

The Case for Positive Fields

By George M. Prince

The work of generating positive fields is demanding and difficult and never-ending. Is it worth all that effort?

Let's look at some case histories that suggest the answer.

The Hawthorne Effect

The first hint that field was making a difference came out of an elaborate series of experiments run in the 1920's by psychologists at a Western Electric Plant. The Hawthorne Works, near Chicago was the site. The purpose was to study the effect of changing "conditions" for the workers. The first experiment involved improving the lighting. Performance improved. The workers were given more frequent breaks and performance improved again. A number of variations in working conditions were tried, and each improved performance.

Then the experimenters changed all the conditions back to what they were when the experiments started. Performance continued to improve.

Many other experiments were tried over the next ten years and the results came to be known as The Hawthorne Effect. It "suggested that any workplace change, such as a research study, makes people feel more important and thereby improves their performance." (*Encyclopedia of Psychology*)

The attention of the research observers made the field more positive, the workers felt more meaningful and engaged more of their potential.

Negative Field and Babies

In 1951 Dr. John Bowlby reported on the effect on infants of putting them in institutions where care was physically healthful but without tenderness and loving attention. In this field, the infants suffered permanent damage to IQ and their ability to relate to others.

At about the same time, Dr. Harry Stack Sullivan, the great psychiatrist, was finding that infant and child development depended almost entirely on the interpersonal field created between infant and caregiver. When the caregiver lacks tenderness and appreciation, the child develops behavior problems and fails to realize its potential for forming rewarding relationships.

Pygmalion in the Classroom

Dr. Rosenthal, a psychologist at Harvard told teachers he had developed a test to identify children who were about to "break through" and become much better students. He gave the test and identified students. At year's end, all had "broken through" and were doing much better work. He then told the teachers that the test was not significant and he had selected the students at random.

The interpersonal field of friendly attention and appreciation and expectation created by the teachers brought out more of the students' potential.

The Need to be Meaningful

"The need to be seen, to be recognized, however it changes in the complexity of its form, may never change in its intensity."

"Meaning is, in its origins,...a survival activity."

"Meaning depends on someone who recognizes you. *Not meaning*, by definition is utterly lonely. Well-fed, warm and free of disease, you may still perish if you cannot "mean". (Robert Kegan, *The Evolving Self*)

From infancy to old age there is, in almost all of us, an ever-present need to be treated as persons who *matter*, who are meaningful. When that fails to happen it speaks to some deep part of us and we withdraw a part of ourselves as we raise our defense against hurt.

The Implication of Equality/Inequality

To be treated as an equal says to me that I am as meaningful as you. To be treated as less than equal says I am less meaningful and seems to lead to a degree of guardedness that makes my potential less available.

It is no coincidence that the powerful field of liberty and equality in the new world generated enormous energy, initiative, inventiveness and accomplishment. There is a significant difference when compared to the progress and productivity generated by the field created by the rigid caste system of countries with similar natural endowment, like Russia.

Southwest Airlines

A Texas company with 18,000 employees, makes the interpersonal field of their company a primary concern. They call it their "culture". President Herb Kelleher believes that love really does make the business world go 'round and that laughter really is the best medicine for employee loyalty.

"Kelleher and other members of the senior management team believe that the relationship between Southwest and its people is the key to the airline's success."

When strapped for cash in the early days, rather than sell one of their four planes or letting people go, employees said they could cut turnaround time from the industry standard one hour to about 15 minutes and they did, establishing a Southwest tradition that no other airline has ever approached.

Today, Southwest employs just over 86 people per plane in an industry where the average is over 200.

In March 1988, Southwest Airlines became the first and only airline to win the coveted Triple Crown—Best on-time Record, Best Baggage Handling, and Fewest Customer Complaints in a single month—based on U.S. Department of Transportation data. It has repeated that performance on a regular basis since, and is still the only airline to earn even on Triple.

Southwest has been profitable every year since 1972, including 1991 and 1992, when every other major airline lost money. \$1000 invested in the company in 1971 would be worth more than \$250,000 today.

“Herb Kelleher has done a remarkable job of crafting a unique culture [field] at Southwest Airlines through a combination of humor, altruism, concern for other people, and good old-fashioned straight talk,” says James Campbell Quick, a professor of management at the University of Texas.

