

## Chapter 18

# Changing the World: The Science of Transformative Action

Scott Sherman

It was considered the most dangerous place in America.

If terrorists could target one place in the nation, this would be it. Inside these gates, there was enough plutonium and uranium to kill tens of millions of people. Inside these gates, if you could breach the security, you would find the “most deadly devices ever invented” (Cameron & Lavine, 2006) by humankind.

Everywhere armed guards patrolled the property from watchtowers that resembled prison fortresses. Anti-aircraft guns shielded against a blitz from above. The walls were constructed several feet thick, so as to withstand invasions and attacks. Menacing razor wire fences kept out intruders, and security cameras kept watch over your every move.

To stop suicide bombers, powerful security measures had been installed. Sentries with submachine guns would halt you at the entrance and swab your car for explosive residues. There were more armed guards at the second stop, scanning your fingerprints to match them with government records. To enter through this second station, you needed to have top-secret clearance; the government would investigate the details from the last 10 years of your life.

After all, national security was at stake.

You had to get clearance through two more security stops, each one more intensive and thorough than the last. Guards with automatic weapons reviewed your entrance permits behind windows of bulletproof glass and 4-inch thick metal doors.

And if you finally made it inside, you would discover what had once been shrouded in secrecy:

This was the birthplace of every nuclear weapon America had ever produced.

This was Rocky Flats. For years, this place in Colorado had been clandestine and concealed. It was only 16 miles from Denver, but few residents of that city had any idea what was here.

They did not know that, every single day, the world’s most lethal weapons were being produced in their backyards. These were plutonium pits—hollow spheres,

---

S. Sherman (✉)

Transformative Action Institute, Los Angeles, CA, USA

e-mail: ssherman@transformativeaction.org

some as small as grapefruits. But each one could destroy a major city. Each one had the explosive force of the bomb that razed Hiroshima. That bomb alone had killed 140,000 people.

But this description didn't even begin to hint at the deadly force of the Rocky Flats arsenal. The plutonium pits produced at Rocky Flats were far more destructive than the atomic blasts that had laid waste to Japanese cities. These pits were just the first step in a chain reaction; they would detonate a thermonuclear fire 600 times stronger than the A-bombs used in World War II (Obmascik, 2000). Each one unleashed a force equivalent to 18 billion pounds of TNT.

During the time of the Cold War, there were more than 70,000 of these nuclear triggers produced at Rocky Flats. Yet the weapons plant operated in total secrecy. Because of national security concerns, it was hidden from public sight. Few citizens and neighbors even knew about the danger in their backyard.

Until the accident.

In 1969, a small piece of plutonium spontaneously burst into flames. It ignited a firestorm that swept through the Rocky Flats complex, releasing radioactive materials into the skies above Denver. It was the largest industrial fire in the history of the United States, causing \$200 million in damage. A subsequent investigation revealed that this was not the first mishap at the facility. There had been a history of nuclear accidents, undisclosed and unbeknownst to the public.

Thus began an ugly conflict and controversy that betrayed the deep ideological fissures in the nation.

On one side were the people who believed that this site was vital to national security. Most workers at Rocky Flats, for instance, took pride in performing their patriotic duty: They were defending the United States against nuclear attack. They were providing safety against the "evil empire" of the Soviet Union. By building thousands of nuclear weapons, they were deterring an enemy's assault on the country.

Indeed, this was during the Cold War, a time fraught with peril and fear. American schools instructed children how to duck and cover to protect themselves from atomic attacks. The Russian leader Nikita Krushchev had taunted the Western powers, threatening: "We will bury you!" In the Cuban missile crisis, the world had gone to the brink of thermonuclear war. To the defenders of Rocky Flats, it seemed obvious that they were on the front lines of protecting the nation. They were responsible for a strong national defense.

On the other side were citizens and activists who were worried about the government spending hundreds of billions of dollars on unnecessary weapons of mass destruction. They cited the problem of "overkill"—the fact that there were already enough nuclear weapons to destroy life on earth many times over. A single nuclear launch would invite massive retribution that would leave more than 100 million Americans dead, as well as billions more people across the planet. Prominent scientists warned of nuclear winter that could lead to the extinction of the human race, and the devastation of the planet. "Except for fools and madmen, everyone knows that nuclear war would be an unprecedented human catastrophe," wrote Carl Sagan (Sagan, 1983).

In the decade after the accident, tens of thousands of people came out to Rocky Flats to protest the proliferation of nuclear weapons. Hundreds were arrested as they put their bodies on the railroad tracks, trying to halt the transportation of nuclear materials.

In 1982, two Catholic nuns actually managed to infiltrate Rocky Flats, raising a flag that dubbed it a “Death Factory.” They were dragged away by security guards just as they were hanging another sign, comparing Rocky Flats to Nazi concentration camps (Buffer, 2003).

