

THE END IS NIGH

NEGATIVE MESSAGES DON'T WORK

Over the past few years, I have trawled through a range of publications with such cheery titles as *The Last Generation*, *Notes from a Catastrophe*, *Collapse*, *The Revenge of GAIA*, *Hell and High Water*, *The End of Oil*, *The End of Food*, *The End of Nature*, *Ireland's Burning*, *Heat*, *The Long Emergency*, *The Last Oil Shock*, *The Party's Over*, and *Requiem for a Species*. And I am left wondering - who on earth reads these books?

A number of summers ago, a young American visitor and I headed over to a neighbouring town to attend events commemorating the Irish Famine. The first was a power point presentation on the topic of climate change and future famines. In a small upstairs room, we were served a relentless vision of starvation, drought, burning forests, melting ice-packs, disease, pestilence and whatever else our imaginations could add. And unfortunately for us, time restrictions didn't allow for any questions or chill-out time, so out we fell onto the street, reeling from the impact.....

Though tempted to go off and have a stiff drink, as planned, we joined a walking tour of the town, guided by an expert in famine history. All fine - it was easy to be detached - the famine was so long ago. Only....the last place we stopped at was the spot where Daniel O'Connell had apparently held a rally to a rapturous and enthusiastic crowd. Our guide told us that it was the eve of the famine and no one had had a clue what was ahead of them. Sound familiar? Our mood was now fully chastened, but the outing not over. We had promised we would attend the screening of *The Age Of Stupid*, which was taking place that evening in a nearby village, so, grabbing a sandwich en route, we headed off and were soon settling down in the Cinemobile, relieved to be getting some light relief (reports had been encouraging). But no, the opening scene said it all, a devastated landscape, grey tortured survivors and a raging sea. There was to be little hope after all.

WE'RE DOOMED

In a 2009 interview in *New Scientist*,¹ James Lovelock, creator of the Gaia theory said he is an "optimistic pessimist" and he thinks it is wrong to assume we'll survive 2°C of warming as there are already too many people on Earth. "At 4°C we could not survive with even one-tenth of our current population. The reason is we would not find enough food, unless we synthesised it. Because of this, the cull during this century is going to be huge - up to 90 per cent. The number of people remaining at the end of the century will probably be a billion or less. It has happened before: between the ice ages there were bottlenecks when there were only 2000 people left. It's happening again." And he doesn't think we can react fast enough, or are clever enough to handle what's coming.

¹ G. Vince; *We're Doomed but it's not all Bad*; *New Scientist*; 24 Jan 2009; p. 30/1

In *The Revenge of Gaia*, published in 2006, Lovelock,² points out that even if we stopped immediately “all further seizing of Gaia’s land and water for food and fuel production and stopped poisoning the air”, it would take Earth more than a thousand years to recover from the damage we have already done.

And in his most recent book, Lovelock³ says his pessimism is justified because of the difference between the forecasts of the IPCC and what observers find in the real world, for instance, the melting and thinning of ice floating on the Arctic Ocean has been far more rapid than the gloomiest of model forecasts. He says he has little confidence in the smooth rising curve of temperature that modellers predict for the next ninety years. And most of all he is pessimistic because business and governments both appear to be accepting uncritically a belief that climate change is easily and profitably reversible.

Interestingly, in early 2012, James Lovelock admitted to MSNBC in an interview reported around the world with somewhat mocking headlines along the lines of “Doom-monger recants”, that he had been “extrapolating too far” in reaching his conclusions and had made a “mistake” in claiming to know with such certainty what will happen to the climate.

