The most important topic in all of science is the laws of nature. Is it possible to extend those laws to the nature of political systems? This chapter argues it is. The laws are expressed as mathematical equations hidden inside a simulation model. Each equation is simple, but together they may begin to explain as much about our political universe as the basic laws of motion and gravity explain about the physical universe.

The analysis model for the first three subproblems is The Dueling Loops of the Political Powerplace. The model was first documented in an unpublished paper by the same name on December 7, 2005. That only modeled the change resistance subproblem. This chapter presents that model in a manner identical to the original paper, with small improvements since five years have passed. The next chapter extends the model to accommodate the next two subproblems.

Using the Dueling Loops model, this chapter presents the analysis in column A in the Summary of Analysis Results on page 202. To preserve the thrill of the chase in the original paper, as little as possible has been changed.

Abstract

Most effort on solving the sustainability problem focuses on its technical side: the proper practices that must be followed to be sustainable. But surprisingly little effort addresses why most of society is so strenuously resisting adopting those practices, which is the change resistance or social side.

This paper presents an analysis of the social side of the problem using a simulation model. The model shows the main source of change resistance is a fundamental structure called the Dueling Loops of the Political Powerplace. This consists of a race to the bottom among politicians battling against a race to the top. Due to the inherent structural advantage of the race to the bottom it is the dominant loop most of the time, as it is now. As long as it remains dominant, resistance to living sustainably will remain high.

The analysis has, however, uncovered a tantalizing nugget of good news. There is a promising high leverage point in this structure that has never been tried. If problem solvers could unite and push there with the proper solution elements, it appears the social side of the problem would be solved in short order, and civilization could at last enter the Age of Transition to Sustainability.
The social side of the problem is the crux

The transformation of society to environmental sustainability requires three steps: The first is the profound realization we must make the change, because if we don’t our descendants are doomed. The second is finding the proper practices that will allow living sustainably. The third step is adopting those practices.

Society has faltered on the third step. By now the world is aware it must live sustainably, which is the first step. There are countless practical, proven ways to do this, which is the technical side of the problem and the second step. But for strange and mysterious reasons society doesn’t want to take the third step and adopt these practices, which is the change resistance or social side of the problem. Therefore the social side of the problem is the crux.

Here’s what the third edition of *Limits to Growth* (Meadows et al., 2004) had to say about the social side of the problem:

[The second edition of *Limits to Growth*] was published in 1992, the year of the global summit on environment and development in Rio de Janeiro. The advent of the summit seemed to prove that global society had decided to deal seriously with the important environmental problems. But we now know that humanity failed to achieve the goals of Rio. The Rio plus 10 conference in Johannesburg in 2002 produced even less; it was almost paralyzed by a variety of ideological and economic disputes, [due to] the efforts of those pursuing their narrow national, corporate, or individual self-interests.

…humanity has largely squandered the past 30 years…

What is the underlying cause of such stiff, prolonged global change resistance? Whatever it is, it must be incredibly strong to cause such a powerful effect.

We might begin to find that elusive underlying cause if we drilled down and tried to determine why change resistance occurs at the national level. For example, looking at the world’s sole remaining economic and military superpower, why did the US Senate vote 95 to zero in 1999 to reject the Kyoto Protocol, despite a democratic President and a strongly pro-environmental Vice President, Al Gore? Why, since the ascendancy of the George W. Bush administration in the United States in 2001, has opposition grown to the point that progress in solving the environmental sustainability problem is moving backwards? Why do US environmental NGOs face “the most hostile environment in which we have ever struggled to advance our goals,” as the Union of Concerned Scientists describes it? (USC, 2003)

If we could understand why the political system works the way it does, we could answer these questions and go further than we’ve ever gone before. *We could find the high leverage points in the system that would allow changing that “hostile envi-
ronment” into one that actively welcomed solving the problem, and thus solve the social side of the problem.

This paper attempts to do this by performing a structural analysis of the fundamental causes of the social side of the problem, using a simulation model. Because the structure of the model so clearly exposes the causes of systemic change resistance, the key high leverage point where problem solvers should “push” to solve the problem becomes conspicuously obvious. Six solution elements are then presented to illustrate how feasible pushing on this point could be.

**The race to the bottom**

There are two feedback loops in the human system that, in the large, affect citizen’s lives more than anything else. They are the loops that politicians use to gain supporters.

Over time, social evolution has pared the many strategies available for gaining political support into just two main types: the use of truth (virtue) and the use of falsehood and favoritism (corruption). For example, a virtuous politician may gain supporters by stating, “I know we can’t balance the budget any time soon, but I will form a panel of experts to determine what the best we can do is.” Meanwhile, a corrupt politician is garnering supporters by saying, “Economics is easy. You just put a firm hand on the tiller and go where you want to go. I can balance the budget in four years, despite what the experts are saying. They are just pundits. Don’t listen to them. A vote for me is a vote for a better future.” The corrupt politician is also saying to numerous special interest groups, “Yes, I can do that for you. No problem.” Guess who will usually win?

The use of corruption to gain supporters is the dominant loop in politics today. Corruption consists of falsehood and favoritism. Most politicians use rhetoric, half truths, glittering generalities, the sin of omission, biased framing, outright lies, and many other types of falsehood to make themselves look as appealing as possible to the greatest number of people possible.

Particularly when an election is drawing near, most politicians use the ad hominem (Latin for against the man) fallacy to attack and demonize their opponents. For example, the use of the Swift boat ads in the 2004 US presidential campaign to attack John Kerry’s character were an ad hominem fallacy, because they had nothing to do with Kerry’s political reasoning or positions. Other terms for the ad hominem fallacy are demagoguery, shooting the messenger, negative campaigning, smear tactics, and sliming your opponent. Finally, once in office nearly all politicians engage in acts of favoritism, also known as patronage.

Politicians are forced to use corruption to gain supporters because if they do not they will lose out to those who do. This causes the Race to the Bottom among Politicians to appear.
The model uses the concept of memes. A meme is a copied mental instruction capable of affecting behavior. All memes are learned from others, either directly from other people or indirectly through a transmission medium, such as books or television. All words, unless you made one up yourself, are memes. All learned values, such as “trustworthiness is good,” are memes. Reading, writing, and arithmetic, because we learned them from others, are gigantic sets of interrelated memes. Thus the entire foundation of all fields of traditional knowledge, such as biology, physics, and mathematics, are memes.

To understand how the race to the bottom works, let’s start at false memes. Rather than show the falsehood and favoritism that corruption relies on, the model is simplified. It shows only falsehood. The more false memes transmitted, the greater the degenerates infectivity rate. The model treats arrival of a meme the same way the body treats the arrival of a virus: it causes infection. After the “mind virus” incubates for a period of time (a delay), the infection becomes so strong that maturation occurs. This increases the degenerates maturation rate, which causes supporters to move from the pool of Not Infected Neutralists to the pool of Supporters Due to Degeneration as they become committed to the false memes they are now infected with. Supporters Due to Degeneration times influence per degenerate equals degenerates influence. The more influence a degenerate politician has, the more false memes they can transmit, and the loop starts over again. As it goes around and around, each node increases in quantity, often to horrific levels. The loop stops growing when most supporters are committed.

A degenerate is someone who has fallen from the norm. They have degenerated. The loop explains why this occurs so easily. The term is not meant as a pejorative label, but rather as a hopefully temporary fall from virtue.
The dynamic behavior of the loop is shown in the graph. The behavior is quite simple because the model has only a single main loop.

Corrupt politicians exploit the power of the race to the bottom by broadcasting as much falsehood and favoritism as possible to potential supporters. This is done with speeches, interviews, articles, books, jobs, lucrative contracts, special considerations in legislation, etc. The lies and favors are a cunning blend of whatever it takes to gain supporters. *The end justifies the means.* Note that the more influence a politician has, the more falsehood they can afford to broadcast, and the greater the amount of favoritism they can plausibly promise and deliver.

*This is the loop that is driving politics to extremes of falsehood and favoritism in far too many areas of the world. This loop is the structural cause behind most of the corruption and bad decisions in government today.*

**Deception** is the act of propagating a belief that is false. The race to the bottom employs a dazzling array of deception strategies. These are usually combined to increase their power. The five main types of deception strategies are:

**Deception Type 1: False promise**

A false promise is a promise that is made but never delivered or never delivered fully. False promises are widely used to win and keep the support of various segments of the population, such as organized special interest groups, industries, and demographic groups like seniors or immigrants. False promises flow like wine during election season.

One of the largest false promises in recent history was the way Russian communism promised one thing but delivered another. It promised rule by the masses for the masses but delivered a totalitarian state. To justify its continued existence and hide the broken promise, the communist system manufactured a steady stream of soothing lies and used harsh repressive techniques on those who did not swallow the lies.

Near the end of the collapse of Russian communism, Václav Havel, writing in 1978 in *Versuch, in der Wahrheit zu leben* (An Attempt to Live in Truth) pointed out
the diabolical, self-destructive nature of the communist approach. It was the ultimate vicious cycle because:

…it turned victims into accomplices: by threatening them and their descendants with disadvantages, it coerces the victims to participate. When Havel became President [of Czechoslovakia in 1989] he reminded his fellow citizens of their complicity arising from their coming to terms with life in lying. Consequently, he exhorted them… to vote for candidates who ‘are used to telling the truth and do not wear a different shirt every week’. 99

Civilization has a learning problem. *It does not seem to learn from its mistakes, even when they are pointed out.* It has not learned the lesson that false promises work so well to destroy lives *en masse* that their effectiveness must be eliminated somehow. This is nothing new, however. We have been warned before. For example, long ago in the 14th century Machiavelli explained why false promises are so rampant in *The Prince*, in the chapter on “How Princes Should Honor Their Word:”

Everyone knows how praiseworthy it is for a prince to honor his word and to be straightforward rather than crafty in his dealings; nonetheless contemporary experience shows that princes who have achieved great things have been those who have given their word lightly, who have known how to trick men with their cunning, and who, in the end, have overcome those abiding by honest principles. …it follows that a prudent ruler cannot, and must not, honor his word when it places him at a disadvantage and when the reasons for which he made his promise no longer exist. … Everyone sees what you appear to be, few experience what you really are.

**Deception Type 2: False enemy**

Creating a false enemy works because it evokes the instinctual fight or flight syndrome. The brain simply cannot resist becoming aroused when confronted with a possible enemy.

The two main types of false enemies are *false internal opponents*, such as negative campaigning, the Salem witch trials, and McCarthyism, and *false external opponents*, such as the “threat” of communism and the second Iraq “war.” While communism and Iraq were true problems, both were trumped up enormously to serve the role of a false enemy. False enemies are often scapegoats. A *scapegoat* is someone who is blamed for misfortune, usually as a way of distracting attention from the real causes or more important issues. Name-calling, the strawman fallacy, the biased sample, the irrelevant premise, and dozens of other types of fallacies are used to create false internal enemies. Most fall under the category of the *ad hominem* attack.

When it comes to creating false internal enemies, the winning strategy is to *attack early and attack often*. This becomes doubly successful when those attacked are
politicians in the opposing party: (1) The fight or flight instinct is evoked, which clouds the judgment and causes people to want a strong militaristic leader to lead them out of harms way. The attacker proves his militaristic capability by the viciousness of his attack, causing those witnessing the attack to frequently swing their support to him. (2) Attacks cause the attacker’s own supporters to fervently support him even more, because he has just pointed out why the opposition is so bad.

This form of deception works so well that attack politics has become the central strategy for many degenerate parties. Look around. Are there any political parties whose most outstanding trait is they are essentially one gigantic, ruthless, insidiously effective attack machine?

**Deception Type 3: Pushing the fear hot button**

When a politician talks about almost everything in terms of terrorism, or communism, or crime, or threats to “national security” or “our way of life,” and so on, that politician is pushing the fear hot button. It’s very easy to push. Just use a few of the right trigger words, throw in a dash of plausibility, and the subconsciousness is automatically hoodwinked into a state of fear, or at least into wondering if there is something out there to fear. Whether or not an enemy actually is out there doesn’t matter—what matters is that we think there might be one.

Fear clouds the judgment, making it all the harder to discern whether there really is an enemy out there. Because we cannot be sure, we play it safe and assume there is at least some risk. Since people are risk averse, the ploy works and we become believers. We have been influenced by statements of what might be lurking out there. Our fear hot button has been pushed and it worked.

How effective fear can be is echoed in this quote:

> Fearful people are more dependent, more easily manipulated and controlled, more susceptible to deceptively simple, strong, tough measures and hard-line postures,” [Gerbner] testified before a congressional subcommittee on communications in 1981. “They may accept and even welcome repression if it promises to relieve their insecurities. That is the deeper problem of violence-laden television. 100

That was 1981. Today, little has changed. Al Gore, writing in *The Assault on Reason* in 2007, included an entire chapter on The Politics of Fear. It may as well have been called The Politics of Pushing the Fear Hot Button. Below are some excerpts: (Italics and comments added)

> *Fear is the most powerful enemy of reason.* Both fear and reason are essential to human survival, but the relationship between them is unbalanced. Reason may sometimes dissipate fear, but fear frequently shuts down reason. As Edmond Burke wrote in England twenty years before the American
Revolution, “No passion so effectually robs the mind of all its powers of acting and reasoning as fear.”

Our Founders had a healthy respect for the threat fear poses to reason. They knew that, under the right circumstances, fear can trigger the temptation to surrender freedom to a demagogue promising strength and security in return. [This is an example of a false promise.] They worried that when fear displaces reason, the result is often irrational hatred [which creates a false enemy] and division.

Nations succeed or fail and define their essential character by the way they challenge the unknown and cope with fear. And much depends on the quality of their leadership. If leaders exploit public fears to herd people in directions they might not otherwise choose, [which is why they push the fear hot button] then fear itself can quickly become a self-perpetuating and free-wheeling force that drains national will and weakens national character, diverting attention from real threats.... [A wrong priority]

It is well documented that humans are especially fearful of threats that can be easily pictured or imagined. For example, one study found that people are willing to spend significantly more for flight insurance that covers ‘death by terrorism’ that for flight insurance that covers ‘death by any cause.’ Now, logically, flight insurance for death by any cause would cover terrorism in addition to a number of other potential problems. But something about the buzzword terrorism creates a vivid impression that generates excessive fear. [Here terrorism has been used not only to push the fear hot button. It doubles as a way to create a false enemy.]

**Deception Type 4: Wrong priority**

Wrong priorities stem from hidden agendas. A hidden agenda is a plan or goal a politician must conceal from the public, due to an ulterior motive.

There are many ways a hidden agenda can come about. A politician may support a certain ideology, and so bends everything to support the goals of that ideology. He may have accepted donations and/or voter support from special interests, such as corporations, and therefore must promote their agenda. Perhaps he had to cut a deal.

A politician with a hidden agenda must make the wrong priorities seem like the right ones in order to achieve what’s on the hidden agenda. How can he do this? For a corrupt politician such matters are child’s play—manipulate the public through false promises, create a false enemy, push the fear hot button hard and often, repeat the same lie over and over until it becomes “the truth,” and so forth.

The low priority that environmental sustainability receives from most governments today is rapidly becoming the textbook example of how devastating wrong priorities can be.
The ultimate wrong priority is the wrong societal goal. For example, the original goal of democracy in the United States was “life, liberty, and the pursuit of happiness.” That’s a quality of life goal. A similar goal was expressed in France’s Declaration of the Rights of Man and of the Citizen. But today the goal is maximum economic growth, which translates to maximum profits. Proof lies in the daily stock market indexes found on the front page of many leading newspapers in the US, Europe, China, Japan, India, and around the world. Market indexes measure future anticipated profits. If the stock market goes up that’s good news. If it goes down it’s bad news. The implicit goal is everyone should do everything they can to make the market go up. But nowhere on any of these newspapers will you find a daily quality of life index or its equivalent. Society is marching to the beat of the wrong priority and the wrong drummer.

Wrong societal goals are the ultimate form of deception because once in place none of the other types of deception are needed anymore. The wrong goal is the new truth and any other viewpoint is by definition false. There is no longer any need to lie because the lie is now the truth. That’s why George Orwell wrote in Nineteen Eighty-Four, Part Two, chapter 9, that:

All rulers in all ages have tried to impose a false view of the world upon their followers.

