

## In a Nutshell

### *Some Personal and Highly Biased Ideas for Digging Our Way Out of This Hole*

CLIMATE CHANGE IS A SCIENTIFIC fact. Scientists have become so bruised by their political battles that they have come to use much weaker language, declaring that climate change is “very likely” or “unequivocal.” Let’s just call it a fact, because that is what it is. There is plenty of uncertainty around how the climate is responding to these enormous changes, but being uncertain is not the same as being unsure.

Scientists are remarkably sure that climate change is bringing major impacts—they simply cannot with absolute certainty disentangle the web of cause and effect. The word *certain* is one of those many false friends of words that scientists use in a particular and unusual meaning. In regard to climate change, we are frequently divided by our common language.

Our psychological obstacles are also a scientific fact. The large body of rigorous research-based evidence suggests that climate change struggles to overcome numerous biases against threats that appear to be distant in time and place. We need to make these explicit and recognize that many may be subconscious.

To create proximity we need to **EMPHASIZE THAT CLIMATE CHANGE IS HAPPENING HERE AND NOW**. In particular, we should **BE WARY OF CREATING DISTANCE** by framing climate change as a

future threat for people far away and, especially, as a threat for non-humans, however cute they might be.

Our sense of loss looks backward rather than forward, and research suggests that people are more motivated to restore lost environmental quality than improve current environmental quality. There is therefore a potential to express climate change as an opportunity to **RESTORE PAST LOSS**, whether it is social (lost community, values, purpose) or environmental (lost ecosystems, species, or beauty). The rapidly growing movement for the rewilding of degraded landscapes is an interesting response to the uncertainties of future loss.

We are very well adapted to respond to immediate threats but slow to accommodate moving change. Climate change is a process, not an event, so it requires that we **RECOGNIZE MOMENTS OF PROXIMITY** that can demand attention. These may be moments of political decision making, collective action, or generated conflict. In my view, the Keystone XL pipeline is a legitimate attempt to create a historic moment. Those critics who argue that the pipeline will only ever be a small part of overall U.S. emissions are missing the point. Their complaint is like saying that the locations of seats at the lunch counter of the Greensboro Woolworth's or on the Montgomery buses were trifling examples of racial segregation. Sometimes the act of **CREATING THE SYMBOLIC MOMENT** is far more important than its overall relevance.

Extreme weather events create a moment of proximity and heightened awareness, but also of the increased in-group loyalty and anxiety that can readily exclude consideration of climate change. Even when confronted with direct evidence of climate extremes, the main influence on people's attitudes will still be the views of the people they know and trust.

The interference of outsiders will very likely be counterproductive in such situations, and the best option for building conviction lies with providing the information for trusted local communicators to **OPEN UP A CONVERSATION ABOUT LONG-TERM PREPAREDNESS**. Preparedness and adaptation are routes for people to accept that climate change is real and already under way—and, as I have shown, it is possible to build a discussion around these topics even when it is politically taboo to talk about the wider issues.

However, these approaches will always be specific to each context. Whatever the findings of psychology experiments with their **WEIRD** experimental subjects, we need to remember that not everyone wants to protect

the status quo, especially if they are already struggling against economic and social injustice. So we need a **NARRATIVE OF POSITIVE CHANGE**, in which our adaptation to climate change does not just protect what is already here but also creates a more just and equitable world.

Climate change is a narrative, shaped through social negotiations and transmitted between peers. People form their response to the narratives, not the science, and so it always needs to **FOLLOW NARRATIVE RULES, WITH RECOGNIZEABLE ACTORS, MOTIVES, CAUSES, AND EFFECTS**. People will be inclined to follow the most compelling narrative, so be careful: **DON'T LET THE NARRATIVE TAKE OVER** the way we think or talk about it.

We interpret climate change through frames, which focus our attention but limit our understanding—they allow us to exclude or ignore meanings that lie outside the frame. Most of the factors that enable us to ignore climate change derive from attempts to limit its meaning; that it is an *environmental* issue, a *threat* or an *opportunity* (but not both), a *wellhead problem* or a *tailpipe problem* (but not both). So, **RESIST SIMPLE FRAMINGS** and **BE OPEN TO NEW MEANINGS**.

Because climate change is a wicked problem, it can easily become defined entirely by its own framings and the solutions we propose, and policy makers can easily become locked into the simple one-off solutions that solve tamer problems. We all need to **ENSURE THAT A WIDE RANGE OF SOLUTIONS IS CONSTANTLY UNDER REVIEW**—a process that planners call iterative risk management.

Frames define battlegrounds, and so limited frames can lead to false debates. Arguments that renewable energy brings greater energy security encourage the expansion of domestic fossil fuels. Arguments that the low-carbon economy will bring jobs become vulnerable to evidence that the high-carbon economy might bring more jobs. As the cognitive linguist George Lakoff says, **NEVER ACCEPT YOUR OPPONENT'S FRAMES**—“don't negate them, or repeat them, or structure your arguments to counter them.”

