



BOSS
IS PROGRAMMED
TO BE A
DICTATOR

A manifesto for anyone who has a boss or is a boss.

by Chetan Dhruve

"Nearly all men can stand adversity, but if you want to test a man's character, give him power."

—Abraham Lincoln

This manifesto is divided into six sections:

- 1 The problem: bad bosses
- 2 Analyzing the problem: why do bosses behave the way they do, and why do you behave in a certain manner with your boss?
- 3 The problem in action: The tragic stories of the Challenger and Columbia space shuttles
- 4 Proposed solution: A different way of doing things
- **5** Summary
- 6 Action items

 $|i\omega$ . 19.05  $|i| \bowtie | \triangleq | \oplus |$ 

#### **SECTION 1: THE PROBLEM**

# The World's Worst Kept Secret

At work, what are you not supposed to talk about, above all else? When you're interviewing for a new job, what are you not supposed to talk about, above all else? Although your HR people may ask you, what must you not talk about, above all else? And especially with your boss, what must you absolutely, absolutely not talk about, above all else?

You know the answer, but you won't talk about it because you've been trained not to. The answer is: a bad boss. You cannot and will not complain openly about your boss. You'd rather just leave. You're not alone. A Gallup poll of one million people showed the no. 1 reason that people quit jobs was their boss. Chances are you've experienced a terrible boss at some point in your career. It's a fact of life. Yet, you're not supposed to talk about it. It's the modern version of the emperor's new clothes. And unfortunately, quitting may not help as you could end up with another bad boss.

Bad bosses are a big, big problem. Organizations suffer because productivity nosedives and good people leave. Individuals suffer because bad bosses inflict tremendous stress — ranging from petty harassment or mild emotional abuse to sexual harassment or outright physical assault. Because of bad bosses, careers are destroyed and lives are ruined. People change jobs, move out of town, go to court or even quit working. Even worse, some people kill themselves.

 $i\omega$ . 19.05  $\mid i \mid \bowtie \mid \stackrel{\triangle}{=} \mid \stackrel{\Theta}{=} \mid$ 

Yes, there are some exceptionally good bosses. But why are bad bosses so common and why has nothing been done about it? Well actually, something has already been done: we've gotten rid of the word 'boss' altogether, and replaced it with a much nicer word: leader. So managers, team leaders and supervisors are sent through 'leadership' training courses. But can you train someone to become a leader? Even if you have great leadership skills, does that make you a leader? Just because you lead people, does that make you a leader? The answer is no. So what's the right answer?

4/44

 $\mid$   $i\omega$   $\omega$   $\mid$   $\omega$   $\mid$   $\omega$   $\mid$   $\omega$   $\mid$   $\omega$ 

#### **SECTION 2: ANALYSING THE PROBLEM**

# Who Is A Leader?

In the context of leading people, who is a leader? There is already a vast amount of material out there dedicated to answering this very question. Most of the material, if not all, states that a leader is someone who has multiple abilities: the ability to inspire, motivate, serve, set visions, craft goals, communicate, delegate, manage conflicts, praise, 'lead from the front', facilitate, give constructive criticism, empathize, sympathize, be a team-player, and so forth.

These skills answer the question, "What skills should a leader have?" but do not explain, "Who is a leader?" The answer to "Who is a leader?" is profoundly simple: **A person who's been elected to lead by the people he's leading**. We have a different word for someone who assumes power and leads without being elected: **dictator**.

In organizations today, the term 'leader' is tossed around without any real understanding of the word. It's important to define 'leader' correctly because it affects how people behave. How so? There's a hidden factor that causes people to behave the way they do.

## The Hidden Factor That Influences Our Behavior

What affects our behavior? Is it our genes, our background, or something else? Let's look at an experiment that was conducted by social scientists at Stanford University, described in Malcolm Gladwell's excellent book <u>The Tipping Point</u>. Gladwell says the purpose of the experiment was to find out why prisons are such nasty places. "Was it because prisons are full of nasty people, or was it because prisons are such nasty environments that they make people nasty?"

iss. 19.05 i  $\bowtie$   $\bigcirc$   $\bigcirc$ 

In the basement of a university building, scientists created a mock prison block with small cells, steel-barred black-painted doors and a closet that served as a cell for solitary confinement. The scientists then advertised for volunteers. Of those who applied, the scientists picked the healthiest participants based on psychological tests.

At random, half of the participants were given the role of prison guards; the remaining participants were asked to be prisoners. The guards were given uniforms and dark glasses and told that they were responsible for maintaining order in the prison. Local police then 'arrested' the 'prisoners' at home, handcuffed them, transported them to the police station and charged them with fictitious crimes. The prisoners were then blindfolded, taken to the 'jail', stripped and given prison uniforms. Each uniform bore an identity number, which was the only way to identify a prisoner.

Once the experiment began, what happened was astonishing. The guards, some who had previously claimed to be pacifists, quickly became hard-nosed disciplinarians. On the first night, they awoke the prisoners at 2 a.m., lined them up against a wall and made them do pushups and other arbitrary tasks. On the second morning, the prisoners rebelled — they ripped off their numbers and barricaded themselves in their cells. The guards retaliated by stripping the prisoners and spraying them with fire extinguishers. The leader of the rebellion was thrown into solitary confinement.

As the experiment progressed, the guards became more sadistic. They made the prisoners say they loved each other, and made them march down the hallway in handcuffs with paper bags over their heads. After just 36 hours of the experiment, several prisoners had to be released because they were emotionally traumatized.

Philip Zimbardo, the lead scientist, said, "What we were unprepared for was the intensity of the change and the speed at which it happened." The experiment was scheduled to run for two weeks, but Zimbardo ended it after just six days.

iss. 19.05 | i | ⊠ | 🖺 | ♥

One guard later remembered, "There were times when we were pretty abusive.....it was part of the whole atmosphere of terror." Another guard said, "It was completely the opposite from the way I conduct myself.....I was positively creative in terms of my mental cruelty." A prisoner recalled, "I realize now, that no matter how together I thought I was inside my head, my prisoner behavior was often less under my control than I realized." Another prisoner said, "I began to feel that I was losing my identity...I was 416. I was really my number and 416 was really going to have to decide what to do."

From the experiment, Zimbardo concluded that there are specific situations which are so powerful that they can overwhelm our inherent traits. You can take people from happy families, good schools and nice neighborhoods and powerfully affect their behavior simply by changing the details of their situation.

In his book, Gladwell also talks about an incident in New York City where a man, Bernhard Goetz, shot four youths who threatened to mug him in a subway car. As one of them lay screaming, Goetz walked up to him and said, "You seem all right. Here's another." Goetz shot him again, paralyzing the youngster for life. Police investigations later revealed that all four thugs had criminal records. Goetz surrendered a week after the shooting and was later tried and acquitted.

What triggered Goetz to shoot so ruthlessly? Goetz had a stormy past, so that could be one of the reasons. But let's also look at subway conditions in 1984, the year of the shooting. The platforms were dingy and dimly lit. The cars were filthy and had trash on the floor. Graffiti was smeared all over the trains. Damaged tracks and daily fires caused frequent delays. In the winter, the subway cars were too cold and in the summer, they were too hot. A multitude of criminals harassed passengers. In short, it was hellish. Outside the subway, New York City itself was suffering a crime wave: during the 1980s, there were over 2,000 murders and 600,000 serious felonies every year.

