’t, harden the sweet moments, justify indifference, and imprison your heart.
3. Stay physically active...keeping energy moving is so important whether through yoga, fast walking, swimming, dancing, singing etc.
4. Engage with a community of people who know what is going on and can talk about both the external issues and internal responses...I find that the challenge of facing a changing world is hard enough as it is, but when I feel I cannot talk honestly about it with those I am regularly relating to, I feel much more despair.
5. Join an advocacy group you feel aligned with...not only do they know what is going on but they are finding ways to create changes, hopefully in a way that moves beyond polarizing. It is important to not take on the concerns of the world alone and also from this support base, to keep open lines of communication with others who have different perspectives.

6. Take on what is doable and meaningful...there will be some effort and “shoulds” in doing climate advocacy work but when we know why we are still choosing to do this work we can stave off victimization and resentment. For some, the motivation comes from the great people they get to meet, for some it is the ethical thing to do, for some the huge amount of meaningful learning feeds them, for some motivation comes from the love of their children, or other species.

7. Create monuments and memorial gardens or cairns—in your home, or public space where you and others can gather to acknowledge disasters or loss of species. The phrase “Lest we forget” will hold a new planetary meaning. Creating rituals and being witness to change in a public manner is a significant, small “p” political act.

8. In the midst of the ‘bad’ news, keep watching for what is arising...the daily reminders of the underlying goodness of human nature, the weekly indicators of creativity and innovation, and the possibilities that lie in the unknown cumulative effects of our efforts. In the very least this mindfulness may keep us from descending into human loathing, or throwing in the towel and partying on. It may help us to bring the best of humanity forward as we evolve our consciousness to face our challenges.

*Hope is definitely NOT the same as optimism.
It's not the conviction that something will turn out well,
but the certainty that something makes sense,
regardless of how it turns out.*

*It is hope, above all, that gives us strength to live
and to continually try new things,
even in conditions that seem as hopeless as ours do, here and now.
In the face of this absurdity, life is too precious a thing
to permit its devaluation by living pointlessly, emptyly,
without meaning, without love, and, finally, without hope.³⁰*

Vaclav Havel

Jan Inglis PhD has been a grassroots and academic climate educator for 30 years promoting the field of climate social science that applies the research of adult development, systems science, and deliberative democracy to public engagement with climate change. She is a facilitator with Joanna Macy's Work that Reconnects network, past board member of the Canadian Community for Dialogue and Deliberation, and past Co-director of the Calgary Integrative Body Psychotherapy Institute. As a community animator she has used participatory theatre to discuss our ecological footprint and north/south issues of community sustainability and equity. She has taught post-secondary peace and conflict studies in relation to cultural and environmental contexts. Her articles have appeared in *Integral Review*, *International Journal of*

³⁰ Vaclav Havel and Karel Hvizdala, (1990) “Disturbing the Peace” trans. Paul Wilson. Knopf: New York. pp. 181-182

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