Mission Statement

To our employees:

We are committed to provide our employees with a stable work environment with equal opportunity for learning and personal growth. Creativity and innovation are encouraged for improving the effectiveness of Southwest Airlines. Above all, employees will be provided with the same concern, respect and caring attitude within the organization that they are expected to share externally with every Southwest Customer.

Interpersonal Field in Marriage

The intimate relationship between the two people in a marriage is often the most important in their lives. Dr. John Gottman has conducted a longitudinal study of marriages to learn why they succeed or fail. He scientifically measured the emotional responses of the partners as they discussed their daily issues.

He found that if there is more than *one* negative moment for every *five* positive moments, the marriage will fail. Destructive fields are triggered by criticism, contempt, defensiveness and withdrawal.

We believe that this same law of 5 positive interactions to 1 negative probably applies to *all* relationships whether at home or in the workplace.

Interpersonal Field on a Production Line (Hawthorne Experiment #2)

In a Hawthorne plant with hundreds of small production lines repairing electronic devices, the lines were averaging 50% of “standard” with a high proportion of rejections. Twelve lines were selected for an experiment. The eight women on each line were taught a problem-solving and field/relationship management process, and given the responsibility to improve their productivity.

In the plant hierarchy there was one supervisor for every four lines. The women's first request was that their supervisors be removed. His criticism and contempt had created a toxic field. Their second request was that the quality control men be barred from personally returning rejections. The QC men made discounting comments when returning rejects and the resulting field was destructive. Then the teams focused on their own performance and interactions and within three months the experimental lines had reduced rejections to virtually zero and increased production 300%—substantially over standard.

Effect of Improved Interpersonal Fields in Three Companies

Two recent examples of the impact of a positive field in the workplace have been reported in books: *Maverick*, (1993) by Ricardo Semler, a Brazilian CEO, reports on how he systematically increased respect and responsibility by giving more and more power and control to the rank and file in his company. He created a field of mutual respect. His company grew 600% in the first ten years of his continuing experiment.

In *The New Partnership*, (1994) Tom Melohn, gave himself the title of Head Sweeper and tells how he methodically changed the field of the small manufacturing plant he purchased, from the traditional hierarchy to a system of high authority, respect and responsibility for each employee. His results are impressive: Sales up 28% each year, Pre-tax profit up 2400%, productivity up 480%.

A third company's experience is described in a detailed application for the "George Land World Class Innovator Award in 1997" (which they won. All quotes are from that application or an article by the CEO, except as noted). Marshall Industries was, in 1990, a large service company distributing industrial electronics. In that year Rob Rodin, the CEO read an article by Dr. Deming about his 14 points. At the time, his company was organized and operated to foster competition. "We paid everybody on an M.B.O. incentive system.

"We reviewed and ranked people, divisions, and departments on a regular basis against each of these objectives. To further motivate the organization, we created competition between our suppliers, our product lines and our sales people. We put up lists and rated our people: who was number one, who was number ten, and so forth."

They created and reinforced a field that brought out individual initiative to do one's best for him or her self. "The MBO system encouraged and caused employees to distort the system in order to obtain personal and financial gain."

It also created "a legacy information system that limited the access and exchange of data between customers, suppliers and business teams restraining the company from innovation and growth."

"Yet, if you looked at our performance, our numbers continued to grow." In 1990 sales were about \$530,000,000.

But Rodin was so impressed with Deming's diametrically opposed philosophy that he became a Deming student, went to Deming courses, and consulted with anyone who had information about this different way of operating.

"Deming's 14 points for transforming management rest on a single imperative, one that is totally alien to all-American love of competition and winning at all costs: Learn to live without enemies...getting a product to market requires the heroic cooperation of a lot of different people and departments. Treat them as valued friends rather than adversaries...a permanent and satisfactory relationship will save a ton of money in the long run."

"Deming is most lauded...for point number 8: Drive out fear. ...Deming alone, among all the management wizards, correctly identifies fear as the basis of all barriers to improving a company."(^Dr. Deming and the "Q" Factor", Nancy K. Austin, *Working Woman*, September 1991)

Rodin then began taking the actions that created a field that brought out a very different kind of behavior:

"The fundamental and scary change that we made over a series of years was to take every one of our individual departments off their own M.B.O., off their own incentive programs and out of the **commission environment**. We put every single person, all 1,360 at Marshall industries, solely on salary and profit sharing.