But it was not just a nuclear holocaust that the activists feared. They also warned of the environmental consequences of a radioactive leak. This could be devastating to the earth, not to mention public health. The toxic and carcinogenic materials on this site were unprecedentedly high. Thirteen rooms at Rocky Flats had radioactive levels of “infinity”—that is, radioactivity levels so high that they went off the scale on measuring devices (Obmscik, 2000).

The workers at the plant felt under siege. As building manager Bob DeGrazio remembered, employees felt that they were “saving the world” from the danger of Soviet attacks. But instead of gratitude, he and his coworkers were met only with hatred. “We were called murderers,” he recalled (Interview, January 2007).

This distrust pervaded everything. The people at Rocky Flats had a bunker mentality—as if they were fighting against the entire world, including their fellow Americans. They especially had a hostile, antagonistic relationship with Congress and federal agencies. The workers knew that they were not subject to government regulation or oversight. Because of national security concerns, they had the right to keep everything confidential. But the government, egged on by the citizens, wanted to investigate possible violations of environmental law. Given the secret history of radioactive leaks and accidents, legislators were concerned that hazardous wastes and nuclear disasters could poison millions of people throughout the American West.

To the staff at Rocky Flats, environmental laws were nuisances. As one manager recalled, the whole situation was “very combative. [We] saw the regulators and activist community as enemies” (Cameron & Lavine, 2006).

And little did they know that the enemies were about to attack.

In 1989, the federal government launched a raid. Dozens of FBI agents, armed with guns and search warrants, stormed the site. For the next 20 days, they occupied the buildings and shut down all operations.

Borrowing the terminology of a military invasion, they called their offensive “Operation Desert Glow.” It was unprecedented for one government agency to declare war on another. But this was a criminal investigation. Members of the Justice Department joined in on the raid. They alleged massive violations of the law and crimes that could endanger people’s lives.

Rocky Flats was a mess. The problems seemed too big and costly to solve within our lifetimes. The government estimated that it would take 70 years and \$36 billion to clean up the dangerous residues of the nuclear weapons produced there. And these threats would not truly disappear for millennia; the half-life of plutonium was more than 24,000 years (Cameron & Lavine, 2006).

For the average citizen, this situation could seem overwhelming. Rocky Flats was a lightning rod for some of the most controversial, contentious issues of our time:

- Terrorism.
- National security.
- Nuclear weapons.
- Environmental catastrophe.
- A massive threat to human health.

All sides in the drama were entrenched for a major battle. But how could anyone win? When the battle lines were so ugly and divisive, how could you solve a problem so enormous?

More than a decade ago, I set out to investigate the mystery of Rocky Flats, as well as hundreds of places like it—places where people seemed to confront insurmountable obstacles and enemies on all sides. These were some of the biggest problems that society faced: from economic woes to crises of public health and education. In sum, they were very much like the crises that we see in America today.

I wanted to know how ordinary citizens—people like you and me—could actually go out and change the world. How could we overcome the biggest problems that we face?

For years, I had heard people quote the dictum of Margaret Mead: “Never doubt that a small group of committed citizens can change the world. In fact, it’s the only thing that ever has.” But, as comforting as these words may have been, they didn’t actually explain *how* citizens could make a difference. Was there a science to social change? Were there strategies that would reliably lead people to win?

Like President Obama, I had been a community organizer in my younger days. I had been engaged in actions where committed citizens were trying to take power over their own lives. I had seen countless people try to confront massive problems that faced them—from racism and violence to deadly chemicals that threatened to poison their children.

Many of these people were poor. Many were women. Most were people of color. All were individuals who had traditionally been excluded from the corridors of power.

Often they were fighting the most powerful forces in the world. Often they were battling the US President, the Congress, and multinational corporations. Often they were outspent 1,000 to 1.

And often they were winning.

This was an unsung story of modern-day heroism. It wasn’t featured on the nightly news; nobody read about it in the daily papers. But there were dozens of successful cases of ordinary citizens, against all odds, solving the biggest problems that bedevil our society.

Of course, countless other citizens were unsuccessful. I had seen so many community struggles take years and years, only to end in loss and frustration. I had

seen so many good-hearted people get burnt out. I had seen so many people feel overwhelmed and exhausted.

It was no wonder that most people felt powerless to make change. A national survey of American college students showed that millions subscribed to the pessimistic claim that, “realistically, an individual can do little to bring about major changes in our society” (Hurtado & Pryor, 2007).

It seemed to me that such cynicism was unwarranted. After all, there were so many heartwarming stories of individuals who had succeeded. There were countless organizers and activists with years of experience in social change—people who had fought hundreds of battles and passed down their lessons. There were training manuals and workshops, each one promising to reveal what led citizens to victory.

I was chagrined to find, however, that there was little agreement about what actually worked. Changing the world was more art than science. Everyone had a pet theory about the best way to make a difference. Many times these theories seemed to contradict each other; many times, when I tried to put them into practice, they backfired.

There was no scientific research into how people actually could change the world. Nobody had analyzed the hundreds of case studies to find common factors that led to success and failure.

