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Chapter 1

Thinking Gray, and Free

Contrarian leaders think differently from the people around them. In particular, such leaders are able to maintain their intellectual independence by thinking gray, and enhance their intellectual creativity by thinking free.

Conventional wisdom considers it a valuable skill to be able to make judgments as quickly as possible, and conventional wisdom may well be right when it comes to managers. But contrarian wisdom argues that, for leaders, judgments as to the truth or falsity of information or the merits of new ideas should be arrived at as slowly and subtly as possible—and in many cases not at all.

One of the most rewarding aspects of teaching a class on leadership has been the opportunity to watch bright undergraduates learn to "think gray" while holding firmly to their core principles. Thinking gray is an extraordinarily uncommon characteristic which requires a good deal of effort to develop. But it is one of the most important skills which a leader can acquire.

Most people are binary and instant in their judgments; that is, they immediately categorize things as good or bad, true or false, black or white, friend or foe. A truly effective leader, however, needs to be able to see the shades of gray inherent in a situation in order to make wise decisions as to how to proceed.

The essence of thinking gray is this: don't form an opinion about an important matter until you've heard all the relevant facts

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and arguments, or until circumstances force you to form an opinion without recourse to all the facts (which happens occasionally, but much less frequently than one might imagine). F. Scott Fitzgerald once described something similar to thinking gray when he observed that the test of a first-rate mind is the ability to hold two opposing thoughts at the same time while still retaining the ability to function.

Generally the only time the average person is instructed to think gray is when he is called to serve on a jury in a court of law (which may be one reason so many people regard jury duty as a colossal pain). A juror is expected to suspend judgment until he has heard all the facts and arguments, and then and only then is he asked to reach a conclusion. I've never served on a jury myself, but talking with people who have and observing juries up close have convinced me that most jurors begin to make up their minds about a case before the trial even begins. And I suspect that most judges do as well.

After all, thinking gray is not a natural act, especially for people who see themselves as leaders. Our typical view of great leaders is that they are bold and decisive people who are strongly governed by their passions and prejudices. Who could imagine a Teddy Roosevelt or a Vince Lombardi thinking gray?

A black-and-white binary approach to thinking may in fact be a successful strategy for some leaders, especially if they must deal daily with fight-or-flight situations. But even many of the world's most noted military leaders were adroit at thinking gray on the battlefield. Napoleon, Washington, and Rommel all knew the value of suspending judgment about important matters, and especially about the validity of incoming intelligence, until the last possible moment.

I recall once chatting with a friend who told me about something she had just heard on the television news. I responded, "That's really interesting."

She looked a little hurt. "You don't believe me, do you?"

I said, surprised, "What do you mean, I don't believe you?"

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She said, "You don't believe what I just told you."

I said, "I believe you're telling me exactly what you heard on television."

"But you don't believe it."

"I don't *disbelieve* it."

"Steve," she asked, "how can you do that? How can you sit there and hear something that was said on TV and not believe it or disbelieve it?"

And I replied, "Because there's no need for me to decide right now whether what the newscaster said is true or false. In fact, I'll probably never have to reach a conclusion on this matter at all, which I regard as a great blessing!"

The person with whom I was speaking is a very intelligent and well-educated woman. But like most people, and unfortunately like so many would-be leaders, she feels an obligation to immediately classify everything she reads or hears as either true or false, good or bad, right or wrong, useful or useless.

For the vast majority of people, giving in to this natural compulsion toward binary thinking is relatively harmless. But for leaders it can lead to disaster.

There are three very real dangers to effective leadership associated with binary thinking. One is that the leader forms opinions before it is necessary to do so, and in the process closes his mind to facts and arguments that may subsequently come to his attention. The second danger is flip-flopping. A leader hears something in favor of a proposition and decides on the spot that the proposition must be true. Later that same day he hears an argument against the proposition and decides that the proposition must be false. Many failed leaders have tended to believe the last thing they heard from the last person they talked to, thereby putting themselves and their followers through mental (and sometime physical) contortions which were both unnecessary and counterproductive.

