Facing Climate Change

A Facilitator's Guide

Created for the

Greater Portland Sustainability Education Network

By

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GREATER PORTLAND
SUSTAINABILITY EDUCATION NETWORK
A Regional Centre of Expertise on Education for Sustainable Development

Facing Climate Change Workshop

Summary: In these times of daunting challenges where we are bombarded with negative news and scales of problems that can overwhelm our psyches, it is important to develop tools that empower us and help us engage in solutions.

Facing Climate Change identifies the psychological barriers that inhibit our sense of efficacy, such as fear, time, and self-limiting frames of actions and outcomes, and offers tools to overcome adversity, develop communication skills, and build our resilience. This workshop will use lessons from ecopsychology to help you build your own reserves of personal resilience so that you can face what you know and read about climate change with clear eyes, not sink into despair, and learn practices that will be psychologically supportive and empowering, including suggestions for how you can take action in your own communities. Through this lens, climate change becomes our ally to help us to move forward.

Goals: As a Train-the-Trainer model, this handbook provides the structure and processes for a variety of activities that will allow you to offer workshops to others in the future. Note the recommended times and resources needed, plus guidelines on how to complete the activities with different sizes of groups. We hope that this training will be worthwhile for you and that this handbook will offer you everything you need to help scale up our collective efforts and offer hope to others.

Structure: The training comprises three sections of focus: **Personal, Community and Planetary.** It will consist of a combination of short lecture, group activities and small group discussions. All of the activities/topics below are options/suggestions as to what could be covered in similar workshops.

Recommended Resources: See the reference section below for additional background.

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Portland Community College

Educate ~ Empower ~ Engage

Introduction

Introduction: 30 minutes

Start with people introducing themselves and briefly sharing what brings them to this workshop. [Time will vary depending on the number of people in the workshop, so facilitate this section accordingly.]

Offer an overview of the workshop:

The topic of climate change can be overwhelming to the psyche due to the daunting news on the subject. Even people who stay informed and do their part to create a sustainable future find that the subject can become too much to absorb. It is understandable then that some people tune it out, go numb, don't talk about it, or choose to deny its existence, and others find themselves feeling depressed if they focus on it. For these reasons, it is helpful to have a structured framework in which to examine climate change whereby people can speak their feelings about it, build personal resilience and feel empowered to act in ways that are supportive.

One such framework is "The Work That Reconnects." This is a workshop format developed by eco-philosopher Joanna Macy that has proven effective in its use in thousands of workshop settings around the world. (See two books on the subject by Joanna Macy in the Recommended Reading: *Active Hope* and *Coming Back to Life*). The Work That Reconnects provides a safe and supportive structure for doing group work on challenging subjects such as climate change. The structure allows us to address psychological barriers to climate change and climate silence, provides support for people's feelings and concerns, and encourages and enlivens our positive responses and engagement.

This format divides the workshop into four stages:

1) Coming from gratitude

2) Speaking our concerns for the world

3) Seeing with fresh eyes

4) Going forth

The Work That Reconnects is effective for several reasons and it can be used as a model for engaging in any type of personal or collective work on difficult subjects. It starts off by grounding us in our wholeness by having us identify those good things that we can be grateful for in our lives. Once we are grounded in our wholeness (which is a first step in building resilience), we then move on to expressing our concern for the world with honesty. This part of the workshop is a necessary step in being able to face fears and allow feelings, however conflicting, to be heard. With our feelings heard a space is opened up and we can then move on to seeing with fresh eyes. This includes seeing what else is possible in the situation, visioning new perspectives and expanding our sense of our own power and interconnectedness with the web of life. The final part of the workshop, going forth, invites us into our next steps so that we leave with ideas, hope and inspiration of what we can do in our own lives to be effective agents of positive change for our communities.

Activities

Gratitude: (30 minutes)

Climate change tends to really wear us down on a variety of levels, not the least of which is being emotional. One of the simplest ways to give yourself an emotional boost is through gratitude practice. All this is is consciously taking note of things you are grateful for. Some people like to spend a few minutes each day thinking and practicing gratitude, perhaps by making a list in their journal. Others practice it in the moment, saying a quiet thank you over food, clothing, even opening the door on a sunny day. Still others practice their gratitude with others, both to stay in the habit, and also so everyone can share their joy together.

What gratitude does for us is reminds us that not everything in the world is terrible. We often take good things for granted, especially the good things that are generally everyday occurrences like being able to breathe clean air or having access to food. In gratitude practice, suddenly even the smallest thing becomes worthy of celebration. And then life just seems so much better!

Let's start by breaking into dyads (two-person groups), so pick someone to partner up with. First, tell each other about things you are grateful about today. It can be anything at all, from getting out of bed without pain, to really enjoying your breakfast, to having the opportunity to be here with us in this workshop. We'll go for a minute or so with the first person, and then we'll switch and let the other person express their gratitude. (2-3 minutes)

Next, let's extend gratitude out into our community. Spend a couple of minutes each expressing gratitude for members of your family, friends, coworkers, even people who have offered you assistance in the store or at a restaurant. (4-5 minutes)

Now, open up your gratitude to the entire planet! That can include even more people, plus other animals, plants, fungi and other living beings, individual ecosystems and other places, and of course the Earth itself. Perhaps even extend beyond that into our galaxy, the sun, and more. Start close in, and work your way out, and see how far your gratitude can reach. (5-6 minutes)

So now that you've spent time expressing all this gratitude, how do you feel? [Allow for some discussion for a few minutes]

Again, there's really no wrong way to do gratitude practice. Here are a few ideas for you to take home with you:

- Keep a daily gratitude journal, either for yourself or to share with someone else
- Make a daily gratitude post on Facebook or other social media that you share with people you like and trust
- Write letters of gratitude to specific people, perhaps one a week. You don't actually have to send them if you don't want to, but just the act of writing them can be encouraging.
- Get together for a "gratitude lunch" where you and a few other people meet up once a month or so to share things you're thankful for. (Make sure to hold space for people to be honest in their emotions, but keep the focus on gratitude rather than complaints.)
- Be mindful of your language on a daily basis. If you find yourself complaining about something and you can't really do anything about it right now, see if you can reframe the situation in a more positive way. Or shift your attention to some of the better things in your life right now.
- Practice gratitude at odd moments, even for the seemingly smallest things. If you take a big, deep breath, be grateful in that moment that your lungs are able to draw in the air and that the air is clean enough to

breathe. When you get into bed at night, feel gratitude for the relaxation that settles over you and the opportunity to let yourself rest.

- Finally, don't forget gratitude to the Earth and all its intricate systems! Yes, we've knocked quite a few of them off kilter, but we're still here, with the opportunity to reverse the damage our species has done. Thank the Earth for the food you eat and the water you drink, the ground beneath your feet and the atmosphere that protects us from UV rays and gives us the variety of weather we get throughout the year.

When we express our gratitude for someone or something, we feel more strongly for it. We stop taking for granted all these interrelationships, and we become more consciously aware of just how fragile the planetary ecosystem is. This awareness cultivates concern and responsibility, and helps us to come to our desire to reverse climate change not through fear and desperation, but through love, resolve and connection.

Giving Voice to our Concern for the World: (60 minutes)

Wouldn't it be great if everyone was in agreement that climate change is a problem? We know that is not the case. With seven billion humans on this planet, each with their own thoughts, opinions and perspectives, it is impossible to get us all to agree on anything down to the last detail! With climate change, disagreements unfortunately eat up precious time that we need to work toward reversing its effects, so it is valuable for us to look at the reasons why some people deny climate change exists, or what (if anything) we should do about it. Moreover, we can also look at some of the other psychological barriers that can get in the way of our actions, even if we wholeheartedly agree that climate change is a reality.

Climate change deniers frequently act as though there's no trouble at all. They may rationalize away evidence, or repress their emotions about it, or distract themselves with video games, sports, alcohol or other entertainment. They may also minimize the authority of those who are presenting evidence of climate change, or claim that everything is a hoax. And they may even numb themselves further any time they hear messages that are contrary to their denial. All these and more are psychological defenses that people use to try to avoid facing difficult realities.

Psychological defenses are not signs of weakness. They're normal parts of the human psyche that help us to deal with harsh or threatening realities. We all have psychological defenses. Can you think of any instances where psychological defenses can be used in a healthy manner? [Discuss 2-3 minutes]

However, if we hold too tightly to our defenses we can become inflexible. Or we become like the proverbial ostrich with its head stuck in the sand. It's a case of "all things in moderation."