 $i\omega$ . 19.05 i  $\bowtie$   $\exists$   $\Theta$ 

It is against this backdrop that we have to examine Goetz's and the thugs' behavior. According to a theory called 'The Power of Context', behavior is a function of social context, and it's the little things that matter. Goetz and the thugs behaved the way they did not so much because of their respective backgrounds, but because of the message of grim lawlessness the subway environment was sending out.

# There's a hidden factor that influences how we behave. That hidden factor is the System of which we are a part.

Goetz later explained: "In a situation like this, you're in a combat situation. You're not thinking in a normal way. Your memory isn't even working normally. You are so hyped up. Your vision actually changes. Your field of view changes. Your capabilities change. What you are capable of changes." Goetz added that he acted "viciously and savagely...if you corner a rat and you are about to butcher it, okay? The way I responded was viciously and savagely, just like that, like a rat."

Gladwell sums it up, "Of course he did. He was in a rat hole."

The lesson is that our behavior can be strongly governed by external circumstances that we may not be conscious of. Put another way, there's a hidden factor that influences how we behave. That hidden factor is the **System** of which we are a part.

How do we define a system? Broadly, a system is an entity which maintains its existence through the mutual interaction of its parts. Examples of systems are our bodies or the weather, where you cannot examine things in isolation. For instance, you cannot determine local weather conditions without reference to global weather systems. Similarly, we cannot

 $i\omega$ . 19.05 i  $\bowtie$   $\bigcirc$   $\bigcirc$   $\bigcirc$ 

properly examine the boss-subordinate relationship by only examining individuals. We need to look at the system, too. So to figure out why bosses behave the way they do, and why you behave in a certain manner with your boss, we need to look at what kind of system we have at the workplace.

## Why Your Boss Is Programmed To Be A Dictator

There's a discipline called Systems Thinking, which is essentially the study of wholes and the relationships between individual components, as opposed to traditional analysis which examines things by taking them apart. In his book *The Fifth Discipline*, Peter Senge says the first principle of Systems Thinking is this: "When placed in the same system, people, however different, tend to produce similar results." Senge also refers to the prison experiment and says that we don't often see the structures of which we are a part and, like the prisoners and guards, "we just find ourselves feeling compelled to act in certain ways."

In other words: if you're put into in a rat hole [one kind of system], you are going to behave like a rat [behavior arising from being in that particular system]. Both Gladwell and Senge provide several other examples of this.

Now, what does all this have to do with bosses? To turn bosses into leaders, they're sent off on leadership training courses. Subordinates try to learn how to manage their managers. So we treat people as individual components whose behaviors need to be analyzed and fixed. This is the traditional, linear engineering approach — you take a problem, break it up, solve each part, and arrive at an overall solution. Problems that can be solved this way are called 'Tame Problems'. Tame problems are not necessarily easy. An example is putting a man on the moon. It's complex, expensive and difficult. But it can be achieved by analysis and a process-oriented approach.

*iss.* 19.05 *i* ⊠ 🖹 🔍

In contrast, problems that cannot be solved by this linear approach are called 'Wicked Problems'. As in the case of the weather, you can't examine things in isolation. These problems need a 'systems' solution. People are wicked problems because you can't just fix their behaviors without looking at the system in which they work. You can't apply a tame solution to a wicked problem. Nonetheless, we treat people as tame problems all the time. No wonder people are frustrated and unhappy. (For more on tame and wicked problems, read this).

Instead of analyzing and fixing people to change their behaviors, we need to fix the system, so that people automatically behave as leaders and team players. How do we do this? We need to start by returning to our definition of leadership: to qualify as a leader, you must be elected by the people you're leading.

To emphasize this, I've postulated what I'm calling Dhruve's Law, to distinguish it from all the other definitions and laws of 'Leadership' and 'Leader' that are out there. (Yes, naming the 'law' after myself makes me sound like an egomaniac, especially for something that seems like an obvious definition. But apart from matters of the ego, if I use another name or term, I could unknowingly infringe on someone else's name or term).

**DHRUVE'S LAW:** In the context of leading people, only an elected person is a leader. **COROLLARY:** An unelected person is a dictator.

The word 'dictator' may sound harsh in the context of the workplace. But that's because we're used to dictators loudly announcing their arrival through violent coups or brazen displays of military power. They openly terrorize their subjects. Bosses don't grab power or instill fear that way. They don't go around in army fatigues waving guns at their subordinates' heads. How then, do they become dictators?

 $i\omega$ . 19.05 i  $\bowtie$   $\Theta$   $\Theta$ 

## How Your Boss Becomes A Dictator

When you get a new boss, you're simply told, "Bob will be your manager". Bob now has power over you. It's very innocuous and subtle, and there's no big drama.

But what has really happened? Bob is now automatically a dictator because you don't have voting rights over him. No one suspects it, but the absence of voting rights results in a dictatorship system springing into existence. In other words, inaction — not voting for your leader — results in a dictatorship. Because it's so easy to overlook, I call it a **stealth dictatorship system**. Anyone who has authority over you, without your having a say, is a **stealth dictator**. What does that make you? A **stealth subject**. This holds true for any situation — whether it's a full-time job, a temporary assignment, an hour-long meeting, or a one minute conversation.

We know how dictators usually behave. But do they just exhibit their individual traits, or does something more mysterious happen?

## How Does Dictatorial Behavior Arise?

There's a concept in Systems Thinking called **Emergent Properties**. What this means is that when individual components of a system interact, they produce characteristics that are different from the characteristics of the individual components. For example, hydrogen and oxygen are gases, but when they interact they produce water, with wetness being an emergent property. The property 'wetness' emerges only when hydrogen and oxygen interact. Similarly, the emergent property of an aircraft is flight, though the individual parts cannot fly. The property 'flight' emerges only when the parts interact.

i86. 19.05 i  $\bowtie$   $\bigcirc$   $\bigcirc$   $\bigcirc$ 

Fundamentally, leadership is the interaction between two individuals: the leader and the individual being led. To find out what behavior arises during this interaction, let's look at two different systems: first, systems in which people don't have the right to vote for their leader and second, systems in which people do have the right to vote.

Let's look at the first case — systems in which people don't have the right to vote for their leader. Finding such systems is straightforward — they go by the names of Libya, Iraq [under Saddam], Russia, Iran, North Korea, Zimbabwe, Pakistan, Saudi Arabia, and many others that you know of.

What's the predominant emergent property in dictatorship systems? The emergent property for people is **fear and a lack of freedom**. People are not citizens but subjects, literally. From fear, many other things emerge: poverty, a lack of competitive advantage, the exodus of talented people, censored media, little or no innovation, a culture of secrecy and so on. People cannot do anything on their own — for every little thing, they need permission from the dictator so after a while, they become very passive.

No one tells people in dictatorships that because they don't have the right to vote and they should behave fearfully. Fearful behavior is an emergent property — an automatic result of the system in which they live. You might as well have programmed them to behave fearfully.

For dictators, the emergent property is absolute power. No one needs to tell a dictator that because his subjects can't vote, he can behave dictatorially. He just does. He tortures, humiliates or even kills. This behavior is so automatic, it might as well be programmed. In contrast to free systems where leadership is just a job, in dictatorships, it's about status viscerally. The ruler is considered literally superior to everyone else.

This holds true regardless of cultural differences. Systems such as Iraq, North Korea, Zimbabwe and Libya have peoples with different traditions, languages and ethnicities. Yet, all

iss. 19.05 i  $\bowtie$   $\ominus$   $\ominus$ 

of them are very alike — they are closed and fearful societies. They're also poor and uncompetitive. To be blunt, they're losers.