But Lovelock is relaxed about how this reversal might be perceived. He says being allowed to change your mind and follow the evidence is one of the liberating marvels of being an independent scientist, something he has revelled in since leaving Nasa, his last full-time employer, in the late 1960s!⁴

Clive Hamilton⁵ says that almost every advance in climate science has painted a more disturbing picture of the future. *“The reluctant conclusion of the most eminent climate scientists is that the world is now on a path to a very unpleasant future and it is too late to stop it. Behind the facade of scientific detachment, the climate scientists themselves now evince a mood of barely suppressed panic. No one is willing to say publicly what the climate science is telling us: that we can no longer prevent global warming that will this century bring about a radically transformed world that is much more hostile to the survival and flourishing of life. As I will show, this is no longer an expectation of what might happen if we do not act soon; this will happen, even if the most optimistic assessment of how the world might respond to the climate disruption is validated.”*

But, when we say we “must warn people of the impending collapse”, “the impacts will be catastrophic”, and my favourite, “millions will die”, are we right? Do such negative messages really work? After all, as Nordhaus & Schellenberger point out, Martin Luther King didn’t stir people to action by proclaiming “I have a nightmare”⁶.

FEAR FACTOR

Proponents of negative messages will argue that fear is a natural emotion evoked by a perceived threat. Our evolutionary responses of fight, flight or freeze act to control either the external danger or the internal experience of fear. Without fear there would be no reaction.

And, as Martin Lindstrom shows⁷, companies are quick to prey on public panic around such issues as food contamination, “killer” viruses or even growing old. Fear is a powerful persuader, which is why the marketing world uses scare tactics to sell us everything from antidepressants to condoms, dental floss to detergents, burglar alarms to mobile phones, bottled water to anti-bacterial spray. Have you noticed how

² J. Lovelock (2006) *The Revenge of Gaia*; p. 6

³ J. Lovelock (2009) *The Vanishing Face of Gaia - A Final Warning*; p. 4/5

⁴ <http://www.guardian.co.uk/environment/2012/jun/15/james-lovelock-interview-gaia-theory>

⁵ Clive Hamilton (2010); *Requiem for a Species*; Preface

⁶ T. Nordhaus & M. Schellenberger (2005) *The End of Environmentalism*; p 31 www.thebreakthrough.org

⁷ M. Lindstrom (2012) *Brandwashed*; Chapter 2

quickly we welcomed antibacterial hand sanitizers into our lives? Containers of the soaps and hand gels can now be found in public places across the globe, thanks to the bird and swine flu epidemics.

According to Dan Gardner⁸, fear is a fantastic marketing tool which is why we can't open a newspaper or turn on the television without seeing it at work. Fear sells and it makes money. The more fear, the better the sales. Politicians talk up threats as do activists and NGOs, who know they are only as influential as their media profile is big and that the surest way to boost that profile is to tell the scary stories that "*draw reporters like vultures to corpses*".

But our responses to fear are most often immediate, gut induced and not always rational or expedient.

After the September 11 attack in New York, Americans were terrified of flying and took to the roads instead. Politicians wondered what the mass exodus of people from planes to cars would do to the airline industry, so they put together a bailout package. But no one talked about the surge in car travel. No politician mentioned that, statistically, air travel is safer than driving, so much so that the most dangerous part of a typical commercial flight is the drive to the airport.

It turned out that the shift from planes to cars in America lasted one year. Then, traffic patterns went back to normal. In 2006, Gerd Gigerenzer, a psychologist at the Max Planck Institute in Berlin, published a paper comparing the number of travel fatalities for the five years prior to the September 11 attacks and five years after. He found that fatalities on American roads soared after September 2001, and settled back to normal levels in September 2002. With this data, Gigerenzer was able to calculate that 1,595 people died in car crashes as a direct result of the switch from cars to planes - more than half the total killed in Ground Zero, and six times higher than the total number of people on board the doomed flights of September 11. Yet almost nobody noticed except the families of the dead.⁹

So, while fear is a powerful motivator, it may not always induce sensible reactions. But what is going on if, as seems to be the case with global warming, people don't react at all, despite being presented with a range of fear-inducing, gut wrenchingly negative messages? How come when they are being told that inaction spells disaster, people continue as normal?

It would appear that fearful messages only work in certain circumstances, and that they can even be counterproductive if used inappropriately.