For another ecotherapist's perspective on the defenses that climate change deniers often over-use, we highly recommend Craig Chalquist's video, "Shifting the Psychology of Climate Change Denial," available on YouTube (see references below). It is too long for us to play today, but we recommend watching it on your own time. In it he details the following three topics:

1. Understanding Psychological Defense
2. 12 Defenses Against Climate Change Awareness
3. Shifting From Denial and Helplessness to Action

Why is it so important for us to understand why someone would deny climate change? When we are trying to convince someone of our perspective, it is really important to meet them where they are at, especially if they are already prone to putting up defenses. Climate change is a really divisive topic, and people on all sides of the discussion have strong feelings about it. When we see climate change deniers as our fellow human beings who,

like us, use psychological defenses to deal with uncomfortable realities, we can see ourselves as standing next to them instead of across from them.

How can we help deniers come to a place of acceptance? First, by understanding that we cannot just force them to see things our way. Chalquist makes a very good point on his website (see reference list):

> *In all defense, the primary goal is to hold the mind together against an onslaught of overwhelming, destabilizing emotions <u>until the defender has a safe place and opportunity to work through overwhelm and move from helplessness into action</u>*. [Emphasis his.]

By holding safe spaces for people to process their feelings about climate change—like this one—we create arenas for them to get past their psychological defenses and work through whatever is at their root. Each person has to come to their conclusions at their own speed, no more, no less. Those of us who are already convinced of climate change's seriousness need to hold space for those just coming to these realizations for the first time. We need to make our efforts to stop climate change open and welcoming to all, too, so no one feels that they aren't the right "type" of person to fight climate change. By doing do, we cultivate a sense of "we're all in this together!"

Now let's look at people who are convinced that climate change is real, but who are feeling completely overwhelmed by the problem. Have any of you attended our Hope and Resilience workshop before?

For those who have not, one of the main goals is to help people feel less overwhelmed by the immensity of climate change. It is all too easy to become so disheartened by all the bad news that we become paralyzed—another one of those psychological defenses. Why should we even bother when so many people are still contributing to the climate change problem? If our efforts might not even have an effect in our lifetimes, or our children's lifetimes, or beyond, how can we stay motivated?

It's a challenge, to be sure. And it is easy to shut down and drop out of the conversation. But climate silence is deadly. Not only does it make it seem as though fewer people are concerned about climate change, but it also discourages us from sharing our fears and feelings with each other. And right now, more than ever, we need the support of each other in these trying times.

Exercise: Breaking the Climate Silence

Let's start by getting in a circle. That way we are all facing each other, instead of having our backs turned. We are one united whole. Now, I would like each of you to think of three emotions that climate change makes you feel, for example "scared, sad, and angry." Let's go around the circle. [Let people share their emotions. Note any common themes.]

Thank you all for sharing! I noticed that these emotions came up a lot: [note the four or five you heard most often.] That shows that you are not alone in feeling that way—a lot of us do, and so do a lot of people outside of this room. Does it feel better knowing there are other people who feel the things you do about climate change?

This is an example of holding space. Right here, in this moment, we are holding space for each other. There is no judgement, and no wrong way to feel. We are united in a circle, but that circle is made of individual people, each with our own path and story.

What are some other ways you can think of that we could use to help create space for people to process their feelings on climate change?

Break (15 Minutes)

Outdoor Movement Exercise (15 minutes)

[Head outside, wearing appropriate weather gear as needed.]

Find a spot out here, wherever you like, as long as you can still hear me alright. Stand in this spot, and close your eyes. Focus for a moment on being completely still, not moving your head or your fingers or even your tongue. Now focus for a moment on your breathing. Feel the air flow in through your nose, down your throat and into your lungs, where it carries life-giving oxygen to your tissues, and then back out again.

Now, feel the ground beneath your feet. Feel yourself solidly rooted to the ground. Imagine the heat of your body, created by the metabolism of your cells, extends down through your shoes, through whatever you are standing on, deep into the soil beneath us. Imagine that it touches the heat of the magma of the Earth, fire to fire. Feel yourself deeply connected to the Earth through that heat.

Next, stretch your arms up and feel the heat given off by the palms of your hands and the top of your head extending up into the sky. Let it stretch until it reaches the sun, even through the clouds and millions of miles of space. Let your body's heat touch the heat of the sun's combustion, fire to fire. Feel yourself deeply connected to the Sun through that heat.

Draw the heat of the Earth up into yourself, and draw the heat of the Sun down into yourself, and let them meet in your very center, a fire in your belly. Let that heat extend throughout your entire body, and let it energize every cell. Let this heat invigorate and strengthen you. Open your eyes and come back to the waking world, and feel how much stronger you are. And then as we head back to the next part of our day, move forward with that strength guiding you and your actions.

Seeing with Fresh Eyes (30 minutes)

In this stage of The Work That Reconnects, we are invited into expanding into what we call the 'ecological self'- which is where we can experience our interconnectedness with each other, with non-human nature, and with the earth itself and where we can tap into a reserve of strength and hope that can support us on multiple levels. We find that we do not have to face climate change all by ourselves. We can draw on reserves of strength we never knew we had by cultivating our ecological self. All activities that nurture our connectedness and sense of belonging will support this. So join in with groups in your community that share your vision and your values.

We are going to do a quick exercise that will help us to identify some of our strengths and ways that we extend our selves to assist others- all aspects of cultivating the ecological self.

So, everyone get a partner and just for a few minutes, share with your partner one thing that you did that made a difference in the life of someone or that caused some positive change. Listeners: see if you can pick out one word to describe what you heard from your partner. Was your partner courageous, giving, compassionate, etc? [Take 10 minutes for this.]

Once the dyads have shared we will all share in a group some of what you heard. This exercise may help us to see with fresh eyes that we do in fact have personal power and inner resources that can support us in affecting positive change in the world. We do have the ability to assist in difficult situations and may even not realize that we have these reserves of strength that other people notice. Write on the board the words that the listeners identified. The collection of words represents just a small fraction of the collective power and personal inner resources present in the room!

On the larger issue of climate change, one possible way to look at it with fresh eyes is to see that climate change is the driving force that is moving us into becoming an ecologically sustainable society. Climate change is usually

perceived as being a negative force and we are not minimizing its devastating impacts. But could climate change also be our ally? Is the Earth spurring us on to return to balance with her biosphere? What if we perceived it as a force that is driving us towards a better, more harmonious way of living on the earth? The 'Great Turning' is a term that is being used to describe this time of transition that we are living in. Climate change is the accelerator for the Great Turning with evidence all around us of ways that society is transitioning towards sustainable living.

Let's take a few minutes and identify some of the positive changes that are taking place in the Great Turning. Some examples might include the rise of solar and wind power, community supported agriculture, etc. [Make a list on the board]. For more on this perspective see the article "Climate Change as Ally" in the appendix.

For many innovative global warming solutions that are coming on stream in the Great Turning, refer to the website and newly published book *Drawdown: The Most Comprehensive Plan to Reverse Global Warming* by Paul Hawken listed in the Recommended Reading and Web Resources.

Going Forth (30 Minutes)

As we work towards concluding our time together today, consider these questions from *Active Hope* (2012: 199): [Take about 7 minutes and have people write their answers individually]

1. If you knew you could not fail, what would you most want to do for the healing of our world?
2. What specific goal or project could you realistically aim to achieve in the next twelve months that would contribute to this?
3. What resources do you have, inner and outer, that will help you do this?
4. What resources, inner and external, will you need to acquire?
5. How might you stop yourself? What obstacles might you throw in the way?
6. How will you overcome these obstacles?
7. What step can you take in the next week, no matter how small- making a phone call, sending an email, or scheduling in some reflection time-that will move you towards this goal?

Let's share some of what you came up with. [List on the board some of the shared actions and goals.]

Closing (15 minutes)

To close we will gather in a circle. I invite each person to share one thing that you are taking away from the day's activities.

Recommended Readings and Resources

Books

Hawken, Paul. Ed. (2017). *Drawdown: The most comprehensive plan ever proposed to reverse global warming*. New York, NY: Penguin Books.

Jones, E., R. Haenfler, and B. Johnson. (2007). *The Better World Handbook*. Gabriola Island, BC: New Society Publishers

Louv, Richard. (2011). *The nature principle: Reconnecting with life in a virtual age*. Chapel Hill, NC: Algonquin Books.

Macy, J. & Brown, M. (2014). *Coming back to life: The updated guide to the work that reconnects*. Gabriola Island, BC: New Society Publishers

Macy, J. & Johnstone, C. (2012). *Active hope: How to face the mess we're in without going crazy*. Novato, CA: New World Library.