So until the time that research was done, there would continue to be lots of contradictory stories, false exhortations, and utopian words of advice. There would be many romantic, idealistic quotes (like the one by Margaret Mead) about people’s power to make a difference. And, of course, there would be slogans.

I remember one time in California, when I watched a crowd of hundreds of individuals marching through the streets, chanting the familiar refrain: “The people, united, will never be defeated!”

A friend of mine, who was a stand-up comedienne, whispered to me jokingly: “I don’t think it’s actually true!

“Maybe we should change the slogan to be more accurate,” she added, tongue-in-cheek. “Maybe we should march through the streets, chanting: ‘The people, united, will sometimes win and sometimes lose!’”

While her point was humorous, it made me return to the fundamental question: When do people actually win, and when do people lose?

I decided to do the research myself. I went back to the university to study the science of social change. For nearly a decade, I conducted doctoral research into what actually worked when people tried to change the world.

I ended up reviewing hundreds of case studies of citizens working for public health, environmental protection, women’s rights, racial justice, and social equality. I selected sixty for which I could find the most information. Then, for each of these cases, I coded for nearly 120 factors that might be correlated with success and failure.

And, at the end of 10 years, the results were surprising:  
Almost everything that I believed to be true was wrong.

I had been taught that law would work.

But research proved this to be false.

In fact, after reviewing dozens of cases across the country, I found that legal strategies were one of the factors most strongly correlated with failure. When people went to court, they almost always lost.

Perhaps this shouldn't be surprising. After all, many of these citizens had little access to money or powerful attorneys; they couldn't afford the legal costs. "Poor people have access to the courts," quipped one judge in Texas, "in the same sense that Christians had access to the lions when they were dragged into a Roman arena" (Elias, 1990).

Moreover, people tended to feel like control was out of their hands once they placed their faith in attorneys. Even the best pro bono legal teams spoke in complicated jargon and Latin phrases that seemed baffling to the citizens.

But worst of all, the law only divided the parties further. The legal system was adversarial. Rather than bringing parties together toward a common solution, it tended to exacerbate differences. It polarized opponents and made enemies for life. Legal strategies were not going to succeed.

Fortunately, I had been taught that politics would work.

But the research proved this to be a myth as well.

The problem with politics was that it wasn't an equal playing field. If people got together to sign petitions and lobby legislators and speak at public hearings, their chances of victory were slim. After all, the opposing side had more money and more power; most importantly, it had more connections to the people in power. Lobbyists for corporations might dine with the decision makers in Washington; they played golf together and sent their children to the same private schools. Ordinary citizens stood little chance of getting their own voices heard, no matter how many voting campaigns or other political events they attended.

So if law didn't work and politics didn't work, perhaps science would be more successful. Especially in cases like Rocky Flats, where people felt like they were being poisoned, all they would have to do is show evidence of harm. They could get scientists from universities who would run epidemiological studies that proved the presence of dangerous radioactive isotopes. Then surely they would win.

The research appeared to dash this hope as well.

Scientific arguments were not triumphant because both sides could quote them. Where citizens showed scientific studies showing threats to human health, corporations and governments would counter with their own experts, who showed that a site was perfectly safe. Given conflicting evidence, it was hard for ordinary people to win.

At this point, you may wonder what was successful. Law didn't work; politics didn't work; and even science didn't work. Thus many groups decided to "fight the power."

They decided to target the enemy, to focus on one individual, and to humiliate that person until he conceded defeat.

They engaged in the art of war—an antagonistic, adversarial battle where they would take any means necessary to defeat their foe. They would play on people's

rage; they would mobilize followers by stirring up their fears and their hatreds; they would win at other people's expense.

While these tactics may seem unduly harsh, they are actually the rules of engagement for most political battles in the United States. These cutthroat strategies are precisely the ones that Republicans often use against Democrats, and the ones that Democrats often use against Republicans.

And they, too, do not work.

I was astonished. My research had destroyed every myth about how to change the world. All the conventional wisdom was wrong.

Indeed, there was a simple reason that the most popular strategies—even the ones used by powerful politicians in major parties—were so unsuccessful in making a difference in the world.

These strategies resembled a never-ending feud, one in which both sides tried to cripple each other. Each time that they were vanquished by their foes, they would aim for vengeance and retribution against their enemies. Any victory was temporary. In the end, everyone was weakened. As Gandhi commented, “The philosophy of an eye for an eye leaves the whole world blind.”

The entire idea of waging war against your enemies was dangerous. When people engaged in adversarial, antagonistic battles, they were doing little to solve their problems.

In fact, I realized that my whole research had been framed around the wrong question. I had originally been asking: How does David conquer Goliath? How do people overcome the world's largest corporations and governments?

But what I found was that the military metaphor blinded me from the truth: The way people succeeded was not adversarial at all. Instead of fighting the power, they *leveraged* the power of corporations and governments to work for a better future. As Lincoln once noted, the best way to eliminate your enemy is to make him your friend.

These winning strategies I have come to call “transformative action.” In the rest of this chapter, I will give a brief overview of how transformative action works.