Moser & Dilling¹⁰ say that threat information causes persistent attitude change and constructive responses only when people:

- feel personally vulnerable to the risk
- have useful and very specific information about precautionary actions
- positively appraise their own ability to carry out the action
- feel the suggested action will effectively solve the problem
- believe the cost associated with taking precautionary action is low or acceptable
- view the consequence for not taking the action as unappealing
- tend to consciously and carefully process threat information.

And therein lies the rub. You can't touch, feel, smell or hear climate change. It is elusive and intangible, uncertain and unpredictable, and one large step removed from people's day to day lives. Its causes are convoluted, complicated, and much argued over, the local impact unclear.

⁸ D. Gardner (2008) *Risk*; p. 15

⁹ *Ibid*; p. 3/4

¹⁰ S. Moser & L. Dilling (Eds.) (2007) *Creating a Climate for Change*; p 70/71

Climate change is seen as a costly global problem which will affect future generations; if the worst comes to the worst, its impact will be widespread and catastrophic and no simple actions by individuals will have any effect; and anyway even the science is questioned, albeit by a small minority.

No wonder people freeze.

HOW WE REACT TO FEAR

When trying to work out what is going on, it's reasonable to expect that when most people hear about the havoc that could be created by climate change their initial reaction will be one of fear. It is how we react to that fear that matters.

According to Moser & Dilling, if a person's reaction only aims to control the fear or pain without reducing the danger, such a response is deemed maladaptive. Such avoidant behaviours on the individual or collective scale include the following:

- the denial of the existence of the threat
- a belief that the problem won't happen here or to us
- the projection of responsibility or blame onto someone else
- wishful thinking or rationalisation that the problem will go away on its own, that it is less severe than believed, or that silver-bullet solutions will be found
- a traditionalist refusal to do anything different - *"we've always done it this way"*
- the uncertainty trap - *"we don't yet know enough to act"*

Other maladaptive responses to fear and frustration can include apathy, or reactance and counterproductive behaviours that may in fact increase one's objective risk to external danger. Survey studies have found for example, that one common response to information about the threats of climate change is a desire to buy an SUV as a means of protecting against unpleasant or unpredictable weather.

And if threat information is unspecific, uncertain, perceived as manipulative, or if it comes from little-trusted sources, it may not even evoke fear, but instead a feeling of anger or resentment.

According to McKenzie-Mohr and Smith,¹¹ in response to a threat, people have two broad coping strategies:

1 Problem-focused coping - taking direct action to alleviate the threat (in relation to global warming, using alternative transportation, increasing the energy efficiency of home, etc).

2 Emotion-focused coping - ignoring the issue, changing the topic whenever it is raised in conversation, denying that there is anything that can or needs to be done, etc

Whether someone uses problem-focused coping or emotion-focused coping appears to be determined by their perception of how much power they have to right the problem. If we perceive that we have a significant amount of control, we are likely to use problem-focused coping and if we perceive that we have very little, we are likely to use emotion-focused coping. Further research the authors have conducted suggests that, regarding global issues, our perception of how much control we have is largely determined by our sense of community. If we feel that in concert with others we can have an impact, we are likely to act. If, however, we feel little common purpose, we are likely to perceive that there is little we can do personally.

¹¹ D. McKenzie-Mohr & W. Smith (1999) *Fostering Sustainable Behaviour*; p. 91/92

Nordhaus and Shellenberger¹² say that the more scared people become about social instability and death, the less likely we are to change the way we think. They say that psychological research shows that:

- presenting frightening disaster scenarios provokes fatalism, paralysis and/or individualistic thoughts of adaptation, not empowerment, hope, creativity and collective action
- we uniformly describe ourselves as happier when we are exercising control over our lives and feel discouraged and depressed when we lose control
- we respond more strongly to threats that we have a mental image of and to threats that involve immediate changes in our perceptions of the world
- we are less likely to acknowledge a threat that makes us feel guilty, than one that does not
- we are less likely to acknowledge a threat or take it very seriously if addressing the threat is tied to actions that we perceive as unpalatable - such as radically downgrading one's quality of life.