Web Resources

Greater Portland Sustainability Education Network (GPSEN)
http://gpsen.org/

Beyond Doom and Gloom: Include Solutions to Climate Change
http://www.aashe.org/climatesolutions

Climate Solutions: Civic Engagement and Energy Video on Youtube
https://www.youtube.com/watch?v=9b3KnxMimbU

Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming.
http://www.drawdown.org/solutions

National Geographic Explorer: Bill Nye's Global Meltdown: The Five Stages of Climate Change Grief
https://www.youtube.com/watch?v=29Xv_npmS6E

The Psychology of Climate Change Communication by Columbia University's Center for Research on Environmental Decisions
http://guide.cred.columbia.edu/index.html

Shifting the Psychology of Climate Change Denial by Dr. Craig Chalquist
https://www.youtube.com/watch?v=wZ17pkIdCus

Yale Program on Climate Change Communication
http://climatecommunication.yale.edu/

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TWENTY PRINCIPLES OF ECORESILIENCE: Personal and Cultural Adaptation to a Changed Planet

By Linda Buzzell and Craig Chalquist

We would like to offer a blueprint for how to strengthen communities as climate change intensifies.

A dictionary definition of resilience refers to the capacity of individuals, communities, and ecosystems to respond and adapt to disturbance. Building on this, ecoresilience includes creative adaptation and response to environmental disturbance and trauma, with global warming a pre-eminent and growing example.

The ongoing unraveling of every sector of our society and each ecosystem on the planet can feel overwhelming. With so many of our life support systems and those of countless other species coming apart, how can we go about healing the mess we've created? And how much can any one person or small group do in the face of a Perfect Storm of crises?

This huge project that theologian Thomas Berry called the "Great Work" of our time can sometimes feel too big, too overwhelming. So in order to take on our personal role in the shift towards a life-sustaining society, we also need to do the inner work of finding our own personal and local calling within this larger global project. No one person or group can successfully manage trying to fix it all.

And we must also discover the joy, excitement, and peace of mind that come from doing our part in this great adventure, surrounded by friends who share our passion and commitment to the restoration of life and health on our home planet.

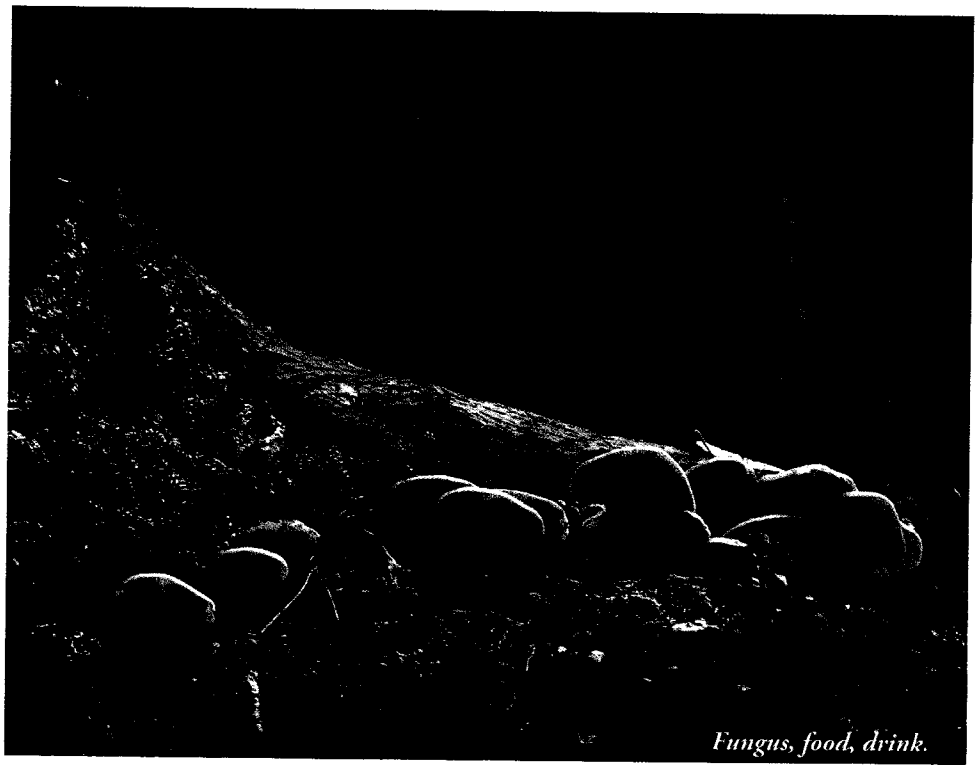
TWENTY PRINCIPLES FOR CULTURAL ECORESILIENCE

1. Recognize Nature as Our Guide–Know and align with the movements and patterns of the natural world.

Contrary to our delusions of grandeur, in the long run humans are not actually in charge of this planet, nor can we indefinitely force it to fit our own selfish, short-sighted goals. To continue to survive as a species, we need to be in harmony with the rest of nature instead of fighting against it. Simply asking "What Would Nature Do?" or "How Would Nature Do This?" before taking any actions can help us begin to move in the right direction.

2.Respect the Wild Around and Within Us–Preserve greenspace and wild places–including in our hearts.

This basic principle seems obvious to most environmentalists, and it's critically important for true resilience that urban populations fully understand that nearby and distant less-human-controlled places—land and water—determine our fate. However, these places don't need to exclude humans. In fact places that we see as "wilderness" often diminish in the absence of the indigenous human caregivers integral to their ecosystem. We also need to understand that wild places and their inhabitants aren't here just to serve humans and that the rest of nature has intrinsic rights we ignore at our peril.



Pixabay

Fungus, food, drink.

3. Come Home to Where You Live–Return to earthly reality in acts of deep homecoming.

To be truly resilient we need to leave behind the modern "nowhere and everywhere" fantasy

bubble fostered by the media, cyber-communications, and cheap, fossil-fueled travel. We can then relocalize and re-emplace our lives, reorienting to actual earth time and space. The disconnection from our own local, bioregional life-support systems (and the habitats of our local animal and plant siblings) allows us to thoughtlessly damage specific earthplaces. We can rediscover the deep pleasure of emplacement as we relearn the historical, geographical, biological, and even geological context of where we live and share it with our children and grandchildren. Finding or rediscovering a beloved place and truly committing ourselves to the welfare of its watersheds, land, air, animals, plants, and people is one of the most exciting life paths we can undertake.

4. Build Heartsteads–Create wisdom circles and gather around a common purpose.

We can organize local change efforts with people who resonate with a shared vision, goal, task, or dream of community that gives its members a sense of meaning, purpose, and agency. For example, a Voluntary Simplicity Circle that met every two weeks in Santa Barbara, California for 10 years forged deep bonds between participants and created support for making the kinds of changes each member wanted in their personal and activist lives.

5. Replace Monoculture with Polyculture–Welcome in who and what has been silenced or excluded.

Nature abhors a monoculture! We need merely observe a cleared piece of open ground to see how nature deals with a vacuum: it is soon full of a wide variety of plants and animals. And to limit a field to one species of plant involves constant "weeding" as we vainly try to remove the polyculture that wants to move in. We can learn from this rule of nature as we create our heartsteads, circles, and other human groups, opening our arms to all, even those our society might consider "weeds" or marginal. There can be no communal, political, or environmental revitalization without a renewal of truly inclusive community and social/environmental justice. This is no easy matter, of course, and we need a deep exploration of our various intersectionalities to understand where change needs to happen in our lives. It is especially important for those with "privilege" of any kind—European-origin, wealth, gender, sexual orientation, good health, etc.—to humbly undertake the hard work of facing how these advantages may blind us to the suffering of others—human or otherwise. Decolonization is a lifelong process.

6. Start Small and Learn as We Go–Make small initial interventions coupled with constant assessment.

This principle, articulated by permaculturist David Holmgren as "Use Small and Slow Solutions," guides us to start with least-harmful, low-tech, simpler, and time-proven solutions and reserve extreme measures for truly desperate situations. This approach is counterintuitive for many in modern industrial cultures as we are brought up to admire Big Everything. Forgetting that we live on a relatively small planet with limited resources in a backwater of a huge universe, we don't realize that being a giant makes us ever more vulnerable. Resilience demands that we begin to think small and make nimble, strategic changes.