**Deception Type 5: Secrecy**

The fifth main type is actually a way to make the other four types ten times as easy to achieve. Secrecy is hiding or withholding the truth. It’s a powerful form of deception because it creates a false impression without actually having to openly lie about anything. Secrecy makes it impossible to tell if a politician is lying because key premises cannot be tested. One type of secrecy is the sin of omission.

Secrecy is so important to the success of the first four types of deception that without it they would crumble into ineffective mumblings. But with secrecy they work most of the time, because there is no way for the population to tell if a politician is telling the truth or not. When you see a politician, administration, or party using much more secrecy than normal and there is no reasonable justification, you can be certain its purpose is deception.

**Discussion**

The five main types of political deception won’t work at all unless they can be implemented. The most common implementation technique is to rationalize why a false promise is really true, why a false enemy is real, why there’s a bogyman to fear, why the wrong priority is really the right priority, why secrecy is necessary when it’s really not, and why the goal of business is the same as the public interest.
A rationalization is a falsehood supporting a pre-conceived conclusion. Clever rationalizations are usually the result of extensive testing and competition with other rationalizations, such as by testing on focus groups. All rationalizations employ well known fallacies to trick the receiver into believing a statement is true, when in fact it is false. A rationalization is a lie.

For example, the widely circulated argument that the Kyoto Protocol would not solve the climate change problem, and therefore is not worth supporting, is a clever rationalization. Of course it won’t solve it, because the first round of greenhouse gas emission reductions (averaging 5.2% below 1990 levels) are only a first step. Another popular rationalization is that mandatory emission limits would harm the US economy. It is true that GDP will probably fall as lower amounts of fossil fuels, cars, trucks, and so on are consumed. But the long term harm will be much greater if nothing was done. Yet another rationalization is why should the US support the treaty if China and India are exempt? The false answer is the US should not. But the true answer is the less developed countries will be included in later phases of the treaty. It makes little sense to include them in the early phases, because they are not a major source of emissions per capita, nor have they been a major source in the past.

There are many more ways to implement the five types of deception, such as biased framing, spin, false grassroots organizations, biased “public relations,” false news stories, the fallacy of “balanced news,” casting doubt on the severity or urgency of a problem, wedge issues, etc. When all this starts working smoothly the forces of reason are so smothered that a population can be manipulated in any desired direction. And it never felt the mosquito bite.

The right steady drumbeat of the five types of deception creates the ultimate political weapon: lies that work on entire nations. This is why history has left us with these gems of dark wisdom:

Next the statesmen will invent cheap lies, putting the blame upon the nation that is attacked, and every man will be glad of those conscience-soothing falsities, and will diligently study them, and refuse to examine any refutations of them; and thus he will by and by convince himself that the war is just, and will thank God for the better sleep he enjoys after this process of grotesque self-deception. – Mark Twain, The Mysterious Stranger, 1910.

The whole aim of practical politics is to keep the populace alarmed (and hence clamorous to be led to safety) by menacing it with an endless series of hobgoblins, all of them imaginary. – H. L. Mencken, In Defense of Women, 1917.

A lie repeated often enough becomes the truth. – Vladimir Lenin.

It does not matter how many lies we tell, because once we have won, no one will be able to do anything about it. – Statement by Dr. Joseph Goebbels to
Adolf Hitler, early 1930s, from *The Rise and Fall of the Third Reich*, by William L Shirer.

More modern history has given us this one:

*The Greatest Story Ever Sold: The Decline and Fall of Truth from 9/11 to Katrina* – This is the title of a 2006 book by Frank Rich. A review in the New York Times gives us a deeper look at Rich’s message:  

> The truly cynical political operator, whether Republican or Democrat, could read this book as a manual for how to use deception, misinformation and propaganda to emasculate your enemies, subdue the news media and befuddle the public, and not as the call to arms for truth that Mr. Rich seeks to provide.

It sounds like Machiavelli is alive and well, and working as a consultant to any government who agrees that the ends justify the means. Notice Rich’s intuitive realization that the “Fall of Truth” is the cause of the corruption problem currently haunting America (any many other nations) and that a “call to arms for the truth” is the cure. This leads to what Henry David Thoreau wrote in *A Week on the Concord and Merrimack Rivers*, in 1849:

> It takes two to speak the truth—one to speak, and another to hear.

Which in turn leads to our own observation:

> It takes two to speak the lie—one to speak, and one to be deceived.

**The two opposing loops of the dueling loops**

Opposing the race to the bottom is the race to the top. The two loops are joined together as shown on the next page. Because each loop competes for the same Not Infected Neutralists, they are “Dueling Loops.”
In the race to the top virtuous politicians compete for supporters on the basis of the truth. (On the model this is called true memes.) No favoritism is used, because those who tell the truth treat everyone equitably. Virtuous politicians can help improve things so that society benefits as a whole, but they cannot promise or give anyone more than their fair share.

The race to the top works in a similar manner to the race to the bottom because the two loops are entirely symmetrical, with one crucial difference: in the race to the
top, the size of the truth cannot be inflated. Corrupt politicians can use false meme size to inflate the appeal of what they offer their supporters. But virtuous politicians cannot use falsehood to promise more than they can honestly expect to deliver. Nor can they use favoritism to inflate expectations of how well they can help particular supporters.

Why exactly do virtuous politicians feel they cannot tell lies? The goal of virtuous politicians is to optimize the common good for all, which includes those who will follow us. The common good includes *the rule of telling the truth*, because the more you can assume a person is telling the truth, the more effectively you can cooperate. Effective cooperation is the foundation upon which all social contract societies are built. Because virtuous politicians feel compelled to tell the truth, they avoid lying. They are rationalists, who base their arguments on the truth about what will benefit the common good the most, as opposed to degenerates, who base their arguments on what will benefit special interests the most. Since that will not win a majority of voters, degenerates are forced to use deception to convince enough voters to support them. They have degenerated from the norm of trustworthy, truthful behavior.

Rationalists know that if they start telling lies their society will begin to crumble. Eventually it will degrade to life in mankind’s natural state (before that of a central government based on cooperation) where, as Thomas Hobbes put it, “the life of man” was “solitary, poor, nasty, brutish, and short.”

But degenerates feel no such constraint. Their goal is the uncommon good: the good of special interests. Instead of the rule of telling the truth, corrupt politicians follow the rule of expediency: do whatever it takes to maximize the good of the special interests supporting you. The end justifies the means. If a situation is best exploited by telling the truth, tell it. If it’s best exploited by a combination of truth and lies, then do that. This makes it impossible to trust corrupt politicians. But that doesn’t matter because if their deception is successful the public has no idea they are being exploited.

By examining how the basic dueling loops model behaves in a series of simulation runs, we can better understand why this political powerplace works the way it does. The table below lists the first six simulation runs we will examine. The first two variables are the changeable variables. By varying them from run to run we can

<table>
<thead>
<tr>
<th>Basic Dueling Loops Model Settings</th>
<th>Simulation Runs</th>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Initial rationalist supporters</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>False meme size</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Results</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Percent rationalists at end of run</td>
<td>0%</td>
<td>50%</td>
</tr>
</tbody>
</table>


try different scenarios. Each is a logical experiment. The third variable is a result variable. It is the outcome of a run after equilibrium is reached. Initial degenerate supporters equals 1 in all six runs.

Run 1 – By setting initial rationalist supporters to zero and false meme size to 1, we get the equivalent of the race to the bottom loop and graph that was presented earlier on page 212.

Run 2 – In run 2 the number of initial rationalist supporters is increased to 1. Now both loops have the same number of initial supporters. Because neither loop has an advantage over the other loop, the result is both loops behave the same. Each attracts the same percentage of supporters.

This run exhibits the most basic behavior of the dueling loops, without the whistles and bells of giving one side an advantage. Notice how in this run the percentage of degenerates and rationalists are always the same, so the degenerates’ curve covers the rationalists’ curve. Both curves will be seen in later runs. Percent rationalists is the number of rationalists divided by degenerates plus rationalists. Naturally the higher this percentage is the better. In this run percent rationalists is always 50%.

Run 3 – In this run we increase initial rationalists to 5. This shows what happens if we give one side a head start on their number of supporters. Because we have not changed false meme size, neither size has an inherent advantage. But even a small head start, if all else is equal, can quickly become a large advantage, as the results show.
Run 4 – Now things get interesting. The number of initial rationalist supporters is set back to 1 and false meme size is increased from 1 to 1.1. This is only a tiny bit bigger, by 10%. It would seem that itsy bitsy lies and favors wouldn’t make much difference, but no—they make a huge difference over a long period of time. As the graph shows, the good guys get wiped out. After 500 years they are down to about 20%. After 5,000 years (not shown) they are down to 0.345879 persons, which in the real world would be zero.

Run 4 is an example of the Principle of Accumulated Advantage, also known as the Mathew Effect from the biblical parable in Matthew 25:29, “For to all those who have, more will be given, and they will have an abundance; but from those who have nothing, even what they have will be taken away.” The principle appears in the proverb “The rich get richer and the poor get poorer.” Run 4 show how when one side starts with a small advantage, if a reinforcing loop is present and there are no sufficiently strong balancing loops, the small advantage will grow into an overwhelming one.

This explains why “balancing” policies like progressive income taxes are necessary. If such policies don’t exist the reinforcing loop grows until one group has most or all of the advantage and the other group has little or none. This causes horrendous amounts of suffering and, as history has shown, eventually revolution to restore the balance that would optimize the common good.

In run 4 notice how slowly the lines for degenerates and rationalists diverged for the first 50 years. What might happen if the bad guys decided to tell bigger lies and give out bigger favors?

Run 5 – If false meme size is increased from 1.1 to 1.3, system behavior changes dramatically. It only takes about 30 years for the degenerates to pull away from the rationalists. Now the degenerate and rationalist lines flatten out after only 500 years, instead of the 5,000 years it took in run 4. The end result is the same. The lesson is that the bigger the lie, the faster a corrupt politician can take over a political
system. I wonder if that explains anything we might be seeing in politics today, such as in the United States?

**Run 6** - Finally we see what happens if a corrupt politician decides to tell real whoppers. False meme size has increased to 2. In other words, every false promise, every false enemy, and so on is now twice as big as they really are.

The results are no surprise. Now the system responds so fast the good guys never even make much of an impact on politics. They are smothered so fast by such big lies that the graph line for rationalists is starting to look like a pancake. Now, after only 500 years, there are 0% rationalists left in the system. They have been exterminated.

There is a limit to how big a lie can grow before it starts to make detection easy. Later we will add the effect of size of lie on detection variable to the model, which will impose diminishing returns on the size of a lie.

This is the basic structure of the dueling loops of the political powerplace. The two loops are locked in a perpetual duel for the same Not Infected Neutralists. In addition, each politician has his or her own loop, and battles against other politicians for the same supporters. It is these many loops and the basic dueling loops structure that forms the basic structure of the modern political powerplace. The outstanding feature of this structure is:

**The inherent advantage of the race to the bottom**

*Because the size of falsehood and favoritism can be inflated, and the truth cannot, the race to the bottom has an inherent structural advantage over the race to the top.* This advantage remains hidden from all but the most analytical eye.

A politician can tell a bigger lie, like budget deficits don’t matter. But they cannot tell a bigger truth, such as I can balance the budget twice as well as my opponent, because once a budget is balanced, it cannot be balanced any better. 102 From a mathematical perspective, the size (and hence the appeal) of a falsehood can be inflated by saying that $2 + 2 = 5$, or 7, or even 27, but the size of the truth can never be inflated by saying anything more than $2 + 2 = 4$.

The larger the “size” of a meme, the greater its average memetic infectivity. In the model a larger false meme has the effect of increasing the number of memes a
person is exposed to per year. This is accomplished by assuming that a size of 2 equals 2 memes, etc. This greatly simplifies the model.

A false meme size of 1 equals one true meme. They have the same infectivity. This is because a meme size of 1 has not been inflated, so it’s true.

Now then, is it true that the greater the size of a meme, the greater the infectivity? Yes, up to a point of diminishing returns. For a lie that occurs when it is so obviously false it’s detected. The bigger the lie, the greater the infectivity, because the lies we are talking about here are the ones that are designed to gain supporters. The five main types of deception are false promise, false enemy, pushing the fear hot button, wrong priority and secrecy. The last really just increases the power of the other four.

Let’s examine an illustrative example. The first type of deception, a false promise, clearly has more appeal (infectivity) the bigger it is. For example, suppose you are going to pay a workforce 10 Euros an hour on payday. The virtuous politician would tell them exactly that, and he cannot tell them any different. The corrupt politician would make a false promise and say he will pay them 20 Euros an hour. Guess who is going to garner the most workers?

In the above example, a false promise of 20 Euros an hour is a false meme size of 2. A false promise of 200 Euros an hour would be a size of 20, which is so big it would be detected. The workers would not believe it because the offer is absurd. If you start reducing the false promise to 12 Euros an hour, the false meme size is 1.2. If you reduce it all they way to 10 Euros an hour the false meme size is 1, and its effect is the same as a true meme because it’s now the truth. The workers really will receive 10 Euros per hour when payday comes.

Let’s consider an example of the second type of deception, a false enemy. A true enemy might be a robber at your door with a knife. A false enemy, say 10% bigger, would have a machete. One 100% bigger might have a gun. One 300% bigger might be ten robbers, all with guns, and they have cut your phone line so you cannot call for help. Clearly the bigger the false enemy, the more motivational (infective) the lie, if you believe it’s true.

Notice how the size of the truth of a robber at your door with a knife cannot be inflated. There is nothing a truth teller can do to make that situation more motivational, without changing it. But if you lie, there is plenty you can do, without lifting a finger.

Getting closer to the ploys we see in politics, we could substitute a country for the robber and say it was about to attack your country. The bigger the false enemy, the more likely you would be to vote for the politician who has spotted it and can lead you out of harm’s way. This might be a choice between a virtuous politician who says the other country has only a conventional weapons army of one million soldiers, versus a corrupt politician who claims that’s not true. The other country really has nuclear bombs, in addition to the one million soldiers. If you as a citizen
have no way to know who is telling the truth, then your chance of survival is maximized by preparing for the worst, by voting for the corrupt politician.

And so on for the other types of falsehoods.

Another way to explain this is lies allow corrupt politicians to offer larger expected payoffs than virtuous politicians. If you can’t tell the difference between the truth and a lie, and they are mutually exclusive, then there is a 50% chance each could be true. If one politician is offering you the equivalent of a 100 Euro payoff and the other a 200 Euro payoff, it’s a no brainer. You vote for the politician offering the larger payoff.

These examples should prove that false memes are more infective than true memes. The bigger the lie, the more infective it is, until it’s so big it’s detected. That’s why people lie. A glance at history will provide many supporting examples. Too many. Once you start thinking in terms of the Dueling Loops you will see evidence of race to the bottom or top strategies everywhere, and not only in politics.

Because the size of falsehood and favoritism can be inflated and the truth cannot, corrupt politicians can attract more supporters for the same amount of effort. A corrupt politician can promise more, evoke false enemies more, push the fear hot bottom more, pursue wrong priorities more, and use more favoritism than a virtuous politician can. *The result is the race to the bottom is normally the dominant loop.* Thus the reason that “Power corrupts, and absolute power corrupts absolutely” is not so much that power itself corrupts, but that the surest means to power requires corruption. ¹⁰³

Due to lack of an in-depth analysis of the fundamental causes of the social side of the problem, problem solvers have long been intuitively attracted to the low leverage point of pushing on “more of the truth.” *On the model this point is the true memes node.* The truth is discovered by research on technical ways to live more sustainably, such as population control, alternatives to fossil fuels, and reduce, reuse, and recycle. The truth is then spread by scientific reports, popular articles, environmental magazines, lobbying, pilot projects, lawsuits to enforce the legal truth, demonstrations to shock the public into seeing the real truth, and so on. This works on problems with low change resistance, such as local pollution problems and conservation parks. But it fails on those with high change resistance, like climate change, because environmentalists simply do not have the force (wealth, numbers, and influence) necessary to make pushing on this point a viable solution.