The third danger relates to an observation by the German philosopher Friedrich Nietzsche, to the effect that people tend to

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believe that which they sense is strongly believed by others. A well-developed ability to think gray is the best defense a leader can have against this kind of assault on his intellectual independence. Leaders may want to nurture a herd mentality among their followers, but they should never succumb to such thinking themselves.

Nietzsche's point was beautifully illustrated by an experiment fashioned by psychologist Solomon Asch a half-century ago and repeated by others many times since then. In the experiment, eight subjects, supposedly chosen at random, were brought together in a room and shown a series of cards on which were printed four vertical lines. Each subject was asked in turn to identify which one of the three lines on the right side of the card was the same length as the line on the left side of the card. The experiment was arranged so that seven of the eight "subjects" were in fact ringers who, with conviction and sincerity, would each identify the same one of the right-hand lines as being equal in length to the left-hand line, when in fact it was not. The one true subject in this experiment was then faced with either going along with the judgment of the group and declaring as true something he knew to be false, or taking a position which was at odds with the consensus opinion of his peers. Roughly *three-quarters* of the subjects went against their better judgment and joined in with the false consensus at least once.

As in so many other areas that are essential to effective leadership, the popular media are a major stumbling block to thinking gray. There is no such thing as an unbiased article in a newspaper or an objective sound bite on television news. On the contrary, reporters and editors are trained experts at getting you to believe what it is they have to say and to adopt their point of view. Indeed, à la Nietzsche, the media want you to believe that everyone else (or at least, every other *important* person) believes what it is they have to say. It is precisely this patina of believability and respectability that makes the popular media so attractive to us, especially when their messages comport with our own pas-

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sions and prejudices. And it is precisely this same patina that stands in the way of our thinking gray.

The binary point of view already inherent in the popular media has become more pronounced, as straight coverage of politics has moved into a sports-section-like obsession with identifying winners and losers and successes and failures. A horse-race approach to political coverage, however, can rarely address adequately the complexities and nuances of developments in public policy.

Lest we go too far with this idea, let it be said that thinking gray—suspending our binary instincts—is really necessary for a leader for only the weightiest of issues. If he were to attempt to think gray about everything, his brain would become a jumbled mess. Decisions about clothes, food, popular music, and so forth are usually made in an off-the-cuff binary way, and that's perfectly fine.

However, these ordinary and routine types of decisions offer a wonderful chance to develop the discipline of thinking gray. One can use these situations as opportunities to practice suspending judgment. You don't have to decide right away whether you like a person you've just met, or whether you might eventually be able to appreciate a new food you've just tried, or whether you should see a particular movie you've recently heard about. Just for fun (or for practice) you can file away your first impressions about these and other relatively trivial matters, and reach conclusions with respect to them at a later date (or not at all). A great benefit of this exercise is that, when a truly important leadership issue surfaces, you will have had some practice in thinking gray.

Aristotle noted that, when carpenters wish to straighten a warped board, they don't put it in a jig that simply holds it straight; rather they put it in a jig that bends it in the opposite direction from that in which it is warped. After a week or two in this reverse-bending configuration, the board naturally springs back to a straight shape when it is released from the jig. So it is when we attempt to correct our own weaknesses. We must bend

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over backward in an effort to overcompensate, and in that way we just might achieve a reasonable middle ground. Forcing ourselves to bend over backward by thinking gray with respect to a few everyday matters is an excellent way to overcome our natural inclination to think in black and white.

Thinking gray is decidedly *not* the same thing as thinking skeptically. The skeptic initially places everything he hears or reads in the "not true" box, with an implied willingness to move things to the "true" box if the accumulated evidence warrants such a transfer. There's often a hint of cynicism about the skeptic that can be very off-putting to followers. It's difficult for people to be inspired by a Doubting Thomas.

