Positive Image, Positive Action: The Affirmative Basis of Organizing

An edited portion of David L. Cooperrider's six areas of research on the role of image.

Imagery: An Introduction

Throughout the ages and from a diversity of perspectives, the image has been considered a powerful agent in the guidance and determination of action:

> A vivid imagination compels the whole body to obey it.
> *-Aristotle* (in Sheikh, 1984, p. 5)

> One of the basic theorems of the theory of image is that it is the image which in fact determines what might be called the current behavior of any organism or organization. The image acts as a field. The behavior consists in gravitating toward the most highly valued part of the world.
>
> *-Kenneth Baulding* (1966, p. 115)

> Mental present anticipation now pulls the future into the and reverses the direction of causality.
> *-Erich Jantsch (1980,* p.14)

> Man is a being who, being in the world, is ever ahead of himself, caught up in bringing things alive with his projection .... Whatever comes to light owes its presence to the fact that man has provided the overall imaginative sunlight for viewin g... .
>
> *-Edward Murray* (1986, p. *64)*

> To the empowering principle that people can with-hold legitimacy, and thus change the world, we now add another. By deliberately changing the internal image of reality, people can change the world.
>
> - *Willis Harman* (1988, p. 1)

> Imagination is more important than knowledge.
> *-Albert Einstein* (in Sheikh, 1984, p. 5)

Six Areas of Research on the Positive Image-Positive Action Relationship

What all this suggests, of course, is that the power of positive imagery is not just some popular illusion or wish but is arguably a key factor in every action. To illustrate the heliotropic propensity in human systems at several levels of functioning I will now turn to six areas of research as examples - placebo, Pygmalion, positive emotion, internal dialogue, cultural vitality, and metacognitive competence.

Positive Imagery in Medicine

The placebo response is a fascinating and complex process in which projected images, as reflected in positive belief in the efficacy of a remedy, ignite a healing response that can be every bit as powerful as conventional therapy. Though the placebo phenomenon has been controversial for some twenty years, most of the medical profession now accepts, as genuine, the fact that any-where from one-third to two-thirds of all patients will show marked physiological and emotional improvement in symptoms simply by believing they are given an effective treatment, even when that treatment is just a sugar pill or some other inert substance (Beecher, 1955; White, Tursky, and Schwartz, 1985).

Numerous carefully controlled studies indicate that the placebo can provide relief of symptoms in postoperative-wound pain, seasickness, headaches, angina, asthma, obesity, blood pressure, ulcers, and many other problems. In fact, researchers are now convinced that no system of the body is exempt from the placebo effect and that it is operative in virtually every healing encounter. Even more intriguing, the placebo is sometimes even more potent than typically expected drug effects: "Consider a series of experiments with a woman suffering from severe nausea and vomiting. Nothing the doctors gave her seemed to help. Objective measurement of her gastric contractions showed a disrupted pattern consistent with the severe nausea she re-ported. The doctors then offered her a `new extremely powerful wonder drug' which would, they said, unquestionably cure her nausea. Within twenty minutes of taking this new drug, her nausea disappeared, and the same objective gastric tests now read normal. The drug which was given was not, of course, a new drug designed to relieve nausea. It was syrup of ipecac, which is generally used to *induce* vomiting. In this case, the placebo effect associated with the suggestion that the drug would relieve vomiting was powerful enough to counteract and direct an opposite pharmacological action of the drug itself' (Ornstein and Sobel, 1987, p. 79).
According to Norman Cousins, now a faculty member at the UCLA School of Medicine, an understanding of the way the placebo works may be one of the most significant developments in medicine in the twentieth century. Writing in *Human Options* (1981), Cousins suggests that beyond the central nervous system, the hormonal system, and the immune system, there are two other systems that have conventionally been overlooked but that need to be recognized as essential to the proper functioning of the human being: the healing system and the belief system. Cousins (1983, p. 205) argues that the two work to - gether: "The healing system is the way the body mobilizes all its resources to combat disease. The belief system is often the activator of the healing system."