The first principle of transformative action—the first strategy for success—is exposing injustice.

Many of the biggest scandals of the last few decades were illegal or unethical acts taking place under the cover of secrecy. Think of Enron and its corporate fraud. Think of Bernie Madoff and his \$50 billion-dollar Ponzi scheme. These deceptions could not have taken place had there been greater transparency and accountability. Instead, they were hidden from view. When people exposed each of these schemes, they collapsed.

Immoral and illegal practices can only thrive in secrecy, when they are well hidden from view. For example, corporations often release thousands of tons of illicit chemicals into the air and water; it is cheaper for them to do this illegal dumping, rather than disposing of the materials properly or retrofitting their facilities to

produce less waste. They know that the government has limited capacity for enforcing environmental laws; the chances are that they won't get caught in their illegal behavior.

However, if individuals can shine the light of day upon these transgressions, then everyone can see the problem. The citizens are likely to stir the consciences of thousands of people; even their adversaries will be ashamed when their behavior is brought to light. The executives at these corporations know that their actions were wrong; that's why they tried to hide such illicit behavior from view. When such transgressions are brought to light, it can cause a public relations disaster for the company. The shareholders may suffer as well, as the stock drops.

Supreme Court Justice Louis Brandeis once noted that, "sunlight is the best disinfectant." In other words, it is only by shining light on problems in society that we can start to heal them. If left in the dark, corruption and deceit can infect everything.

Transformative action is about "speaking the truth to power." But it does not seek to demonize anyone; it's not about embarrassing, humiliating, or treating people like enemies who need to be destroyed. Instead it's about overcoming the problems of society, while uplifting all people.

In this sense, the first principle of transformative action builds upon the legacy of nonviolence pioneered by Mohandas Gandhi, Dorothy Day, Martin Luther King, Jr., Cesar Chavez, Aung Saan Suu Kyi, and other social change leaders of the twentieth century.

Nonviolent strategies have proven extraordinarily successful at exposing injustice and protesting social problems in the last 100 years. All around the world, the strategies of nonviolent social change have produced dramatic transformations that would have been thought impossible just a few decades ago.

The entire Soviet Union collapsed without a fight. Communism virtually vanished from Europe without violence. Meanwhile, brutal military dictatorships across South America were overturned peacefully and democratically by the nonviolent masses. From the Philippines to Liberia, nonviolent revolutions also toppled brutal regimes. Most recently, in South Africa, a nonviolent movement led by Bishop Desmond Tutu and Nelson Mandela managed to end the racist regime of apartheid. Even against Nazi Germany, nonviolence was successful in the few cases it was attempted.

"The historical results were massive," commented political scientists Ackerman and DuVall. "Tyrants were toppled, governments were overthrown, occupying armies were impeded, and political systems that withheld human rights were shattered. Entire societies were transformed, suddenly or gradually, by people using their nonviolent resistance to destroy their opponents' capacity to control events" (Ackerman & DuVall, 2000).

Yet the potential of nonviolence has hardly been explored. As peace activist David Dellinger said, the "theory and practice of nonviolence are roughly at the same stage of development as those of electricity in the early days of Marconi and Edison" (Nagler, 1982).



To call on the words of Gandhi:

We are constantly being astonished these days at the amazing discoveries in the field of violence. But I maintain that far more undreamt of and seemingly impossible discoveries will be made in the field of nonviolence. (Easwaran, 1978, p. 50)

Indeed, Gandhi considered nonviolence itself to be a science. Yet, in his own lifetime, he was never able to scientifically prove how to transform hatred into goodwill or enemies into allies. Only in the last decade have scientists across the world made major breakthroughs in these areas. . .

Until recently, the science of psychology was devoted to what goes wrong with human beings. There was a diagnostic manual of nearly 1,000 pages that could help determine what mental illnesses and pathologies were afflicting humans. We knew much about depression, deviance, and disease. We could easily identify neurotic, psychotic, and sociopathic behavior. But we had little insight into humans at their best. Few scientists had studied excellence in our species.

This situation has been changing since the turn of the twenty-first century. Now there is burgeoning research into the field of positive psychology. Hundreds of studies have begun to identify what goes right with human beings: their strengths and character virtues—things like courage, love, compassion, kindness, and altruism.

These emerging scientific findings dovetail nicely with the second principle of transformative action: what we call “social aikido.”

Social aikido is about the science of transforming negatives into positives. Just like the martial art of aikido, where you can turn the strength of your opponent into your advantage, this social phenomenon is about transforming enemies into allies and hatred into goodwill.

Why would goodwill be a superior strategy to hostility? Wouldn't it make sense that you should try to intimidate, harass, and humiliate your opponents until they become so weak that they succumb? This was certainly the traditional idea of how people win: You win by going to battle. You win by defeating the other side. This seems to make sense.

In fact, conflict theory mostly studied how one side could gain a victory over the other (Oberschall, 1997). It was based on the idea that some people would win, while other people would inevitably lose. As one leading sociologist defined it, “the aims of the (parties in a conflict) are to neutralize, injure, or eliminate rivals” (Coser, 1956).