Because of its overwhelming advantage, the race to the bottom is the surest way for a politician to *rise to power*, to *increase* his power, and to *stay* in power. But this is a Faustian bargain, because once a politician begins to use corruption to win, he joins an anything goes, the-end-justifies-the-means race to the bottom against other corrupt politicians. He can only run faster and keep winning the race by increasing his corruption. This is why the race to the bottom almost invariably runs to excess, and causes its own demise and collapse.
This collapse ends a cycle as old as the first two politicians. A cycle ends when corruption becomes so extreme and obvious that the people rise up, throw the bums out, and become much harder to deceive for awhile. But as good times return, people become lax, and another cycle begins. These cycles never end because presently there is no mechanism in the human system to keep ability to detect deception permanently high.

The dueling loops structure offers a clear explanation of why environmentalists are facing such a hostile political climate. This strong opposition occurs because a dominant race to the bottom causes corrupt politicians to work mostly for the selfish good of degenerate supporters, instead of working for the common good of the people. In other words:

**The Race to the Bottom Is Easily Exploited by Special Interests**

**Exploitation** is the use of others to increase your own competitive advantage, at the cost of theirs. Because this is so obviously self-destructive to those being exploited, deception is required to pull it off. (We are considering only voluntary exploitation and not cases like slavery.)

The race to the bottom provides the perfect mechanism for political exploitation, via election support of some type in return for favors. A little of this goes a long way, because each politician has his or her own loop. There are also hierarchies of loops, since a politician’s supporters can be other politicians. At the top of each hierarchy is the top politician, such as a president, political strategist, or party. Whoever is at the top has tremendous leverage. Thus the race to the bottom greatly amplifies the power of the exploiter.

In stark contrast, the race to the top cannot be exploited. Unseemly rewards cannot flow to a truth telling politician without everyone knowing about it, because part of telling the truth is keeping no secrets and not committing the “sin of omission,” a type of lie. Nor can the race to the top be exploited by supporters or outsiders with bribes or favoritism, because truth telling politicians would say no and if necessary report them. If they didn’t, they would lose supporters because they would be committing falsehood.

Basically the race to the top is not exploitable because exploitation requires unjustified support, which is what the race to the bottom thrives on. But in the race to the top, all support is justified because it is based on the truth and the equitable distribution of the benefits of social cooperation.

The incentive to exploit occurs when a special interest group has interests that conflict with those of society as a whole. Common examples are religious fundamentalists, the rich, the military, and large for-profit corporations. The latter two (or is it really the latter three?) make up the infamous military industrial complex.
A corrupt politician, by accepting donations (legal bribes) and votes in return for favoritism, becomes beholden to the special interest groups involved. If a special interest is powerful enough, it can control and exploit a political system by clever use of the race to the bottom. This is exactly what is happening today. The global political system is by and large being exploited by:

**The New Dominant Life Form**

Let’s define a **life form** as any independent agent that follows the three fundamental requirements of evolution: replication, mutation, and survival of the fittest. Building on our earlier definition of a meme, life forms can be genetic or memetic.

Here’s a question: What life form has the ability to replicate instantly with almost no expenditure of energy, can mutate during replication or at any time thereafter, and, when it has failed in the battle of survival of the fittest, sells little pieces of itself to its competitors in order to minimize its own pain of death? These are fantastic powers no human could hope to have. But what if we go further, and ask what life form has the miraculous power of being in many places at the same time, has an infinite life span, and can cleave off chunks of itself and have them instantly come alive? That would make it a formidable competitor indeed, one that could run rings around any other plant or animal. Darwin would be astounded.

But there’s more: What life form totally dominates mankind, by controlling most jobs in developed countries, by determining the path of nearly all of new technology, products, and services, by controlling elections and political decisions more than any other life form, and by defining the very evolution of culture to its advantage through demand advertising, ownership of the media, and new product design? If that is not enough, what life form controls the billions of boxes in our homes that provide us with most of our “news,” and most of our new knowledge once we have finished school, while at the same time subconsciously indoctrinating us to be high volume, complacent consumers? To top it off, what life form is spreading exponentially from industrialized countries to the rest of the world, and will soon dominate them all? The answer is obvious. It is large for-profit corporations, which is the **New Dominant Life Form**, also known as Corporatis profitis.

Thus the dominant life form on Earth is no longer genetic Homo sapiens. Instead, it is the memetic modern corporation and its allies, notably the rich.

The corporate life form has not only achieved economic and cultural dominance. It has achieved *political* dominance by successful exploitation of the race to the bottom. It can thus endlessly thwart or delay all efforts to significantly change the human system to environmental sustainability, and just as endlessly continue to maximize Gross World Product growth so as to achieve its goal. Globalization is mainly the deliberate spread of the New Dominant Life Form into new economic
niches, cloaked in the fallacious but appealing premise that free market/corporate system, driven by profit maximization, is the most efficient and best system possible.

The goal of an agent determines its behavior. The goal of most for-profit corporations is to maximize the net present value of profits. The goal of most people, once past the survival and security stage, is to maximize quality of life for themselves and their descendents.

These goals are mutually exclusive. As a result, as things get better for the New Dominant Life Form they get worse for the previously dominant life form: \textit{Homo sapiens}. For example, as Gross World Product continues to rise, sales and profits soar to unprecedented heights. However, so does pollution and natural resource depletion. While the consequences of these effects are delayed, it is only a matter of time before the quality of life for \textit{Homo sapiens} begins to fall.

Please note this is not an indictment of all corporations and their managers. Most are doing the best they can, and are basically good. Each agent, from its own perspective, is behaving rationally. \textit{It is the life form as a whole that has the emergent property of behaving unsustainably.}^{104}

This is the real enemy environmentalists are battling. Don’t blame the problem on “bad” politicians. These are mere proxies for the real opponent: the modern corporation and its allies. Its allies include top corporate management, stockholders, the rich (the key ally), the military, and politicians, plus various large special interest groups as expediency requires, such as the religious right.

It is a paradox why \textit{Homo sapiens} would create an entity that is more powerful that itself and has a mutually exclusive goal. Such a creation is guaranteed to cause its creator great harm, if not eventual extinction. But it is really not a paradox at all—it is an experiment gone awry. So awry, in fact, that it is time to end the experiment by redesigning that creation.…

\textbf{A comparison of competitive advantage}

That creation has steadily pulled ahead of its closest rival. Step by tiny step, it has relentlessly changed the rules of the game to favor itself. This has been done so cleverly and in such small, imperceptible increments that few citizens have noticed. But when you pause to examine the outcome the findings are shocking, as the table below reveals.
Only in the first attribute does *Homo sapiens* have the advantage. In the second attribute they are equal. In all the rest the modern corporation has the overwhelming advantage.

Galloping galoshes! Decision by legal decision the modern corporation has built up an astronomical lead over *Homo sapiens*. These are huge, order of magnitude advantages. There is little question who is going to win the battle for niche dominance unless things change. Furthermore, because corporations march to the beat of a different drummer (maximization of profit instead of quality of life), they have been aggressively using these advantages to their own benefit, with only enough regard for their opponent to keep him alive so that he may perform his role of incognizant slave.

We now have enough pieces of the puzzle to draw an important conclusion: *high political deception effectiveness, via successful exploitation of the race to the bottom*

### The Competitive Advantage of Two Life Forms

<table>
<thead>
<tr>
<th>Attribute</th>
<th>The Modern Corporation</th>
<th><em>Homo sapiens</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Can physically manipulate its surroundings</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Is legally considered a person</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Maximum life span</td>
<td>Infinite</td>
<td>About 120 years</td>
</tr>
<tr>
<td>4. Can be in many places at the same time</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5. Can own slaves like itself</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6. Speed of procreation</td>
<td>Hours</td>
<td>Nine months</td>
</tr>
<tr>
<td>7. Can cut itself up into little pieces, each of which can become a new life form</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8. Can hibernate indefinitely in hard times</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9. Body size limit</td>
<td>Unlimited</td>
<td>About 8 feet high</td>
</tr>
<tr>
<td>10. Brain size limit</td>
<td>Unlimited</td>
<td>About 1,500 grams</td>
</tr>
<tr>
<td>11. Owners have limited liability</td>
<td>Yes</td>
<td>No, since no owners</td>
</tr>
<tr>
<td>12. Has international organization with high efficiency of decision making and full power of enforcement of decisions for its life form type</td>
<td>Yes, the World Trade Organization</td>
<td>No, the United Nations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary energy input</th>
<th>Money via sales</th>
<th>Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Requires a physical form for its primary energy</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>14. Can transmit its primary energy instantaneously over great distances</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>15. Can store its primary energy indefinitely</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>16. Can store infinite amounts of its primary energy at no cost</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>17. Financial impact of storing its primary energy</td>
<td>Makes a profit by charging interest</td>
<td>Must pay storage costs</td>
</tr>
</tbody>
</table>
by the New Dominant Life Form, is the structural root cause of most of the stiff, prolonged resistance to adopting a solution to the environmental sustainability problem. Civilization is presently stuck in the dominant race to the bottom part of the cycle. Our challenge is to cause this cycle to end as soon as possible, and then to prevent it from ever starting again. If we can do that civilization will not only enter the Age of Transition to Sustainability. It will also enter an entirely new mode: a permanent race to the top among politicians, along with all that has to offer but has never been achieved.

This may seem even more ambitious than the last great political mode change, which was the rise of democratic forms of government in the 18th century. There is, however, good cause for rational hope, because of:

The high leverage point that has not yet been tried

We have extremely good news. There is a very promising high leverage point in the human system that has not yet been tried. It is general ability to detect political deception, as shown on the revised model on page 232. Pushing there appears to give problem solvers the greatest possible chance of solving the social side of the problem.

Actually the model identifies not one but two high leverage points. Both need their present values raised to solve the problem. But as we will show in another series of simulation runs, it is the key high leverage point of ability to detect deception that makes the biggest difference.

The central purpose of this paper is to convey the importance of two propositions: that the dueling loops of the political powerplace explain why environmentalists are meeting such stiff resistance, and what the high leverage points of that structure appear to be. If we can do that, it will not be long before readers of this paper explore these propositions for themselves, launch their own analyses, and begin to push on the correct high leverage points. Those points may or may not be the ones presented here, because this analysis is merely a first iteration.

Our deeper purpose is a third proposition: Environmental activists, academics, politicians, and agencies are failing to solve the global environmental sustainability problem because they are pushing on low leverage instead of high leverage points. This is due to use of an ad hoc, instinctual problem solving process instead of a formal analytical one, particularly on the problem as a global whole. If environmentalists would switch to a formal analytical process tailored to the problem, as science did back in the 17th century when it adopted the Scientific Method, they would be able to correctly analyze even difficult problems and find the high leverage points necessary to solve them. Only then will the impossible become the possible.

A formal analysis tailored to the problem does not simply mean find good people, give them the budget they need, apply the Scientific Method, and expect the cows to come home tomorrow. It means design a custom process that fits the specific
problem. An example of such a process is the System Improvement Process, which is described at Thwink.org. This process was designed from scratch to solve complex social system problems. It works by breaking the total problem down into three subproblems, each of which is much easier to solve. Its key advantage is recognition of the social side of complex social system problems.

However nowhere in environmental activism, academia, political decision making, governmental agencies, or even international bodies have I been able find a group following a process specifically designed to solve the overall global environmental sustainability problem. This includes the United Nations Environmental Program, the European Union, the Organization for Economic Cooperation and Development, the US EPA, numerous books and papers, and countless environmental NGOs.

What might happen if there was such a group? What if they proved a formal, analytical process tailored to achieving their mission was a better way, and soon there were a hundred such organizations? What if that in turn lead to the majority of environmental organizations in the world using an appropriate process, either for the complete *problematique* or for the portion of it they were working on?

But we digress. Let’s return to the model at hand, and examine the behavior of the high leverage point that has never been tried. On the next page is the revised model.

On the model a solid arrow indicates a direct relationship. The two dashed arrows show an inverse relationship. A dotted arrow is a constant or a lookup table function.

Currently general ability to detect political deception is low. The lower it is the lower detected false memes are. The lower that is, the higher undetected false memes are and the lower repulsion memes are. This causes more degenerates and fewer rationalists, which is bad news.

Currently repulsion to corruption is also low. The lower it is, the lower the rationalists infectivity rate and the lower supporter desertion due to repulsion. This is because repulsion to corruption times detected false memes equals repulsion memes. This makes sense, because detected corruption is a good reason to decide to support virtuous politicians and to desert corrupt ones.

For an actual system reaction to deception detection to occur, two steps must take place. The deception must be detected, which is handled by general ability to detect political deception times false memes equals detected false memes. Then those detected false memes must cause people to be repulsed enough by the corruption to either defect from the degenerates, which is what the supporter desertion due to repulsion variable does, or to become rationalists, which is handled by adding repulsion memes to true memes to calculate the rationalists infectivity rate. In addition to this, false memes minus detected false memes equals undetected false memes, which reduces degenerate infectivity.
Let’s summarize how the You Can’t Fool All of the People All of the Time loop works, focusing on the higher leverage point. Currently the loop is weak, and thus might be more appropriately named You Can Fool Most of the People Most of the Time. The level of ability to detect deception, the size of false memes, and the effect of the size of a lie on detection determine the amount of detected false

There are two high leverage points (HLP). The one making the most difference is general ability to detect political deception. If the model is reasonably correct then pushing there will allow us to overcome systemic change resistance to solving the sustainability problem. Currently nearly all effort is directed toward the more intuitively attractive but low leverage point (LLP) of “more of the truth,” which is the true memes point. Pushing there fails, because environmentalists simply do not have enough force to directly overcome the inherent advantage of the race to the bottom. They can only overcome it indirectly by pushing elsewhere on high leverage points. This will reduce undetected false memes and thereby resolve the root cause of successful change resistance (RC of CR).
memes. Thus when ability to detect deception is low corruption works like a charm because most false memes flow through the system unimpeded. This causes undiscovered false memes to be high and detected false memes to be low, which strongly favors the race to the bottom.

But if problem solvers can raise ability to detect deception to a high level, most false memes flow to detected false memes. This greatly decreases undiscovered false memes, which destroys the power of the race to the bottom because that’s what allows successful change resistance. At the same time this increases repulsion memes, which increases the rationalists infectivity rate and increases the degenerates recovery rate due to supporter desertion due to repulsion. The result is corruption doesn’t work anymore, which causes the race to the bottom to collapse as most people suddenly see the real truth and flee for their lives to the stock of Supporters Due to Rationality. This is precisely what happens when massive amounts of corruption are suddenly exposed.

It is the effect of influencing so much so strongly that makes general ability to detect political deception such a potent high leverage point.

Allow me to make a personal observation. The dueling loops structure is generic. It applies to many problems, not just environmental sustainability. Thus the successful exploitation of the race to the bottom by the modern corporation and its allies is the fundamental reason progressive activists are encountering such strong resistance in achieving their objectives. If progressive philosophy is defined as promotion of the objective truth for the good of all, then progressives (no matter what party they belong to) are rationalists at heart, and thus eschew falsehood and favoritism in its many forms. Progressives may not realize it, but their central strategy is the high road of winning the race to the top.

Next let’s familiarize ourselves with how pushing on the two high leverage points affects model behavior. The table below lists the simulation runs needed to do this. In these runs the number of initial degenerate and rationalist supporters is 1.

<table>
<thead>
<tr>
<th>Two HLPs Model Settings</th>
<th>Simulation Runs</th>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>False meme size</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ability to detect deception</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>Repulsion to corruption</td>
<td>NA</td>
<td>0%</td>
</tr>
<tr>
<td>Results</td>
<td>50%</td>
<td>98%</td>
</tr>
</tbody>
</table>
Run 7 – This is the same as run 2 presented earlier. The purpose of this run is to test that the revised model has the same foundational behavior. It also serves as a good starting point for further scenarios.

Run 8 – In the United States and many other countries, the general ability to detect political deception is low, somewhere around 20% or 30%. This is obvious because of the large amount of political corruption that goes undetected. Let’s try raising this high leverage point from 0% to 20% and see what happens.

Wow! Great results! Finally it’s the bad guys whose graph line is flattened like a pancake. Percent rationalists rises to 75% in 100 years and levels out at 98%. This is a dream scenario. All we’ve got to do is figure out how to make it happen.

Unfortunately that can’t be done, because this scenario is unrealistic. There is no way corrupt politicians are going to sit by and stick to a false meme size of 1, when they know full well, from at least 200,000 years of experience, that corruption works. So let’s fix that in the next run.