By contrast, the contrarian leader who can think gray doesn't place things he hears or reads in either the "not true" or the "true" box. He is as open to enthusiastically embracing a new idea as he is to rejecting it. And he can truthfully compliment a lieutenant for having come up with a new idea or observation, without misleading the lieutenant as to whether he (the leader) believes it to be good or true or useful.

A close cousin of thinking gray is what I like to call thinking free—free, that is, from all prior restraints. It's popular these days to talk about "thinking out of the box" or "brainstorming," but thinking free takes that process of inventiveness to the next level.

The difference between thinking out of the box and thinking free can be understood when we imagine ourselves coming out of a heated swimming pool on a cool, brisk day. When we merely think out of the box, we stay in the cold just long enough to feel slightly uncomfortable, and then hastily retreat either back into the warm pool or indoors. But when we are truly thinking free, we stay out in the cold until we shiver and our teeth chatter. It's the ability to tolerate the cold long after it becomes unpleasant—to forcibly sustain our thinking free for more than a fleeting moment—that leads to the greatest innovations.

The key to thinking free is first to allow your mind to contemplate really outrageous ideas, and only subsequently apply the

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constraints of practicality, practicability, legality, cost, time, and ethics. As with thinking gray, thinking free is an unnatural act; not one person in a thousand can do it without enormous effort.

Here's a simple example. A leader brings a group of people together who share a common goal (e.g., keeping their company afloat in a brutally competitive market), but who have widely varying opinions as to how the goal might best be achieved. The leader asks each person in turn to propose an off-the-wall idea for achieving the goal, with the proviso that every other person in the group must respond with at least two reasons why the idea will work. The result is often surliness or sullen silence on the part of the participants. Most people are simply unable to force themselves to think positively for even a few minutes about an idea which they believe in their hearts is stupid, wrongheaded, immoral, impractical, or illegal.

Now please do not misunderstand me; I am not suggesting that leaders should pursue evil or illegal or ridiculous ideas. On the contrary, I have found that one's principles, passions and prejudices always reassert control after a few minutes of thinking free. But during those few minutes the leader or his or her associates just might come up with a truly original idea.

Congenital naysayers are among the greatest stumbling blocks to thinking free. Rather than imagining how a new idea might possibly work, they instinctively think of all the reasons why it won't. They sincerely believe they're doing everyone a favor by reducing the amount of time spent on bad or foolish ideas. But what they really do is undermine the creativity that can be harvested from thinking free.

Most new inventions are merely novel combinations of devices or techniques that already exist. Thus, the key to successful invention often lies in getting one's brain to imagine new combinations of existing elements that solve a problem in a way no one has ever thought of before.

My favorite way to stimulate this kind of thinking free is to force myself to contemplate absolutely outrageous and impossible ways to address a particular problem. For example, in 1967 I was

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struggling to invent a new way to control a dishwasher, in order to replace the ubiquitous (and troublesome) clock-motor timer. At one point I lay on the floor and forced myself to imagine hay bales, elephants, planets, ladybugs, sofas, microbes, newspapers, hydroelectric dams, French horns, electrons and trees, each in turn and in various combinations controlling a dishwasher.

This exercise was, to say the least, extremely difficult and disconcerting, so much so that I could only do it for ten minutes at a time. But after a few such sessions I suddenly saw in my mind's eye an almost complete circuit diagram for a digital electronic control system for a home appliance. This system was unlike anything I or others had ever contemplated before. As a consequence my colleagues and I were able to establish a very strong patent position in this particular area of technology, and my invention was eventually employed in hundreds of millions of home appliances around the world.

As improbable as it might sound, this same approach to thinking free can lead to novel ways of addressing some of the competitive, political, legal, policy and bureaucratic challenges one must confront as a leader. The key is to break free for just a few minutes from the incredibly tight constraints that rule our thinking almost all of the time, even when we dream or engage in so-called free association.

