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Getting Our Bearings



*Pause in the present.
Then, pivot to the possible.*

Earth's atmosphere is, among other things, a paradox. The invisible quilt of gases around our planet swaddles life, historically holding just the right amount of heat to nurture *Homo sapiens* and so much else on this teeming, humming sphere. O, praise to you, greenhouse effect.

But the balance is off due to pollution from industry—the equivalent of adding to the skies ply upon ply, fluff upon fluff. Now, that quilt, our vital buffering firmament, has grown thick with all those additional molecules of

heat-catching, heat-keeping gas. In other words, the atmosphere is how we find ourselves alive at all, and also in this hot mess called climate change.

Given the scale and urgency we face, it makes some sense that we look to “big” levers for change—things able to make a dent in the roughly 50 gigatons of greenhouse pollution emitted globally every year. Exponential expansion of clean energy. Sweeping regulatory packages. Market-shifting movement of capital. To be sure, we need them, and fast.

However, in our yearning for technical fixes, miracle policies, and mass interventions, we sometimes overlook the most critical infrastructure of transformation: *people*. We are the living, breathing fiber of planetary healing, making all the rest possible.

Maybe it’s no surprise that people, as a force for positive change, are consigned to an afterthought, time after time. As science identified the phenomenon of climate change and came to understand its contours, it also diagnosed the problem as *anthropogenic*. That is, “made by humans.” The very term for the topic at hand puts an emphasis on the ills we create. (I can’t help but hear echoes of Judith Viorst’s classic tale of Alexander and his wretched day: *Terrible, horrible, no good, very bad humans*.)

Dominant cultural biases around how to effect change only make matters worse. Hard science is matter-of-fact. Humans? *Yeesh, they’re messy*. Far better to stick with engineering and economics over ethics and emotions—to bank on mechanical, linear approaches. So focus goes to dollars invested, technologies deployed, and tons of carbon dioxide reduced. Those are “necessary.” Human-focused efforts are relegated to the realm of boosterism and bake sales—harmless really, but merely “nice to have.”

We stick to this peopleless path at great risk. Because if the problem of climate change originates in human activity, then planetary healing must as well. We must draw a different association between our species and Earth’s conditions. The cultivation and continuation of widespread climate engagement is *itself* a vital solution—or, if you like, a crucial foundation to every solution,

from telling captivating climate stories to installing rooftop solar systems. We will only move away from the brink if we center people in our grand U-turn.

➤ Have you ever felt shame around being human? Have you felt awe for people as a positive force?



So, we might ask: What would it mean to take seriously the conviction that each one of us can be a *node of possibility* for climate healing? And to tend that possibility in ourselves and one another? In other words, how do we realize the leaderful climate community we so need?

We have little research about what sparks and sustains climate engagement over time. Studies look at why people participate in a particular march. Biographies trace a single leader’s path. I did my own doctoral research on what was then a burgeoning community of climate leaders within American evangelical Christianity.* But much remains a relative mystery. We know far more about the global climate system than the global climate movement and all those who comprise it.

At the helm of The All We Can Save Project—a nonprofit dedicated to nurturing climate leadership—I knew we would need some kind of framework to guide our work. If living buildings begin with renderings and blueprints, and ecological restoration jumps off from sketches and schematics, the *human* infrastructure of transformation deserves something similar. We need a model that centers people as essential rather than bypassing them. We need a model that speaks to the nodes.

*In 2012, I published this body of work as a book, *Between God & Green*. I wish, for the sake of American climate politics and our planet, that the subtitle had sustained: *How Evangelicals Are Cultivating a Middle Ground on Climate Change*. It became clear that religion could only carry people so far and was often cut off at the pass by political ideology—though some determined creation care efforts still continue within the evangelical community.

So, I dusted off my social science hat, drew on what research we do have, and supplemented it with many years of observation and my own lived experience. I synthesized a set of core dynamics that support and enable us to take part in climate healing over time. We call our novel framework the 8 Dynamics of Climate Engagement.*



8 Dynamics of Climate Engagement

* You can engage with an interactive version of the 8 Dynamics at climatewayfinding.earth.