Run 9 – In this run we change false meme size from 1 to 4.8, which is the optimum that effect of size of lie on detection and supporter desertion due to repulsion will let the bad guys get away with.

The bad guys may be corrupt, but they are not dumb. They are usually plenty clever enough to adjust the size of lies and favoritism to be close to the right amount: not too big, and not too small. Those corrupt politicians that cannot do this will be selected out by the iron hand of evolution’s most merciless law: survival of the fittest.
The graph tells the sad story. Now it is the good guys are as flat as a pancake after a *Tyrannosaurus Conservatex* stepped on it. In this scenario the rationalists have lost the game so soon and so badly it’s as if they had hardly any influence at all on the political system. But once again, is this a realistic simulation run? Not quite, because repulsion is still 0%, which is unrealistically low. Let’s do another run and experiment to see what happens when we increase it.

**Run 10** – Now we push on the second high leverage point, repulsion to corruption, raising it from 0% to 20%. Because both high leverage points are now being pushed, things should start looking more favorable. If they don’t, our understanding of the model is faulty.

The results look better but they’re still not good enough. Percent rationalists tops out at 41%, which is well below what’s needed for a political system to run itself well. We’ve got to do better.

**Run 11** – The smarter the agent, the faster and better it adapts to changing circumstances. We can only assume that degenerate politicians will adapt their strategy to the new circumstances of run 10. Experimentation with the model shows that the optimum false meme size for a 20% ability to detect deception and a 20% repulsion factor is 2.4. So in this run let’s change false meme size to 2.4.

The results show this strategy has a substantially better outcome for the degenerates. Percent rationalists levels off at 20% instead of the 41% of run 10. In other words, the degenerates have increased their percentage
from 59% to 80%. Not bad for such a simple change. What’s interesting is they did it by decreasing the size of lies and favoritism, which means less corruption earned them more supporters.

The point is that false meme size is not fixed. It is fluid and, like so many agent strategies in complex social systems, changes as the situation demands.

**Run 12** – Next let’s see which of the two high leverage points gives problem solvers the most leverage. First let’s raise repulsion to corruption from low to high, which is from 20% to 80%. Then we experiment with the running model to determine the optimum false meme size is for this competitive situation. It turns out to still be 2.4. Will the result be good enough for the good guys to win or not?

Actually the model is now so complex I found it hard to reliably predict the outcome of this run. But that’s one of the many benefits of simulation modeling: Once you have expressed your analysis as a dynamic structure, the software takes it from there and tells you how that structure will behave in any situation. And unlike my poor overworked cranial lobes, simulation software never makes a mistake.

The results show that even 80% is still not good enough. The forces of truth and corruption are still so evenly matched that they would be totally unable to deal cooperatively and proactively with difficult problems like the global environmental sustainability problem, because they would be too busy battling each other. The degenerates would also be engaging in promoting too many wrong priorities for the right priority of environmental sustainability to emerge as a top priority.

Time for a sanity check. Does this result make sense? Yes, because ability to detect deception is still low, at 20%. So let’s roll back repulsion to a more realistic value and then see what would happen if we raised ability to detect deception.

**Run 13** – First we must estimate a reasonable value for repulsion to corruption. Later we hope to measure it in the field, but for now we must rely on an estimate.

There are five ballpark values repulsion to corruption could be: zero, low, medium, high, and 100%. Zero and 100% are so extreme as to be unrealistic, so we will rule them out.

I feel that presently repulsion to corruption is low. When the average citizen hears about detected corruption they do very little. They do not take action. Instead, the incident is written off as “politics as usual.” Only if corruption is extreme and prolonged do they take effective action. Even when Election Day comes, it is not
corruption that voters consider the most. It is numerous other factors, like looks, charisma, sound bytes that stick in the mind, and most importantly, where the candidate stands on issues that are important to each voter. These issues rarely center on corruption, unless corruption has been prolonged and extreme.

Let’s not go too low, like 10%. A value of 20% seems reasonable. Much higher would slip into a medium level (40% to 60%), which does not make sense. People do not act on half the corruption they hear about. It is much less.

Also let’s start to raise ability to detect deception. In runs 8 to 12 it was 20%. Let’s raise it to 60%. Let’s continue to assume corrupt politicians will adapt to the new situation and change to the optimum strategy of 3.8 for false meme size.

The results show that to adequately counter a false meme size of 3.8, ability to detect deception must be at least 60% and repulsion at least 20%. Percent rationalists is now up to 69%, which is probably about the bare minimum for a government to begin to put aside political squabbling and begin to work on its backlog of problems. But 69% is still not high enough for nations to focus efficiently on highly demanding problems, because solving these types of problems requires a nation’s full attention and its complete cooperation with other nations.

Run 14 – To see if we can achieve a high enough percent rationalists to solve the problem, let’s raise ability to detect deception from 60% to 80%. Again we assume adaptation and change false memes size to 4.7.

The graph shows that at last we have the behavior in the model we would like to see in the real world, because percent rationalists has risen to a blissful 100%. The opposition is eliminated and virtuous politicians can now focus on society’s proper priorities, at last. If the model is correct, then raising the general ability to detect political deception from low to high is all it takes to make the race to the top go dominant and thus solve the social side of the problem.
Notice how this run was able to raise percent rationalists from 41% to 100% (a 59% rise) by raising ability to detect deception from 20% to 80%, while run 12 only raised percent rationalists from 41% to 57% (a 16% rise) by raising repulsion from 20% to 80%. Calculating the leverage, 59% / 16% = 3.7. Thus in these fairly realistic scenarios ability to detect deception has 370% more leverage than repulsion to corruption has.

Comments on these runs – What about leaving ability to detect deception at 60% and raising repulsion to corruption? Would that solve the problem? No. Experimentation with the model shows that increasing repulsion to 80% increases percent rationalists to 94%, and increasing it to 100% only increases percent rationalists to 95%. It seems that increasing repulsion cannot eliminate the last few degenerates. However it does appear that the best overall solution is to raise both high leverage points some: repulsion a little bit, and ability to detect deception a lot.

Now for the important question: Is the model correct? No one knows, because it has not yet been subjected to the rigors of experimental proof and field calibration. But I do believe that it contains the fundamental brushstrokes explaining why solution adoption resistance is so high. At the very least the model should be able to serve as the starting point for a larger project that would go much further than I’ve been able to go by myself.

Next we need to take up the notion that the dueling loops are cyclic. However, let’s first pause for:

A word of caution

At Thwink.org, as well as in this paper, we think like scientists. Every assertion we make is a hypothesis that could be overturned tomorrow. The pages you are reading contain many novel hypotheses. While these seem to have withstood the test of logical proof, using a number of analytical tools, few have undergone the acid test of real world experimentation. No one knows how many will survive. But rather than couch every assertion with a “maybe,” a “this suggests,” or a “probably,” and so on, we have elected to only occasionally stress that all the conclusions in the paper are merely examples and pointers to a new way of thwinking. None should be interpreted as the analysis or the solution.

The cyclic behavior of the Dueling Loops

Up until now the model has ignored consideration of what it is that causes a society to want to raise its general ability to detect political deception and/or repulsion to corruption. To raise the values for these two variables in our simulation runs, all we had to do was reach into the model and change them. That is not how it happens in the real world. How then do societies adjust these values?
My hypothesis is that societies reactively change these values when they see the clear and present need to change them. This need appears when a prolonged excess of corruption occurs. Because there is no formal reliable mechanism to keep the values of these two variables permanently high, they tend to fluctuate as the decades pass. Another way to say this is societies have a short organizational memory on what the values of these two variables should be.

Reactively changing these values causes an endless cycle. This cycle was briefly described earlier as: A cycle ends when corruption becomes so extreme and obvious that the people rise up, throw the bums out, and become much harder to deceive for awhile. But as good times return, people become lax, and another cycle begins. These cycles never end, because presently there is no mechanism in the human system to keep ability to detect deception permanently high.

The minimum conditions required for the dueling loops to be cyclic appear to be:

1. The natural tendency for general ability to detect political deception and repulsion to corruption to be low.

2. The existence of critical points that are automatically activated when corruption gets bad enough. Once a critical point is activated, society invests in raising general ability to detect political deception and/or repulsion to corruption.

3. The critical point is deactivated once corruption falls low enough. This is because there is no permanent mechanism to keep these variables high enough to prevent corruption. (Maxims like “The price of democracy is eternal vigilance” intuitively recognize the need for a permanent mechanism, but even 1,000 such maxims are not enough. Something more is needed.)

4. The presence of delays in raising and lowering the two variables, and in changing supporters of one type into the other.

The previous model has been revised to incorporate these minimum conditions by renaming the key high leverage point to be Ability to Detect Deception and changing it to a stock instead of a variable. (It is traditional to capitalize the names of stocks, due to their central importance in stock and flow models.) The Critical Point Reaction Subsystem, shown on the next page, was then built around this stock to give it a realistic critical point and change delay.

In the model $1 \cdot \text{percent rationalists} = \text{corruption}$. The critical point reaction occurs when \text{corruption} rises above a certain arbitrary cultural \text{corruption critical point}. 
240      Part 3. Analysis and Solution Convergence

The Ability to Detect Deception Subsystem

This simple subsystem imitates how society reacts when corruption rises above an unwritten, culturally defined critical point. This reaction is part of a cycle that never ends because presently there is no formal, enduring mechanism in governments to keep Ability to Detect Deception permanently high.

Here’s how a We Won’t Tolerate Corruption (for awhile) cycle works: Once corruption rises above the corruption critical point a common complex social system reaction occurs. The reaction to excessive corruption activated node goes from false to true, after a reaction delay of 5 years. This causes normal activation investment rate to become the additional cultural investment rate. Because that is 20 times as large as the normal cultural investment rate, the reaction vastly increases a society’s investment in raising Ability to Detect Deception, such as by launching investigations, publishing information on who is corrupt, prosecuting corrupt officials, and changing the processes of its governmental institutions to be more corruption proof. This takes time, as represented by the investment delay of 5 years and by the way it takes many years to fill the stock up to the high level needed to detect most corruption.

As the stock of Ability to Detect Deception investments accumulates, more and more false memes are detected. Once the stock rises high enough, so much falsehood and favoritism is detected that corruption falls so low that the corruption critical point is no longer exceeded. This causes reaction to excessive corruption activated to change back to false, which causes additional cultural investment to change back to zero, which causes the stock of Ability to Detect Deception to start falling. It contin-
ues to fall until it goes so low that another critical point reaction is triggered, and the cycle starts over again.

Below is the table of simulation runs needed to illustrate the dynamic behavior of the critical point model. In all runs repulsion to corruption is 20%. In a real solution it probably needs to be increased a bit, but here we leave it alone for simplicity.

<table>
<thead>
<tr>
<th>Critical Point Model Settings</th>
<th>Simulation Runs</th>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Corruption critical point</td>
<td>100%</td>
<td>65%</td>
</tr>
<tr>
<td>False meme size</td>
<td>2.4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

**Run 15** – This run has no critical point reaction since the corruption critical point equals 100%. That’s so high it can never be exceeded. Thus this run’s behavior is identical to run 11 because additional investment has not yet been triggered.

The subsystem has a normal cultural investment rate that keeps Ability to Detect Deception at 20% when additional investment is zero. Run 15 is the reference mode for the critical point model. In the graph percent rationalists has been replaced by Ability to Detect Deception, which in this run is a constant 20%.

It takes this run only a hundred years to reach steady state equilibrium. To show the cyclic nature of the dueling loops in later runs, the reaction start year is set to 1900. Starting the reaction then instead of in 2000 (which would be about now, and make the modeling experience a little more true to life) gives us more cyclic activity to look at, so that we can more clearly understand the model and its implications.
Run 16 – This is the basic problem to solve. In this run the critical point is lowered from 100% to 65%, which means the critical point reaction will take place whenever corruption rises above 65% or percent rationalists dips below 35%. Since in the reaction start year of 1900 percent rationalists equals 20%, the critical point reaction starts then. The simulation results show such insightful social system behavior that we’ve enlarged the graph for this run so the details may be more easily seen.

The graph shows the cycles are about 200 years long. This is much longer than the corruption cycles (really exploitation cycles) we see today. Thus it is more representative of the deeper cycles that occur, such as those due to changes in styles of government, which are a reaction to very deep social system drivers like class oppression by a landed aristocracy or a hereditary line of rulers. If the four delays in the model are reduced to low levels, cycle length falls to about 75 years, which is closer to what we see in cyclic political party dominance or exploitation by life forms or special interest groups like the modern corporation, due to corruption and other related factors that tend to obscure the fact that exploitation of the race to the bottom is the central driver of these cycles. (75 years requires investment delay = 1 year instead of 5, reaction delay = 1 year instead of 5, incubation time = 1 year instead of 10, and infection lifetime = 5 years instead of 20.)

For example, the modern corporation became ruthlessly dominant in the US was in the late 19th century. The cycle was ended with a backlash against the oppressive power of corporations that led to passage of legislation like the Sherman Anti-Trust Act of 1890. But now corporations are overly dominant again, due to successful exploitation of the race to the bottom.

The important thing to realize is that the natural tendency of the dueling loops is to be cyclic. The length of the cycles varies greatly depending on a host of factors, only a few of which are incorporated in the model. Because there are many corrupt politicians and special interest groups trying to exploit the race to the bottom, there are many cycles underway at the same time. A political system will be most domi-
nated by whichever cycles are currently dominant and by how strong and clever the various exploiters are.

Let’s walk through a cycle and explain what’s happening, both in the model and the real world it attempts to represent.

A cycle begins when percent rationalists falls below the corruption critical point. Then, after a reaction delay of 5 years we see that Ability to Detect Deception suddenly spikes upward. These spikes are mass panic reactions to flagrant amounts of corruption. When a spike is underway a society will be wildly investing in all sorts of things to increase the public’s ability to spot political deception, like editorials and articles explaining how certain politicians are using lies and favoritism to achieve their nefarious goals, investigations to get to the bottom of various scandals and root out corrupt politicians, speeches extolling the importance of virtue and the ravaging effects of corruption, and so forth. Mechanisms to detect falsehood will start spontaneously appearing, such as the way FactCheck.org appeared in the 2004 election and PolitiFact.com in 2007, both in the US.

The incubation time of 10 years and other delays causes the percentage of degenerates to not fall as fast or as soon as Ability to Detect Deception spikes upward. Instead, there is a noticeable lag. While it takes only about 25 years for Ability to Detect Deception to reach its peak, it takes about 70 and 80 years for the percentage of degenerates to fall to its lowest level and for the rationalists to reach their peak. These excruciatingly long delays do occur, because it normally takes generations for fundamental cultural norms, like ideology allegiance or addiction to consumptive extravagance, to shift radically.

Once a critical point reaction occurs, eventually the degenerates fall out of power, the rationalists come into power, and a society enters good times. Those times are so good and what is allowing them is so well hidden that without realizing it society “forgets” that it should be investing in keeping the Ability to Detect Deception high. The result of this oversight is that very early in the cycle the level of detection ability starts to fall. In this run it starts to fall after only about 25 years, which is 1/8 of the cycle’s length. It continues to fall, though the rate of fall slows down as it approaches its normal level of 20%.

In the graph the good times begin when supporter type crossover occurs after about 35 years. After this the rationalists are dominant. This lasts for about half the cycle’s length, and then crossover occurs again as the degenerates become dominant. As the percentage of degenerates continues to increase, it eventually triggers another critical point reaction and the cycle starts all over again.

Note that after 1900 the percentage of neutralists stays within a range of 17% to 29%. This corresponds to the roughly 10% to 30% of the population who are the so called “swing voters.” These voters are not strongly committed to either side. If the percentage of rationalists is close to the percentage of degenerates in a political sys-
tem, as it so often is, then it is the neutralists who determine election outcomes. This fact has not escaped the attention of election strategists.

**Run 17** – In the first draft of this model write up I completely missed the fact there’s a very successful strategy the degenerates can employ to totally overcome what the rationalists did in run 16. It was only due to correcting a modeling error that I noticed that the wily degenerates have an ace up their sleeve.