The presence of enemies with the intention to do harm engages our moral brain and energizes our outrage. However, climate change lacks clear enemies: We all contribute to this problem and all stand to suffer its impacts. This is an incomplete and unconvincing narrative, and activists on all sides seek enemies that can fill these missing roles of good against evil, David against Goliath, might against right.

We need major change, and change requires social movements. Some argue that movements need enemies, and this may well be true for generating rapid change. However, there is also a price to pay. This is an in-group, out-group game, so **BE CAREFUL THAT ENEMY NARRATIVES DO NOT FUEL DIVISION** or agitate deep-rooted and distracting animosities at a time when we need to be finding common purpose. My view is that campaign narratives could experiment more with alternative narrative traditions, for example **CREATE A HEROIC QUEST** in which the enemy may be our internal weaknesses rather than an outside group.

Overall, we need to **BUILD A NARRATIVE OF COOPERATION** that can bring people together around a common cause. This should **STRESS COOPERATION NOT UNITY**—we do not have to become the same people, and conservatives in particular require well-defined differences rather than a merger. **ACCEPT THE SPECTRUM OF APPROACHES** with radical protesters, lobbyists, policy makers, and multiple different sectors, all pushing in the same direction if not with the same detailed objectives.

In the way that we tell the climate change story, we need to **BE HONEST ABOUT THE DANGER**—but remember that this will only motivate people if they hear it from trusted communicators and can see opportunities for action and change. **ENCOURAGE POSITIVE VISIONS**, but remember that these may carry social cues that may repel others. The bright side technocratic future vision, for example, is elitist and materialistic, and alienates those who already feel disenfranchised.

When people say that climate change requires a values change, they invariably mean that other people need to change to *their* values. In fact we *all* hold the right values, and humans have an extraordinary capacity to empathize and care about the welfare of others. The problem is that we have not all engaged the right values with this issue. The challenge is how to best **ACTIVATE COOPERATIVE VALUES RATHER THAN COMPETITIVE VALUES. STRESS WHAT WE HAVE IN COMMON**: a better life for our children, health, security, thriving communities.

By contrast, attempts to motivate people through appeals to personal self-interest are unlikely to be successful. Contrary to the assumptions of conventional communications, extensive research confirms that people are poorly motivated by money. Money is important, but it is a proxy for other ends: security, caring for your family, and social identity, which could be addressed in other ways. It is far more effective to **RELATE**

**SOLUTIONS TO CLIMATE CHANGE TO THE SOURCES OF HAPPINESS**, and the connections we feel with our friends, neighbors, and colleagues.

People are best motivated when an action reinforces their identity and sense of belonging to their social group. **EMPHASIZE THAT ACTION ON CLIMATE CHANGE MAKES US PROUD TO BE WHO WE ARE**, and reinforce this with the *social cues* and *social proof* that people like ourselves are seen as concerned and taking action. Most communication around climate change and low-carbon behaviors is anti-replicating, based around loneliness, isolation, and despair. So **ENABLE COMMUNICATIONS WITH BUILT-IN INTERACTION** that can be passed between peers and create visible social norms. We need to stop regarding climate change as an isolated intellectual exercise and **CREATE COMMUNITIES OF SHARED CONVICTION** within which people can share their doubts and fears and draw on the strength of shared commitment.

Climate change is a science *and* a conviction. Following the division built into our own brains between our rational and emotional processing systems, it is entirely possible to know about climate change and yet not to fully believe in it. Conviction is the critical process by which we incorporate climate change into our moral framework and accept the need for action.

A conviction is not a blind faith: We should continue to **KEEP AN OPEN MIND**. There is an excessive level of closed-mindedness on all sides, and two-thirds of people say that they will never change their minds about climate change. Because climate change is ambiguous and multi-valent, it is open to multiple interpretations. So **BE ALERT TO YOUR OWN BIAS** and to your own innate tendency to select the information that confirms your existing views.

**REMEMBER THAT EXPERTS CAN ALSO BE BIASED** by their own specialism or worldview. Clever people indulge in clever confirmation bias. Experts are human too and are also coping with their own internal conflicts, which they may be projecting onto the way that they interpret climate change. So always **SEEK OUT A WIDE RANGE OF VIEWS**.

Listen to people who disagree with you, and recognize that they can sometimes be a source of insight and alert you to your own bias. **DEBATE IS USEFUL** so **LEARN FROM YOUR CRITICS**.

And, for the benefit of conservatives and skeptics, I would add that you, too, should listen to the other side and **RESPECT**

**ENVIRONMENTALISTS**, who have worked for three decades to keep this issue alive. If you do not like what they say, then you should become more involved in building positive solutions around your values rather than fighting a losing battle to undermine the science.

We should **BE PREPARED TO LEARN FROM RELIGIONS** and the thousands of years of experience they have in creating methods to sustain socially held belief. This does not mean that climate change is a religion, any more than a declared belief in the right to personal freedom, sound finance, or the strength of the military are religions—these are statements of commitment to personally held ideals (taken, as it happens, from Republican presidents).