Social aikido turns this idea on its head: It insists that the true goal is for *everyone* to win. The ideal situation is to “exalt all sides” (Easwaran, 1978). Instead of triumphing over their antagonists, citizens seek to eliminate the antagonisms all together.

Transformative action changes the struggle from one of “you versus me,” to one where “you and I are working together against the common problems we share.” From a very practical standpoint, it is clear why this strategy might prove more effective than traditional conflict strategies: When two parties are struggling against each other, they often pour a great amount of energy, time, money, and resources

into defeating the opponent, rather than the problem itself. What results? The losing side is often bitter and resentful. It may have lost the battle, but it will probably seek revenge.

For example, most protest movements in the United States mobilize hundreds of grassroots activists and enraged citizens against the existing power structure. They denounce corporate leaders and government officials. They hold mock trials of their enemies, condemning them for “crimes against humanity.” They burn their opponents in effigy and rally against their evils.

These strategies often prove ineffective for several reasons: First, they attack people, rather than attacking the problem. Second, they encounter tremendous resistance from the people being attacked. The government leaders and corporate executives invest a considerable amount of energy, time, and resources into battling back against the grassroots activists. There builds up an enormous amount of anger, resentment, ill will, and acrimony between the warring parties. Meanwhile, the problems themselves are rarely solved. The groups have been focusing all their attention on each other, rather than the problems that confront them.

A transformative movement seeks to change the perspective from a win–lose situation to a win–win situation. This is the basis of negotiation theory, consensus building, and alternative dispute resolution (Fisher & Ury, 1991). It is a powerful force for bringing people together. It seeks to transform the enemy into a friend. It is based on understanding and respect, rather than divisiveness and conflict.

Hundreds of scientific studies have supported the idea that people working together will be much more productive than people who are competing against each other. For instance, social psychologists David and Roger Johnson reviewed dozens of studies that had been conducted in North America on the effects of competition and cooperation. Most of the evidence showed that people performed better when they were united with others toward a common goal rather than when they were competing against opponents. Sixty-five studies found that working together leads to higher achievement and success in an activity than does competition. Only eight studies came to the opposite conclusion.

Indeed, after reviewing the extensive literature on the subject, researcher Alfie Kohn concluded that competition “drags us down, devastates us psychologically, poisons our relationships (and) interferes with our performance” (Kohn, 1986). In fact, the “superiority of cooperation held for all subject areas and all age groups” (Kohn, 1986). From business to education to social change, cooperative efforts seem to produce the best results.

The findings of conflict resolution theory confirm that cooperative strategies are the most effective. At the end of his life, Morton Deutsch, the leading scholar in the field, summarized the discoveries of his 50 years of studying conflict.

Studies repeatedly showed that people who use antagonistic and adversarial tactics are most likely to escalate the intensity of a conflict; the results of such strategies are increased hostility, suspicion, and distrust. They lead to a breakdown in communication and an atmosphere of threats and coercion. Overall, antagonistic tactics destroy relationships (Deutsch, 1985).

On the other hand, people who use cooperative strategies (similar to the principles of transformative action theory) tend to engage in constructive solutions to their problems.

According to all the evidence, the most profound and enduring positive changes in intergroup relations happen when groups are working together on a common goal. They are no longer fighting each other; they are now cooperating and uniting to achieve some greater victory that will leave all parties better off. The hostility and suspicion between the groups diminishes substantially; their communication improves; and, most importantly, they overcome the barriers and prejudices that had been dividing them.

But why is this so effective? This is where the lessons of positive psychology are so important. Researchers have studied the people who are most likely to be kind and altruistic. It turns out that happier people are more likely to help others in need.

This flies in the face of most conventional wisdom on social change. Saul Alinsky, the inspiration for community organizing, used to emphasize the need to “agitate” people and “rub their resentments raw.” He figured that happy people would be complacent; they wouldn’t care much about changing society. It’s only people who were outraged and full of anger who would rise up in action.

And part of this is true: When people were outraged by some injustice, it was an effective way of rousing citizens who might ordinarily be apathetic. Citizens who had never been involved in politics would suddenly find themselves as leaders. Indeed, one of the principles of social movement theory is that “suddenly imposed grievances” are likely to cause a community to mobilize (McAdam, McCarthy, & Zald, 1988). A plan for a toxic waste incinerator is likely to mobilize angry opposition from the community. Citizens are likely to become upset, uniting against this perceived threat to their health and well-being.

Transformative action theory does not dispute the effectiveness of mobilizing people against injustice. Indeed, all of the major experiments of nonviolence—whether led by Gandhi, King, Chavez, or others—have come about in response to grave injustices such as exploitation or discrimination.

However, transformative action theory postulates that anger, while effective in mobilizing a social movement, will not be very effective at actually *solving* the problem. Anger hurts the individual; it breaks down social relations; it builds walls between people.