Once the cyclic behavior of run 16 begins, the degenerates are dominant a little less than half the time. Thus they are losing. But as the run 17 graph shows, they can win by “losing” even more! This is done by increasing false meme size from 2.4 to 4.7 so as to get caught red handed even more. This causes the pre 1900 portion of the run to level out at 40% instead of the 20% percent rationalists that we saw in run 15. The amazing result is the critical point of 65% is never triggered, the cyclic behavior never happens, and the degenerates, instead of being dominant less than half the time as in run 16, now stay at 60% dominance! How’s that for craftiness?

In other words, at a 65% critical point corrupt politicians can win big by telling whoppers they know are going to be detected and cause them to lose more supporters. This corresponds to the flagrant, braggadocio style of lie spinning and cash for favors we sometimes see corrupt politicians or political parties engaging in. There seems to be no logical reason they would try to get caught. But from the viewpoint of the model, there is a perfectly sane reason for such insane behavior: it is the winning strategy. *Figuring out why baffling social behaviors like this occur is impossible without building simulation models like this one.*

**Run 18** – It looks like our friends, the virtuous politicians, have no choice but to try a higher critical point. Let’s hold false meme size at 4.7 and lower the critical point to 50%.

Once again we have cyclic behavior, though it is a little less so than in run 16. This time the degenerates are dominant only about 10% of
This run begs the intuitive question, if Ability to Detect Deception is 50%, then why aren’t the rationalists and degenerates each dominant about 50% of the time? The answer is they would be, if repulsion to corruption was 0% instead of 20%. But 0% is unrealistic, because some people do take effective action when they detect corruption, so we have used the value of 20%.

We must not forget for a moment the cleverness of those who believe the end justifies the means. Is there a winning strategy the degenerates can use to counter a critical point of 50%?

**Run 19** – Yes there is. Telling even bigger whoppers works like a charm once again. A false meme size of 5.6 allows the degenerates to do much better than being dominant 10% of the time, as in run 18. The results show they don’t do quite as well as run 18, because now they are in the minority. But they have achieved a dominance of 45%, which is definitely enough to achieve many of their goals, not to mention the sizable impact such a large minority would have on political decision making.

**Run 20** – The rationalists need to do much better. Let’s get serious and lower the critical point all the way to 30%. Surely this will do the job. At least I hope it does, because raising Ability to Detect Deception even higher is not going to be easy.

The results of this experiment are much better, as expected. For the first time the rationalists are safely in control of the political system all the time, by a very comfortable margin. There is still a little cyclic behavior, but now the forces of reason are never seriously challenged. The rationalists average about 60% of the population and the degenerates average about 20%.

Once again, is there a strategy the degenerates can use to do better? No. At least not the way this model is constructed. A false meme size of 6.7 does avoid triggering
the critical point reaction but the degenerates average only the same percent domi-
nance. That strategy does not give a better outcome. In this run their best strategy is
to maximize their cyclic dominance and use the chaos that causes to try for a lucky
victory, which requires adapting to an optimal false meme size of about 4. Thus an
important conclusion we can draw from the model is that a high level of Ability to
Detect Deception is required to successfully counter the extraordinary power of the
race to the bottom.

We are not yet done. Looking at the graph closely, this run is still not good
enough because even a 20% minority, with occasional swings to over 25%, can still
upset the applecart. In modern democracies every sizable minority still has a voice
that must be listened to and frequently accommodated. Thus if a society was trying
to deal with a problem so large and difficult that it required all of that society’s or a
planet’s attention to solve it, a 20% minority could prevent that.

So how high does the critical point have to go to solve the problem? That is, how
strong does a society’s organizational memory have to be for it to always remember
how to prevent excess corruption? Let’s continue experimenting to find out by low-
ering the critical point again, this time to 5%. The optimal false meme size of 4 re-
mains the same.

Run 21 – The cyclic behavior is now almost completely gone. But some still exists
and there are still a few degenerates to be reckoned with. Is a critical point of 5%
good enough to solve problems as intractable as the global environmental sustain-
ability problem?

I think not, for several reasons. One is that as long as some cyclic spikes exist in
a social system, it is too easy for those signals to obscure other signals and thus add to
the complexity of any problems a society may be trying to solve. Ability to Detect
Deception spikes are not just another signal—they lay at the very heart of human
systems, because they are attempts to adjust the perceptual acuity of self-governance.
That acuity needs to be at least 20/20 to be able to see the true facts of the many
complex, difficult problems governments are responsible for solving. Thus spike
signals due to rising degeneration must be responded to in a serious manner, because
they may indicate problems of great importance. In addition to the signal confusion
problem, spikes in Ability to Detect Deception investment siphon investment away
from other endeavors.
There is, however, an even greater reason that a corruption critical point of 5% is not good enough. I believe you can see for yourself what that reason is, from this article that appeared the day after I wrote this. Only the first half of the article is quoted since the rest adds very little to the article’s basic argument. (Italics added)


They succeeded. The Kyoto Protocol was ultimately ratified by 156 countries. It was the first agreement of its kind. But it may also prove to be the last.

Today, in the middle of new global warming talks in Montreal, there is a sense that the whole idea of global agreements to cut greenhouse gases won't work. A major reason the optimism over Kyoto has eroded so rapidly is that its major requirement - that 38 participating industrialized countries cut their greenhouse emissions below 1990 levels by the year 2012 - was seen as just a first step toward increasingly aggressive cuts.

But in the years after the protocol was announced, developing countries, including the fast-growing giants China and India, have held firm on their insistence that they would accept no emissions cuts, even though they are likely to be the world's dominant source of greenhouse gases in coming years. Their refusal helped fuel strong opposition to the treaty in the United States Senate and its eventual rejection by President Bush.

But the current stalemate is not just because of the inadequacies of the protocol. It is also a response to the world's ballooning energy appetite, which, largely because of economic growth in China, has exceeded almost everyone's expectations. And there are still no viable alternatives to fossil fuels, the main source of greenhouse gases.

Then, too, there is a growing recognition of the economic costs incurred by signing on to the Kyoto Protocol. As Prime Minister Tony Blair of Britain, a proponent of emissions targets, said in a statement on Nov. 1: “The blunt truth about the politics of climate change is that no country will want to sacrifice its economy in order to meet this challenge.”

The message I glean from this article is that the solution adoption resistance part of the problem has reached the stage where it is no longer just difficult—it may now be impossible to solve in time. This is because, as shown in Tony Blair’s statement, most of the world is trapped in an Economic Race to the Bottom among Nations and doesn’t know how to get out. But guess what life form benefits most from that particular downward spiral and therefore has caused it to happen? And guess
what high leverage point must be pushed extraordinarily well to stop that downward spiral in its tracks?

The problem is now so close to the threshold of insolvability (or past it, we really don’t know) that society no longer has the luxury of tolerating any corruption, because that hinders solving the problem and could tip it over the threshold.

One solution alternative is to wait until the first “wake up call” environmental catastrophes start to occur, and then use the belated global realization that humanity must solve the problem to move forward on a solution. But if we wait that long, Humpty Dumpty will have already fallen off the wall and it will not be possible to put all of the pieces back together again.

The case can even be made that as percent degenerates approaches zero, a multiplier effect is at work. These last few percent are the desperate, hard core degenerates, which includes the smartest of the lot. As percent degenerates goes low, every special interest degenerate ties up two or more for-the-good-of-all rationalists, because (under present conditions) that’s how many people it takes to handle damage control and counter the insidious, endlessly disruptive stream of falsehood and favoritism.

Therefore a rule of zero tolerance to political corruption must be adopted, so that Homo sapiens is not distracted while it attempts to save itself from ecocide. Anything less is just asking for trouble when it comes to figuring out how to get the US,

![Why the International Stalemate Exists](image)

What Tony Blair was really saying is no country can afford to “sacrifice its economy” to get out of the above race to the bottom. This is because the New Dominant Life Form has structured the international commerce game so that nations see the main loop before the side loop. The way out is to raise ability to detect deception at the level of nations, so that they can break free of the illusion that they are trapped in the main loop, and can see the truth: that the Pay the Piper Later side loop is the more important loop to their citizens.

The main loop starts when a country makes a commitment to economic growth at the expense of the environment. This increases environmental degradation, which in turn raises the short term economic gain, which increases that nation’s inter-country economic advantage, and the loop starts all over again, because that is A Good Thing. The side loop shows how, if the delay of environmental degradation is considered, then there is a long term economic loss that will eventually decrease the inter-country economic advantage, arguably by much more than the short term economic gain.
China, India, and the entire world on board a rapid and radical solution to the climate change problem, as well as to other global environmental problems such as topsoil loss, deforestation, and groundwater depletion.

Let’s take a look at what would happen if we tried the rule of zero tolerance in the final simulation run by using a critical point of 0%.

**Run 22** – As expected, zero tolerance to corruption completely ends the cyclic behavior of the dueling loops. Once the rationalists rise to dominance they stay there. Degenerates do not just drop to a low level—they are reduced to 0%. Their best strategy is to hold out as long as possible, by using a false meme size of 4.7. After about 50 years, society’s Ability to Detect Deception holds steady at 80%. A successful transition to solving the solution adoption resistance part of the problem has occurred.

But this transition takes a long time. It takes about 25 years for rationalists to begin to outnumber degenerates, and 40 years for percent rationalists to rise to 69% (barely over a 2 to 1 majority), which was mentioned in run 13 as probably the bare minimum it will take to make a serious start on solving the problem, though it is still too low to be enough. As we argued in run 21, it will take somewhere near 100% to be enough.

Because the model is not calibrated (the numbers used in it are estimated, not measured), it cannot make accurate predictions. Nevertheless, it does look as if solving the solution adoption resistance part of the problem will take a long time. Will it take too long? That is one of the great questions facing problem solvers and civilization.

**Six sample solution elements for raising ability to detect political deception**

We have concluded that the general ability to detect political deception was the key high leverage point. If problem solvers can raise it to a high level, then the race to the bottom among politicians will collapse, leaving the race to the top dominant. Politicians will now be competing on the basis of who can provide the most benefits to society as a whole, based on the objective truth. It will not take them long to realize that their top priority needs to be global environmental sustainability, causing that problem to finally receive the full attention and commitment it deserves.
But that will never happen unless the general ability to detect political deception can be raised from low to high.

The Solution Convergence step of the System Improvement Process has discovered that it takes six solution elements to achieve this. The first is the foundation for all the rest. It is:

**Solution Element 1 – Freedom from Falsehood**

Hindsight sharpens the vision. Most difficult social problems have, in retrospect, what appears to be a surprisingly simple solution. Looking back at history, it almost seems the bigger the problem the simpler the solution. For example, the Magna Carta of 1215 introduced the idea that a ruler’s subjects have rights that must be respected by law. The invention of democracy gave a population the right to choose its own leaders, who must respect the population’s lawful rights. The ending of serfdom and slavery gave serfs and slaves the right to freedom from control by their former masters. Each of these solutions solved an age old, seemingly intractable problem with a solution so simple that we can now describe it in a single sentence.¹⁰⁵

Civilization remains saddled with a problem that is every bit as debilitating and exploitive as any problem the solutions above solved. Ever since politics began, corruption has been the norm. Corruption is so rampant that a “good” politician is not the one Diogenes could hold a lamp up to and say, “This is an honest man.” Instead, a good politician is one who is the least corrupt. That we are forced to choose from the lesser of the evils is pathetic and perverse.

But this need not be so. Diogenes would find an honest politician every time he held up his lamp if people had the right to Freedom from Falsehood. Freedom from Falsehood gives people the right to freedom from falsehood from sources they must be able to trust. This includes all “servants” of the people, such as politicians, public employees, and corporations. A servant is an agent created or employed by Homo sapiens to do something useful for humanity. All servants must remain subservient to Homo sapiens and keep the interests of humans above their own.

What is not prohibited by law is permitted by implication. Therefore if people do not have the legal right to freedom from falsehood, then by implication it is okay for those in positions of power to manipulate citizens by the use of lies, fallacies, the sin of omission, and all the forms of deception, propaganda, and thought control available.

Corruption relies on the use of falsehood to hide or rationalize favoritism. Eliminate falsehood, and you have eliminated favoritism. This is because once falsehood is banished, politicians will be forced to compete for supporters on the basis of the objective truth. The truth includes the long term optimization of the general welfare of all members of Homo sapiens. Favoritism conflicts with this goal because it
gives someone more than his or her fair share, and hence someone else less. This promotes the welfare of an elite few, rather than that of the many, so it is not the optimal allocation of a society’s resources.

If “we the people” do not have freedom from falsehood, then falsehood in all its Machiavellian and Orwellian forms will continue to appear again and again, because it is the surest way to rise to power, increase power, and stay in power.

Activists are intuitively coming to the conclusion that Freedom from Falsehood is essential. As one example, in an article on May 15, 2007 Julian Burnside, a prominent Australian barrister, advocated almost exactly that. Here’s the beginning of the article: (Bolded added)

The Future Summit, being held in Melbourne this week, is a hotbed of ideas, solutions and attempts to imagine a better world. Global warming, reliance on fossil fuels, the growing gap between rich and poor, all have been debated by academics, captains of industry, religious, community and political leaders.

But one solution — put forward yesterday by the top silk Julian Burnside, QC — met with more acclaim than any other, and received rapturous applause.

‘If we really want to make things better, I suggest we introduce a law that makes it an offence for politicians to lie,’ he told the conference. ¹⁰⁶

Julian Burnside has intuitively sensed what the Dueling Loops model analytically shows: that political deception is so damaging to democracy it should be illegal. The way to make that happen is to recognize that as long as the democratic model lacks the fundamental right to Freedom from Falsehood, it is an incomplete and too easily compromised model.

However this new right alone will do little good unless falsehood can be detected. This is why we need:

**Solution Element 2 – The Truth Test**

The Truth Test is a personal skill, much like other skills such as frugality, language, and mathematics. It is designed to handle nearly all arguments the average person receives in seconds or minutes. The rest take longer or an expert.

The objective of the Truth Test is to reduce deception success at the individual level to a very low, acceptable amount. It consists of four simple questions:

1. What is the argument?
2. Are any common fallacies present?
3. Are the premises true, complete, and relevant?
4. Does each conclusion follow from its premises?
The Truth Test allows people to see the widespread fallaciousness of the arguments they receive from corporate proxies, such as corrupt politicians, many news sources, and articles. Once citizens can no longer be fooled by unsound arguments, they will elect better leaders and support better positions.

We certainly don’t expect the general population to master the Truth Test very soon. But we do expect those performing Truth Ratings (described below) to do so, as well as those who are trying for high Truth Ratings.

As the general population sees the published Truth Ratings and occasionally reads the details behind a rating they are particularly interested in, they will get a long, gradual exposure to how the Truth Test works. This and more direct educational efforts will gradually lead to truth literacy, which is the ability to tell truth from falsehood.

Universal truth literacy is just as important to society as reading literacy, because if people cannot “read” the truth, then they are blind to what the truth really is.

The average person is never taught anything like the Truth Test in school or the workplace. Thus their immunity to deception is largely a matter of cultural chance. For truth literacy to become a cultural norm and achieve its full success, it must become as essential to a person’s education as reading and writing.

History has shown again and again that those who are not truth literate become the unknowing slaves (really ideoserfs) of the masters of falsehood, as the cyclic nature of the race to the bottom versus the race to the top plays itself out over and over. A cycle ends when corruption becomes so extreme and obvious that the people rise up, throw the bums out, and become much harder to deceive for awhile. But as good times return, people become lax, and another cycle begins. These cycles never end, because presently there is no mechanism in the human system to keep ability to detect deception permanently high.

The appalling effects of this cycle, during which corrupt politicians and special interests are dominant most of the time, is historic evidence that truth literacy is more important to society than reading literacy. This applies even more so today as we enter the 21st century, because if the truth is not seen in time, Homo sapiens will surely perish by his own hand.
How the Truth Test works dynamically

Implemented properly, the Truth Test is true structural change. It works by introducing the reinforcing feedback loop shown below:

Once a person completes initial study of the Truth Test the cycle of **Lifting the Blanket of Deception** can begin. Use of the Truth Test increases the amount of falsehood spotted on everyday arguments. This increases quality of decisions. Once a person perceives this has happened, an increase in knowing you benefited from better decisions occurs. This causes that person to use the Truth Test even more, and the main loop starts over again.