Learning from religions, we can **PRESENT CLIMATE CHANGE AS A JOURNEY OF CONVICTION** which will contain periods of doubt and uncertainty as well as moments of personal revelation and sudden awareness. Encourage people to explain, in their own words, these moments and the *process* by which they came to terms with the science, recognizing that conviction is sometimes hard to maintain and needs to be reaffirmed.

We should also **CREATE MOMENTS OF COMMITMENT** and **FRAME CLIMATE CHANGE AS AN INFORMED CHOICE** between desirable and catastrophic outcomes, in which people can understand that inaction is itself a choice in favor of severe climate change.

To break through the self-interest of our cognitive biases, and fully activate our emotional brain, we need to **INVOKE THE NONNEGOTIABLE SACRED VALUES** that would enable people to make short-term sacrifices for the long-term collective good—for example, values that prohibit destroying a precious cultural asset, inflicting harm on the weak or innocent, abusing God's creation, and being cruel to our parents or children.

In the formation of conviction, trust is more important than information. Communicators, especially scientists, should learn to **EMPHASIZE THE QUALITIES THAT CREATE TRUST** (their independence, values, accountability) and especially **TELL PERSONAL STORIES**. Communicators should talk about their personal journey, especially if they have come to their conviction from a position of doubt. They should **BE EMOTIONALLY HONEST**, talking openly about their hopes, fear, and anxieties.

Moral consistency is especially important for trust. If you wish to

communicate climate change, you need to **RECOGNIZE THE ROLE OF YOUR OWN EMISSIONS**, not least because a high-emission lifestyle will inevitably corrupt your own judgment, and you should share your own struggle and success in reducing them

Campaigners and politicians love to fantasize that a huge top-down communications projects will finally knock it into people's heads. They are unlikely to work. Instead we need to **ENABLE FRESH, REAL VOICES**, and not depend on the glib slogans of advertising agencies. And this means that the people who currently communicate climate change, especially environmentalists, must be prepared to **BACK OFF AND ENCOURAGE NEW COMMUNICATORS**—not as the guests on their podium but as new speakers in their own right.

Actually, let's go a step further. Climate change does not belong to environmentalists and is not even environmental. Of course, it includes environmental concerns and impacts, but it is so much bigger than that. As soon as we label it, we restrict our understanding of it. Obviously, environmentalists can talk about it however they like in their own networks, but for wider presentation and to the media, I plead, **DROP THE ECO-STUFF**, especially polar bears, saving the planet, and any other language that stakes out climate change as the exclusive cultural domain of environmentalism.

Above all, it is critical that we **CLOSE THE PARTISAN GAP** between left and right by opening up climate change to conservative framings and ownership. This should start with **AFFIRMING WIDER VALUES**, which, it is well established experimentally, makes people far more willing to accept information that challenges their worldview. This requires communicators to reverse the normal flow that converts the science into people's values and begin by understanding and validating their values first and then come up with the ways that climate change can speak to those values.

Testing suggests that new framings of values could include respect for authority, personal responsibility, and loyalty to one's community and nation, avoiding intergenerational debt, and reducing societal dysfunction. I warn environmental liberals that the measure of success will inevitably be the emergence of some new ways of talking that you find unpleasant. Similarly, **NEVER ASSUME THAT WHAT WORKS FOR YOU WILL WORK FOR OTHERS**. Indeed, the fact that you strongly like something may well be an indication that people with other values will hate it.

We also need to **BE HONEST—THIS IS TOUGH**. Psychotherapists argue that the real challenge is that climate change generates strong feelings that can, unless recognized, lead us to disavowal and outright denial. We need to **RECOGNIZE PEOPLE'S FEELINGS OF GRIEF AND ANXIETY**, and acknowledge and provide space for contradiction, ambivalence, loss, and mourning.

The starting point could be providing the space for people to openly acknowledge their feelings and share them. We need to **MOURN WHAT IS LOST, VALUE WHAT REMAINS**. And not just the natural world; we need to **MOURN THE END OF THE FOSSIL FUELS AGE**, which, for all of its dirt and danger, was also exceptionally affluent, mobile, and exciting. The low-carbon world will have new pleasures, but no longer the sweet roar of the Ford Mustang V8.

We should all **BE GLAD TO BE A POLLYANNA**. She has become synonymous with dim-witted optimism, but in the original books by Eleanor H. Porter, the character is clearly shown to be coping with immense grief and suffering through her gratitude for what she does have—her friends, community, and the joy of being alive.

What is clear is that this is a fast-moving issue and everything will change. At present, climate change exists largely as a narrative of anticipation shaped by familiar experience and existing frames. But momentous shifts are under way in the world's climate systems and carbon cycles, which will, within a single lifetime, make climate change entirely real, salient, and unavoidable. This will be a new world in which past certainties will disappear and our inbuilt social and psychological biases will become increasingly influential on our judgment.

This is why current responses are so important. **REMEMBER THAT HOW WE RESPOND NOW WILL PROVIDE THE TEMPLATE FOR FUTURE RESPONSES**. Acceptance, compassion, cooperation, and empathy will produce very different outcomes than aggression, competition, blame, and denial. We hold both futures within ourselves and, as we choose whether and how to think about climate change, we are choosing how we will think about ourselves and the new world we are creating.