Really thinking free is hard work, and it usually requires a good deal of effort and determination beyond simple daydreaming or mental freewheeling. It's tough to break out of the deep ruts in which our minds normally run. But the benefits that accrue to the leader from thinking free can be truly spectacular.

Of course, microbes, hay bales and elephants never found their way into my application for a patent on a new way to control a home appliance. On the contrary, the solution to this problem involved a simple combination of standard electronic components—so simple, so nearly obvious, that I wondered why no one had ever thought of it before.

That's the way it is with so many innovations—they seem obvious once they've been discovered and deployed. But prior to

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that time, they are anything but obvious. For example, the benefits of universal adult suffrage seem obvious to twenty-first century Americans, but it took millennia after the development of writing to discover and implement this novel idea (which was not fully adopted in England until 1928, when women were finally given the vote). The wheel-and-axle seems an obvious bit of technology to us today, but it was not discovered until thousands of years after the invention of the roller, and many human societies *never* discovered the wheel-and-axle on their own. The auto mall would appear to be an obvious way to increase the sales of new cars, but when I was a boy the Ford dealer in town wanted to be located as far away as possible from the Chevrolet dealer.

It's well known among engineers that the most important inventions in a particular field are often made by people who are new to that field—people who are too naïve and ignorant to know all the reasons why something can't be done, and who are therefore able to think more freely about seemingly intractable problems. The same is true of the leadership of institutions: it's often fresh blood and a fresh perspective from the outside that can turn an ailing organization around.

When my wife and I were interviewing in the early 1980s for the presidency of the State University of New York at Buffalo (SUNY-Buffalo, or the University at Buffalo, or UB for short), we saw a university with great underlying strengths and numerous superficial problems. Unfortunately, the problematic surface was all that was perceived by most of UB's constituencies at the time.

Never in our lives had we encountered a university that was so down on itself or that was held in such low esteem by so many of its own faculty, students, administrators, townspeople, and alumni. The body politic of the university seemed to be bruised all over—whenever we touched it, no matter how gently, it seemed to quiver and shrink back a bit.

For example, during the four months prior to my officially assuming the presidency in March of 1982, and during my first few months in office, I spoke directly with hundreds of UB's constituents. Almost invariably these conversations began with the

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other person saying something negative about the university. And during this same period I never met a single student who said that he or she was *proud* to be attending UB.

However, from my wife's and my perspective, the inner core, the infrastructure if you will, of the University at Buffalo was in exceedingly good health. We saw a university which had an excellent (albeit somewhat dispirited) faculty, competitive faculty salaries, good students who were willing to work hard, a loyal and supportive governing council, competent and dedicated staff, an active university foundation, a brand-new physical plant, mostly new scientific equipment, an outstanding library, and a long and distinguished academic history.

We also recognized that UB was in fact SUNY's flagship campus, although the vast majority of New Yorkers, and indeed most Buffalonians, would not have agreed with that statement in 1982. It seemed clear to us that, as the flagship public institution in a large and prosperous state, UB had a shot at becoming one of America's premier public universities.

There were of course formidable obstacles blocking UB's development. In addition to the spiritual malaise cited earlier, there loomed the fact that the city of Buffalo and its environs were mired in a deep recession, with unemployment rates running as high as 15 percent. Then too, the entire SUNY system was caught in the suffocating embrace of a huge state bureaucracy which was trying its best to micromanage everything at the university from coffee cups to student-contact hours.

And finally there was the fact that most New Yorkers seemed to view public higher education as being inherently inferior to private higher education. I recall how shocked I was when, early in my tenure at UB, I heard a trustee of the SUNY system say in public that "SUNY is the college of last resort." Good grief! I should have thought that every trustee would see the SUNY system as the college of *first* resort for *all* classes of New Yorkers, as is the case with the great public universities in other states.

Nonetheless, in spite of these difficulties and problems, my wife and I were convinced that UB's future was potentially very

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bright. Fortunately most members of the UB Council and a significant number of faculty and staff agreed.