Let’s examine the side loop. Knowing you benefited from better decisions will increase study of the Truth Test. This occurs when people realize that if they study the test more, they can handle a broader range of arguments and make better analyses. Or there may be a particular type of argument they would like to handle better. After the delay of learning, there will be a tendency to use the test more, because now it can offer them even greater benefits.

Nothing can grow forever, so these reinforcing loops have balancing loops associated with them. Examples are the increased time and cost of using the test, and the increased complexity or cleverness of arguments. Each of these causes diminishing returns, which keeps the **Lifting the Blanket of Deception** loop from growing forever. For simplicity these additional loops are not shown.

As just one example of how the Truth Test might affect society, imagine what a talk show might be like if the host was trained in the Truth Test and was familiar with Truth Ratings. After a particularly fallacious string of comments from a guest, such as one from a biased think tank, the host might reply with “By the way, while you and I have been talking, my assistant was jotting down how many fallacies and truths you uttered, and what kind. Did you realize that since you began ten minutes ago, out of a total of 24 propositions, 6 were *ad hominem* attacks, 4 were based on biased samples, and 8 were false enemies or pushing the fear hot button without any...
justification? This leaves only 6 reasonably true propositions. In other words, in my opinion your sequacious punditry is false 75% of the time. THAT is the real news here. And…, let me see, my assistant reminds me that it was about the same last time you were on. What do you say to that?”

The silence that followed might be the sound of the beginning of the race to the top.

The Truth Test provides a way for citizens of all kinds, including talk show hosts, to spot the truth. But it is a bit of a stretch to expect that truth literacy will sweep the world soon. The Truth Test also provides no irresistible incentive for corrupt politicians to start telling the truth. For that we need:

**Solution Element 3 – Politician Truth Ratings**

Politician Truth Ratings would provide an accurate measure of the truth of what key politicians are saying and writing. If this objective can be achieved, then construction of a new reinforcing loop causing virtue to triumph over corruption in the political arena becomes possible. *Once this new loop is established, it become increasingly difficult for political deception to succeed.*

Truth ratings work by rating the truth of important statements made by important politicians. They are similar to other types of ratings that have been around for a long time.

Credit ratings quantify the creditworthiness of a person, organization, or government. Product ratings, such as those in Consumer Reports magazine, quantify the worthiness of products. Both are widely used. Truth ratings would quantify the truthfulness of important arguments, such as those in political statements, articles, and so on.

A **truth rating** is the probability an argument is true. For example a few days after a presidential debate, its truth ratings would come out. They might say that candidate A averaged 45% true, while candidate B averaged 70%. Guess which candidate would probably win the debate in the public’s mind?

If the organization doing the rating was credible and the public trusted the truth ratings, a race to the top would begin. Politicians would compete to see who could be the most truthful in the fullest sense of the word, and therefore the most helpful. Campaigns would become based on reason and truth rather than rhetoric. Due to a trickle down effect from the successful use of Truth Ratings, a race to the top would also begin in many other areas of society where less than the truth has long prevailed, such as advertising, the appeals of special interest groups, editorials, and to a growing degree, the news.

No one person can become an expert on the many critical issues of our day and spend hundreds and sometimes thousands of hours analyzing each important political
argument they encounter. Therefore the public has no choice but something like Truth Ratings.

Instead of individuals continuing the impossible task of deciding the truth of each important argument, rating organizations would do that. Certified rating organizations would quantify the truthfulness of important arguments by applying the Truth Test and providing a written rationale for each rating, so that the public could make its own final judgment. As they read more about the logic behind ratings of interest, the public would gradually become educated in how to apply the Truth Test.

Efforts to provide the beginnings of Truth Ratings are springing up spontaneously. For example, in October of 2006 Eric Schmidt, chairman and CEO of Google predicted:

…that, within five years, ‘truth predictor’ software would ‘hold politicians to account.’ Voters would be able to check the probability that apparently factual statements by politicians were actually correct, using programs that automatically compared claims with historic data. ¹⁰⁷

Politicians are not the only social agent needing Truth Ratings. Another is the news media, where fiction is too often presented as fact. That it was “in the news” makes whatever is presented all the more believable.

That the news must be allowed to flow freely is why the inventors of modern democracy, both in France and America, made a special point of protecting the freedom of the press. For example, France felt that: (Italics added)

*The free communication of thoughts and opinions is one of the most precious human rights: hence every citizen may speak, write, print with freedom, but shall be responsible for such abuses of this freedom as shall be determined by Law.*


Information, including that which is untrue, must be allowed to flow unfettered. Thus we are not saying that falsehood in the news media should be made illegal—only that **Media Truth Ratings** should be available to concerned citizens, so they know which sources they can trust.

This need not require evaluation of 100% of the news, which would be prohibitively expensive. A small random sample can accurately measure the level of truth within a small range, like plus or minus 3%, just as polls can measure how a population feels about an issue.
Once a workable approach to Media Truth Ratings is introduced, a race to the top in the news industry will begin.

Let’s return to the main strategy for this solution element: Politician Truth Ratings. The truth of political arguments is not the only behavior that needs to be rated in order to establish the correct feedback loops. The overall corruption of politicians must also be rated. This is done with:

**Solution Element 4 – Politician Corruption Ratings**

A *corruption rating* is an overall measure of how corrupt a politician is. Corruption includes falsehood, favoritism, coercion, abuse, criminal activity, the giving or accepting of bribes, knowledge that corruption is going on, and so on.

A major component of a politician’s Corruption Ratings is past Truth Ratings. This would account for 40% or so of the rating. As a politician’s Truth Ratings go up, his or her Corruption Rating would go down.

Corruption Ratings would need to be done regularly, perhaps every two years. The running average of the last ten years or so would be a politician’s rating. Corruption Ratings would become as routine and cost about as much as a high level security check.

**Politician Ratings and the analogy of credit ratings**

Politician Truth Ratings and Corruption Ratings are examples of *Politician Ratings*. They would be calculated in a similar manner by certified independent organizations. Both could cause the race to the top to become dominant. Because it measures total corruption, Corruption Ratings would play the stronger role. However Truth Ratings are easier and cheaper to perform, and thus would probably make a difference first.

Politician Ratings need not affect all voters to make the critical difference—only the swing voters, who are normally just 10% to 30%. Fortunately it is this group who is most likely to be receptive to a tangible, sound reason to choose one politician over another.

Politician Ratings are analogous to credit ratings. To demonstrate how important credit ratings have become in just one area, the corporate bond market, here is an excerpt from testimony presented to the US Senate on March 20, 2002, to the Committee on Governmental Affairs, chaired by Senator Joe Lieberman: ¹⁰⁹ (Italics added)

Simply put, a credit rating is an assessment of a company’s credit worthiness or its likelihood of repaying its debt.

John Moody, the founder of what is now Moody’s Investors Service, is recognized for devising credit ratings in 1908 for public debt issues, mostly
railroad bond issues. Moody’s credit ratings, first published in 1909, met a need for accurate, impartial, and independent information.

Now, almost a century later, an ‘investment grade’ credit rating has become an absolute necessity for any company that wants to tap the resources of the capital markets. The credit raters hold the key to capital and liquidity, the lifeblood of corporate America and of our capitalist economy. The rating affects a company’s ability to borrow money; it affects whether a pension fund or a money market fund can invest in a company’s bonds; and it affects stock price. *The difference between a good rating and a poor rating can be the difference between success and failure, prosperity and bad fortune.*

In a similar manner, the difference between a good politician rating and a poor one would be the difference between success and failure for politicians, and prosperity and bad fortune for the public.

But even more interesting is the testimony went on to say:

*The government—through hundreds of laws and regulations—*requires corporate bonds to be rated* if they’re to be considered appropriate investments for many institutional investors.*

So too would the government require politicians to be rated if they were to be considered appropriate choices for many citizens. Credit ratings greatly lower the risk of financial loss. Politician Ratings would greatly lower the risk of corruption. If they proved as successful as credit ratings, they would lower it by somewhere around 99%, which would make sizeable cases of corruption about as frequent as Halley’s Comet.

Presently Politician Ratings are not required but corporate bond ratings are. This is one more example of how, over the centuries, the New Dominant Life Form has silently and relentlessly defined the rules of the game to be in its favor.

**How Politician Ratings work dynamically**

Like all deep structural change, politician ratings would cause important new feedback loops to become dominant. A diagram of these is shown on the next page. The main loop is *The Public Loves Those They Can Trust.* *This is probably the most important feedback loop in the entire solution, because if it works, the whole solution will probably work.*

Let’s start at the top of the main loop, on the use of ratings of politician’s behavior node. Suppose that node is activated because ratings have been implemented and are being regularly published for a few politicians. The ratings would at first be embarrassingly bad.
This would cause a rated politician to want to improve the quality of his or her behavior in order to get better ratings. This causes an increase in virtuous behavior, which would lead to better Truth and Corruption Ratings. This would increase the relative advantage of a politician in the eyes of the public, because the public can now reliably tell whose arguments are more truthful and whose overall behavior is less corrupt, and thus who is a more trustworthy representative and more likely to get better results. This would increase public support of the politician, which would, in turn, increase their election and re-election advantage. The politician would know this happened. They would also know this benefited the people, so he or she would promote the use of ratings of politician’s behavior so as to gain an even larger advantage and more benefits for the people. The loop then starts over.

Because politicians would now be competing to get better and better in the quality of their behavior, a race to the top among politicians would begin. This would cause the race to the bottom to collapse, because its supporters would switch to the race to the top.

The effect of ratings on the behavior of Homo politico would be astounding. That sub species would be singing “The public loves those they can trust, those they can trust,” and other little ditties all the way to election day, and after that, to the next election day. Homo citizenicos everywhere would applaud, and join the chorus.
It is essential to understand the balancing loops that accompany the main loop. If problem solvers don’t comprehend how the balancing loops work, they may be unable to design the most effective solution aspects, or they may have difficulty figuring out what went wrong if things go awry in implementation. *They may fail to understand what is limiting how far the race to the top can go, so they may be unable to make it go far enough.*

Returning to our discussion, what if there is no way for truth and corruption raters to get the facts they need, because they are hidden behind a wall of secrecy? This is why we need:

**Solution Element 5 – No Competitive Servant Secrets**

The objective of No Competitive Servant Secrets is to prevent servants, particularly politicians and corporations, from using secrecy to their own advantage.

This is accomplished by complete openness in all that a servant does. *No servant may keep competitive secrets of any type, either from their masters or other servants.* After all, if a servant is an entity created or employed by humanity to provide people with goods and services, why should a servant need to keep any form of competitive advantage secret, except to gain advantage over its master or other servants?

Competitive secrets are a form of non-sharing and hence a form of non-cooperation. When combined with the mutually exclusive goals that servants have of each maximizing something, such as profits, this leads to a *destructive competition* mindset. But what we want is *constructive competition*, where agents compete in a friendly, let’s help each other manner. It appears that removing competitive secrets takes independent agents one step closer to cooperation. Therefore full and complete cooperation between servants and their masters, as well as between servants, requires no competitive secrets.

No Competitive Servant Secrets covers many areas. Some could be tackled soon. Others would take time. A few are counterintuitive and controversial, though less so as the analysis and solution strategy is more fully absorbed. Ultimately all would be dealt with, because a servant that keeps competitive secrets from its master has time and time again proven to be a danger to its master. The transition would probably take several generations.

No Servant Competitive Secrets is part of the Corporation 2.0 solution element (presented later). This reengineers the modern corporation to where its interests no longer conflict with those of *Homo sapiens*.

No Competitive Servant Secrets is already spontaneously appearing in the form of freedom of information acts, sunshine laws, and so forth. But these are a haphazard collection of ways to reduce servant secrecy. Competitive secrecy needs to be reduced to zero in a comprehensive manner, which No Competitive Servant Secrets finally does.
One type of servant secret is government secrecy. A standard objection to eliminating government secrecy is the need for “national security.” However this objection is really designed to benefit one country (and its military industrial complex) at the expense of others. Military secrecy is a form of competitive advantage. If countries truly want to cooperate instead of compete, then there is no need for military secrecy.

The standard rebuttal to this argument is that if I can’t keep secrets and my competitor can, then they will gain an advantage over me. Rubbish. The same logic can be used to argue if I can’t steal and my competitor can, they will gain an advantage. We have all seen that it is to society’s benefit as a whole to outlaw theft. The same is true for secrecy. A country insisting on military secrecy is a country refusing to cooperate for the common good of all.

Because national security secrets increase the destructive competition mindset, they increase international conflict and/or preparation for it, which in turn increases the sales and profits of military goods and services. This benefits the military industrial complex, and hence the New Dominant Life Form. But it does not benefit Homo sapiens. In fact, international conflict or the diversion of national output to military purchases (the guns or butter choice) does just the opposite.

Servants include corporations. No Competitive Servant Secrets would mean the end of all competitive corporate secrecy. No longer could corporations ply politicians with secret favors and donations, or secretly influence political decision making. No longer could they secretly receive political favors. Because all this would now be out in the open, it would stop, because corporations are loathe to draw criticism from the people or the press.

Corporate secrecy includes trade secrets, which would no longer be allowed. The standard defense of trade secrets is they are necessary to provide an incentive for invention. Without trade secrets, a corporation could not make enough profit to pay for innovation.

This argument is fallacious. If corporations are servants and are truly working for the good of their masters, then the incentive to innovate should come from the desire to serve their masters the best they can, rather than to serve themselves as best they can. Trade secrets are really a form of selfishness.

Trade secrets are not necessary for scientists to innovate. Nor were they necessary for the long history of innovations that occurred up to modern times.

The real reason corporations want trade secrets is they are a form of competitive advantage. This increases profits. But why should humans allow their servants to have any form of competitive advantage over other agents, which includes humans? There is no good rebuttal to that or the points raised above. Therefore trade secrets are not necessary and, because they are a form of secrecy that can be abused, they would not be permitted.
If any type of competitive advantage servant secrecy is allowed, then servants can use that as an excuse to hide all sorts of corruption from their masters. Thus No Competitive Servant Secrets means exactly that: No Competitive Servant Secrets of any kind.

Certain forms of non-competitive advantage servant secrecy would be allowed, such as passwords. This is because passwords serve as identification and ownership identifiers, rather than as a form of competitive advantage. Other allowed types involve personal information, law enforcement, jury deliberations, and so on.

A special note: Several careful readers have suggested that this solution element should be removed because it makes it too easy for the opposition to find a spot to attack successfully. But without No Competitive Servant Secrets, there is no way to fully and accurately implement Truth and Corruption Ratings. If servant secrets continue to be allowed, so much of the data needed for ratings will remain hidden behind a wall of secrecy that ratings will probably fail. Thus No Competitive Servant Secrets is a required prerequisite for creating the key new feedback loops necessary to eliminate the current dominance of the race to the bottom.

* * *

Let’s assume that we have implemented the first five solution elements. These are Freedom from Falsehood, the Truth Test, Truth Ratings, Corruption Ratings, and No Competitive Servant Secrets. Would this be enough to raise the level of ability to detect political deception to a high enough level to solve the environmental sustainability problem?

Not quite, because it lacks a measure of problem solving success. Lack of this has allowed many politicians (really corporate proxies) to more easily deceive the public with false priorities, and has dissipated problem solving effort.

The measure of problem solving success would be:

**Solution Element 6 – The Sustainability Index**

The top problem facing humanity today is the global environmental sustainability problem, because due to large social and ecological delays, it must be resolved proactively now to avoid catastrophe later. To trick the public and politicians into not solving this problem now, there is a tremendous fear, uncertainty, and doubt (FUD) campaign underway. This campaign has been so successful that millions of citizens, corporate managers, and politicians have been hoodwinked into thinking that the problem does not even exist, is not that bad, is too expensive to solve, lies too far in the future to worry about, or is so full of uncertainty solution is not required. Environmental sustainability has become such a low priority that it is rarely a significant factor in elections or the national agendas. The corporate FUD campaign has worked all too well.
But it could be stopped in its tracks if citizens and politicians could look up and see, every day, a number that told them point blank how bad the problem really is and a graph showing where the trend is going. The Sustainability Index would provide exactly that. It would be an accurate, universally understandable measure of how well society is doing on solving the global environmental sustainability problem.