Let's look at the opposite scenario now. What property emerges when an individual has the right to vote for his leader? You already know the answer to this — you only have to look at systems where people have voting rights. Examples are the United States, Britain, France, Holland, Germany, Japan and so on. The emergent property is **freedom**.

You could argue that we have the right to vote only because we're free. To prevent a chicken and egg situation here, let me ask the opposite question: if we did not have the right to vote, would we continue to be free? The answer is a resounding no.

How do people with voting rights know they can behave freely? Who tells them? No one. They just behave freely, within the boundaries they set for themselves. They criticize their leaders, ridicule them, change them, praise them, or whatever. Citizens take initiatives and act without having to get permission from their leader for every little thing. There is a culture of dynamism and openness.

In turn, the leaders, though vested with power, behave in a certain way. The citizens and the leaders behave in ways that are products of the system. These behaviors are so automatic, they might as well be programmed. Further, where there's freedom, leadership is considered a job just like any other job. Unlike monarchs or dictators who consider themselves inherently superior to commoners, leaders are not considered superior to citizens. Yes, leadership is a very highly regarded job, but it's still a job. If a leader isn't performing to our expectations, we can throw him out.

Many other things emerge when people can vote: innovation, wealth, power, competitive advantage, a free media, the attraction of talent and so on. The richest and most powerful systems on the planet are those in which people vote for their leaders — the United States being a prime example. You could argue that communist China is becoming powerful, too

 $i\omega$ . 19.05  $i \bowtie \exists \oplus \bigcirc$ 

— the answer is yes, of course, but its ascent began only after it gave its citizens more economic freedom. In any case, a better question to ask is: how much more rich and powerful would China be, if its citizens had the right to vote?

# Real freedom brings real success. Shared systems matter more than shared culture.

You could also argue that in a system like India, where people do have voting rights, poverty is widespread. But there's a historical reason for this — because of rapacious British colonialism (dictatorial control over India), the country associated capitalism with subjugation. India thus strangled the economic freedom of its own people for decades. Once the economic handcuffs came off in the early 1990s, it began to get competitive and wealthy, a journey that still continues.

The important point here is that real freedom brings real success. Shared systems matter more than shared culture. For example, Japan, Germany, Italy, France and the United States are all very different culturally from one another. Their peoples have different histories, traditions, languages and even ethnicities. Yet, despite these huge differences, they are amazingly similar — they are free, wealthy, innovative and powerful. Winning is an emergent property.

Having looked at emergent properties in country-systems, let's now look at emergent properties in the workplace. You may say there's a big difference between a country and an organization or company. But remember that fundamentally, leadership is simply the interaction between the leader and the individual being led. This interaction is the main thing. Let's examine the emergent properties of an organization in which people don't have the right to vote for their bosses.

 $i\omega$ . 19.05 i  $\bowtie$   $\Theta$   $\Theta$ 

## Emergent Properties In The Workplace

How do people behave at work? Just like courtiers or sycophants in monarchies or dictatorships, subordinates continually strive to be in the good-books of their superiors. People are afraid to criticize their bosses, even in private; this is similar to dictatorships where people are scared to criticize their rulers. There's often a culture of secrecy. In stark similarity with dictatorships, there's censorship — you don't see cartoons or articles by subordinates criticizing their bosses splashed routinely in the in-house magazine or intranet. You had better stick to the party line or you're asking for trouble. In fact, several people have been fired for talking ill of their bosses — here's a news article about a British man who was dismissed from his job for blogging about his "Evil Boss". So what's the predominant emergent property for subordinates? Fear. This could range from feeling occasionally anxious to living in complete and abject terror.

For bosses, the emergent property is **power**. Like dictators who torture and bully people just for the fun of it, so do bosses, according to an <u>article</u> in *The New York Times (NYT)*. The article quotes Dr. Harvey A. Hornstein, a retired professor at Columbia University and the author of the book "Brutal Bosses and their Prey". Dr. Hornstein found that while bosses used power in expected ways like putting down threatening subordinates or making them scapegoats, **their main reason for abusing power was far more monstrous. Managers abused their subordinates for the fun of it, for the sheer pleasure of exercising power. Dr. Hornstein was quoted, "It was a kind of low–grade sadism, that was the most common reason. They'd start on one person and then move onto someone else." Dr. Gary Namie, director of the Workplace Bullying and Trauma Institute, was quoted as saying that women are at least as likely as men to be the aggressors, and they are more likely to be targets.** 

It's not just the relationships between bosses and subordinates that are affected. Relationships between subordinates suffer, too. As in dictatorships, subordinates who witness a colleague

 $i\omega$ . 19.05 i oxtimes oxtimes oxtimes

being humiliated are relieved that they aren't the target, and feel happy that they look good in comparison. The *NYT* article also mentions a survey by Dr. Michelle Duffy, a psychologist at the University of Kentucky business school. The survey found that although workers were happy when praised by their boss, they were happier still when the praise was accompanied by news that a colleague was struggling. So much for teamwork.

Dr. Duffy also noted that co-workers watch silently when a colleague is being humiliated. The person at the receiving end feels suddenly isolated, while those who idly witnessed the humiliation resolve their guilt by making up reasons for the colleague's shaming — perhaps he was lazy, or did something to deserve it.

And like all small-time dictators, bosses who enjoy abusing power offer reverence to those with even more power — their superiors.

There are other knock-on effects, too. Dr. Leigh Thompson, an organizational psychologist at Northwestern University, and Cameron Anderson of the New York University business school, studied the effects of management styles on small groups. In a simulation, they found that a bullying, mean and 'alpha dog' boss transformed the behavior of the no. 2 managers, who themselves became copies of their bullying boss.

The startling thing was that as in the Stanford prison experiment, this behavior happened even if the no. 2 managers were rated as compassionate on personality tests outside the experiment. Because they wanted to please their bosses, the no. 2 managers temporarily turned into 'alpha dogs' themselves. This phenomenon also worked the other way: if the boss was compassionate, the no. 2 managers also became compassionate. But in both cases, the level 3 people were entirely at the mercy of what was going on at levels 1 and 2.

Levels reflect a strict hierarchy, which is the most important characteristic of dictatorships and monarchies. People know their place and are expected to behave accordingly. A hierarchy is also the defining characteristic of a contemporary organization chart. This top-down

16/44

 $i\omega$ . 19.05  $\mid i\mid oxtimes \mid oxtlesh \mid oxtlesh \mid oxtlesh \mid$ 

thinking is revealed in the words we use — 'superior' for our bosses, and 'subordinates' for those below us. The words 'superior' and 'subordinate' indicate your status as a human being, not just your expertise. Moreover, your position is graded — say on a scale of 1–12. The person at grade 11 is higher ranked than the person at grade 7. What's the objective of this grading? To put you in your place so you don't act above your station.

The world's most powerful man is far above your station. Why then, are you not afraid of openly calling the American President an idiot, while you are afraid of openly calling your boss an idiot? Because the moment you enter your workplace, you leave a free system and enter a dictatorship system. Since you 'know your place', you behave with your boss and higher ups as a person of lower status behaves with a superior — submissively and with a measure of anxiety. Obviously, we often do this in extremely sophisticated ways.

This emphasis on status at work has other consequences. According to the *NYT* article, psychologists studying obedience said that **subordinate status itself causes people to defer to a superior's judgment.** In his book the *Wisdom of Crowds*, James Surowiecki mentions a series of experiments in which military fliers were asked to solve a logic problem. The pilots, even if wrong, always spoke more convincingly of their solution than their lower-ranked navigators. And the navigators deferred to the pilots because they assumed the pilots were right. We'll later discuss how this emphasis on status can have catastrophic results.