7. Broaden Your Focus from Linear to Systemic–Shift your attention from simple causes to complex interactions.

Systems and Complexity Theory teach us that life is much more complicated than simple pushes and pulls, causes and effects. Living systems are characterized not only by their elements but by the interactions between elements. It is necessary to think the way nature does: in the round, focusing more on process and interaction than on content and element.

8. Simplify, Decentralize, Interlink–Keep an appropriate scale.

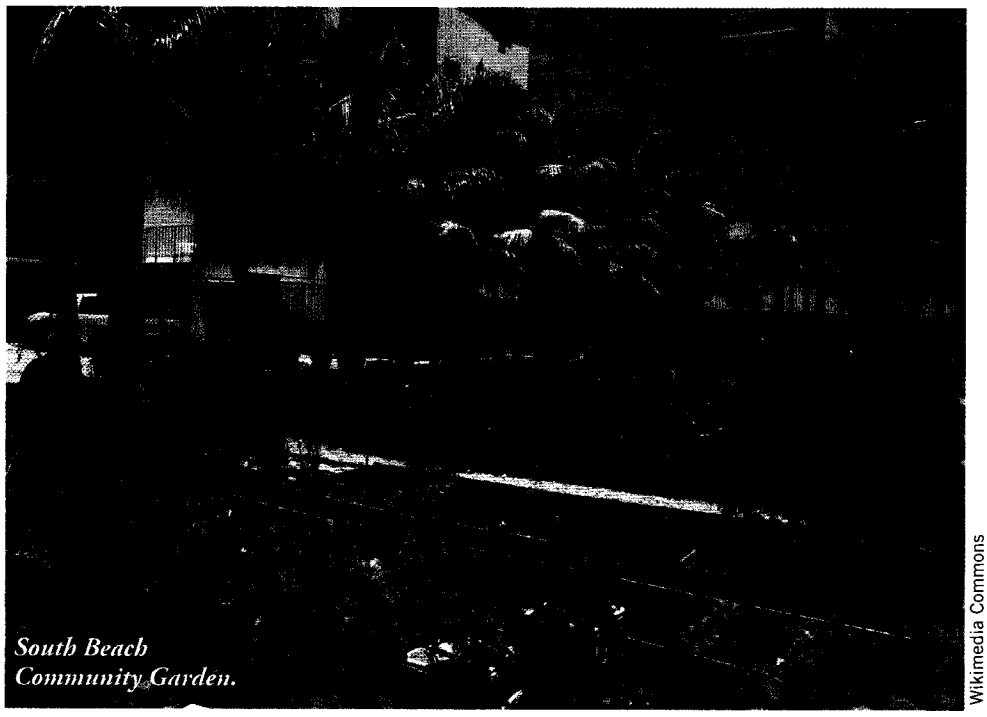
Starting small (Principle #6) reminds us of the importance of not growing beyond nature's limits. Poorly designed overcomplexity governed by giant centralized monocultures is the bane of modern industrial society and leaves us vulnerable to collapse. Think of the Titanic, the giant ship "too big to fail" that ended up on the bottom of the ocean. Simpler systems are often more robust—and can be interlinked into a highly resilient, interconnected web of new, earth-based cultures.

9. Act Local, Share Global–Be helpful well beyond your community.

Rebuilding local community and relocalizing the basics of life—food, companionship, building materials, medicine, entertainment, work, our support systems, the economy, and more—is a basic principle of sustainability. But no community can be fully self-sufficient, especially in a world in which humanity has long been a planetary species. Centuries before modern globalization taught us its cruel lessons of displacement and irresponsibility, pockets and cultures of humanity spread information and trade networks wherever we lived, in conditions pleasant or inhospitable. The counter to a *Road Warrior* post-collapse chaos of "all against all," as Hobbes put it long ago, is for groups and communities to pool resources, share knowledge, build kinship webs, and form strong alliances based on common needs.

10. Rely on Intelligent Redundancy–Set up backup plans and alternative resources.

Or as they say in the computer world: back up, back up, back up! The secret of ecoresilience, whether physical or cultural, is having multiple backups, fallbacks, and interconnections.



South Beach Community Garden.

Wikimedia Commons

11. Create Wise Governance–Reimagine community leadership developmentally.

This is probably the most difficult cultural ecoresilience principle of all, perhaps because women and men have been pondering "right governance" for millennia without taking developmental maturity into account. For our era and critical situation, we need to rely on the inclusive practices of council, restorative justice, egalitarian power-sharing, and peaceful conflict resolution to resolve inevitable differences—while also encouraging natural leadership. Inspired by indigenous wisdom, we need to create initiatory procedures through which leaders must be tested to guarantee their responsibility, self-reflexivity, wisdom, courage, and emotional maturity.

12. Decommodify Life–Redesign the economy.

To create wise and equitable governance, we must take back control of community leadership from those who benefit most from today's corrupt global economy. The word economy comes from the Greek "oikos" (home) and means management of the household. But as Senator Gaylord Nelson famously remarked, "The economy is a wholly-owned subsidiary of the environment." Our society's privileging of the money economy over everything else has gotten us into the mess we're in: we have turned almost everything, including human beings and the rest of nature, into a commodity to be bought and sold in the marketplace for profit, with disastrous results.

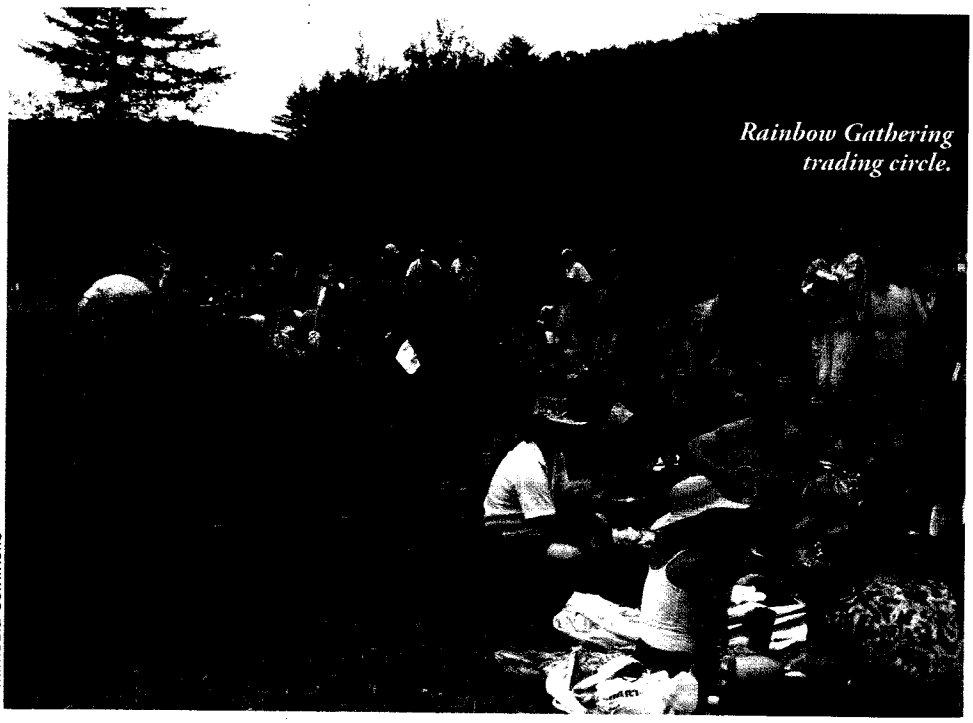
For true ecoresilience in the 21st Century we need to combine traditional and contemporary knowledge and practice.

13. Adopt an Ethos of Care–Make sure everyone is embraced.

Another part of reinventing community governance involves revisioning local and global care systems. We need to take a deep look at our crumbling family and community support networks to see how they can be creatively redesigned for maximum physical and mental well-being for all—including "all our relations."

14. Prepare Crisis and Trauma Teams–Develop emergency readiness and train first responders.

Rapidly degenerating global conditions demand robust and resilient crisis preparation and backup plans. We need the redundancy mentioned above: multiple ways to perform each function. And as part of our redesign of community governance, we need to reinvent emergency preparation and community protection practices, rethinking the deep meaning of true "security" philosophically and realistically, while not ignoring potential threats from flood, drought, fire, toxins, pandemics, criminal behavior—or even military attacks. We need to train psychologically-savvy, flexible, resilient, and redundant first responder trauma and ecoresilience teams to help the community survive proliferating extreme weather and economic disruption events as well as traumatic social events resulting from the unraveling or collapse of our culture.



Rainbow Gathering trading circle.