As you see in the heart of the framework, the aim is clear: *deep, sustained, courageous climate engagement*. The links connecting the eight circles suggest that the strength of one dynamic buttresses others, and all are needed in an ongoing flow.

The statements are each framed from the perspective of an individual—I *have*, I *feel*, I *find*—to support self-reflection. It makes the framework personal. That “I” framing also honors that *systems change*—addressing the webby roots of a problem, not just tinkering with its symptoms—stems from what is small and close at hand.* But the real power comes when these dynamics hold true for many people: “I” upon “I” upon “I” as a multitude, all participating in the transformation in motion.

Each of the eight statements is succinct but carries layers of meaning.

1. I hold deep motivations to foster a just, life-giving future.

This is about purpose—the *why* or *whys* that fuel us, stoking the proverbial fire in the hearth of the belly. It is also about imagination—growing our capacity to look beyond the fissures and troubles of the present, which can sometimes be so all-consuming, and to catch sight of the future we *do* want, one that is genuinely life-giving for everyone, including the more-than-human world. Our motivations may reflect our values or guiding principles, and they offer us a wellspring for participation.

2. I feel connected to Earth and kindred community.

This honors the truth of our fundamental interconnection and interdependence. We *are* connected to Earth, to each other, though we may not always feel that way. Actively tending the felt nature of that connection—the vibrant threads between us—is vitally important. On so many levels, we need one another to

*The Systems Change Lab defines *systems change* as “the reconfiguration of a system, including its component parts and the interactions between these parts, such that it leads to the formation of a new system that behaves in a qualitatively different way.” Think of building a new subway line instead of another lane on the gridlocked highway. Think of creating employee-owned companies, not just mandates to pay minimum wage.

take part in planetary healing, from cheering each other up to cheering each other on. And what is climate transformation ultimately about, if not returning to reciprocal relationship with the living Earth? We aim to move into alignment with life.

3. I can see myself in the unfolding, collective climate story.

Human beings are a storytelling species. Though it has not been central to much popular art, film, and literature—*yet*—the collective climate story is a tale being told in real time, in our time. Do we see ourselves in it? Do we trust that we belong in the narrative—not as bystanders, victims, or villains, but as actors in the most fundamental sense? Do we dare to take up the pen or paint a fresh scene or sing new verses? Ultimately, we are the shapers of this story, right from within its pages.

4. I'm able to work with climate emotions and access healing and rest.

The reality of the climate crisis is heavy, and climate engagement can be too. Around the world, there is swelling grief, anxiety, fear, anger, numbness, shame, exhaustion. Burnout within the climate community is all too rampant. In our rhythms as individuals and in groups, we need and deserve time to go dark and dormant, to pause and rest. Having the space, skills, and support to be with our difficult emotions is essential—to let the heart metabolize what is hard and to renew the wonder, reverence, and love that often live at the root of our participation.

5. I understand climate truth, just solutions, and leverage points for change.

This is about our ability to wrap our heads around the problem and grasp the ways we might respond to the urgency stamped in our atmosphere. When it comes to climate change, what are we dealing with, and how did it come to be? What solutions are in hand? How can we enact them in ways that are fast, fruitful, and fair, especially to those most climate-burdened? This is also about continuing to learn over time. We can keep following the questions that pull at our curiosity, honoring that knowledge is powerful and ever partial.

6. I have clarity around my contribution while embracing its evolution.

There is so much we each can do, and none of us can do it all. Not even close. Some of the work is more yours than mine, some more mine than theirs. As a small part of a vast collective, can we each navigate to our best ways to help? Can we hold clarity around what those roles are, while also allowing that they will necessarily evolve as we do—and as the world around us does? This is about moving through cloudy complexity into more lucid direction, again and again.

7. I find footholds for meaningful action and collaboration.

Here, theory becomes practice and intentions become deeds. To begin an ascent, a climber on a rockface reaches for a first handhold, a first foothold. Each hold allows for the next, though not always, or even often, in a straight line. Can we find ways to take meaningful climate action in our daily lives, at work or school, and in the public square? Can we find opportunities to collaborate, drawing on the might of many hands? Not every move will mean progress. It is a core capacity to stop, suss things out, and then continue the climb.