Instead of fear about the problem being too expensive to solve, there would now be fear about the cost of not solving the problem. This would really be concern, not fear, because now citizens would be facing a known, measured problem.

Instead of uncertainty about the status or magnitude of the problem, there would now be easily understandable numbers measuring how sustainable the planet is.

Finally, instead of doubt about the accuracy of data, there would now be a strong sense of trust that the Sustainability Index was as correct as is humanly possible. And, instead of doubt the problem needs solving now, there would be just the opposite: a strong national or global desire to solve the problem as soon as possible.

While no single measure of environmental sustainability is perfect, it is possible for a single number to accurately summarize how sustainable society is on a global basis. This single measure is called the Sustainability Index. It measures how much of the earth’s carrying capacity is being used. If the index is over 100%, then it is unsustainable. Currently it is about 150%, as shown on the next page. Note is a rough approximation.\textsuperscript{110}

We’ve chosen the Ecological Footprint for the index, though any suitable index would do. The carrying capacity of the earth is approximated by the 1.0 horizontal line. This was crossed in the 1970s. It is not hard to visualize that if the footprint is extrapolated a few decades ahead, it will grow to such a high level of overshoot that catastrophic collapse is inevitable.

The index would include projected results (not shown). If society is doing nothing or too little to solve the problem, then people can immediately see that the projected Sustainability Index is still not good enough.

The Sustainability Index would be as widely published as stock market indexes. Eventually, once a suitable data collection system was in place, it would be updated just as frequently, in real time. Local, regional, and national indexes would also be published and compared. Together these would serve as a constant reminder of the true state of affairs, a sort of giant thermometer of the environmental health of civilization.
The local index is estimated. The other two are actual data. Using 2007 data the USA is actually using about 2.05 planets to live on. It needs to reduce that to below 1.0 planets as soon as possible, as does the entire world.\footnote{111}

How the Sustainability Index works dynamically

The purpose of the Sustainability Index is to provide an accurate, universally understandable measure of how well we are doing in solving the global environmental sustainability problem. Once the index is created, the \textit{We Need to Be Sustainable} loop shown on the next page will appear.

Actually many Sustainability Indexes or their equivalent already exist. Unfortunately they are not in the public’s eye every day, mainly due to wrong priorities. Most are not sufficiently mature or updated frequently enough. If the wrong priorities of the race to the bottom can be changed to the right priorities of the race to the top, high quality Sustainability Indexes will start springing up faster than cornstalks in the springtime.
Starting at the left node, the loop works like this: When the index starts to be widely published, the ubiquity of the Sustainability Index goes up. This increases the percent of the population knowing the current and projected levels of sustainability. Due to a delay little will change at first, because it takes time for people to come to new conclusions. That is, it takes time for their sustainability memes (a meme is a mental belief) to grow in strength and number. But once those memes grow and reach a certain threshold of activation, people will increase their demands on leaders to be more sustainable.

Once again, little will change at first, because it also takes time for leaders to come to their own new conclusions. Their sustainability memes must grow in strength and number too. They must also grow to a high enough quantity and strength to overcome the competing memes emanating from the New Dominant Life Form.

But eventually, after a delay, this will happen, causing an increase in realization by leaders that the more people who want to be sustainable, the easier it will be to get all people to drastically change their behavior. One way to do that is to increase the ubiquity of the Sustainability Index, and the loop starts over again.

The loop also affects a node outside the loop. As demands on leaders to be more sustainable grows, so does group decisions to become more sustainable. This is the real benefit of creating the loop.

As the loop grows, more and more citizens and leaders will be thinking We Need to Be Sustainable. As the percentage of the population thinking this way becomes the majority and then a super majority, the desire to be sustainable will become an irresistible, unstoppable force that will lead to rapid solution of the problem. This will occur even if a large amount of self-sacrifice is necessary, because people will now see sustainability as the highest priority. They will see it this way because the alternative of not doing enough to solve it will be clearly shown by Sustainability Index projections as a certain road to disaster.
Summary and key findings

Simplifying enormously, most conventional wisdom says all we need to do to solve the sustainability problem is to find the proper practices needed to live sustainably and then aggressively promote those practices until they are adopted. This approach has tremendous logical and technical appeal. The inner talk runs about like this: "Solving this problem is basically a matter of finding out what's best for the good of all, and then spreading that knowledge. Once people and governments see what's in their own best interests, they will start doing things that way, because people are rational."

There is, however, a slight drawback to this approach. It doesn’t work.

This is because it completely misses the social side of the problem, and fails to see the hidden social structure that is the true cause of decades of solution failure. If problem solvers would focus their efforts on why so much change resistance is occurring they might find, as this analysis has, that all they’ve been doing is engaging in “more of the truth.” This is a low leverage point. **Pushing on this point fails because it is no more than a heavy handed, naive attempt to make the race to the top dominant through the application of brute force.** It does not consider that the race to the bottom is inherently stronger and has a more powerful special interest group behind it. Thus conventional approaches have no hope of succeeding, unless the laws of physics change or a “wakeup call catastrophe” occurs in time. Neither appears likely.

Fortunately there is at least one way out. It is the high leverage point of general ability to detect political deception. Currently this is low. If problem solvers can raise it to a high level the race to the bottom will collapse, leaving the race to the top dominant. Politicians will then respond correctly to the truth about the global environmental sustainability problem because it will now be in their best interests. If they come to the same conclusion that environmentalists have, that sustainability is civilization’s top priority and nothing else comes close, then civilization will at long last enter the Age of Transition to Sustainability.

One way to summarize this paper is that democracy doesn't work if citizens cannot tell the difference between a good and a bad politician.
Confirming the root cause

Above is how the original *The Dueling Loops of the Political Powerplace* paper ended in 2005. This chapter needs further material since we’ve learned more and the System Improvement Process (SIP) has improved. Root causes now need to be validated to ensure they pass the five requirements of a root cause. This is critical because the crux of the sustainability problem is high systemic change resistance and because the root cause we’ve found is so radically different from conventional paradigms.

Below are the five substeps of the analysis step of SIP, with emphasis on the root cause.

Substep A. Find the immediate cause of the problem symptoms in terms of the system’s dominant feedback loops.

The symptom of the change resistance subproblem is successful opposition to passing proposed laws for solving the sustainability problem. The basic Dueling Loops model on page 232 shows the immediate cause is *The Race to the Bottom among Politicians* is dominant most of the time. The more dominant that loop is, the more deception transmitted to Not Infected Neutralists. These are swing voters and recently disenchanted degenerates or rationalists. The race to the bottom amplifies degenerates’ influence with false memes. Because the size of a falsehood can be inflated but the size of the truth cannot, the race to the bottom wins more supporters from the pool of Not Infected Neutralists than the race to the top does. The result is degenerate supporters elect corrupt politicians, who because they are in the majority, successfully oppose attempts to solve the sustainability problem.

It’s that simple. The reason it’s so simple is we have a one page model that nearly anyone with a college education can understand in about thirty minutes. Using a laptop to bring the simulations alive, I’ve personally shown the model to dozens of people. All eventually understood it. If you’d like to see what I showed them and much more, watch the Dueling Loops video series on Thwink.org.

Substep B. Find the intermediate causes, low leverage points, and symptomatic solutions.

The Dueling Loops model and the theory of Classic Activism make it easy to conclude that classic activists follow *The Race to the Top among Politicians* strategies. Not having modeled the problem, they intuitively sense that the intermediate cause is the universal fallacious paradigm (see page 337) of Growth Is Good. That cause must be countered with “more of the truth,” which is the low leverage point. This is done with steps 2, 3, and 4 of Classic Activism: (2) find the truth in the form of the technical proper practices needed to solve the problem, (3) promote the truth, and (4) if that doesn’t work, magnify the truth with exhortation, inspiration,
and bargaining. Because they push on a low leverage point, methods of pushing are all *symptomatic solutions*.

The universal fallacious paradigm has a second main belief: “corporations are good.” Some classic activists sense this false meme exists. They use the same process as in the above paragraph, so the result is more symptomatic solutions that push on low leverage points. But most activists see Growth Is Good as the main falsehood to counter, so that’s where most effort goes.

Classic activists are attempting to replace the Growth Is Good meme with Sustainability Is Good, because more economic growth is unsustainable. This has failed because of the hidden root cause of successful change resistance: high political deception effectiveness. No amount of “more of the truth” can counteract the greater power of deception, due to the structure of the Dueling Loops. It simply can’t be done.

Why are classic activists trying to do the impossible? Because their simplistic problem solving process offers no better alternatives. It is blind to *systemic* change resistance. All it sees is *individual* change resistance. The tragic result is the environmental movement has failed in its heroic attempt to prevent humanity from destroying himself, one more unsustainable environmental impact at a time.

**Substep C. Find the root causes of why the loops in A are dominant.**

Why is *The Race to the Bottom among Politicians* dominant most of the time? What is the root cause of that dominance?

Several months after I joined the system dynamics list on October 31, 2007, I posed what to me was an important question: Why are system dynamics modelers not using root cause analysis? Business has long used it, with great results. So why can’t modelers do the same?

The answers were an unexpected shock: Loops, unlike causal chains, don’t have ends, so there’s no one place to go to find the root cause. A system’s behavior is an emergent property of its entire structure, so you can’t isolate its behavior to any one thing. There’s no such thing as a root cause for the behavior of a complex social system. For example, here was one reply:

Jack Harich asks about the definition of root cause. Broadly stated, it would be the structure that produces the reference mode up to the present and, if policies were left as is, would result in the "feared" mode in the future.

And here is another:

I don't see how Jack Harich's emphasis on root causes is helpful. Trying to find the “true” original or root causes in complex social systems (unlike engineered systems) is a fruitless endeavor, because when it comes to human behavior among multiple stakeholders there is no end to the forces at play. The best we can do is to peel the onion of causation to get a few more layers
down. The way we do this is with models that help us understand why current policy approaches are not working or may lead to problems in the future, and why certain other approaches may hold more promise.

Here’s an addition to the first reply:

I ought to have added that once the model is constructed, the high leverage policy or policies that (when changed, added, or deleted) produce the desired (“hoped”) behavior would be indicators of the root cause (that is, the root cause would be policies that are mal-designed, missing, or present and problematic).

Humbly accepting the mantle of Dean of the Thou Shalt Have No Root Cause school, [name]

Rubbish. The humor is appreciated, but this is one more case of paradigm change resistance. Root causes of undesired behavior may be found in any system whose design can be changed. All social systems fit that category.

This pushback was disheartening and confusing at first, but eventually a good thing. It caused me to redouble my efforts to improve the process I was using. It caused me to go over the Dueling Loops model with a doubting Thomas eye, looking for flaws in the root cause analysis. I found ways to improve the clarity and simplicity of the model, but no flaws. It held up just fine. It was not the model that was flawed. It was the paradigm that old school modelers were using. That paradigm, that “Thou Shalt Have No Root Cause,” was holding them back from solving the world’s toughest problems. So I resolutely marched on, alone. Here’s what I found:

Requirement 1. It is clearly a (or the) major cause of the symptoms.

The main root cause of successful change resistance appears to be high political deception effectiveness. In the Dueling Loops model this occurs in the degenerates infectivity rate node. That rate (people infected per year) is much higher than the rationalists infectivity rate, due to the greater effectiveness of deception.

There will be skepticism that something as simple as this could be the main root cause. What about people’s selfishness? What about force of habit? Basic ignorance about the problem? Voter apathy? And so on.

Let’s cut right through this foggy mishmash of possible root causes. The precise question is why is change resistance so successful? Selfishness is a cause of resistance, not a success factor. Ditto with force of habit, ignorance, apathy, etc. People are confusing Column A with column B. Column A deals with the success of change resistance. Column B deals with the source. The reason for this continual confusion is classic activists are trying to simultaneously solve columns A, B, and C, without realizing it. They might as well be trying to sign three signatures simultaneously with one hand.
Such a problem solving approach is not only foolhardy. It is humanly impossible. On large complex problems one must divide and then conquer: divide et impera. This has long worked on the battlefield, in politics, and in large engineering problems. The pattern is it works on large formidable problems of any kind. So why not bring the pattern to the sustainability problem?

Suppose you study an actual political system and starting asking why resistance to solving the sustainability problem is so successful. You might decide, as many have, that it’s because activists are not packaging their message well enough, or they’re just not reaching the right people, or they’re being outspent on media messaging and lobbying. But that’s a classic activist viewpoint. These causes deal with individual resistance. What about systemic change resistance and the feedback loops behind that? Causes like these can’t answer deeper questions like this at all.

But models like the Dueling Loops can. The model explains exactly why systemic change resistance is so strong and works so well. It’s because the those opposing change use massive amounts of deception to trick voters and politicians into voting for what special interests want, even though that hurts the system as a whole. If that deception didn’t work resistance would vanish, because the truth of the matter is that the sustainability problem is the top priority problem of our time. We thus conclude that high political change resistance is the main root cause of successful change resistance.

There may still be some skepticism. How can such a complex problem, massive global change resistance to living sustainably, have such a simple root cause?

This has occurred before. Before invention of modern democracy by America and France in the late 16th century, autocratic government was the norm. This had long been terribly hard on subjects, who had few rights and were often over taxed to the point of poverty and rebellion. But all that ended with a single simple solution: addition of the voter feedback loop. Another example is the low productivity of science before invention of the Scientific Method. After it appeared, the basic problem of science, how to tell if a cause-and-effect proposition was probably true, was solved. That each problem was solved by a single simple solution means it had a single simple root cause. For the autocratic government problem the root cause was no incentive for rulers to rule for the good of the people instead of themselves. For the pre-science problem the root cause was no reliable way to tell a theory that made plenty of sense from one that was actually true.

Note that because SIP has allowed us to decompose the overall problem into four subproblems, it’s much more likely that each subproblem has a single main root cause. When they do, that’s a signal that the right subproblems have been identified.

**Requirement 2. It has no worthwhile deeper cause.**

Why is mass political deception so effective? That might lead to deeper more useful causes.
It hasn’t for two reasons. One is that digging deeper gets into individual factors, like how people make decisions, how force of habit becomes stronger with age, how wording and framing affects infectivity, etc. This is tempting rabbit hole to dig into. Many have. But it’s not productive, because it gets into causes of individual susceptibility to deception. This line of attack falls into the trap of the Fundamental Attribution Error. This trap has snared more classic activists than any other. It works like this: 113 (Italics and bolding added)

A fundamental principle of system dynamics states that the structure of the system gives rise to its behavior. However, people have a strong tendency to attribute the behavior of others to dispositional rather than situational factors, that is, to character and especially character flaws rather than the system in which these people are acting. The tendency to blame the person rather than the system is so strong psychologists call it the “fundamental attribution error.”

In complex systems different people placed in the same structure tend to behave in similar ways. When we attribute behavior to personality we lose sight of how the structure of the system shaped [their] choices. The attribution of behavior to individuals and special circumstances diverts our attention from the high leverage points where redesigning the system or governing policy can have significant, sustained, beneficial effects on performance. When we attribute behavior to people rather than system structure the focus of management becomes scapegoating and blame, rather than the design of organizations in which ordinary people can achieve extraordinary results.

The Fundamental Attribution Error explains why Classic Activism has such powerful appeal but fails over and over. When solving normal everyday people related (social) problems, we frequently have to win over one mind at a time. This causes the false assumption that can work in the large, such as on the sustainability problem. But it cannot, because activists do not have the numbers, money, or power to change the many minds in positions of power required to solve the problem.

Systemic problems can only be solved by resolving systemic root causes. When strong systemic change resistance is present, as it is in the sustainability problem, it cannot be overcome by attempting to directly change the behavior of one mind at a time, as Classic Activism tries to do with steps 3 and 4. One must instead change the system, which is where all individual social agents get their most important behavioral cues from.

The second reason digging deeper is not productive is that the hypothesized root cause, high political deception effectiveness, is resolvable. Resolving it will fix the problem. So why dig any deeper?
Requirement 3. It can be resolved.

All too effective political deception has long been a problem. That it can be resolved has been known just as long. James Hoggan, in *Climate Cover-up: The Crusade to Deny Global Warming*, describes why it’s necessary and possible: (p25, note the final sentence)

…to arm yourself against the effect of those [deceptive] tactics in the future. It’s as Aristotle said more than two thousand years ago: someone who is highly trained in rhetoric can argue any question from every angle—a skill that can be used for good or ill. But Aristotle didn’t teach rhetoric so hysterics could play the public for fools. Rather, he was trying to make sure that people would recognize when someone was playing with the language rather than promoting the truth. He taught rhetoric to inoculate the public against that kind of abuse.