In 1998, Ted Brader, a political scientist at the University of Michigan, devised a series of experiments to see who is influenced by the emotional appeals in political campaign ads in the US.¹³ He recruited 286 volunteers through community service announcements and flyers, in eleven communities in Massachusetts. At the time, a primary election race was under way with two leading candidates vying to be the Democratic nominee for governor. Brader created four ads for one of the candidates using scripts he wrote, along with video clips and music taken from past ads. The first featured a voice-over that was "enthusiastic" and positive but the images and music were bland; the second ad used the same voice-over but the words were matched with soaring music and images of sunny skies and laughing children. A third ad featured a fearful script about crime and drugs, but again it used bland pictures and music, unlike the fourth ad, which had the same script but paired it with ominous music and harsh images of guns, criminals and drugs. The idea was to separate the effects of negative and positive information from those of negative and positive emotion.

The subjects were shown a half hour news show, with commercial breaks which included one of the ads. When the screening ended, participants answered a series of written questions about the newscast, the commercials and the upcoming elections. The results were interesting. People who saw the juiced-up version of the enthusiastic ad were more likely to say they would volunteer for a campaign, vote in the primary election, and vote in the general election than were those who saw the bland version of the same ad. Note this was the result of a single casual viewing of one short ad. Fear seemed to be much less influential, however, as there was little difference between the answers of those who saw the fear drenched ad and those who saw the neutral version. The effect of the emotional "enthusiasm" ad was universal – it influenced everybody, whether they knew anything about politics or not. But the effect of the fear based ad was divided. It did not boost the rate at which those who knew less about politics said they would get involved. But it did significantly influence those who knew more - making them much more likely to say they would volunteer and vote.

Their conclusion - it isn't the less informed who are likely to be influenced by fear-driven advertising. It is the more informed, those who have already made up their mind.

In an article on the Big Think website,¹⁴ Matthew C. Nisbett points to research which suggests that many political leaders, environmentalists, and scientists - by focusing narrowly on the risks of climate change - may unintentionally trigger disbelief, scepticism, or decreased concern among audiences.

¹² T. Nordhaus & Shellenberger (2007) *Break Through* p. 222

¹³ D. Gardner (2008) *Risk*; p. 146/7

¹⁴ <http://bigthink.com/ideas/24991>

In surveys since 2007, fewer people report concern over climate change, less report that they accept that human activities are causing climate change, and a growing number of Americans say that they believe that the news media exaggerate the problem.

While many claim that this shift in public opinion is due to the impact of the climate sceptics, Nisbett maintains that a de-sensitization among segments of the public to climate change fear appeals is a very likely cause.

Interestingly, in his article he refers to a study carried out by Matthew Feinberg and Robb Willer, from the Department of Sociology in UC Berkeley,¹⁵ which suggests that the tendency towards *“belief in a just world”* also serves as a psychological filter on fear based messages about climate change. The just world phenomenon is particularly prevalent in the US. People who have a strong belief in a just world tend to view society as being ordered by hard work and individual merit. Future rewards await those who strive for them, and punishment awaits those who slacken or break rules.

According to a news release about the research, 97 UC Berkeley students were ranked according to their political attitudes, scepticism about global warming and level of belief in whether the world is just or unjust. Rated on a *“just world scale,”* which measures people’s belief in a just world for themselves and others, participants were asked how much they agree with such statements as *“I believe that, by and large, people get what they deserve,”* and *“I am confident that justice always prevails over injustice.”*

Next, participants read a news article about global warming, which started out with factual data provided by the United Nations Intergovernmental Panel of Climate Change. Half the participants received articles that ended with warnings about the apocalyptic consequences of global warming, and the other half read ones that concluded with positive messages focused on potential solutions, such as technological innovations that could reduce carbon emissions.

Results showed that those who read the positive messages were more open to believing in the existence of global warming and had more faith in science’s ability to solve the problem. Moreover, those who scored high on the just world scale were less sceptical about global warming when exposed to the positive message. By contrast, those exposed to doomsday messages became more sceptical, particularly those who scored high on the just world scale.

In a second experiment, involving forty five volunteers recruited from thirty U.S. cities via Craigslist, researchers looked specifically at whether increasing one’s belief in a just world would increase his or her scepticism about global warming.