8. I have a sense of possibility, authentic power, and joy in the work.

This is really about *life force*—the most potent, persistent dynamic on this planet. Life force is our multi-billion-year inheritance, passed down to us despite all odds. It could also be our legacy. There is profound aliveness in possibility. Can we dance with the odds, even when they seem hopelessly long? Can we tap into our authentic power—not external power *over*, but internal power, rising up from within? And can we find joy along the way—delight in the very thing we aim to sustain, life itself?

➤ As you read through the 8 Dynamics, what are you drawn to? What sparks curiosity or excitement?

In the summer and fall of 2009, I was toiling to turn interview transcripts and focus-group findings into a dissertation. If you had asked me then to consider the truth of this framework for myself, I think I would have found the exercise fairly overwhelming. I was struggling with most of these dynamics. The lonely road of a doctorate had depleted me. Academia didn't feel like the right place, but where did? Climate policy was stuck in the mire. A global recession was making it hard to find a job. *Possibility, power, and joy? Are you kidding me?*

And yet, when I reflect back on that time and other personal crossroads—moments of feeling stuck, skeptical, troubled, or torn—I can see how helpful the 8 Dynamics would have been. I can imagine this framework validating my struggles and helping me identify what had become a hindrance or a hurdle to my climate engagement. It would have given me something for sensemaking, for getting my bearings, maybe even for figuring out a good step forward. More importantly, I would have known where I needed help—from my friends or mentors, my school or workplace—to transform those barriers and tend my small node of possibility.

Scanning the decades of my own experience as a climate feeler, thinker, and doer, I witness the ways these dynamics have flourished, waned, and revived. I can spot real low points, as in 2009, and I am certainly not always feeling strong on all of them. Some are easier or more intrinsic for me; others take real effort. But I can also spot moments of uplift, and, over time, the trends incline upward. The fluctuation will certainly continue—at times due to things that are out of my own control—but, today, the 8 Dynamics largely ring a bell of truth for me.

If a framework can have desires, this one hopes to be used. It's a philosophy that begs to be put into play. Every one of the 8 Dynamics benefits from space and support for reflection, connection, sharing, and renewal. Of course, a single pass through the framework isn't enough. These dynamics need ongoing care and conscious investment.

To that end, this is a tool to return to. It can shed light on our starting point when entering into something new, such as the journey of *Climate Wayfinding*. It can also make visible the shifts in our inner terrain if we come back to it at

key junctures, such as starting a new year. We can use it alone or with others—within a class or team, for example. It can be a touchstone.

Ultimately, these dynamics nurture us in the wholeness of ourselves, as we confront the wholesale challenge of a planet under pressure. They open up pathways for our rich participation in climate healing, and from there, the overarching potentiality of a life-giving future.

➤ When you're feeling bewildered or adrift, what helps you to get your bearings and return to possibility?



Possible—that mainspring word in *Climate Wayfinding*—has a somewhat unusual etymology. (As you may have gathered by now, I am quite keen on the often-illuminating origins of words.) It comes from the Latin *posse*, meaning “be able.” But the suffix, *ibilis*, then seems to double down. Meaning “able, or worthy, to be,” it points to something one can act on.

Put the two together, and the word takes on a kind of cyclical rolling forward, almost train-like: *able . . . to be . . . able . . . to be . . . able . . . to be . . .* It's as if possibility wants to become reality, if we are willing to take part in the momentum. It's a summons to step into the locomotion.

But *possible* packs yet more punch. The Latin root also gives us our modern word *posse*, as in “a group of people.” So I hear in it not just a summons but an axiom, too: *We* are where possibility lives.

Yes, we are. The 8 Dynamics framework uplifts that *we*—strengthening each filament, each confluence, each offshoot, and the whole of our quickening collective. With these dynamics at work, we can cultivate our innate human capacity to face the climate challenge and pledge ourselves to what is, despite it all, still possible.

So let us pause to offer praise, too, for all the people in the greenhouse. All of us looking up at the atmosphere with both awe and angst. All of us trying to put things to right.