As we've seen, emergent properties at the workplace resemble the emergent properties of a country ruled by a dictator. If you disagree, perhaps you're not even aware of these behaviors. Still not convinced? Let's look for proof in the one place that knows exactly what goes on inside you. Your body.

 $i\omega$ . 19.05 i  $\boxtimes$   $\exists$   $\Theta$ 

## The Medical Evidence

A study of British civil servants, called the Whitehall study, B showed that a person's position in the organization hierarchy was directly related to his risk of getting heart disease. Those lower down the ladder suffered from a greater risk of heart disease than those higher up, even after accounting for factors such as smoking, diet, and exercise.

The remarkable thing according to the director of the study, Sir Michael Marmot, was that, "It was not the case that people in high stress jobs had a higher risk of heart attack, rather it went exactly the other way: people at the bottom of the hierarchy had a higher risk of heart attacks. Secondly, it was a social gradient. The lower you were in the hierarchy, the higher the risk. So it wasn't top versus bottom, but it was graded. And, thirdly, the social gradient applied to all the major causes of death."

Sir Marmot explained further, "What the Whitehall Study of British civil servants showed very clearly is that in people who are not poor, who are not deprived by any of the usual criteria because British civil servants exclude both the richest and the poorest members of society, but in such people there is a social gradient in health and disease. And by that I mean the lower you are in the hierarchy the higher the risk of disease. People who are in the middle range have more disease than people at the top. People in the lower part of the middle range have more disease than those who are in the upper part of the middle range, and people at the bottom have more disease than those in the middle range."

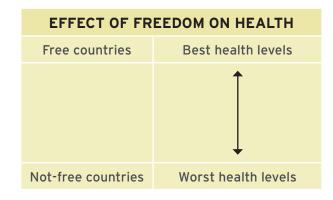
The study also found that within grades, there was hardly any difference between men and women. Crucially, the study stated that the actual pressures of work did not matter: "High job demands, low social support, and the interactions between work characteristics (job strain) were not related to the coronary outcomes."

 Moreover, among people dying up to age 69, men in the lowest grade were four times more likely to die prematurely than those in the top grade. Why does position in the hierarchy matter so much? The issue studied was job control — the more power you had over your destiny at work, the less likely you were to suffer from major diseases. What does having power over your own destiny mean? In a word, freedom. (Read interviews with Sir Michael Marmot <a href="here">here</a> and <a href="here">here</a>.

If varying degrees of freedom causes corresponding variations in the health of employees, it should follow that varying degrees of freedom among countries should cause corresponding variations in the health of their citizens. Fortuitously, scientists have studied exactly this. This study quoted in the BMJ (*British Medical Journal*)<sup>C</sup> examined the effect of freedom [elected rulers and civil liberties] on health. The study's sample represented 98% of the world's population in 170 countries. The study found: "The highest levels of health were in free countries followed by the partially free countries, and the worst levels of health were in countries that were not free." So, similar to the Whitehall findings, the effects of freedom are graded — your health varies according to the amount of freedom you have.

If we juxtapose the Whitehall study and the Freedom/health study, you'll see the similarities are striking:

WHITEHALL STUDY		
High Grades	Lowest heart disease risk	
Low Grades	Highest heart disease risk	



 $i\omega$ . 19.05 i  $\bowtie$   $\exists$   $\Theta$ 

What does this show? That our bodies can tell the difference between living in freedom and living in fear. Using health as an indicator, we can infer that freedom varies according to grade/ rank in the office hierarchy — those in the lowest grades have less freedom than those in the highest grades. How different is this from a dictatorship where the dictator at the top of the hierarchy has the most freedom, and the people at the bottom have little or no freedom?

Nobody likes being powerless, and it shows in our bodies. This <u>study</u> published in the *BMJ*<sup>D</sup> found that every time a boss and subordinate interacted, the subordinate's blood pressure went up if the subordinate thought the boss was unfair. When does the issue of unfairness crop up? When we feel trapped. When do we feel trapped? When we have no freedom.

Perhaps in the future, health insurance companies will charge you a premium according to your position on the company ladder. The lower you are, the more you pay. But then, insurers will also have to extract higher premiums from organizations that are hierarchical, because the consequences of fear and hierarchy are disastrous not just for the body. They can be catastrophic for projects or organizations, too. Let's look at two very high-profile cases, the loss of space shuttles Challenger and Columbia.

 $i s s \cdot 19.05$   $i \bowtie \exists \Theta$ 

#### SECTION 3: THE PROBLEM IN ACTION - CHALLENGER AND COLUMBIA

# The Challenger Tragedy

In January 1986, the Challenger space shuttle disintegrated soon after launch, killing everyone on board. The investigation found that a problem with something called an 'O-ring' (a kind of seal) had caused a solid rocket booster, on which the shuttle rides, to blow up. Engineers had pointed out the O-ring problem well before the shuttle's launch, but were overruled by their bosses (see this case-study).

One of those engineers, Roger Boisjoly, was a seal specialist. He worked for Morton Thiokol, the company that made solid rocket boosters for the shuttle. A few months before the launch, Boisjoly had written a <a href="memo">memo</a> explicitly warning management of the danger of "a catastrophe of the highest order — loss of human life". On launch night, because of very cold weather that could affect the seal's performance, Boisjoly and other engineers had <a href="fought">fought</a> like hell" to postpone the launch. Boisjoly was later quoted: "There was not one engineer in that room the night before the launch that supported the decision to launch — not one."

Lest you think all engineers are good and all managers are bad, note that several managers both at Thiokol and NASA were engineers themselves. They had other pressures to deal with. Several earlier launches had already been postponed. President Reagan was due to make his State of the Union address in which he would mention the first teacher in space, Christa McAullife, and NASA wanted the shuttle in space by then. NASA also had some unexpected competition from the European Space Agency. Thiokol had a billion dollar contract with NASA that was up for renegotiation. These factors almost certainly put pressure on the managers. What do you think happened?

iss. 19.05 i  $\bowtie$   $\bigcirc$   $\bigcirc$ 

Boisjoly <u>later said</u>, "Four top [Thiokol] executives convened their own meeting [in front of us] without our participation, and it became very obvious that they were seeking some information to put on a piece of paper that would justify a decision to launch. That [memo] was almost immediately accepted by NASA without any troubling questions or discussions, because they had received the answer that they had hoped they would receive from the beginning — the decision to launch."

Shouldn't Boisjoly have aired his objections vociferously, even if this meant risking his job? Note that if he was fired, at his age he was unlikely to get another job. Boisjoly voiced these fears a few weeks after the disaster: "I hope and pray that I have not risked my job and family security by being honest in my conviction." Unfortunately, Boisjoly's worst fears materialized — he was demoted and forced to leave. Not surprisingly, his health suffered and he struggled to find work after that. The aerospace industry, in which he had worked for over 25 years, shut him out. He said, "I couldn't get a job if I worked for free."

The response to Boisjoly was the classic dictatorship response: instead of killing the problem, the dictatorship 'eliminated' the person who raised the problem. Dictatorships know that killing someone is the best way to silence everyone else. As Boisloy said, "People are reticent to do that [stand up] because when they do, they get creamed, and that effectively silences others."

In contrast, you would assume that everyone involved with shuttle missions would be clearly told to shout out the bad news. But this doesn't happen because the organization structure allows only one kind of news to travel upwards: good news. As with Boisjoly, the system gets rid of bad news mercilessly: it eliminates the messenger.