Wikimedia Commons

15. Design for Replenishment–Build nothing that does not enrich the natural world and support future generations.

As William McDonough and Michael Braungart observe in their excellent book *Cradle to Cradle*, we have long been entranced by industries and products that ravage and pollute. Merely making them less destructive, while useful in the short run, remains within the alienating worldview that gave rise to them. The same might be said for cultural structures like overlarge cities, megacorporations, and even nations. Instead, we can design for right-sized personal and ecological health, productivity, and abundance. What we make can be good for the natural world of which we are a living expression.

16. Combine Old Knowledge with New–Integrate the deep wisdom of the past with the smartest and most nature-friendly knowledge and practices of our era.

For true ecoresilience in the 21st Century we need to combine traditional and contemporary knowledge and practice. This includes educating our next generations with the understanding and practical/cultural skills needed to survive and thrive in very different conditions from the ones we now live in—instead of preparing them for a world that is rapidly passing away. Keepers of knowledge, tradition, and resources can help multiply, back up, diversify, and safeguard what the community depends on to survive and flourish.

17. Develop a Deep Appreciation and Understanding of Human Culture–Preserve, learn from, and expand the humanities.

In addition to practical skills, each person needs access to the stories that provide individual and collective guidance and call most deeply to our hearts, minds, and souls. From humanity's earliest days, gathering around the fire to hear tales has been basic to our species. This kind of learning finds nourishment in the tales and lore of every human culture, including

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TWENTY PRINCIPLES OF ECORESILIENCE: PERSONAL AND CULTURAL ADAPTATION TO A CHANGED PLANET

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history, philosophy, folkways, and the stories we have told and continue to tell about our life on this planet. The humanities engage us in discussions about primary values, about what matters most in life, and about paths that lead to fruition and wholeness and those we should not take. This is how we learn about human nature and what it needs, including justice, beauty, and purpose.

18. Slow Down and Reflect Deeply–Reground ourselves so we can stay sane during "The Long Emergency."

When we're in an extreme situation and are working towards quick individual or collective behavior change "or else," we need to pace ourselves, be especially gentle and patient with our progress, and tend the inner psychospiritual ecosystem with ongoing reflective practices, both personal and collective. There are many ways to do this. Artful community guides will be able to help us individually and collectively keep our spirits and positive energy up as we confront the challenges and make the necessary changes in how we live. This is a challenging and delicate endeavor, as we need to find a balance between "doom and gloom" and unrealistic escapist fantasy: the place where an accurate assessment of our situation is accompanied by enjoyment and gratitude for the richness of nature and all our relationships.

19. Explore Reverent Practices–Cultivate awe and appreciation of the more-than-human.

By exploring a wide variety of possibilities, we can discover and benefit from a consciousness-raising practice of our choosing. Many practices increase the feeling of awe and love for the world and its cosmic frame. Let us not hesitate to call such activities "spiritual" if we choose, although "reverent" might be an alternative for some.

20. Put Arts at the Heart–Celebrate, create, and ceremonialize.

Too many environmentalists are caught up in gloom, fear, and panic. While it's true that the situation is critical and life-threatening and we must yell "Fire!" to wake up our communities, it's also a psychological fact that most people can't effectively process unremitting traumatic information and soon numb out and resist such messages. As part of keeping our community's spirits up during Transition, we can foster and integrate play, festival, dance, music, drama, and all the arts to nurture the cultural life of the community, share people's rites of passage through the human lifespan, enjoy the experience of being together, and celebrate appreciative ties to Earth and the seasons. As we become more effective ecoresilience leaders and transition guides we learn to help ourselves and others balance the bad news with these simple joys of life: good food, music, inspiring stories, life-saving humor, beautiful art, joyful dance, kind friends, and exciting, earth-enhancing projects.

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The Question I Get Asked the Most

By Bill McKibben

The questions come after talks, on Twitter, in the days' incoming tide of email—sometimes even in old-fashioned letters that arrive in envelopes. The most common one by far is also the simplest: What can I do? I bet I've been asked it 10,000 times by now and—like a climate scientist predicting the temperature—I'm pretty sure I'm erring on the low side.

It's the right question or almost: It implies an eagerness to act and action is what we need. But my answer to it has changed over the years, as the science of global warming has shifted. I find, in fact, that I'm now saying almost the opposite of what I said three decades ago.

Then—when I was 27 and writing the first book on climate change—I was fairly self-obsessed (perhaps age appropriately). And it looked like we had some time: No climate scientist in the late 1980s thought that by 2016 we'd already be seeing massive Arctic ice melt. So it made sense for everyone to think about the changes they could make in their own lives that, over time, would add up to significant change. In *The End of Nature*, I described how my wife and I had tried to "prune and snip our desires," how instead of taking long vacation trips by car we rode our bikes in the road, how we grew more of our own food, how we "tried not to think about how much we'd like a baby."

Some of these changes we've maintained—we still ride our bikes, and I haven't been on a vacation in a very long time. Some we modified—thank God we decided to have a child, who turned out to be the joy of our life. And some I've abandoned: I've spent much of the last decade in frenetic travel, much of it on airplanes. That's because, over time, it became clear to me that there's a problem with the question "What can I do?"

The problem is the word "I." By ourselves, there's not much we can do. Yes, my roof is covered with solar panels and I drive a plug-in car that draws its power from those panels, and yes our hot water is heated by the sun, and yes we eat low on the food chain and close to home. I'm glad we do all those things, and I think everyone should do them, and I no longer try to fool myself that they will solve climate change.

Because the science has changed and with it our understanding of the necessary politics and economics of survival. Climate change is coming far faster than people anticipated even a couple of decades ago. 2016 smashed the temperature records set in 2015 which smashed the records set in 2014; some of the world's largest physical features (giant coral reefs, vast river deltas) are starting to die off or disappear. Drought does damage daily; hundred-year floods come every other spring. In the last two years we've seen the highest wind speeds ever recorded in many of the world's ocean basins. In Basra, Iraq—not far from the Garden of Eden—the temperature hit 129 Fahrenheit last summer, the highest reliably recorded temperature ever and right at the limit of human tolerance. July and August 2016 were not just the hottest months ever recorded, they were, according to most climatologists, the hottest months in the entire history of human civilization. The most common phrase I hear from scientists is "faster than anticipated." Sometime in the last few years we left behind the Holocene, the 10,000 year period of benign climatic stability that marked the rise of human civilization. We're in something new now—something new and frightening.

Against all that, one's Prius is a gesture. A lovely gesture and one that everyone should emulate, but a gesture. Ditto riding the bike or eating vegan or whatever one's particular point of pride. North Americans are very used to thinking of themselves as individuals, but as individuals we are powerless to alter the trajectory of climate change in a meaningful manner. The five or 10 percent of us who will be moved to really act (and that's all who ever act on any subject) can't cut the carbon in the atmosphere by more than five or 10 percent by those actions.

No, the right question is "What can we do to make a difference?"

Because if individual action can't alter the momentum of global warming, movements may still do the trick. Movements are how people organize themselves to gain power—enough power, in this case, to perhaps overcome the financial might of the fossil fuel industry. Movements are what can put a price on carbon, force politicians to keep fossil fuel in the ground, demand subsidies so that solar panels go up on almost every roof, not just yours. Movements are what take five or 10 percent of people and make them decisive—because in a world where apathy rules, five or 10 percent is an enormous number. Ask the Tea Party. Ask the civil rights movement.

The other side knows this, which is why it ridicules our movements at all times. When, for instance, 400,000 people march on New York City, I know that I will get a stream of ugly tweets and emails about how—saints preserve us—it takes gasoline to get to New York City. Indeed it does. If you live in a society that has dismantled its train system, then lots of people will need to drive and take the bus, and it will be the most useful gallons they burn in the course of the year. Because that's what pushes systems to change.

When brave people go to jail, cynics email me to ask how much gas the paddywagon requires. When brave people head out in kayaks to block the biggest drilling rigs on earth, I always know I'll be reading dozens of tweets from clever and deadened souls asking "don't you know the plastic for those kayaks re-

quires oil?" Yes, we know—and we've decided it's well worth it. We're not trying to be saints; we're trying to be effective.

We're not going to be forced into a monkish retreat from society—we need to engage this fight with all the tools of the moment. We're trying to change the world we live in and if we succeed then those who come after will have plenty of time to figure out other ways to inhabit it. Along the way those who have shifted their lives can provide inspiration, which is crucial. But they don't by themselves provide a solution. Naomi Klein once described visiting an "amazing" community farm in Brooklyn's Red Hook that had been flooded by Hurricane Sandy. "They were doing everything right, when it comes to climate," she said. "Growing organic, localizing their food system, sequestering carbon, not using fossil fuel inputs—all the good stuff." Then came the storm. "They lost their entire fall harvest and they're pretty sure their soil is now contaminated, because the water that flooded them was so polluted. It's important to build local alternatives, we have to do it, but unless we are really going after the source of the problem"—namely, the fossil fuel industry and its lock on Washington—"we are going to get inundated."