Half the volunteers were asked to unscramble sentences such as *“prevails justice always”* so they would be more likely to take a just world view when doing the research exercises. They then showed them a video featuring innocent children being put in harm’s way to illustrate the threat of global warming to future generations.

Those who had been primed for a just world view responded to the video with heightened scepticism and less willingness to change their lifestyles to reduce their carbon footprint.

¹⁵ <http://willer.berkeley.edu/FeinbergWiller2011.pdf>

CLIMATE PORN

In 2006, the UK Institute for Public Policy Research (IPPR)¹⁶, coined the term climate porn to describe the alarmist language widely used to discuss climate change, which, they say offers a terrifying, and perhaps secretly thrilling, spectacle, but ultimately makes the issue appear unreal and distances the public from the problem. Having looked thorough more than six hundred articles and ninety TV, radio and press ads, news clips and websites over three months, their research concluded that the alarmist language widely used to discuss climate change is likely to be having a counter-productive effect.

The “we’re all going to die” approach which refers to climate change as awesome, terrible, immense and beyond human control, excludes the possibility of real action - *‘The problem is just too big for us to take on’*.

According to Simon Retallack of the IPPR, climate change messages fall into two categories: the first provides the apocalyptic vision of catastrophe, the second focuses on small actions everyone can take to counter climate change, urging people to *“follow 10 top tips”* and *“start saving energy and money today with simple measures”*. The language is one of ease and domesticity, seen in reference to kettles, TVs and light switches. The problem with this is that it easily lapses into “wallpaper” - the domestic, the routine, the boring and the too-easily ignorable.

And when the two approaches, the apocalyptic and the mundane, are put side-by-side as they often are - *“20 things you can do to save the planet from destruction”* - you can forgive people for thinking *“why bother?”*

Retallack says we should spend less time trying to convince people that climate change is real, instead treating the argument as having been won and the facts as so taken for granted that they need not be disputed. If the problem is discussed, we should steer well clear of using inflated or extreme language and giving the impression that we are all doomed. Above all, he says, we need to place the solutions upfront and inject communications about them with the energy they currently lack.

Two climate change ads produced by the UK government in 2009¹⁷ were banned by the Advertising Standards Authority (ASA) for exaggerating the potential harm. The adverts, commissioned by Ed Miliband, the then energy secretary, used popular nursery rhymes to suggest that Britain faced an inevitable increase in storms, floods and heat waves unless greenhouse gas emissions are brought under control. One depicted three men floating in a bathtub over a flooded British landscape, and the text read: *“Rub a dub dub, three men in a tub - a necessary course of action due to flash flooding caused by climate change.”* The other showed two children peering into a stone well amid an arid, post-climate-change landscape. It read: *“Jack and Jill went up the hill to fetch a pail of water. There was none as extreme weather due to climate change had caused a drought.”*

The ASA ruled that the claims made in the newspaper adverts were not supported by solid science and told the Department of Energy and Climate Change that they should not be published again. It also referred the accompanying television commercial to the broadcast regulator, Ofcom, for potentially breaching a prohibition on political advertising. Ofcom decided that the ad had sailed close to the wind, but that it was not “political”

To view the ad, see <http://www.youtube.com/watch?v=QD2WTK94c1U>

¹⁶ <http://www.ippr.org/pressrelease/?id+2240>

<http://www.guardian.co.uk/commentisfree/2006/aug/03/theproblemwithclimateporn>

¹⁷ <http://www.dailymail.co.uk/news/article-1258712/Jack-Jill-hyped-risks-global-warming-government-adverts-children.html>

FLOURISHING

Clinical psychologist Maureen Gaffney,¹⁸ says that a sobering body of evidence is now showing that negative emotions and the patterns of thoughts and behaviour they trigger, are far more powerful, contaminating and contagious, and their long term effects considerably more troublesome, than was once suspected. But she concedes that we shouldn't eliminate all negativity from our lives. Unless we feel fear, we can't protect ourselves from harm; unless we feel anger we won't fight injustice or protect what we value. Without the capacity for longing and sadness, we can't know the power of love. But there is a balance and that balance is astonishingly precise. Moreover, the positive-negative ratio in the way we feel, think and behave is what determines whether we flourish or languish in life, and also whether our relationships, and the organisations we work in, flourish. When we achieve the right ratio, it initiates an upwards virtuous spiral. When the ratio is wrong, we are tipped into a downward vicious cycle. This is when we become depressed, when relationships begin to flounder, and when organisations become dysfunctional.