In the *Wisdom of Crowds*, Surowiecki mentions a study of middle managers that found a positive correlation between upward mobility and not telling the boss about things that had gone wrong. The most successful executives tended to hide information about problems.

 $i\omega$ . 19.05  $\mid i\mid oxtimes \mid oxtlesh \mid oxtlesh \mid oxtlesh \mid$ 

Since bad news is bad for its bearer, it morphs into good news as it moves up the hierarchy. Before the Challenger disaster, a 1 in 100 failure risk as assessed by engineers became a 1 in 100,000 failure risk by the time it reached top management. The late Dr. Richard Feynman, who served on the Presidential Commission that investigated the disaster said, "[W]hy do we find such enormous disparity between the management estimate and the judgment of the engineers? It would appear that, for whatever purpose, be it for external or internal consumption, the management of NASA exaggerates the reliability of its product, to the point of fantasy."

Blaming management is a natural reaction, and that's what Boisjoly did. He took Thiokol to court for deceiving NASA, but lost. The court ruled that since no information was concealed, the issue was not deception but the interpretation of information. Managers just happened to interpret the information differently from the engineers.

If no individual was at fault, what was the problem then? Groupthink was blamed. Groupthink is a phenomenon in which a group of people — however smart — ends up making poor decisions by disregarding facts, just to maintain consensus. Two personnel experts who conducted management seminars at NASA said groupthink was part of NASA's culture. Larry Mulloy, NASA's rocket booster project manager at the time of the Challenger disaster admitted, "We at NASA got into a groupthink about this [O-ring] problem."

But the engineers themselves had recommended against launching, so how did they become part of groupthink? Isn't it strange that groupthink usually results in group members thinking what the bosses want them to think? Lawrence Wear, a NASA engineer, said statements from [Marshall Space Flight Center] officials could have intimidated dissenters: "When the boss had spoken, they might quiet down."

We could perhaps excuse non-engineer managers for not being sufficiently knowledgeable and hence rendered voiceless. But what caused the engineer-managers to disregard the

 $i\omega$ . 19.05  $i \bowtie \exists \exists \bigcirc \bigcirc$ 

opinion of their own engineers? Simple. Once they became bosses, they behaved as dictators. Obviously, they didn't suddenly become monstrous tyrants. The transformation was far more subtle — because they were their engineers' superiors, managers valued their own opinions more. In short, the bosses confused expertise with status.

Dictatorships are full of status-driven groupthink, because not thinking in tune with the bosses can be fatal. In a regular dictatorship, you could lose your life. At the workplace, you could lose your job, as Boisjoly found. In any case, NASA took many measures to improve after the Challenger disaster. Yet sadly, Columbia didn't make it back on Feb 1, 2003.

## The Loss of Columbia

During Columbia's launch, a piece of white foam broke away from the external fuel tank and smashed into the shuttle's left wing. NASA's engineers wanted photographs from which they could gauge the damage and work out possible solutions. The photos could only be provided by other agencies via satellites or powerful ground telescopes. Rodney Rocha, an engineering chief, tried six times to get the higher managers to request the photos. Two similar attempts were made by other engineers. All these requests were turned down. Linda Ham, the head of the Mission Management Team (MMT), justified this refusal saying: "I really don't think there is much we can do so it's not really a factor during the flight because there is not much we can do about it." Essentially, she had decided for herself and for everyone else that the foam strike was not worth examining.<sup>I</sup>

Astonished, Rocha <u>drafted an email</u> saying, "In my humble technical opinion this is the wrong — and bordering on the irresponsible — answer from the [space shuttle program], not to request additional imaging help from any outside source. I must emphasize — again — that severe enough damage … could potentially present grave hazards." For reasons he

iss. 19.05 i  $\bowtie$   $\exists$   $\bigcirc$ 

hasn't publicly explained, Rocha didn't send the email, but instead showed it to colleagues. He later said that after being repeatedly rebuffed by management, he "lost the steam" to press his case. Ultimately, Columbia burned up on re-entry because of the foam strike.

According to an Associated Press <u>report</u>, Rocha and other engineers were "too uncomfortable" and "too afraid" to speak up at key meetings. At the end of one such meeting, Ham invited questions but was met with silence. Rocha didn't say anything because he was apparently intimidated: "I was too low down here in the organization and she's way up there." Further, Rocha said, engineers were often told not to send messages much higher than their own rung in the ladder. What happened to Rocha was exactly what studies have found: **subordinate status** — **not expertise** — **makes people defer to their superiors' judgment.** 

According to John Logsdon, a member of the Columbia Accident Investigation Board (CAIB), NASA's culture of fear could have been a legacy of Daniel Goldin, NASA's previous boss. Goldin scared workers with his abrasive and demanding manner. Logsdon said, "There were people afraid to tell Mr. Goldin things he didn't want to hear."

Predictably, management was rebuked for the Columbia disaster. The <u>CAIB said</u>, "Perhaps most striking is the fact that management ... displayed no interest in understanding a problem or its implications."

But let's now look at the pressure on NASA management. NASA's chief is appointed by the U.S. government, meaning NASA can be subjected to political pressures. The CAIB reported that after the cold war ended, NASA was left without a competitor. No political gains could be made from the space program, and NASA's budget was cut by over 40% in real terms during the 1990s. The government had effectively put NASA on probation. Sean O' Keefe, NASA's head at the time, had warned the agency saying, "NASA's credibility with the [Bush] Administration and Congress for delivering what is promised ... hangs in the balance."

 $i\omega$ . 19.05  $\mid i\mid oxtimes \mid oxtlesh \mid oxtlesh \mid oxtlesh \mid$ 

With pressure on credibility came pressure to keep the shuttle launches on schedule, since delays meant further funding cuts. The CAIB report said, "Most of the Shuttle Program's concerns about Columbia's foam strike were not about the threat it might pose to the vehicle in orbit, but about the threat it might pose to the schedule." With such pressures, it's not surprising that NASA management ignored the foam strike. Yet, how were they able to disregard the engineers? Easy. They had power over the engineers. What power? The power to fire people if they didn't obey orders, especially in a critical situation.

NASA made many changes after the Challenger, including emphasizing a culture of safety. So why did the Columbia also perish? The problem wasn't the lack of a safety culture. Specifically, it seems safety wasn't a priority for the people *at the top*. Without doubt, executives did not intentionally disregard safety — no one would in such high–stakes missions. But they had other pressures to which they succumbed. Hence the real problem was the status–driven dictatorship culture, which enabled these pressures to be pushed down the chain. While a safety culture was obviously important, a freedom culture was far more important.

After Columbia, NASA has tried to become fairer, and it's not just lowly engineers who were shunted off. Of the top 15 shuttle managers, 11 were reassigned or have retired. O'Keefe said he was committed to "creating an atmosphere in which we're all encouraged to raise our hand and say something's not right or something doesn't look safe." But James Oberg, a former shuttle flight controller, doubts things will change: "I've heard that before. In fact, I heard that 17 years ago [after Challenger]." He was also quoted as saying, "The NASA team leaders think they're way smarter than their record indicates."

Why do team 'leaders' think they're way smarter? Because when you're a dictator, you automatically think you're way smarter than anybody else. In the *Wisdom of Crowds*, James Surowiecki quotes Chris Argyris, an organizational theory expert, as suggesting that bosses have a deep-rooted hostility to opposition from subordinates. This gets in the way of real information exchange. Surowiecki says, "This is the real cost of a top-down approach to deci-

 $i\omega$ . 19.05 i  $\bowtie$   $\exists$   $\ominus$ 

sion making: it confers the illusion of perfectibility upon the decision makers and encourages everyone else to simply play along."