Like Klein, I find that the people who have made some of those personal changes are usually also deeply involved in movement-building. Local farmers, even after a long day pulling weeds, find the energy to make it to the demonstration, often because they know their efforts out in the field aren't enough, even to guarantee a climate that will allow them to continue their efforts. No, the people calling environmentalists hypocrites for living in the real world are people who want no change at all. Their goal is simply to shame us and hence to quiet us. So we won't make them feel bad or disrupt the powers that be.

It won't work, unless we let it. Movements take care of their own: They provide bail money and they push each other's ideas around the web. They join forces across issues: BlackLivesMatter endorsing fossil fuel divestment, climate justice activists fighting deportations. They recognize that together we might just have enough strength to get it done. So when people ask me what can I do, I know say the same thing every time: "The most important thing an individual can do is not be an individual. Join together—that's why we have movements like 350.org or Green for All, like BlackLivesMatter or Occupy. If there's not a fight where you live, find people to support, from Standing Rock to the Pacific islands. Job one is to organize and jobs two and three."

And if you have some time left over after that, then by all means make sure your lightbulbs are all LEDs and your kale comes from close to home. ❧

Environmental author and activist Bill McKibben is the founder of 350.org, an international climate change campaign. A version of this article appeared at www.ecowatch.com/bill-mckibben-climate-change-2041759425.html.

"What If…?": Climate Change as Ally

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Abstract

Human-induced climate change is the largest threat to our continued existence on beautiful planet Earth. It is currently framed as "global warming," "climate disruption," "climate chaos," and "the climate emergency" in attempts to draw attention to our dire situation and the need for immediate and dramatic action. As ever more frightening scientific evidence of the likely extent and speed of climate change's impacts becomes readily accessible, it seems that the extent of our collective denial increases. It is as if we are "caught in the headlights" of an oncoming vehicle, unable to act towards personal and planetary survival. This paper draws upon Gaian science, deep ecology, the "work that reconnects," and the power of story to explore how we might reframe climate change so we can engage with, and respond to, it productively. It asks "What if… instead of being a 'Threat' to us and our world, we consider climate change as an 'Ally' of 'The Great Turning' of humankind towards a more sustainable way of living and being?" In doing so, we might feel more at ease amidst forthcoming catastrophic weather events and other dramatic changes; feel supported in our efforts to transform our own lives and communities from "Business as Usual"; become more motivated to act for wider systemic change; and even discover new meaning, purpose, and joy at being alive at this moment in time. Key Words: Climate change—Deep ecology—Gaia—Narrative psychology—Denial.

January 2013. In the calm after the storm, a three-day storm with an intensity I have not experienced before outside the tropics … I walk through shredded leaves, over broken branches, through mud and water, to reach my local beach.

I sit on the dune, looking out at the ocean in a form I have never seen before … roaring white and brown waves, stretching out to sea as far as I can see. Thundering, racing, crashing … their power undeniable. Huge. Awe inspiring.

This experience changed something in me.

I believe that Nature speaks to us, mediated by the stories we tell ourselves, the psychological "frames" we hold in our head, the philosophical "lenses" we are wearing. I have long explored the power of "shared understandings"[1], the importance of narratives and worldviews for making sense of our world (Bragg, 1995, 1996). The way that we create meaning out of our sensory experiences, and how we emotionally and behaviorally respond to them, is complex. Socially constructed frames—generated by and received through media, conversation, and other discourses—are applied, processed, and altered individually, through our own internal reflection, and then communicated to others. This is an ongoing sensory, psychological, social, and cultural process. The actions we take, based on the resultant meaning, then affect the physical world around us. *Stories* or narratives are socially constructed frames that contain a temporal aspect or "flow" and have additional power for meaning-making, as they are our traditional, ancient forms of conveying information and holding culture or "lore"/customary "law." As Joseph Campbell famously put it, this is the "power of myth" (Campbell et al., 1988). The field of narrative psychology focuses on the way that our stories affect our individual lives (Angus & Greenberg, 2011; Howard, 1991). Many authors have argued that what matters now, in this time of climate change and vast interweaving ecological, social, and economic crises, is which stories we collectively choose to inhabit (Berry, 1988; Korten, 2015; Macy & Johnstone, 2012; Marshall, 2009). "This situation seems to call for a new type of narrative" (Swimme & Berry, 1994, p. 2). And as Thom Hartmann says, "There is hope. There is still

[1]Depending on the academic discipline with which the reader is most familiar, these understandings might be known as environmental "attitudes and values" (psychology), "conceptions" (education), "cultural meaning systems" (anthropology and cultural studies), "ideologies" (sociology), "ethics" (philosophy), or "worldviews" (anthropology and human geography).

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a possibility we can transform the stories our culture tells itself" (1999, p. 141). The stories we tell ourselves at this point in history will not only affect our psychological health but profoundly affect our planetary health and survival as a species.

According to these works, there appear to be three alternative "big stories" or metanarratives available to us in our contemporary Western culture. The first story we can choose to live by is "Business as Usual" (Macy & Johnstone, 2012, pp. 14–17), believing that nothing is wrong, really … that our current way of life, our social and economic systems, are sustainable, although we may need to "change our light bulbs"[2]. This story has also been referred to as "get yours before anybody else can" (Hartmann, 1999, p. 131). A version of this story, looking into the future, is "Adaptation" (Hopkins, 2008, p. 40), which admits that there may be some difficulties ahead but that we "can somehow invent our way out of trouble." Alternatively, we can choose the story of "Disaster"[3], believing that our existing way of life is unsustainable, that it will lead to ecological collapse and runaway climate change, and that there is not much we can really do about this. Hartmann refers to this story as "the world is going to end anyway, so grab what you can now" (1999, p. 132). Both of these stories lead us towards the same behaviors … getting on with life, going to school, working at our jobs, buying stuff, and enjoying all the material wealth we have (or aspire to). Business as Usual and Disaster are the two dominant stories of our time, as can be confirmed by perusing any mainstream news media source. Conveniently for the status quo and vested interests, these two narratives are generally not explicitly linked, despite the fact that one leads to the other. News media often engender a passive stance, placing the reader in roles of consumer and powerless bystander within each of these stories. Given the power of mainstream media in framing issues of consequence[4], it is not surprising that in our own lives we can oscillate between living the two stories and between the psychological states of denial and concern (Macy & Johnstone, 2012, pp. 24–26).

Alternatively, we can choose a story of "The Great Turning" (Macy & Johnstone, 2012), the "Sustainability Revolution" (Edwards, 2005), "Transition Culture" (Hopkins, 2008), "The Great Transformation" (Speth, 2008), where we exist in a time of massive societal change towards a sustainable future, to which we can each contribute positively. A time in which profound solutions can, and will, be found[5]. Without embedding ourselves in this positive mind-set, a worldview of radical possibility, there is no likelihood of achieving the goal of a sustainable future at all. Only by believing in this possible world does a door open to it. This process is not necessarily a case of rationally understanding, "given all the facts," that it is probable that such massive positive change will occur, but rather entertaining the possibility that this be so, and living the story so that it *becomes* so. This is the concept of "active hope" (Macy & Johnstone, 2012) and "engaged optimism" (Heinberg in Hopkins, 2008, p. iix) and is the essence of visioning (Cuming, 1996; Hopkins, 2008, pp. 93–103). It is eloquently expressed by poet and activist Arundhati Roy, "Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing" (2003). This third story is *not* covered by mainstream news media, and it takes some initiative and sociocultural support to regularly expose ourselves to, and surround ourselves with, this alternative narrative.

Each of the three stories is "true" to some extent, so we have a "narrative choice" as to which to believe[6]. The current socioeconomic system that we are living in is functional to the extent that we (at least those of us who are reading this article!) are living in luxury, like a large Ponzi scheme (Hartmann, 1999, p. 25). There is lived experience and scientific proof of the environmental and social crises that are crashing around us, and the predictions about climate change are now terrifying (IPCC, 2014; Speth, 2008). And there is growing evidence of powerful movements for change setting in place new cultures, and social and economic systems that foster a healthier world (Hawken, 2007; Korten, 2015).