Overwhelming medical evidence shows the deleterious effects of anger. People who suffer from chronic hostility suffer a 5–7 time greater risk of dying before age 50; moreover, frequent feelings of frustration and rage can tremendously increase the chances of developing a life-threatening malady like heart attacks, strokes, cancer, depression, and anxiety (Novaco, 2000).

Moreover, anger leads to emotional distance and separation. It can harm people in many ways. Not only do people have less control over their behavior, they also invite dangers such as retaliation, social censure, and loss of supportive relationships. One medical expert described anger as “eruptive, destructive, unbridled, savage, venomous, burning, and consuming” (Novaco, 2000).

Of course, anger can also be seen as energizing and empowering. It can be seen as something valuable, especially in the face of injustice. As environmental activist Julia Butterfly Hill has written, “we have a right—and a responsibility—to be angry,” when confronted with corporate malfeasance. “We have a right and responsibility to be angry when we see old-growth forests getting clearcut and toxic wastes being dumped in minority neighborhoods. We should *not* be victims, passively accepting injustice. Instead we should become indignant about injustice. But then we must convert that energy into something stronger. If we are angry when we act, it will destroy the situation and destroy us. Instead, we must transform our anger and transform the situation” (Hill, 2000a).

Hill continues: “I knew that to hate. . . was to be a part of that same violence I was trying to stop. . . You see that a lot in activists. . . The intense negative forces. . . wind up overcoming many of them. They get so absorbed by the hate and anger that they become hollow” (Hill, 2000b).

Martin Luther King, Jr. explained the same idea:

In struggling for human dignity, the oppressed of the world must not allow themselves to become bitter or indulge in hate campaigns. To retaliate with hate or bitterness would do nothing but intensify the hate in the world. (King, 1986, p. 8)

For King, the central principle of nonviolence was love. This was not a sentimental, romantic notion. Instead, it meant goodwill toward all people—even those who were racist, even those who bombed his church and killed four little girls. King wanted to oppose people’s actions, but not the people themselves. He wanted to get rid of the evil system, but “not the individual who happens to be misguided, who happens to be misled, who was taught wrong” (King, 1986).

Transformative strategies are never the result of anger or malice. Anger, rage, and hatred are forms of violence. True transformative action means not even harboring ill will toward your adversaries. This may sound difficult to do, but it is crucial for leading an effective movement. Late in his life, Gandhi commented:

I have learnt through bitter experience the one supreme lesson to conserve my anger, and as heat conserved is transmuted into energy, even so our anger controlled can be transmuted into a power which can move the world. (Easwaran, 1978, p. 47)

But transformative action is more than just social aikido; it’s more than simply fighting against injustice. There has to be a next step of constructing a better alternative. All the energy that is normally poured into anger should be channeled into constructive pursuits.

Typically, the most famous strategies of a nonviolent social change campaign are those that respond to injustice: marches, protests, boycotts, and acts of civil disobedience.

These are the techniques that the Civil Rights movement used very effectively throughout the South during the 1950s and 1960s. In cities such as Selma and Birmingham, they proved that these tactics could be very powerful in winning converts to their cause and in tearing down the structures of racism and injustice that scaffolded American society.

Yet King realized late in his life that responding to injustice was only the first step. It was a great victory to end discrimination in restaurants, but if African Americans did not have the money to purchase food in these restaurants, then their hard-won rights were meaningless.

In a similar vein, he once mused that:

“If one is in search of a better job, it does not help to burn down the factory. If one needs more adequate education, shooting the principal will not help. . . . (If housing is the goal, only building and construction will produce that end. To destroy anything, person or property, can’t bring us closer to the goal we seek.” (King, 1986, p. 58)

There needed to be a constructive program: a better alternative and vision for the future. This is the third principle of transformative action.

King was assassinated before he started on a constructive program. But this was already the direction that his thinking was taking in the last few years of his life. He was beginning to address problems of poverty and economic injustice; he was beginning to address the need for creating an entirely new society.

Ironically, it was Malcolm X who pointed out the psychology behind the constructive program. In his autobiography, he talked about the most important lesson he ever learned. His mentor, Elijah Muhammad, took two glasses of water. Into one of the glasses he poured some oil so that the water became viscous and dirty. The other glass remained clean, pure, and pristine. Never tell anyone that they have a dirty glass of water, he instructed Malcolm. They will resent you for pointing out their problems. They will go into denial. They will get upset. They may even end up fighting you.

A much better strategy is to hold up a clean glass of water and let the other person make a choice for himself (Haley, 1964).

After all, as transformative activist Sharif Abdullah, points out: “Protests are not effective in solving problems. They are good at *pointing out* problems, but they do nothing to resolve them.

“A person who spends his time fighting the power is really just acknowledging his own powerlessness. In effect, he is saying that he has no power to change conditions of his community; instead, he has to complain, scream, cajole, and coerce some other person to make some changes for him. A much better strategy is to acknowledge the power you already have to change conditions in your community” (Abdullah, 1993).