I often draw back from the question incessantly posed to climate leaders: *What gives you hope?* What gives me a sense of *possibility* feels so much more tangible, truthful, real. But call it what you will, the source, for me, is clear: scores of people stepping into their own generative capacities and trying to make *anthropogenic* not terrible-horrible but a very good thing, in the end.



♥ The Big Picture

Ellen Bass

I try to look at the big picture.
The sun, ardent tongue
licking us like a mother besotted

with her new cub, will wear itself out.
Everything is transitory.
Think of the meteor

that annihilated the dinosaurs.
And before that, the volcanoes
of the Permian period—all those burnt ferns

and reptiles, sharks and bony fish—
that was extinction on a scale
that makes our losses look like a bad day at the slots.

And perhaps we're slated to ascend
to some kind of intelligence
that doesn't need bodies, or clean water, or even air.

But I can't shake my longing
for the last six hundred
Iberian lynx with their tufted ears,

Brazilian guitarfish, the 4
percent of them still cruising
the seafloor, eyes staring straight up.

And all the newborn marsupials—
red kangaroos, joeys the size of honeybees—
steelhead trout, river dolphins,

so many species of frogs
breathing through their
damp permeable membranes.

Today on the bus, a woman
in a sweater the exact shade of cardinals,
and her cardinal-colored bra strap, exposed

on her pale shoulder, makes me ache
for those bright flashes in the snow.
And polar bears, the cream and amber

of their fur, the long, hollow
hairs through which sun slips,
swallowed into their dark skin. When I get home,

my son has a headache and, though he's
almost grown, asks me to sing him a song.
We lie together on the lumpy couch

and I warble out the old show tunes, "Night and Day" . . .
"They Can't Take That Away from Me" . . . A cheap
silver chain shimmers across his throat

rising and falling with his pulse. There never was
anything else. Only these excruciatingly
insignificant creatures we love.



✧ Lighting the Way

with Dr. Kate Marvel (Brooklyn, New York)

This time calls for new cartographers—those who can map the physical transformations of our planet and decipher what they mean for human beings. Dr. Kate Marvel is uniquely adept at both. As a climate scientist, she models the potential pathways ahead for her “favorite planet,” Earth, and all of us Earthlings. She helps us understand what it would mean to inhabit the realities rendered and, more importantly, grasp our chance to chart toward the better worlds, still reachable.

Most days, you can find Kate immersed in the equations and code of climate models or writing her take on the collective climate story. She was born in California and grew up smack-dab in the center of Ohio—a kid who was more fascinated than most by the nature of reality. But she never once considered being an Earth scientist. In fact, the creepy scientists in the film *E.T.* had given Kate the distinct impression that the whole field was terrible.

My path took an unexpected turn in undergrad, when I took Introduction to Astronomy to fulfill a course requirement. I remember sitting there and thinking, “This is amazing! Why didn’t anyone tell me this was amazing?” I thought everything we were learning was so cool and wanted to know more, so I switched my major and then continued to study physics all the way through to a PhD.

But that was *theoretical* physics, which can tend toward the abstract, if fascinating. Think: string theory. Kate cares immensely about the material here and now. She didn’t want to run thought experiments; she wanted to understand and inform the real-time experiments playing out on our planet. She wanted to answer questions that matter, deeply, for what we might then do.

I drifted through different topics for a while. Then, I found climate science. Lots of physics, computer programming, data analysis, and all of it dealing with real-world problems—maybe the real-world problem.

November

LYNNA ODEL

If I can't save us

then let me feel you
happy and safe
under my chin.

If this will drown
or burn

then let us drink starlight
nap under trees
sing on beaches—

the morning rush to sit indoors is for
what, again?

If we are dying

then let me rip open
and bleed Love,
spill it, spend it
see how much
there is

the reward for misers is
what, again?

If this life is ending

then let me begin
a new one

What Is Emergent Strategy?

ADRIENNE MAREE BROWN

"Emergence is the way complex systems and patterns arise out of a multiplicity of relatively simple interactions"—these words from Nick Obolensky are the clearest articulation of emergence that I have come across. In the framework of emergence, the whole is a mirror of the parts. Existence is fractal—the health of the cell is the health of the species and the planet.