This was not supposed to happen after the Challenger and Columbia disasters. But unfortunately, the fact that Discovery faced the same falling-foam problem as Columbia shows little has changed.

## A Note On Space Shuttle Discovery

Despite all the effort and money expended after Columbia, space shuttle Discovery also narrowly missed being hit by falling foam. Mercifully the crew returned safely, but the same old issues have emerged. A NASA report had warned in 2004 that engineers at Lockheed Martin, the contractor that handles the external fuel tank, "did not do a thorough job" of ensuring quality. Why? Conley Perry, a retired NASA division chief who wrote the report, said the problem "stems from the 'schedule first' attitude of Lockheed Martin management." So it was the same story again: management pushing scheduling concerns down the chain, at the expense of safety.

It would be only too easy to blame specific individuals. But it's the system that needs to be fixed, as the CAIB report recognized: "It would be tempting to conclude that replacing them [individuals] will solve NASA's problems......People's actions are influenced by the organizations in which they work, shaping their actions in directions that even they may not realize". This hits the nail on the head: organizations affect our behavior even without our conscious knowledge — our behavior may as well be programmed.

(Before I end this section, I'd like to say that like most people, I deeply respect NASA's achievements. I've only referred to NASA because the facts of the shuttle cases are public and easily available. Just

 $i\omega$ . 19.05  $\mid i\mid oxtimes \mid oxtlesh \mid oxtlesh \mid oxtlesh \mid$ 

in case you're wondering how NASA's 'dictatorship culture' allowed the facts to be so openly revealed, remember that NASA is owned by a system in which people vote for their leaders).

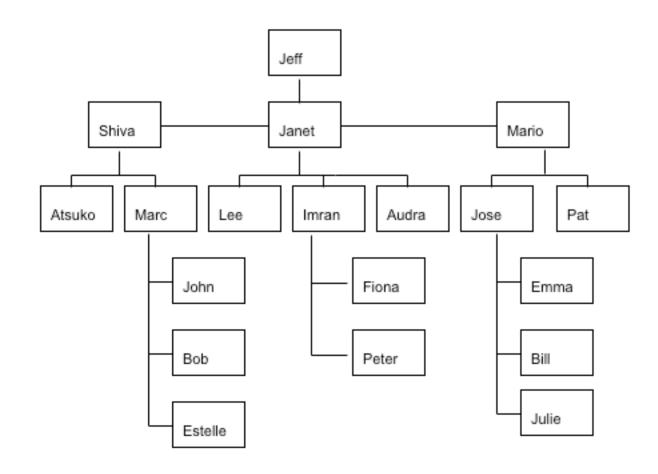
The shuttle tragedies and the medical evidence reveal a brutal truth: organizational dictatorships can literally kill. They kill our bodies by causing diseases, and they kill people by causing disasters. What's the solution? Coming up is one that most organizations boast about.

## Flat Organizations

In the early 1900s, efficiency expert Frederick Taylor described a good worker as someone who does "just what he is told to do and no back talk. When the foreman tells you to walk, you walk; when he tells you to sit down, you sit down." K

Of course, that attitude would not have brought about all the innovations that we now see around us. Organizations today are far more 'free' and 'flat' than they were during the height of the command-and-control era of the industrial age. Incremental improvements over a long period have meant that organizations have changed with changing times. However, freedom is still not institutionalized — the extent to which subordinates are empowered still depends on their bosses, and even a 'flat' organization with just two levels cannot be called truly flat. The hierarchical command-and-control model is still with us. As we know, this is what it looks like (see next page):

 $i_{\mathcal{SS}.\ 19.05}$  i  $\bowtie$   $\stackrel{\triangle}{=}$   $\bigcirc$ 



In a hierarchy, power flows from top to bottom. Even without the job titles, you can tell who's at the top of the pile, who's at the next level and so on. The fact that we're still stuck with the top-down model shows that you can improve a caterpillar as much as you want, but you will still end up with a caterpillar. To get a butterfly, we need a quantum leap in thinking.

 $i\omega$ . 19.05 i  $\bowtie$   $\supseteq$   $\bigcirc$   $\bigcirc$ 

#### **SECTION 4: PROPOSED SOLUTION**

# From Caterpillar To Butterfly

For organizations, that quantum leap means institutionalizing freedom. How? By giving sub-ordinates the right to vote for their leaders.

It may appear foolishly idealistic. To an all-powerful dictator looking in from the outside, a free system appears weak and vulnerable. After all, citizens openly criticize their leaders. The leaders squabble with one another. People who back different leaders squabble with one another. Issues are openly debated. The media ridicules leaders on the front page of newspapers and on prime time TV. If people don't like their leaders, they throw them out. How messy is that, compared to a neat tightly controlled command-and-control system?

Even so, we know that dictatorship systems produce poor results. The key is that in free systems, it's not that leaders are powerless, there is a power balance; the leaders have power, but the people also have power. As we know, countries with elected leaders aren't unorganized anarchies. Despite their chaotic appearance, free systems are tremendously powerful. In fact, during crises, they become even stronger. After all, who do you think would make a weaker opponent — a team whose leader was chosen by the team-members, or a team whose leader was thrust upon it? If you were in an army fighting a war, what kind of team would be more committed to you — one whose members had chosen you as leader, or a team you'd been thrust upon?

So we know this for sure: success comes from freedom, and hence, employees must have the right to vote for their bosses. How else can we balance power at work? A subordinate's compensation, and indeed his continued survival, depends on the boss's appraisal of him. Likewise, a subordinate needs to appraise his boss's performance, in terms of the boss's

 $i\omega$ . 19.05 i  $\bowtie$   $\exists$   $\Theta$ 

leadership of that particular subordinate. The boss's compensation then needs to factor in the ratings his subordinates give him. This way, there would be a bottom-up pressure to counter the top-down pressure. Yes, organizations do try to provide a semblance of power balance through tools such as 360 degree feedback. But that's like getting a dictator to ask for feedback. You don't have a choice in whether or not you want the person as leader.

Say Boisjoly or Rocha and their engineers had the power to substantially cut their managers' pay, or even fire (vote out) them. Don't you think perhaps their bosses would have listened more carefully? Would Enron have happened, if the whistleblowers had power over their bosses?

We've seen that bosses drive groupthink. To prevent groupthink, James Surowiecki says in his book that the best way for a group to be smart is for each person to think and act independently. How best to guarantee independence? Ensure that bosses are real leaders, not dictators.

As an aside, large companies say they want to foster an entrepreneurial culture, like small companies who can be nimble by virtue of their size. But if it was just a question of size, why are free large countries (such as the US) far more entrepreneurial than small countries run by dictators? Because the question is not big vs. small, but freedom vs. fear.

When people are free — they have power over their work situation — it has a tremendous impact on productivity. Tom Peters mentions a <u>landmark experiment</u> in which subjects were given complex puzzles to solve while random noise was played in the background. The subjects were divided into two groups — one was given a switch with which they could turn off the noise, while the other group had no such switch. The subjects with the switch solved five times more puzzles than their counterparts. The surprising thing was that the subjects with the switch didn't use it at all! Tom's article concluded, "The mere knowledge that one can exert control made the difference." If a mere switch can make such a difference, imagine the impact on productivity if subordinates have power over their bosses.