The magic ratio is 5:1. For people, communities and organisations to function normally we need to have 3 parts of positivity to 1 part of negativity; this is the minimum platform. For everyone to flourish, to be at their best and most productive, and to be able to respond to challenges, the ratio has to be ramped up to 5 parts positivity to 1 part negativity.

And setting out positively to create a particular state of mind is much more likely to succeed than setting out to eliminate a negative state of mind. So, we need to actively build the positive, and actively contain (not eliminate) the negative.

After all, the rewards are great. Being in a positive mood makes you:¹⁹

- A more constructive thinker
- Better at creating an atmosphere of generosity, cooperation and trust
- Better able to develop and maintain high-quality interpersonal relationships
- More creative at resolving conflicts when they arise

Psychologist and neuroscientist, Elaine Fox²⁰ states that psychological science has established a simple truth: how we view the world and how we interact with it change how the world responds to us. Our way of being, our take on things, the attitude we bring to life, our affective mindset, colours our world, affecting our health, our wealth, and our general well-being. Whether we are optimistic and turn to the bright side of life, or pessimistic and turn to the dark, can define who we are and how other people see or hear us.

According to Fox, optimism has a lot to do with accepting the world as it is, acknowledging that both good and bad have their place, and the trick is to not allow notions of evil or negativity to overwhelm us. The trait of pessimism is almost the polar opposite. The mind of the dispositional pessimist becomes infused with negativity, and every setback is taken as further evidence that the world is against them. Pessimists are convinced that their problems are beyond their control and will never go away. Such feelings of powerlessness frequently lead to an enduring passivity and lack of motivation, which are key components of pessimism and its darker cousin, depression.

Optimists, on the other hand, feel that they have some control over what happens to them; tackling problems as temporary hitches, rather than as ongoing difficulties. They have a natural tendency to accept the world as it is but believe that the way you deal with things determine who you are.

The traits of optimism and pessimism are not fixed entities. The brain, after all, is elastic. Having concentrated a lot on negativity and pessimism, neuroscience and psychology are now trying to

¹⁸ M. Gaffney (20110) *Flourishing*

¹⁹ *Ibid.*; p. 235

²⁰ Elaine Fox (2012) *Rainy Brain, Sunny Brain*

understand the mechanism underlying the resilience and optimism of our sunny brain. One factor that has emerged repeatedly from many different areas of research is that feelings of being in control are crucial. If we have a real sense that we control our destiny, this not only helps us bounce back from setbacks but also maximises our well being and enjoyment of life. If we believe we have even a small degree of control over a difficult situation, it becomes far easier to deal with.

VISION

"I have a dream today!

I have a dream that one day every valley shall be exalted, and every hill and mountain shall be made low, the rough places will be made plain, and the crooked places will be made straight and the glory of the Lord shall be revealed and all flesh shall see it together.

This is our hope, and this is the faith that I go back to the South with.

With this faith, we will be able to hew out of the mountain of despair a stone of hope. With this faith, we will be able to transform the jangling discords of our nation into a beautiful symphony of brotherhood. With this faith, we will be able to work together, to pray together, to struggle together, to go to jail together

MARTIN LUTHER KING JR.

According to Nordhaus & Shellenberger,²¹ we need a vision and a plan that makes people feel more in control of their future and better able to address the climate crisis. We need a story that offers immediate, perceptible impacts that can be observed and directly addressed in the present, not in the future. And we need a definition of global warming that is easy to represent by a mental image, which communicates a perceptible and immediate change in the environment and does not make people feel guilty. We need a solution that is not perceived to require tremendous, arduous sacrifice and which gives people a sense of control.