Abdullah contends that even the most impoverished people in communities fighting against toxic wastes have some power to make a difference in their community. The belief that they have no power is a jail that they have built for themselves. Indeed, Abdullah believes that people spend too much time protesting the conditions in which they live, rather than creating a constructive program around a better vision of the future.

“If I want to have the perfect chocolate chip cookies, I don’t go out and protest the terrible cookies that are being made at the Keebler cookie factory,” Abdullah comments. “Instead, I get a recipe, and I start making them for myself” (Abdullah, 1993). Similarly, if citizens want to create a better society, it does little good to

spend their entire time protesting the old one. It's better to start creating the new society that they want to see.

In any constructive program, there must be positive, creative goals. Normally, revolutions are reacting to the problems of the past—trying to overthrow some unjust social order. But transformative revolutions look toward creating a better future. Essentially, they attempt to promote a vision of the ideal society.

Today there are literally thousands of people who are engaging in scientific experiments to create this better world. They are called social entrepreneurs.

Unlike traditional business entrepreneurs, who focus on making a profit, social entrepreneurs are using their expertise to solve the biggest problems facing society.

These are people like Katherine Chon. As a young girl, she read about the slavery in her history books. In college, she learned that slavery still exists in the modern world—that it is, in fact, the second largest criminal industry on the planet. Rather than drowning in despair or proclaiming that she was powerless, Chon helped start one of the most powerful and effective organizations in the world combating the trafficking of human beings. Her ultimate goal is to create a world without slavery.

Another social entrepreneur also got his start while he was still in college. Mark Hanis was a young man whose grandparents had survived the Holocaust. Like many Jews, he heard the vows that humanity would “never again” allow another genocide. Yet in college, he learned that there had been numerous campaigns of ethnic cleansing and mass murder since the time of the Nazis. In places like Cambodia, Serbia and Rwanda, the world stood by helplessly as millions of people were slaughtered. Hanis created an organization to end genocide in our times.

Still other social entrepreneurs are people like Majora Carter and Van Jones. They are creating an organization that seeks to address both the economic crisis and the ecological crisis at the same time. Their organization, Green for All, was dedicated to creating 5 million new jobs in environmental restoration and regeneration—jobs for impoverished people who otherwise would be drowning in the financial meltdown. They too have a powerful vision of the future.

All these social entrepreneurs were not just protesting the way that the world worked. They were taking power into their own hands to create a better future. As newscaster Scoop Nisker would say at the end of every depressing broadcast, “If you don't like the news, go make some of your own.”

And so perhaps it would be a group of social entrepreneurs—unsung heroes and heroines—who would solve the problem of Rocky Flats.

Today the most dangerous place in the world has been transformed into a wildlife refuge.

The deadly weapons are gone. The machine guns, the prison-like fortresses, and the terrorist targets are history. The infinity rooms, where radioactive hazards measured off the charts, no longer exist.

Now deer, elk, and prairie dogs roam. Native flora and fauna are returning to the land, including species that had once been endangered and under threat of extinction. Even mountain lions have settled the refuge. One journalist described the land

as “a hiker’s dream” with rolling grasslands, deep valleys, and flourishing wildlife, set against a backdrop of snow-covered mountains (Kelly, 2005).

The solution is something that could not have been imagined in 1989, when the United States was still engaged in a Cold War against the Soviet Union. Now the entire communist threat is gone, transformed by a series of nonviolent revolutions. And the weapons facility that produced enough nuclear bombs to destroy the world has been transformed into fields of wildflowers.

It resembles nothing so much as the biblical image of beating swords into ploughshares. This is the world’s first example of a nuclear weapons facility being shut down and transformed into peaceful purposes.

Most remarkably, the project was finished 60 years early, and more than \$30 billion under budget. And it was cleaned to a standard that was 13 times more rigorous than the original federal regulations required.

How did they achieve such stunning results? This process had all the hallmarks of transformative action:

First of all, activists were successful in exposing the problem of injustice. For decades, the nuclear weapons facility had operated in complete secrecy. But a few courageous citizens voiced their concerns about pollution and contamination. At first they may have been dismissed. But their fears were soon vindicated. They were able to shine a light on serious violations of law—transgressions that could pose significant threats to human health.

But this was only the beginning. The real success of Rocky Flats came from a transformation of enemies into allies. All the parties that had previously distrusted each other—the workers, the government, and the local citizen activists—decided to work together toward a common vision.

Moreover, this vision was not simply about responding to problems, or just cleaning up the mess. It was a positive vision of a better future: a beautiful wildlife refuge where people could bike and hike, and where wildlife would flourish and thrive.

Of course, there are still critics of the Rocky Flats solution. One activist, LeRoy Moore of the Rocky Mountain Peace and Justice Center, does not believe that the site can ever be safe for humans. In his view, Rocky Flats will continue to be contaminated for thousands of years; even minimum levels of plutonium will pose a threat to human health.