[2]I use the phrase "change our light bulbs" to symbolize simple individual actions that are easy to achieve and do not require large or difficult changes in behavior or changes to overarching educational, political, or economic systems. Another, more extreme, version of the Business as Usual story does not accept there is any need for humans to change their behavior at all (Hoggan & Littlemore, 2009). We might call this story, which casts doubt upon anything other than business as usual, "Active Denial."

[3]Macy and Johnstone refer to this as "The Great Unravelling" (2012, pp. 17–24). Hopkins calls this "Collapse" where "the inevitable outcome of peak oil and climate change will be the fracturing and disintegration, either sudden or gradual, of society as we know it" (2008, p. 40). An early version of this was "The Doomsday Syndrome" (Maddox, 1972, in Woodcock, 1975), where Maddox is attributed as saying that "the *real* danger … is that the Doomsdayers' negative prophesies will become self-fulfilling—that their dismal forecasts will rob us of the will and the technical means we will need to manage our affairs effectively in the future" (p. 425).

[4]Mainstream media content plays a powerful role in public discourse because of its prevalence, relatively high level of organization, and appeals to objectivity and authority (Lockie, 2006, p. 314).

[5]Speth refers to this perspective as "solutionist" (2008, p. 42).

[6]Whilst this appears to be a postmodern perspective, the term "narrative choice" should not suggest that everything is socially constructed and so one worldview or story is as valid as any other. The perspective taken here is that of "ecological postmodernism" (Spretnak, 1991), which acknowledges that each choice of narrative is not morally equivalent because of its social and environmental consequences.

On the other hand, each of these metanarratives, as we listen to and absorb it and make it our own, encourages us to think, feel, and behave in quite different ways. As I have argued, each one indeed *creates* its own world in physical reality. Business as Usual and Disaster lead to the continuation of our destructive patterns of consumerism at any cost, whilst The Great Turning provides the space in which to build a new reality towards visionary sustainability. Neither are they psychologically equivalent, with Business as Usual entailing some level of denial about the extent and the likely consequences of our current lifestyles and the economic systems in which they are embedded. This can be accompanied by a sense of meaninglessness and "anomie." The Disaster narrative is psychologically challenging and likely to elicit such feelings of anxiety, guilt, sorrow, anger, disorientation, and overwhelm that it tips us back into the Business as Usual narrative. Both of these stories can drive us to "distraction," ameliorating our uncomfortable states of mind with entertainment, mind-altering substances, and shopping for more stuff. What are the tools that enable us to *choose* to live through the third narrative, the story of The Great Turning, and inhabit a psychological reality of active hope and engaged optimism? Certainly, there is power in providing alternative narratives through therapy, cultural products, and education. From a Jungian perspective, "We need new, useful and meaningful myths to live by" (Marshall, 2009, p. xxii). As ordinary citizens, we can co-create lived experiences of social change towards sustainability and share them with our communities[7] … promoting success stories, stories of our "new world" … thereby actively constructing The Great Turning narrative and embedding our own (extra)ordinary lives within it.

Sitting there on that wild beach, I was struck by a new thought. "What if … we reframed climate change in this way?" Recent research indicates that direct encounters with climate change[8] heighten people's perception of the risks (Akerlof et al., 2013) and "foster a contextualized and more personally meaningful realisation of what climate change portends, implies, and ultimately means, locally and globally" (Reser et al., 2014, p. 521). What happens if sensory experiences of extreme weather events are combined with, or filtered through, the three metanarratives? Embedded within the Business as Usual story, Nature, the thrashing storm and rabid ocean are things that just happen to us, that bear no relation to our human behaviors. Extreme weather events and changing weather patterns are "natural disasters" that we have no influence on[9]. Inhabiting the Disaster story, this roaring ocean and the storm that brought it are frightening evidence of climate instability, the systems that support life on this planet unraveling around us. Powerful and raw, these changes seem unstoppable and out of our control as we reach toward/beyond the "tipping point." The raw power of nature is interacting with what we humans have done to the climate system by our profligate use of fossil fuels, our consumptive lifestyles, our desire for an "easy life."

Of course, living within either of these stories we, collectively, have immense fear of climate change. We are understandably traumatized by our direct encounters with it—reporting grief, concern and worry, fear and panic, shock and horror, pessimism and hopelessness (Reser, Bradley, Glendon, Ellul & Callaghan, 2012, pp. 78–85). We are distressed by the uncertainty that climate change brings … how *will* it affect us in our lifetimes, our children's lifetimes, and onward into the future? What *will* happen to the planet as we know it, with all its wondrous species and places? Even the best of climate scientists cannot tell us exactly, but future prospects look pretty bleak (IPCC, 2014). These are real concerns, to be taken seriously, pondered, taken in, and emotionally processed for psychological health and translation into effective action. It appears to me that the direct experiences of climate change explored in recent research are moving people from one frightening story to the other: from Business as Usual to Disaster. In the words of Naomi Klein,

> Because, underneath all of this is the real truth we have been avoiding: climate change isn't an "issue" to add to the list of things to worry about, next to health care and taxes. It is a civilizational wake-up call. A powerful message—spoken in the language of fires, floods, droughts, and extinctions—telling us that we need an entirely new economic model and a new way of sharing this planet. Telling us that we need to evolve. (2014, p. 25)

[7]Firstly, there is growing evidence that people trust friends and family, more so than most journalists or politicians, as sources of information about the environment and climate change (Donald, 2013); so stories told through personal conversations are more powerful than most people realize. This is consistent with the important role that "significant others" are known to play in the social construction of reality. Secondly, through the advent of the internet and social media, there has never been a time in human history whereby personal stories could be shared with as many other people.

[8]My paper defines the climate as the "sum of all weathers over a certain period, for a region or for the planet as a whole" (Flannery, 2008, p. 20). Reser and colleagues define direct encounters or personal experience of climate change as "perceived direct experience of environmental changes or events deemed to be manifestations of climate change" (2014, p. 521). I use the term "extreme weather events" to describe the full spectrum of changes to the climate, including cyclones/hurricanes, floods, droughts, and bushfires that are more typically classified as "natural disasters" due to their intensity.

[9]At most, within the Business as Usual narrative, although humans may not have significantly contributed to climate change, we might be able to manage its symptoms.

The intensity of such insight and accompanying emotions, however, can be paralyzing and misdiagnosed as personal pathology (Buzzell & Chalquist, 2009, p. 19; Edwards, 2008; Edwards & Buzzell, 2009). This is why it is so important to "give voice" to our direct experiences of climate change and express our "emotionally intelligent" responses in a psychologically supportive environment (Bragg, 2013). Through facilitated processes of despair and empowerment, it is possible to work through intense feelings and come to collective meaning and emerge "revitalized and ready to engage" (Seed & Rosenhek, 2012, p. 37). Recent research has shown that climate change distress is the most powerful predictor of behavioral engagement but that this is mediated by psychological adaptation (Reser, Bradley & Ellul, 2012). At the same time as escalating numbers of people are reporting direct experiences of climate change and its associated distress (Reser et al., 2014), human-induced climate change is being renamed by activists as "climate disruption," "climate chaos," and "the climate emergency"[10] in order to bring attention to the severity of the crisis and in an attempt to motivate immediate action in response to it (e.g., www.climatecodered.org). Could this reframing, however, without adequate psychological support, merely exacerbate distress and drive people's psychological responses back towards denial? It is in this context that I offer my "aha moment" from the beach.

What if … for a moment … instead of being a "Threat" to us and our world, we consider climate change as an "Ally"[11] of The Great Turning? Without falling into the trap of minimizing the severity of the issues we are facing[12], might it give us enough "breathing space" from the fear and disempowerment to generate new ideas and take effective action? Feeling that the Earth or Nature is "on our side" might provide motivation and support as we work for positive change. As Vandana Shiva is quoted as saying, "If you are doing the right thing for the Earth, she is giving you great company," perhaps even in her wrathful form. This simple thought could be a useful tool for ecopsychologists and therapists, workshop facilitators, teachers, and social change agents/activists, and I believe is worthy of exploration.