"The amazing thing was that, on the day we took all of management (a thousand people who had been preparing for the change for one year) off the old system, we immediately received new levels of cooperation."

"All employees are encouraged to make decisions, take risks and move concepts to implementation." "By driving fear out of the organization you create an environment [field] that allows the entrepreneurial spirit to thrive."

"We work within a management environment in which anyone at any point ..may be the leader, depending upon their expertise....This ease of access and communication created by our information technologies and 'open door' policy stimulates dialogue, ideas and experimentation that leads to innovation and lack of formal hierarchy which allows access to anyone."

"Through this period our sales grew from \$530 million to \$1 billion. Our expenses are down, our days outstanding are down, our turnover went down by 50%, and our earnings doubled.

"Our stock price in the beginning was \$17 1/2, It ran up to 59 1/2. We split in January and in July of 1995, it is trading in the mid-\$30s. More importantly, intangibles are up: Customer satisfaction, morale, teamwork, efficiency, productivity, consistency and relationships."

Two Teams at Union Carbide

In an experiment to test the impact of fields, two teams of equal talent were formed. One received training in an idea-getting system—Brainstorming. The other trained in an idea-getting system that included instruction in maintaining a positive field—Synectics®.

They were given the same problem to work on: How to introduce and market a new fertilizer that required some unusual procedures of application.

At the end of the problem solving period all participants voted on the ideas developed by both teams. Those developed by the “field conscious” team were unanimous choices.

Teams at the Harvard Graduate School of Design and MIT Sloan School

In virtually the same experiment as at Union Carbide, teams were formed at these two graduate schools. One team had Brainstorming training, the other the idea-getting plus field management training of Synectics®.

At MIT the results were judged by faculty members. At Harvard, an outside jury of architects was used. In both instances the field conscious teams far outperformed their rivals.

The Synectics® Discovery

Unwritten Laws of Relationship

From observation and analysis of thousands of creative problem-solving groups in business, it has become clear that when the unwritten laws governing relationships are ignored, it creates a field that brings out the least in participants. “Those who relate through coercion, or disregard for the other person, create negative energy” (Margaret Wheatley, 1994). The coercion or disregard does not have to be intentional—it is the perception of the recipient that is critical.

The vast majority of people in our culture are hypersensitive to *any* demeaning action; criticism, discounting, being found wanting, rejection, etc.—far more so than is commonly appreciated. Discovery of this law of discount/revenge began with an amusing incident. The group was trying to devise a new, loss-proof stopper for a wide-mouthed Thermos bottle.

About ten minutes into the session, one member jumped to his feet and said, “I think I've got it !” He waved a hand over the top of the sample Thermos bottle and said, “Suppose we took a thin sheet.....”

Another member of the group, the only woman, interrupted to say, “That would be too expensive.”

We observers were puzzled: how could she know it would be too expensive, if she did not know what the idea was ?

We later replayed the videotape. Earlier in the session, when the group was organizing itself to work on the problem, we found the answer to her later behavior. The man who had offered the “thin sheet” idea had said to the woman, the only female in the group, “Your handwriting is probably good, so why don't you be the note-taker for the group.”

She had perceived this as a discount, she told us, relegating her to be secretary of the group. She was aware of that, but her “revenge” reaction came as a surprise to her.

Negative Reactions are Universal and Powerful

At the time, we thought her reaction was perhaps a reflection of immaturity; a more mature person would not be so affected by an unintended discount. However, as we began to pay close attention to anything that might be perceived as a discount, we discovered that the negative reaction was all but universal— regardless of age or position. Usually there was some form of revenge, but on occasion, the discounted person simply withdrew from participation and support.

The next surprise was the great range of actions (or inactions) that were perceived as discounts. Any sort of slight or negative attention or lack of acknowledgment was enough to change the field and set the discount/revenge syndrome in motion. Given the unlimited opportunities for such unintended discounts in the everyday operations of businesses and other organizations, the extent of the destructive fields and the resultant defensiveness and lack of commitment by employees is hardly surprising.

Another surprise was the power of the reactions. The response is totally disproportionate to the provocation, which is often (usually ?) unintended (as in the example given earlier). When a person feels discounted, they do their best to conceal any sign of its impact. However, by slowing the videotape replay it is possible to observe minute changes in expression and physical attitude, and it becomes clear that something significant has happened. It is likely that their next participation will be adversarial to the offender, even if that is destructive to the purpose of the meeting.