But John Rampe, an environmental scientist, insists that the site is safe. Researchers have conducted hundreds of tests of the soil and wildlife to ensure that it is clean enough for families and children to visit. According to Rampe, the chances of anyone getting cancer from visiting the wildlife refuge are minuscule—approximately 1 in 200,000. And that level of risk would only come if people “made 100 visits a year, spending 2.5 h per visit for 30 years (Kelly, 2005).

The truth of the matter is that the site is remediated far better and faster than anyone could have ever imagined. If you would have told the protesters 20 years ago that the nuclear weapons facility would be transformed into a wildlife refuge, that enemies would have worked together, and that the culture of secrecy would have given way to transparency, they never would have believed it.

As Michigan Business Professor Kim Cameron attests, the real story of Rocky Flats is “the achievement of extraordinary success well beyond the expectations of almost any outside observer.”

And this is the secret of success. When confronted by massive social problems, we need not give up hope. There is an actual science of how we solve them, and how we create the future.

As the futurist Buckminster Fuller once said, “You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.”

This is transformative action.

## References

- Abdullah, S. (1993). Interview by author, 2 July. Portland, Oregon.
- Ackerman, P., & DuVall, J. (2000). Nonviolent power in the twentieth century. *PS: Political Science & Politics*, 2, 147–148.
- Anger and resentment kill*. (2000). Retrieved from <http://www.angerviolence.com/health.html>
- Buffer, P. (2003, June). *Rocky flats history*. Retrieved from [http://www.lm.doe.gov/documents/sites/co/rocky\\_flats/RockyFlats\\_HistoryBook\\_rev2.pdf](http://www.lm.doe.gov/documents/sites/co/rocky_flats/RockyFlats_HistoryBook_rev2.pdf)
- Cameron, K. S., & Lavine, M. (2006). *Making the impossible possible: Lessons from the cleanup of America's most dangerous nuclear weapons plant*. San Francisco: Berrett-Koehler.
- Coser, L. (1956). *The functions of social conflict*. New York: The Free Press.
- Deutsch, M. (1985). *Distributive justice: A social-psychological perspective*. New Haven, CT: Yale University Press.
- Easwaran, E. (1978). *Gandhi the man*. Petaluma, CA: Niligri.
- Elias, S. (1990). *Legal breakdown*. Berkeley, CA: Nolo Press.
- Fisher, R., & Ury, W. (1991). *Getting to yes: Negotiating agreement without giving in*. New York: Penguin Books.
- Haley, A. (1964). *The autobiography of Malcolm X*. New York: Castle Books.
- Hill, J. (2000a). *The legacy of Luna*. San Francisco: Harper Collins.
- Hill, J. (2000b). Speech to pioneers conference.
- Hurtado, S., & Pryor, J. (2007). *The American freshman: National norms for fall 2006*. Los Angeles: Higher Education Research Institute, UCLA.
- Interview with Bob Degrazio (2007, January). *Weapons to wildlife: The newsletter of the Rocky Flats Cold War Museum*.
- Johnson, E. (1990). *The deadly emotions: The role of anger, hostility, and aggression in health and emotional well-being*. New York: Praeger.
- Kelly, D. (2005, February 7). Dispatch from rocky flats: An idyllic scene polluted with controversy. *Los Angeles Times*.
- King, M. (1986). *A testament of hope: The essential writings of Martin Luther King Jr.* San Francisco: Harper & Row.
- Kohn, A. (1986). *No contest: The case against competition*. Boston: Houghton Mifflin.
- McAdam, D., McCarthy, J., & Zald, M. (1988). *Social movements*. Newbury Park, CA: Sage Publications.
- Nagler, M. (1982). *America without violence*. Covelo, CA: Island Press.
- Niehoff, D. (1999). *The biology of violence: How understanding the brain, behavior, and environment can break the vicious circle of aggression*. New York: The Free Press.
- Novaco, R. (1986). *Anger as a clinical and social problem*. Orlando, FL: Academic Press.
- Novaco, R. (2000). *Anger*. Oxford: Oxford University Press.



- Oberschall, A. (1997). *Social movements: Ideologies, interests, and identities*. London: Transaction Publishers.
- Obmascik, M. (2000, June 25). Rocky Flats: The price of peace. *Denver Post*.
- Sagan, C. (1983). *The nuclear winter*. Retrieved from [http://www.cooperativeindividualism.org/sagan\\_nuclear\\_winter.html](http://www.cooperativeindividualism.org/sagan_nuclear_winter.html)
- Shekelle, R. (1983). Hostility, risk of coronary disease, and mortality. *Psychosomatic Medicine*, 45, 109–114.
- Siegman, A., & Smith, T. (1994). *Anger, hostility, and the heart*. Hillside, NJ: Erlbaum.
- Susskind, L., & Field, P. (1996). *Dealing with an angry public: The mutual gains approach to resolving disputes*. New York: The Free Press.
- Williams, R. (1980). Type a behavior, hostility, and coronary atherosclerosis. *Psychosomatic Medicine*, 42, 539–549.