31/44

 $i\omega$ . 19.05  $\mid i\mid oxtimes \mid oxtlesh \mid oxtlesh \mid oxtlesh \mid$ 

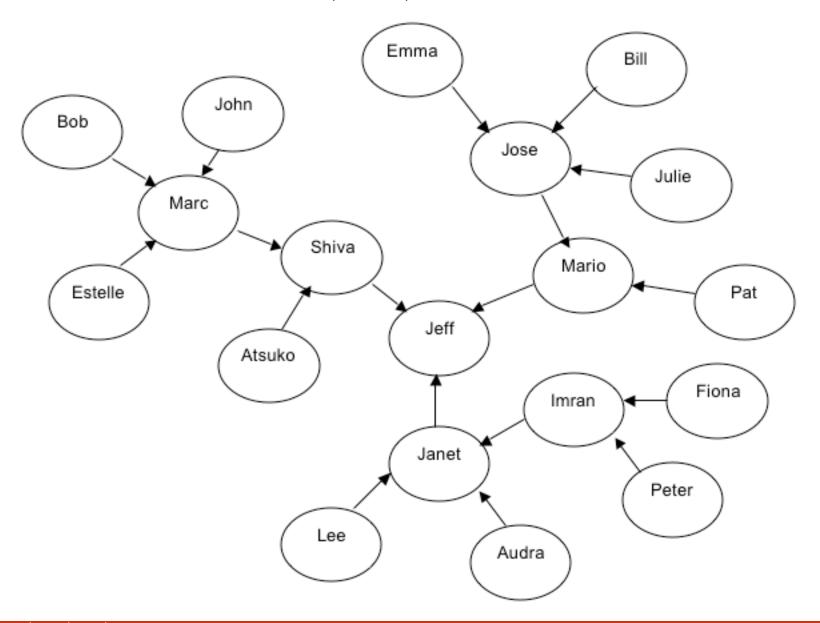
Moreover, this will result in real decentralization. As we progress further into the 21st century, the pace of change is manic. A hierarchical organization will never be able to cope with this pace, and is headed for extinction. As Charles Darwin said, "It's not the strongest of the species that survives, nor the most intelligent, but rather the one most responsive to change." Hence, we need to move from a hierarchical world-view to a paradigm in which the organization is a collection of relationships between free people.

## A New Kind Of Organization Chart

To capture this new world-view, I propose a new kind of organization chart. Think of it as a three-dimensional globe, with no 'up' or 'down'. (I've called it the Dhruve Chart, for reasons I've already mentioned).

 $|i_{\delta\delta}.\,_{19.05}|$  i  $|\bowtie|$   $|\triangleq|$   $|\oplus|$ 

## **DHRUVE CHART** (The arrows point to a person's leader)



iss. 19.05 | i | ⊠ | 🚊 | ⊕ |

You will notice there's no hierarchy. Yet, the relationships between individuals are still captured — the arrows tell us who a person's leader is. There's no rigid top-down structure to the chart — you can put any person anywhere in the chart, and draw the rest of the organization around that person.

## What Madness Is This?

You may find the idea of voting for your leader at work downright bizarre. Many questions will arise. Are subordinates intelligent enough to choose their leaders? What would subordinates know about leadership? Remember, this was also the view held of women before they were given the right to vote — that they weren't intelligent enough, that they knew nothing of politics or leadership.

You can now understand the plight of contemporary dictators, who are genuinely bewildered when they're continually admonished by our leaders for not allowing their subjects to vote. Similarly, company owners may rile at the thought of being fired by their own employees. But we must not confuse ownership with leadership.

It may be initially difficult to change our mindset. Which kingdom's monarch would give up control and let elected commoners lead? Weirdly enough, such a kingdom exists. It's called the United Kingdom of Great Britain. The Queen is technically the head of that country, and she still retains her pomp and splendor. She's called Her Majesty, and people still bow or curtsy to her. The government is called Her Majesty's Government. Yet, elected leaders run the show.

Naturally, there are going to be many issues in implementing the new system. You may worry that there will be more, not less, office politics. But as Tom Peters says, "If you don't love politics, find another life (don't pretend you're a "leader")". To support this new system, a

iss. 19.05 i  $\bowtie$   $\supseteq$   $\bigcirc$ 

new institutional framework needs to be created, because our current one (HR processes and so on) supports the old dictatorship model. As in any new undertaking, the most important thing is to have conviction. If there's conviction, the practicalities can be worked out. If you think it's not practical, just be glad that the founding fathers of our nations didn't think the same way. They had nobody to guide them and yet they embarked on an awesome journey, the fruits of which we live with daily. We now have countries that have forged institutional frameworks and undertake massive logistical exercises to ensure that hundreds of millions of people can choose their leaders. How impractical is that?

 $|i\omega$ . 19.05 |i|  $\bowtie$   $|\exists$   $|\mathfrak{A}|$ 

#### **SECTION 5**

# Summary

- → Your behavior is affected by the system in which you live and work.
- → At work, you don't have the right to choose the person who has power over you
   your boss. That makes him a dictator, and you a subject.
- → The system is hence that of a dictatorship. Your boss, you and your colleagues all behave accordingly.
- → To change the system to a free system, subordinates should be given the right to vote for their bosses.
- → The result will be a more productive and successful company, and a more successful and healthier you.

 $i\omega s. 19.05$  i  $\bowtie$   $\bigcirc$   $\bigcirc$   $\bigcirc$ 

#### **SECTION 6**

# **Action Items**

How do you begin implementing such a system? You already know how to go about voting for your leader, both in large contexts (countries) and small ones (clubs, groups or similar associations). It's just a matter of tailoring the processes to your own organizations. Here are some things you can do right away:

- → When someone talks of people leadership, check to see if it violates Dhruve's Law. Become aware when someone's making a stealth dictator or stealth subject out of you.
- → Ask your subordinates to vote to see if they'd continue to want you as their leader.
- → Re-draw your organization chart according to the new one. Do away with giving grades/ranks to job positions.
- → Start an appraisal process in which subordinates rate their leader's performance. Factor in these ratings to the leader's compensation package.
- → Encourage employees to write critical articles or draw cartoons about their bosses, and publish these on the company intranet or in-house magazine. It will be difficult at first for the bosses and subordinates, but like our political leaders and citizens, they will soon accept it as part of the game.
- → Last but not least, if you have a terrific boss, please bow to him/her as deeply as you possibly can. It's even more difficult to be a great boss than it looks these bosses have somehow fought being programmed by the system and have come out winners.

 $i\omega$ . 19.05 i  $\bowtie$   $\oplus$   $\ominus$   $\ominus$ 

## ChangeThis

I've created a blog to discuss these issues. As I've mentioned earlier, creating a new system will be an ongoing exercise, and I hope we can all put our heads together to make a happier and more productive workplace for everyone. Take part at <a href="http://dhruve.blogspot.com">http://dhruve.blogspot.com</a>. You can contact me at <a href="mailto:cvdhruve@gmail.com">cvdhruve@gmail.com</a>.

 $|i\omega.19.05|$  i  $\bowtie$   $\lozenge$   $\lozenge$ 

# **Acknowledgements**

A big thank you to Amit Gupta, Kate Mytty and Todd Sattersten. Thanks also to Seth Godin for launching ChangeThis.