A voting population can be armed against the effects of deceptive tactics. They can be inoculated against the abuse of deceptive rhetoric. It can be done. Not perfectly, but good enough to resolve the root cause.

The timeline on page 340 lists the Three Cycles of Dark Ages and Ages of Reason. Civilization is currently in the Third Dark Age, where the source of corruption is the modern large for-profit corporation. In the Second Dark Age the source of corruption was large organized religion, which replaced reason with dogma. The greater portion of that dogma was a biblical (or Koranic, etc) based story of how our universe worked and why people had to be good. The dogma worked because the masses could not tell truth from deception. But the Second Age of Reason ended the success of that deception with invention of the Scientific Method. For the first time, people had a reliable way to tell cause-and-effect truth from falsehood. Starting with the breathtaking scientific discovery of Galileo in *Dialog Concerning the Two Chief World Systems* in 1632, the masses threw off the oppressive dogma of the church and underwent a societal mode change so large it eventually allowed the Industrial Revolution.

It can happen again. The Third Age of Reason can come. All we have to do is resolve the root cause of high systemic change resistance. Once that happens the root causes of social and economic improper coupling will be resolved in a flash, because there will no longer be such strenuous resistance.

Requirement 4. Its resolution will not create other equal or bigger problems. Side effects must be considered.

By far the most important requirement of any species is the size and health of its ecological niche. Resolving the root cause of successful change resistance to solving the environmental sustainability problem will not create other problems of equal or bigger size, because no other problems affect *Homo sapiens’* niche nearly as directly.
Requirement 5. There is no better root cause. All alternatives have been considered.

This is a tough requirement to prove. No one can actually consider all alternatives because the root cause space is so vast. Thus one has to search the space intelligently.

The symptom of the change resistance subproblem is successful opposition to passing proposed laws for solving the environmental sustainability problem. The immediate cause of that is a dominant Race to the Bottom among Politicians. Inspection of the model shows this dominance is due to one key feature of the loop: undetected false memes. This node is not in the race to the top. It is the feature differentiating the race to the bottom from the race to the top. It is therefore the feature explaining the root cause of the race to the bottom’s dominance. High undetected false memes is the same as high political deception effectiveness.

Is there a better model that would explain the symptoms? That might lead to a better root cause.

There might be. In fact, many improvements to the analysis are certain to be found because it’s so young and is the work of a single researcher. But after seven years of analysis, I’ve yet to find anything else even close to persuasively explaining the symptoms of such successful change resistance.

Furthermore, the Dueling Loops model was built by inspection of the system. There’s no need to search a million possible alternatives. All one has to do is “count the camel’s teeth.” Here’s the way I remember the fable, which I read in my youth:

Centuries ago, somewhere in the deserts of North Africa, a tent full of wise old Arab philosophers were pondering weighty subjects. After hours of debate the question of how many teeth a camel had came up. Some felt it had this many. Others felt it had that many. Plausible, clever theories were put forward why each argument had to be true. Heads nodded after each was presented, until yet another was put forth supporting the opposite opinion.

There was no agreement. After hours of debate a younger philosopher remembered that outside the tent were the camels they all rode to get there. Just as one of those camels poked his head inside a flap in the tent’s wall and starting grinning, the young man shouted in exasperation “WHY DON’T WE JUST COUNT THE CAMEL’S TEETH?”

All talk stopped. All eyes spun around and stared at the camel. His big grinning mouth had the answer.
Substep D. Find the feedback loops that should be dominant to resolve the root causes.

This is clearly the You Can't Fool All of the People All of the Time loop. Once it goes dominant corruption will collapse, as will systemic change resistance to solving problems whose solution would benefit the common good.

Substep E. Find the high leverage points to make those loops go dominant.

This follows smoothly from the root cause. If the root cause is high political deception effectiveness, then we need to prevent that effectiveness. Looking at the model, it’s effective because of so many undetected false memes. How can this be greatly reduced? By raising detected false memes. How can that be done? By raising general ability to detect political deception. That is the high leverage point. Solutions must push there to solve the subproblem.

Again, it’s that simple. Why? Because we have a process that fits the problem. That process has produced a model that makes the root causes and their high leverage points so starkly obvious that once they are agreed upon by the environmental movement as a whole, the movement will at last be able to solve the sustainability problem.

How can they come to that agreement? By counting the camel’s teeth.

False meme infectivity

The Dueling Loops model assumes one false meme with a size of 1 has the same infectivity as one true meme. But how can this be? If something is actually true then how can it possibly be as persuasive as someone saying the same thing is false? Conversely, if something is actually false then how can it possibly be as persuasive as someone saying the same thing is true?

The answer lies in the basic Dueling Loops model on page 232. If general ability to detect deception is zero then you are not using reason to decide if something is true or false. You are either accepting everything, rejecting everything, randomly accepting some things and rejecting others, or using some other acceptance rule that ignores meme content. Every meme has the same chance of acceptance. Using the ignore meme content acceptance rule, if a true meme and a false meme have the same size of 1 then they have equal chances of infectivity.

Everything changes when one’s ability to detect deception rises above zero. Suppose it rises to 20%. Now you have a 20% chance of detecting false memes. They will be 20% less infective than true memes. If ability to detect deception is 100% then a false meme will have a zero chance of infectivity.

What happens when ability to detect deception is zero and false meme size is greater than 1? Since the acceptance rule ignores meme content, false meme size should make no difference. Therefore the model is flawed.
However, ability to detect deception is never zero in the real world. The defining characteristic of *Homo sapiens* (wise or knowing man in Latin) is a highly advanced ability to reason. Except for people with severe brain or sense damage, this causes a person’s ability to detect deception to always be greater than zero. Once it’s above zero it become possible to trick a person’s reasoning ability with deception. That’s how false memes with a size greater than 1 work. They trick one’s ability to tell false memes from true memes. The higher that ability is, the harder it is to trick.

The first seven simulation runs assumed ability to detect deception was zero. These runs were presented to acquaint the reader with the model. The unequal infectivity that occurred in some of these runs should be seen as the result of the small amount of residual ability to detect deception in all of us. We actually can’t be fooled all the time.

That’s a good thing. But as the model shows, when it comes to politics we’ve got to do a lot better because currently most of the people are fooled most of the time. There is a sucker born every minute. General ability to detect deception must be raised to a high level or *The Race to the Bottom among Politicians* will take the entire civilized world down with it.

**A second way to model the problem**

The Dueling Loops model how special interests exploit democratic systems with deception. There’s another way to model this, as shown.

If democracy is working properly, *The Voter Feedback Loop* steers the system toward the goal of optimizing the long term common good. This goal appeared with the invention of modern democracy two centuries ago and is still in use today.

Let’s explain the four nodes on the right side of the loop. In this loop “quality” means benefits to the citizens of a country.

Before democracy people lived under the autocratic rule of kings, dictators, and warlords. Only the four nodes on the right existed: leadership, actions, and actual and perceived results. As quality of leadership went up, so did quality of actions in terms
of what was best for a political system. As this increased, so did actual and perceived quality of results. Actual is what physically happens. Perceived is what people perceive with their senses.

Before democracy only the four nodes on the right existed. Invention of democracy closed the loop by adding the performance gap and probability of voting for the best choice nodes.

Voting allows citizens to compare perceived quality of results with the goal of optimizing the long term common good. The difference is the performance gap. The higher the gap, the greater the incentive to elect better leaders. This increases the probability of voting for the best choice, which increases quality of leadership.

Successful deception breaks the loop two ways:

One way is to break the relationship between actual quality of results and perceived quality of results. This relationship has become distorted by deliberate mass deception, causing most citizens to be unable to perceive the truth about how large the performance gap of a particular politician really is. This leads to a low probability of voting for the best choice, resulting in low quality of leadership. This method of breaking the loop uses all five types of deception: false promise, false enemy, pushing the fear hot button, wrong priority, and secrecy.

The second way to break the loop uses only the fourth type of deception: the wrong priority. An exploiter simply deceives the public into believing that a different goal is best for the common good. This reduces the performance gap, which reduces quality of leadership from the viewpoint of the average citizen. It raises it, however, for those who are exploiting The Voter Feedback Loop, which is done by exploiting The Race to the Bottom among Politicians.

A wrong goal (also called goal erosion) has much higher leverage than the other way to break the loop because a system’s goal set is much smaller than the set of all perceptions of the quality of many different politicians. The smaller the set, the easier it is to transmit enough false memes to redefine what’s true in the minds of the public.

An outstanding example of the wrong goal is how in the US the goal of full employment was changed (eroded) to the natural rate of unemployment. Here’s what the goal used to be: 115

President Franklin D. Roosevelt put full employment on the table in 1944, declaring that having a job was a basic human right. During World War II, the nation actually achieved full employment. And twice since then, Congress has considered bills that would have guaranteed a job at decent pay for every adult who wanted work.

The goal of full employment was cleverly replaced by the goal of the “natural rate of unemployment” as part of Milton Friedman’s theory of monetarism. Sharon Beder, writing in Free Market Missionaries: The Corporate Manipulation of Com-
276 Part 3. Analysis and Solution Convergence

Community Values, 2006, talks a great deal about wrong goals, though she uses terms like “manipulation of community values.” Here’s her take on how Friedman replaced the community value of full employment in the United States with the lesser goal of the “natural rate of unemployment:” (p97)

...monetarism [was] a theory that had been discredited following the Great Depression. Its renewed appeal in the 1970s came because it claimed to explain the stagflation that many countries were experiencing. ...in the 1970s inflation increased while economic growth stagnated and employment levels fell. Monetarists such as Friedman blamed inflation on increases in the money supply. ... They also argued that there was a tradeoff between unemployment and inflation and that some unemployment was necessary to keep inflation down.... The level of unemployment necessary to prevent inflation was named the “natural level of unemployment” because it was supposedly determined by the market.

Thatcher and Reagan tried monetarism in the 1980s. It failed just as badly as it had before. But even though monetarism has been discredited a second time, part of that package of deception lives on. The natural rate of unemployment is still used. To hide the fact it’s the wrong goal it was renamed “the non-accelerating inflation rate of unemployment.” Few citizens or politicians can decipher that term, which sounds terribly academic so it must be correct.

Let’s lift the curtain of deception. The graph below shows that’s possible if a nation has the right goal.¹¹⁶

There is no slight of hand here. This is actual data. The acceptable rate of unemployment in the US is absurdly high. Switzerland’s experience proves a much lower rate is possible. The difference is that Switzerland’s political system has not been
deceived into pursuing the *wrong priorities* that the US government is pursuing, like maximum economic growth and deregulation of business. Switzerland has the *right priority* of quality of life. One component of that is maximum employment.

Why did Switzerland’s unemployment rate shoot up after 1990? Switzerland entered the European Union in 1992. That linked Switzerland’s economy closer to Europe’s and hence easier to control by large for-profit corporations. After that recessions affected Switzerland much more than before. In spite of that its unemployment rate remains relatively low.

The Dueling Loops model shows how there are two main groups in a democracy: (1) those supporting the common good and (2) those supporting special interests. Democracy offers the first group a chance to achieve the goal of optimizing the *long term common good*. The second group is opposed to that goal, so they try to change it. In general they have succeeded, as demonstrated so starkly by the Great Recession of 2008. This was caused mainly by excessive deregulation and lax regulation of business, especially the banking industry. Special interests got what they wanted. Why did the US government give in to business demands? Because of the wrong goal. The goal of the system is now the one imposed by special interests.

The goal of democracy in highly industrialized democratic nations is no longer optimizing the common good. It is maximizing profits. This goal has been imposed by the New Dominant Life Form using deception. The average citizen has no idea what’s happened, the deception has been so incremental and clever. It’s a masterpiece of how well propaganda can work, if the very best public relations techniques are employed and funding is adequate.

I know of no book that explains this better than Sharon Beder’s *Free Market Missionaries: The Corporate Manipulation of Community Values*, 2006. Chapter 2, *Promoting Business Values*, exposes how it was done in the country that influences the world the most: (Comments added)

[Starting] in the 1930s, the heads of some of the largest US corporations, “the men who manage America’s industry, trade and finance,” started meeting regularly for dinner in New York. … Members of the group called themselves the “Brass Hats.”

The entire project was original. Businessmen had sold goods and services; they had sold individual companies, or industries, or even specific ideas (like the idea that private ownership of utilities is best); but they had never undertaken to sell business-as-a-whole. Never before had they tried to sell that general philosophy which animates business, and which serves as a guide [a goal] to social, political, and economic action.

… [Because of the New Deal’s popularity] business could not attack the New Deal directly without seeming to attack the public. The answer, business leaders realized, was to change public opinion [the system’s goal] and
undermine the support for New Deal measures. To do this they sought to associate the New Deal with “creeping socialism” and to promote the benefits of unregulated capitalism. …

The Brass Hats chose NAM [the National Association of Manufacturers] as their vehicle of battle, and in 1932 big business took over the association and restructured it. Following its reorganization, NAM’s “propaganda activities… became one of its most important functions, absorbing more time, effort, and money than all the other functions of the association put together. …

NAM’s campaign utilized all the techniques of persuasion that had previously been used to sell products “to sell the business idea… the American System, of Private Enterprise.”

[It was a hard sell because] Polls generally confirmed business fears that the public did not believe in the free enterprise system as wholeheartedly as business would wish. Although most people were in favor of private ownership and thought well of large corporations, a majority also thought that most businessmen did not have the good of the nation [the common good] in mind. … Surveys showed that some 70% of workers believed that the government should guarantee full employment.

Business sought to deal with these threats by selling free enterprise on the basis that “if you control public opinion you have the government in your hand and labor behind the eight ball.” …

Next the story describes the exact false memes used. These were so clever they were invisible. The public never knew they had been fooled:

The business community set out to build an agreement around an alternative agenda. [a wrong goal] In doing so, it sought not only to recast the political economy of post-war America, but also to reshape the ideas, images, and attitudes through which Americans understood their world. Employers wanted support for the belief that economic decisions should be made in corporate boardrooms, not in legislative chambers. Prosperity was to be achieved through reliance on individual initiative and the natural harmony of workers and managers inherent in business’s interpretation of the free enterprise system. …

Corporations, and the public relations people hired by them, identified business interests with national interest and “the traditional American free enterprise system with social harmony, freedom, democracy, the family, the church, and patriotism.” They identified “all government regulation of the affairs of business, and all liberals who supported such interference, with communism and subversion.”
Skipping to the chapter on *Pro-Business Policies as Ideology*, on page 104 Beder identifies the key false meme as:

General business interests and the public interest are synonymous.

This would be a 100% wrong goal. The public interest should be long term optimization of the common good. But business is trying to redefine the public interest to be the goal of business: short term profit maximization.  

Goal erosion is changing the right goal of a system to a wrong, lesser goal. The higher goal erosion is, the lower the performance gap. The lower the gap, the less the effort required to break the link between actual and perceived results. Breaking that link requires much more work than eroding the goal. Those exploiting the race to the bottom realize this. Goal erosion is their highest leverage point, so that’s where they direct most of their effort.

How far has goal erosion gone? Beder concludes her chapter on *The Free Market Gospel* with these chilling words:

Free enterprise has become the prevailing idea of our times, an idea without serious rival—although not without critics. It is an idea that equates business interests with the public interest and gives corporations increasing freedom to invest, produce, and trade without government interference, despite the social, cultural, and environmental consequences that are accumulating. The facilitation of market transactions increasingly takes priority over democratic process, and social and environmental decisions are increasingly left to the Market. Corporations are increasingly able to go about their business, increasingly free from democratic controls.

The “Free Market” has become the dominant ideal and is given priority over democratic ideals whenever they are in conflict. Free enterprise propaganda has deprived its victims of the rationale to oppose it, credible alternatives to rival it, and the mechanisms to control it.

The race to the bottom is the dominant loop most of the time because The Voter Feedback Loop is broken. Until it’s fixed we can only read Beder’s words one more time and shudder at the future that lies ahead. (pun intended)