This vision requires a new mood appropriate for the world we hope to create. It should be a mood of gratitude, joy and pride, not one of sadness, fear and regret. It should trigger feelings of joy rather than sadness, control rather than fatalism, and gratitude rather than resentment. If we are grateful to be alive, then we must be grateful that our ancestors overcame, and we must know that thanks to what they have given us, we too will do the right thing.

Stephen Hounsham²² says we need to start looking at things in a different way. This means taking people from where they are, rather than where we'd like them to be. It means trying to touch people's emotions and inspiring them, rather than starting an argument with them. It means focusing on the positive with messages of "we can do this" and "something better is on the way", rather than Nicholas Humphrey's "the world's going to end. I thought you'd like to know."

We have to stop using shock or guilt tactics and to avoid the temptation to exaggerate or go beyond science. The presumption must be that we will get through all this, and that there is light at the end of the tunnel and that it is daylight, rather than the train hurtling towards us. Our motto should be to reassure and offer a way through.

²¹ T. Nordhaus & M Shellenberger (2007) *Break Through*

²² S. Hounsham (2006) *Painting the Town Green*; p. 7

We need to agree a vision of the future and make sure it isn't hopelessly unobtainable. This has to be presented as an exciting new way of looking at things and marketed as something better. We should turn from defence to attack by moving away from "defending" the environment through the reduction of damage and exploitation to "attacking" on its behalf through promoting a positive vision of a better way of doing things. In this way we can be associated with solutions rather than problems. Our message must be *"something better is on the way."*

And according to Richard Florida,²³ creativity is the driving force for change. Creativity is a virtually limitless resource. It is multi-faceted and multi-dimensional. Each of us has creative potential that we love to exercise and that can be turned to valuable ends. Furthermore, creativity is the great leveller. It cannot be handed down or "owned" in the traditional sense. It is a precious asset not to be squandered trivially, and a powerful force to be harnessed and directed with careful consideration of all its possible consequences. It is our commitment to creativity in its varied dimensions that forms the underlying spirit of our age. And the task of building a truly creative society is not a game of solitaire. This game, we play as a team.

SMILE OR DIE

"Realism - to the point of defensive pessimism – is a prerequisite not only for human survival but for all animal species" ²⁴

The views of Barbara Ehrenreich add a note of caution to this chapter and should remind us to avoid being too happy-clappy.

Ehrenreich rails at the "positive thinking" industry, which she says is *"a quintessential American activity, associated in our minds with both individual and national success"* which is *"driven by a terrible insecurity."* She says that Americans have been working hard for decades to school themselves in the techniques of positive thinking, and these include the reflexive capacity for dismissing bad news. By insisting that we concentrate on happy outcomes rather than on lurking hazards, positive thinking contradicts one of our most fundamental instincts, one that we share not only with other primates and mammals but with reptiles, insects and fish. The rationale of the positive thinkers has been that the world is not, as or at least no longer is, the dangerous place we imagined it to be.

But Ehrenreich does not think the alternative to positive thinking is despair. In her view, negative thinking can be just as delusional as the positive kind. Depressed people project their misery onto the world, imagining worst outcomes from every endeavour, and they then feed their misery on to these distorted expectations. In both cases, there is an inability to separate emotion from perception. You accept the illusion over reality, either because it feels good or, in the depressive's case, because it reinforces familiar, downwardly spiralling neural pathways. The alternative to both is to try to get outside of ourselves and see things as they are, or as uncoloured as possible by our own feelings and fantasies, and to understand that the world is full of both danger and opportunity.

The threats we face are real - global warming, peak oil, forests are falling, deserts are advancing, the supply of animal species is declining, seas are rising and there are fewer fish to eat. But they can be vanquished only by "shaking off self-absorption and taking action in the world", and by having a good time trying.

²³ R. Florida (2002) *The Rise of the Creative Class; Preface*

²⁴ Barbara Ehrenreich (2009); *Smile or Die*; p. 200