There are examples of emergence everywhere.

Birds don't make a plan to migrate, raising resources to fund their way, packing for scarce times, mapping out their pit stops. They feel a call in their bodies that they must go, and they follow it, responding to each other, each bringing their adaptations.

There is an art to flocking: staying separate enough not to crowd each other, aligned enough to maintain a shared direction, and cohesive enough to always move toward each other. (Responding to destiny together.) Destiny is a calling that creates a beautiful journey.

Emergence is beyond what the sum of its parts could even imagine.

A group of caterpillars or nymphs might not see flight in their future, but it's inevitable.

It's destiny.

Oak trees don't set an intention to listen to each other better or agree to hold tight to each other when the next storm comes. Under the earth, always, they reach for each other, they grow such that their roots are intertwined and create a system of strength that is as resilient on a sunny day as it is in a hurricane.

Dandelions don't know whether they are a weed or a brilliance. But each seed can create a field of dandelions. We are invited to be that prolific. And to return fertility to the soil around us.

Cells may not know civilization is possible. They don't amass as many units as they can sign up to be the same. No—they grow until they split, complexify. Then they interact and intersect and discover their purpose—I am a lung cell! I am a tongue cell!—and they serve it.

And they die. And what emerges from these cycles are complex organisms, systems, movements, societies.

Nothing is wasted, or a failure. Emergence is a system that makes use of everything in the interactive process. It's all data.

Octavia Butler said, "Civilization is to groups what intelligence is to individuals. It is a means of combining the intelligence of many to achieve ongoing group adaptation."

She also said, "All that you touch you change / all that you change, changes you." We are constantly impacting and changing our civilization—each other, ourselves, intimates, strangers. And we are working to transform a world that is, by its very nature, in a constant state of change.

Janine Benyus, a student of biomimicry, says: Nature/Life would always "create conditions conducive to life." She tells of a radical fringe of scientists who are realizing that natural selection isn't individual but mutual—that species survive only if they learn to be in community.

How can we, future ancestors, align ourselves with the most resilient practices of emergence as a species?

Many of us have been socialized to understand that constant growth, violent competition, and critical mass are the ways to create change. But emergence shows us that adaptation and evolution depend more upon critical, deep, and authentic connections, a thread that can be tugged for support and resilience. The quality of connection between the nodes in the patterns.

Dare I say love.

And we know how to connect—we long for it.

On Fire

NAOMI KLEIN

It has been over three decades since governments and scientists started officially meeting to discuss the need to lower greenhouse gas emissions to avoid the dangers of climate breakdown. In the intervening years, we have heard countless appeals for action that involve "the children," "the grandchildren," and "generations to come." We were told that we owed it to them to move swiftly and embrace change. We were warned that we were failing in our most sacred duty to protect them. It was predicted that they would judge us harshly if we failed to act on their behalf.

Well, none of those emotional pleas proved at all persuasive, at least not to the politicians and their corporate underwriters who could have taken bold action to stop the climate disruption we are all living through today. Instead, since those government meetings began in 1988, global carbon dioxide emissions have risen by well over 40 percent, and they continue to rise. The planet has warmed by about 1 degree Celsius since we began burning coal on an industrial scale, and average temperatures are on track to rise by as much as four times that amount before the century is up; the last time there was this much carbon dioxide in the atmosphere, humans didn't exist. *

As for those children and grandchildren and generations to come who were invoked so promiscuously? They are no longer mere rhetorical devices. They are now speaking (and screaming, and striking) for themselves. And they are speaking up for one another as part of an emerging international movement of children and a global web of creation that includes all those amazing animals and natural wonders that they fell in love with so effortlessly, only to discover that it was all slipping away.

And yes, as foretold, these children are ready to deliver their moral verdict on the people and institutions who knew all about the dangerous, depleted world they would inherit and yet chose not to act.

They know what they think of Donald Trump in the United States and Jair Bolsonaro in Brazil and Scott Morrison in Australia and all