The next nine years more than justified Kathryn's and my seemingly unfounded optimism. By the end of that period UB had been elected to the prestigious Association of American Universities (only 61 of the more than 3,500 colleges and universities in America are members of the AAU; UB was the first public university in New York or New England to have been elected), sponsored research funding had tripled, applications for admission had doubled, we had completed or begun construction of more than two million square feet of new buildings at a cost of more than $400 million, UB was raising more private funds each year than all the other SUNY campuses combined, and *U.S. News and World Report* had named UB as one of the five most rapidly rising universities in the country.

Was it a miracle? No. Was the president a genius? No. It was just that my wife and I, coming from our experiences at the University of Nebraska, Purdue University and the University of Illinois, were able to see UB and its surrounding community from a very different perspective. In other words, our thinking about UB was freer and less constrained than that of our colleagues and peers in western New York.

We often speak of the need for leaders to have vision. Creative imagination, which relates to the ability to think free, may in the end be every bit as important as vision.

Many of us were tested on spatial relations in school, being asked to look at a number of pieces of a puzzle and imagine different ways in which those pieces might be combined. A similar act of imagination is a powerful tool for leaders.

The leader has to be able to imagine different organizational combinations in his mind and see how they will play out. He has to be able to move people around in his mind and grasp how they would respond to new situations. He has to be able to move resources and budgets around and be able to discern how those moves would affect the bottom line. He needs to be able to look

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at complex human situations and sense how the outcome would be affected depending on the sequence in which he interacts with various participants.

If he cannot do these things effectively using only his imagination—if he can only work with tangible, concrete data—he may well fail as a leader. It is far too time-consuming, far too risky and far too expensive to conduct an actual experiment to test the feasibility of every new idea. Generally speaking, a leader must be able to accurately play out contingencies within the arena of his imagination.

But here's a bit of good news for would-be leaders who find it difficult to think free, and whose imaginations are, shall we say, a bit underdeveloped. It's not absolutely necessary that a leader himself, in order to be effective, be a creative genius overflowing with original and inventive ideas. In many cases it's sufficient if the leader simply recognizes and nurtures thinking free among his followers, and then capitalizes on *their* creative ideas and imaginations. Indeed, many successful leaders would say it's more important that a leader's lieutenants be able to think free than it is for the leader himself to do so. (J. Robert Oppenheimer once said of his Manhattan Project team, "What we don't know we explain to each other.") Realistically, though, a leader whose own mind is stuck in a rut will find it very difficult to value imaginative thinking on the part of those around him.

One must always keep in mind that leadership is an art, not a science. Effective management may be a science (although I have my doubts), but effective leadership is purely an art. In this sense, leadership is more akin to music, painting and poetry than it is to more routinized endeavors. When Franklin Roosevelt met Orson Welles, the president showed great deference to the media pioneer and actor, saying he wished he were as gifted a performing artist as Welles—to which Welles replied, "With all due respect, Mr. President, you are!"

All of the arts, when practiced at the highest levels of excellence, depend on a steady stream of fresh ideas and creative imag-

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ination. Make no mistake, Mozart was thinking free when he composed, even though his music may sound canonical today. As a former professional musician, I know that the best solos in jazz occur when the soloist frees his mind of prior constraints and makes up entirely new musical associations as he goes along. Can anyone view Picasso's paintings or Frank Gehry's buildings and not see flashes of unrestrained thought and imagination? And when I read Shakespeare I hear the cacophonous undertones of thinking free—his constant testing of unusual juxtapositions of words, his novel metaphors and similes, his making up of new words and stretching the meanings of old ones with impunity.

So it is with effective leadership. The leader whose thinking is constrained within well-worn ruts, who is completely governed by his established passions and prejudices, who is incapable of thinking either gray or free, and who can't even appropriate the creative imagination and fresh ideas of those around him, is as anachronistic and ineffective as the dinosaur. He may by dint of circumstances remain in power, but his followers would almost certainly be better off without him.