The Physiology of a Negative Field

One's internal field goes negative whenever meaningfulness is threatened. It is helpful to understand the physical mechanism that perceives threat and triggers anxiety and a negative field.

Anxiety originates in an organ of the brain. The amygdala acts as the storehouse of emotional memory and thus of significance itself. The signals from eyes and ears are channeled through the thalamus which routes them to the amygdala which scans for emotional danger. The neocortex—the reasoning/thinking part of the brain—receives the information split seconds later. If the amygdala detects threat, it flashes an emergency signal to all parts of the brain to mobilize. This signal is sent *before* the neocortex has had a chance to analyze the situation to determine the reality of the danger.(Daniel Goleman, *Emotional Intelligence*, P. 15–17)

History

An infant first experiences anxiety at about six months when s/he senses that he has been abandoned by Mother, or that Mother is gripped by anxiety, or when the infant is confronted with a stranger. (Kagan P. 43) The emotion remembered by the amygdala is an unspecified fear of ceasing to exist—failing to survive—the feeling we call anxiety. “If a sight, sound or experience has proved painful before—Dad’s drunken arrival home was followed by a beating—then the amygdala floods the circuits with neurochemicals before the higher brain knows what is happening. *The more often this pathway is used, the easier it is to trigger.*” (Newsweek 2/19/96 P. 58) [emphasis ours]

Because the amygdala is *approximate* rather than precise, this dread feeling will later be triggered whenever any event resonates with that emotional memory of abuse and threatened abandonment—any event that even remotely conveys “you are unimportant”, or that demeans, discounts; suggests that one does not matter; that one is meaningless. *Any action of control, domination, demand, repression, or imposed restrictions tends to set in motion this powerful counterforce.* Very often the expression of this force is hidden because the recipient is subordinate.

Enter Brain Research

In the 1990’s Joseph LeDoux, scientist at NYU, Michael Gazzanica, Daniel Siegel, and colleagues began to unravel the specific ways the brain deals with fear and anxiety. Incoming information from the senses is routed through an organ called the amygdala and its system. The information is scanned for two things: threat and possibilities for nurture—danger and love.

When the signal says danger, the system goes into emergency. It virtually by-passes the thinking part of the brain and goes into emotional fight or flight mode. Anxiety is triggered and an electrical/chemical neural cascade in the brain produces a defensive action.