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It is easy to feel inspired and healed by Nature in its calm and idyllic forms (e.g., White, 2009), but what about Nature destroyed[13] or "in chaos"? Can we source psychological support from the very systems themselves that appear to be out of control, a world where "darkness, chaos and turbulence can easily be met with" (Marshall, 2009, p. xviii)? According to Gaian science (e.g., Flannery, 2008), the Earth as a self-regulating system generates climatic phenomena and weather events that redistribute energy around the ocean/atmosphere system to maintain its equilibrium—in accordance with thermodynamics. As the Earth warms, storms are getting stronger (NASA, 2015). The additional heat-energy in our global system generated by excess greenhouse gases is being moved around, across the surface of the planet, through layers of the ocean and layers of the atmosphere—a process of dissipation that helps to keep temperatures within the realm suitable for life as we know it.[14] Redistribution of this growing heat-energy is linked with increased extreme weather events—cyclones/hurricanes and their associated storm surges, tornadoes and freak thunderstorms, as well changes in ocean currents that drive continent-scale cycles of flooding and drought … all potentially experienced by humans as "natural disasters." From a Gaian science perspective, it is possible to see the elements—the wild forces of nature—as doing their best to protect the Earth, protect current ecological systems (and thereby even we humans), by sustaining the conditions under which we are currently surviving.

According to this new story of "Climate Change as Ally," perhaps these elemental forces can also be perceived as doing their best to disrupt our Business as Usual. On a physical level, there is no escaping that extreme weather events are disrupting our "normal" existence in

[10]An earlier form of this change in terminology is the gradual transition from the term "global warming," with its benign or even positive connotations, to "climate change."

[11]Drawing upon the notion of an "ally" from traditional indigenous cultures, some deep ecology experiential processes including the Council of All Beings (Seed et al., 1988) often find, use, and even embody an aspect of nature as a source of inspiration and support for taking environmental action.

[12]Spratt's analysis of the dangers of "bright-siding" climate change advocacy is insightful in this regard (2012). In contrast, Universe Spirit (2015) takes a radical approach similar to "Climate Change as Ally" by focusing on the "surprise benefits" of global warming.

[13]Johnson (2014) shares an interesting process for engaging with wounded natural places as they are, without attempting to restore or fix them, thereby finding personal healing.

[14]For the purposes of my argument, it is only necessary to focus on these basic geophysical processes, without the complex interaction of ecological systems or the philosophically provocative concept of the living Earth having "consciousness" or "agency." Taking this Gaian science perspective does *not* suggest that we need not worry about climate change, that the Earth will take care of itself (and us!). The Earth's self-regulatory processes are severely stressed by the extent of human impact and are therefore unlikely to adequately ameliorate climate change. Other symptoms of climate change, such as melting glaciers, permafrost and ice caps, are likely to exacerbate climate change towards an irreversible tipping point (Flannery, 2008).

the so-called "developed" world. Floods are cutting highways, preventing trucks carrying our food from one state to another; fires and droughts are killing monoculture crops and livestock on a massive scale; cyclones are destroying power lines and other centralized infrastructure; storm surges are washing away affluent beachside suburbs. Even during our storm in January, we had no electricity, no phone, no Internet. Many shops and businesses were closed. Food in the refrigerator was spoiled. Life as normal effectively stopped or at least "limped along" for about a week until services were restored. In essence, the physical infrastructure of our centralized, "big business" economy and fossil-fuel-reliant lifestyles is disrupted by the extreme weather events associated with climate change. Billions of dollars are often spent rebuilding after just one event. If we pause for a moment to both rationally consider this fact and expand our narrative possibilities to imagine climate change guiding us towards sustainability, perhaps we might organize ourselves better as individuals and communities and put pressure on governments to rebuild with infrastructure that will adapt to and ameliorate climate change. Might we also feel cognitively and emotionally supported by the complex systems of life on the Earth as we take deliberate steps towards more resilient, localized communities and economies?

Perhaps this narrative of Climate Change as Ally will help us hold a mirror to our existing worldview and way of life in the developed world. Like a wrathful deity[15] cutting through our ignorance with a sword of clarity, extreme weather events and changing weather patterns might draw attention to what is most important to us. Not only is immense human (and nonhuman) suffering caused by climate change, there is social inequity in how its effects are distributed across the world[16], and with contemporary technology we are able to vicariously experience these disastrous impacts wherever we are. On a psychological level, we are receiving immediate feedback as to the unintentionally cruel impacts of our current lifestyles. Is it also possible that personal disasters caused by climate change in developed countries, when people lose all their treasured belongings through cyclone, fire, or flood, can bring attention back to what is really important in life—core values of life itself, health, family, friends, community support? Research into the psychological impacts of natural disasters and other traumatic events shows that this might temporarily be so, particularly given effective psychosocial support including promoting "positive action" and "helpful thinking" (Australian Centre for Posttraumatic Mental Health, 2015). With appropriate *ecopsychological* support, there may be a "teachable moment" after these extreme events in which such reevaluation can be supported and utilized for behavior change. In this way, the distress and fear we feel in encountering climate change, even in its lesser or vicarious forms, might function as an effective "wake up call" that climate change is happening, is human-induced … and that we care about ourselves, our families, the world, enough to make significant changes to our lifestyles.

As I sat on the dune, I felt empowered, at one with the forces of nature in their wild unmanageable form. I remembered an epiphany I had as a teenager, standing on a cliff above the sea on a sunny day, recognizing for the first time the vast rhythmic power of the ocean itself, its waves and currents, and realizing that humans could never destroy this. Joseph Reser and colleagues describe my experience well,

> In the context of dramatic environmental changes and extreme weather incidents and events, there is an elemental quality to the personal witnessing of such manifestations of natural forces, unimpeded by human technology or artifice. (2014, p. 531)

As nature writer Mark Tredinnick challengingly invites us, quoting Okakura Kakuzo's Zen classic from a century ago,

> We stagger in an attempt to keep our moral equilibrium and see forerunners of the tempest in every cloud that floats upon the horizon. Yet there is joy and beauty in the roll of the billows as they sweep outward toward eternity. Why not enter into their spirit, or, like Liethse, ride upon the hurricane itself? (2009, p. 86).

On that storm ravaged beach, I felt like "we are on the same side." I experienced an alliance with climate change, enabling me to connect even more deeply with the power of nature…

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What if … we invite the raw power of climate change, the elemental forces, to inspire and activate within us our own wild nature?[17] Rather than hiding away in fear from the "threat" of the

[15]Many spiritual traditions use this metaphor, such as Hinduism (Kali's Sword of Knowledge), Buddhism (Manjushri's Sword of Discrimination), and Christianity, Judaism, and Islam (Archangel Michael). The characterization of these forms are wrathful, and sometimes gruesome, but ultimately compassionate (i.e., doing good).

[16]Whilst the causes of climate change are generated mostly by the more developed nations closer to the poles, the majority of the effects are experienced in equatorial regions, areas of both higher population density and material poverty.

[17]This experience and process is, upon reflection, inspired by the Truth Mandala (Macy & Young Brown, 1998, pp. 101–104), Buddhist meditations on the four elements (Nisker, 1998), and indigenous four-direction rituals (Pikler, 1993).

changes in weather patterns—turning up our air-conditioners to avoid the heat, dismissing the statistical weather records as "natural variation" or at least not "human-induced"—we could embrace our place in this time, our (human) place in this (natural) world, and celebrate and foster our connection with nature.

We could welcome the *element of water*, with its incessant downpours and floods, its tundra melts and glacier retreats, to remind us of our emotions of sadness and grief about what is being lost from this world. Our tears can remind us of our love and caring for this beautiful planet and all the beings that inhabit it.

We could invite the *element of fire*, with its ever-increasing temperatures and massive wildfires, to remind us of our increasing motivation to make a difference, and in fact, our anger and rage at what is happening to our world and the injustices being perpetrated towards the voiceless and the oppressed. This anger can remind us of our passion for justice and the immense power available to us when we know a "wrong" must be righted.

We could ask the *element of earth*, with its landslides and erosion as the earth beneath our feet crumbles or is washed away, to remind us of our fear of change, of the rug of "normality" being pulled from beneath our feet. This fear can remind us of the courage that we have to face the future, to step bravely into the future and create a new world; for without fear, there is no courage.

We could even welcome the *element of air*, with its cyclones, tornadoes, and wild winds that blow everything we know and hold dear away so that we are left with nothing, to remind us of our despair and our "not knowing what to do." This sense of hopelessness can remind us of our "emptiness," of our spirituality, of the "space" we need in order to come up with new ideas and ways of being that will care for our world.

If we allow ourselves to live our encounters with climate change through *this* story, how might our thoughts, feelings, and lifestyles be changed? Might we find a new source of strength to adapt to, respond to, and reduce its effects? Perhaps we may even feel once more embedded and at home in nature (that we humans do, in fact, belong) even when such dramatic change is taking place…

Amidst the tempest we may still get a glimpse of Vandana Shiva's view, "If you are doing the right thing for the Earth, she is giving you great company."

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