Definition given by the late Austrian biologist, Ludwig Von Bertalanffy. There are several variations. <a href="http://www.systems-thinking.org/systems/systems.htm">http://www.systems-thinking.org/systems/systems.htm</a>



## **Endnotes**

- **A** Will this new system be perfect? No countries in which people vote for their leaders aren't perfect either, but they're a lot better than the alternative. We're just starting, and it's going to be an evolving process.
- **B** Hans Bosma, Michael G Marmot, Harry Hemingway, Amanda C Nicholson, Eric Brunner, Stephen A Stansfeld. Low job control and risk of coronary heart disease in Whitehall ii (prospective cohort) study. <a href="http://bmj.bmjjournals.com/cgi/content/full/314/7080/558">http://bmj.bmjjournals.com/cgi/content/full/314/7080/558</a>
- C Alvaro Franco, Carlos Alvarez-Dardet, Maria Tereza Ruiz. Effect of democracy on health: ecological study. http://bmj.bmjjournals.com/cgi/content/full/329/7480/1421
- N Wager, G Fieldman, T Hussey. The effect on ambulatory blood pressure of working under favourably and unfavourably perceived supervisors. <a href="http://oem.bmjjournals.com/cgi/content/abstract/60/7/468">http://oem.bmjjournals.com/cgi/content/abstract/60/7/468</a>
- **E** Morton Thiokol is currently owned by Alliant Techsystems Inc. <a href="http://www.atk.com/homepage">http://www.atk.com/homepage</a>
- **F** Richard P Feynman. Appendix F Personal observations on the reliability of the Shuttle. http://science.ksc.nasa.gov/shuttle/missions/51-l/docs/rogers-commission/Appendix-F.txt
- **G** Groupthink is a term coined by US psychologist Dr Irving Janis. http://www.sourcewatch.org/wiki.phtml?title=Groupthink
- **H** Andrew J Dunar and Stephen P Waring, *The Power to Explore*: A history of Marshall Space Flight Center 1960–1990 <a href="http://history.msfc.nasa.gov/book/chptnine.pdf">http://history.msfc.nasa.gov/book/chptnine.pdf</a> p39
- I James Surowiecki, The Wisdom of Crowds (2004), p215
- **J** Emails and other documents were released by NASA under the Freedom of Information Act.
- K James Surowiecki, The Wisdom of Crowds (2004), p266

 $i\omega$ . 19.05 i  $\bowtie$   $\triangleleft$   $\triangleleft$   $\triangleleft$   $\triangleleft$ 

#### **URLS REFERENCED**

http://www.abc.net.au/rn/talks/8.30/helthrpt/stories/s17092.htm

http://history.nasa.gov/rogersrep/genindex.htm

http://science.ksc.nasa.gov/shuttle/missions/51-l/docs/rogers-commission/table-of-contents.html

http://spacecraft.ssl.umd.edu/academics/483f04/483l07.eng\_ethics/columbia.nyt030926.pdf

http://www2.ncsu.edu:8010/project25/csc379/lectures/wk16/lecture.html

http://www.businessweek.co.za/bwdaily/dnflash/jan2002/nf20020130\_7564.htm

http://gadfly.igc.org/eds/pol/blissful.htm

http://www.nspe.org/etweb/10504viewpoint.asp

http://www.friends-partners.org/pipermail/fpspace/2003-july/449127.html

http://www.space.com/missionlaunches/caib\_report\_030826.html

http://www.wsws.org/articles/2003/sep2003/col2-s20.shtml

http://www.asa3.org/archive/asa/199703/0200.html

http://www.engineering.com/content/contentdisplay?contentid=41009024

http://www.disinfopedia.org/wiki.phtml?title=groupthink

http://www.lutins.org/nasa.html

http://www.caib.us

http://dsc.discovery.com/news/briefs/20030331/nasa.html

http://channels.netscape.com/ns/careers/package.jsp?name=fte/quitjobs/quitjobs

http://news.bbc.co.uk/1/hi/sci/tech/2724505.stm

http://www.csmonitor.com/2003/0207/p01s02-usgn.html

Http://www.chron.com/cs/CDA/ssistory.mpl/space/2122160

 $\mid$  iss.  $_{19.05}\mid$   $\mid$   $\mid$   $\bowtie$   $\mid$   $\mid$   $\boxminus$   $\mid$   $\circlearrowleft$ 

# info

#### **ABOUT THE AUTHOR**

Chetan Dhruve has worked for several organizations including IBM, Cisco Systems, and the Department for International Development (the aid wing of the British Foreign Office). He has an MBA from Cass Business School (London), an MA in International Journalism from City University (London) and a BSc in Physics, Maths and Electronics from Bangalore University (Bangalore).

Homepage URL: http://dhruve.blogspot.com

#### **DOWNLOAD THIS**

This manifesto is available from http://changethis.com/19.BossDictator

#### **SEND THIS**

Click here to pass along a copy of this manifesto to others.

http://changethis.com/19.BossDictator/email

#### **SUBSCRIBE**

Learn about our latest manifestos as soon as they are available. Sign up for our free newsletter and be notified by email. http://changethis.com/subscribe

42/44

# info

#### WHAT YOU CAN DO

You are given the unlimited right to print this manifesto and to distribute it electronically (via email, your website, or any other means). You can print out pages and put them in your favorite coffee shop's windows or your doctor's waiting room. You can transcribe the author's words onto the sidewalk, or you can hand out copies to everyone you meet. You may not alter this manifesto in any way, though, and you may not charge for it.

#### **NAVIGATION & USER TIPS**

Move around this manifesto by using your keyboard arrow keys or click on the right arrow ( $\rightarrow$ ) for the next page and the left arrow ( $\leftarrow$ ). To send this by email, just click on .

#### HAVING PROBLEMS SAVING TO DISK?

First, make sure you have the latest version of Acrobat Reader 6 which you can download from <a href="http://www.adobe.com/products/acrobat/readstep2.html">http://www.adobe.com/products/acrobat/readstep2.html</a>. If problems persist, it may be due to your Acrobat Reader settings. To correct the problem (for Windows), a reader, J. Hansen, suggests going to your Acrobat Reader Preferences > Options > Web browser Options. Check the "Display PDF in Browser" option. Then click on Save to Disk

.

KEYBOARD SHORTCUTS	PC	MAC
<b>Z</b> oom in (Larger view)	[ CTL ] [ + ]	[ # ] [ + ]
Zoom out	[ CTL ] [ - ]	[ 光 ] [ - ]
Full screen/Normal screen view	[ CTL ] [ L ]	[X][L]

 $i \otimes i \otimes 19.05$   $i \bowtie \exists \bigcirc \bigcirc$ 

# info

#### **BORN ON DATE**

This document was created on 9 November 2005 and is based on the best information available at that time. To check for updates, please click here to visit <a href="http://changethis.com/19.BossDictator">http://changethis.com/19.BossDictator</a>

# some rights reserved creative

#### **COPYRIGHT INFO**

The copyright in this work belongs to the author, who is solely responsible for the content. Please direct content feedback or permissions questions to the author: <a href="mailto:cvdhruve@gmail.com">cvdhruve@gmail.com</a>

This work is licensed under the Creative Commons Attribution–NonCommercial–NoDerivs License. To view a copy of this license, visit <a href="http://creativecommons.org/licenses/by-nc-nd/2.5">http://creativecommons.org/licenses/by-nc-nd/2.5</a> or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.

Cover image from <a href="http://istockphoto.com">http://istockphoto.com</a>

#### **ABOUT CHANGETHIS**

ChangeThis is a vehicle, not a publisher. We make it easy for big ideas to spread. While the authors we work with are responsible for their own work, they don't necessarily agree with everything available in ChangeThis format. But you knew that already.

ChangeThis is supported by the love and tender care of 800–CEO–READ. Visit us at main site www.800ceoread.com or at our daily blog blog.800ceoread.com.

 $i\omega \delta$ . 19.05 i  $\bowtie$   $\stackrel{\triangle}{=}$   $\Theta$