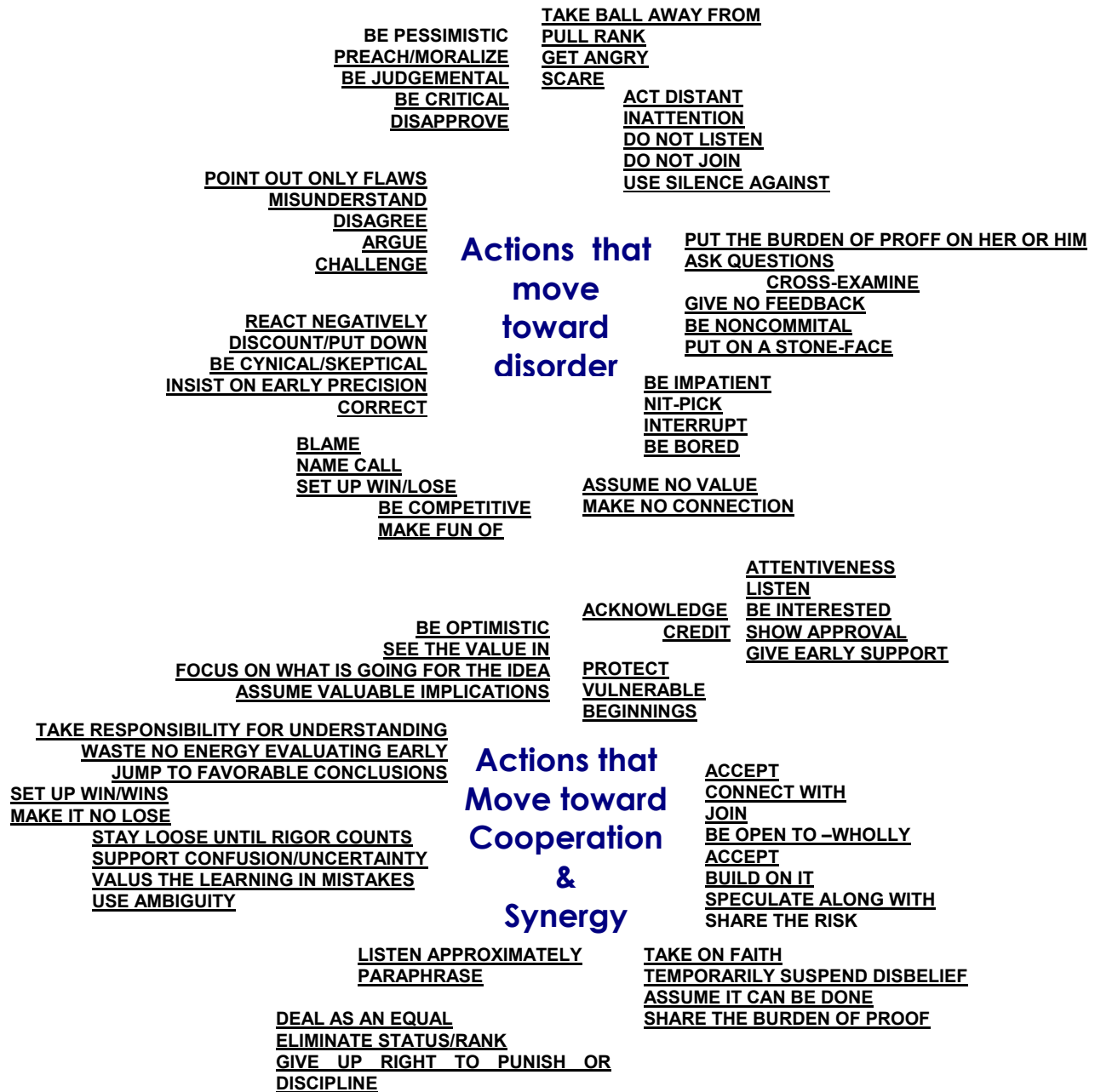
This defense system begins to develop in infancy. When the infant is left alone too long, it senses that it has been abandoned and goes into an emergency display of screams and wriggling to get attention. Nature, knowing that abandonment will lead to death and meaninglessness, has sensitized the infant to defend itself.

This alarm and defense system does not discriminate. Any *slightest* threat and it goes into action. Any abuse or neglect triggers the cascade to defensive action. As instances of abuse or neglect are repeated, the neural cascade becomes hard-wired. The threat occurs, the behavior happens without thought. As the infant matures, the brain continues to react to threat with anxiety, but this is a painful feeling and the brain develops ‘foresight function’. It perceives threat and to avoid the dread feeling of anxiety it substitutes a defensive action. In the case of an infant, the initial defensive action is screaming and wriggling. This gradually evolves to going numb. When the ‘more experienced’ infant perceives threat of abandonment, its brain by-passes the screaming and goes directly to numb.

Defensive maneuvers develop largely out of conscious awareness and we are often unmindful of what triggers a defensive reaction. Most of us have experienced the surprising rush of anger when, as we attempt pay for a purchase, the salesperson ignores us. Road rage and wife battering are extreme examples of inappropriate responses to a perceived threat to meaningfulness.

Actions that Tend to Govern the Field (and relationships)

Clues For Reading Culture(s)



Conclusion

The clear conclusion is that it pays great dividends to create positive fields in one's company. The behaviors that generate such fields are clear, as are the behaviors that toxify the field. Why are these so difficult to eliminate?

Recent brain research suggests that these contrary behaviors are actions that originated in our brains long ago, when we were infants and children, as a defense against the anxiety triggered by fears of neglect, abandonment, and abuse. The development of these actions proceeded outside conscious awareness, and they are still active and defending us against 'dangers' that are no longer there. Although mainly out of our awareness, each of us is exquisitely sensitive to any signal that resonates, even slightly, with long ago anxiety about neglect, or abuse—any hint that we are not being treated as the important person we know we are.

When we examine the success stories above, each illustrates an effort to treat people as special, protecting them from, as far as possible, from any of the toxic actions identified. This points clearly to the direction we need to go if we are to release natural excellence of the people we deal with.

In addition, we will need to devise ways to bring the defensive reactions out of the unconscious realm and make them actions that are visible and unacceptable.