Using himself as a living laboratory, Cousins (1983, p. 44) has movingly described how the management of his own anticipatory reality allowed him to overcome a life - threatening illness that specialists did not believe to be reversible and then, some years later, to again apply the same mental processes in his recovery from an acute heart attack: "What were the basic ideas involved in that recovery? The newspaper accounts had made it appear that I had laughed my way out of a serious illness. Careful readers of my book, however, knew that laughter was just a metaphor, Hope, faith, love, will to live,

cheerfulness, humor, creativity, playfulness, confidence, *great expec*tations-all these, I believed, had therapeutic value."

In the end, argues Cousins, the greatest value of the placebo is that it tells us that indeed positive imagery can and often does awaken the body to its own self-healing powers. Research in many areas now confirms this view and shows that placebo responses are neither mystical nor inconsequential and that ultimately mental and psycho physiological responses may be mediated through more than fifty different neuropeptide molecu lar messengers linking the endocrine, autonomic, and central nervous systems (White, Tursky, and Schwartz, 1985). While the complex mind-body pathways are far from being resolved, there is one area of clear agreement: Positive changes in anticipatory reality through suggestion and belief play a central role in all placebo responses. As Jaffe and Bresler (1980, pp. 260-261) note, the placebo "illustrates another important therapeutic use of imagery, namely, the use of positive future images to activate positive physical changes. Imagining a positive future out- come is an important technique for countering initial negative images, beliefs, and expectations a patient may have. In essence it transforms a negative placebo effect into a positive o n e .....The power of positive suggestion plants a seed which redirects the m i n d - a n d through the mind, the body-toward a positive goal."

Before moving on, there is one other perhaps surprising factor that adds significantly to the patient's placebo response - the expectancy or anticipatory reality of the physician. Placebo effects are strongest, it appears, when belief in the efficacy of the treatment is shared among a group (O'Regan, 1983). This then raises a whole new set of questions concerning not only the individual but the interpersonal nature of the positive im age- positive action relationship.

Positive Imagery in Education with the Pygmalion Effect

In effect, the positive image may well be the sine qua non of human development, as we now explore in the Pygmalion dynamic. As a special case of the self-fulfilling prophesy, Pygmalion re-minds us that from the moment of birth we each exist within a complex and dynamic field of images and expectations, a vast share of which are projected onto us through an omnipresent environment of others.

In the classic Pygmalion study, teachers are led to believe on the basis of "credible" information that some of their students possess exceptionally high potential while others do not. In other words, the teachers are led, on the basis of some expert opinion, to hold a positive image (PI) or expectancy of some students and a negative image (NI) or expectancy of others. Unknown to the teachers, however, is the fact that the so -called high-potential students were selected at random; in objective terms, all student groupings were equivalent in potential and are merely dubbed as high, regular, or low potential.

Then, as the experiment unfolds, differences quickly emerge, not on the basis of any innate intelligence factor or some other predisposition but solely on the basis of the manipulated expectancy of the teacher. Over time, subtle changes among students evolve into clear differences as the high-PI students begin to significantly overshadow all others in actual achievement. Over the last twenty years there have been literally hundreds of empirical studies conducted on this phenomenon, attesting both to its continuing theoretical and to its practical importance (Jussim, 1986; see Rosenthal and Rubin, 1978, for an analysis of over 300 studies).

One of the remarkable things about Pygmalion is that it shows us how essentially modifiable the human self is in relation to the mental projections of others. Indeed, not only do performance levels change, but so do more deeply rooted "stable" self-conceptions (Parsons and others, 1982). Furthermore, significant Pygmalion effects have been

experimentally generated in as little time as fifteen minutes (King, 1971) and have the ap - parent capacity to transform the course of a lifetime (Cooper and Good, 1983). (I wonder how many researchers on this subject would volunteer their own children to be part of a negatively induced expectancy grouping?) Specific to the classroom, the correlation between teacher expectation and student achieve ment is higher than almost any predictive lQ or achievement measure, ranging in numerous studies from correlations of .5 all the way to an almost- perfect .9 (Brophy and Good, 1974; Crano and Mellon, 1978; Humphreys and Stubbs, 1977). Like-wise, in one of the earliest organizational examinations of this phenomenon, Eden and Shani (1982) reported that some 75 per -cent of the variance in achievement among military trainees could be explained completely on the basis of induced positive expectation on the part of those in positions of authority.

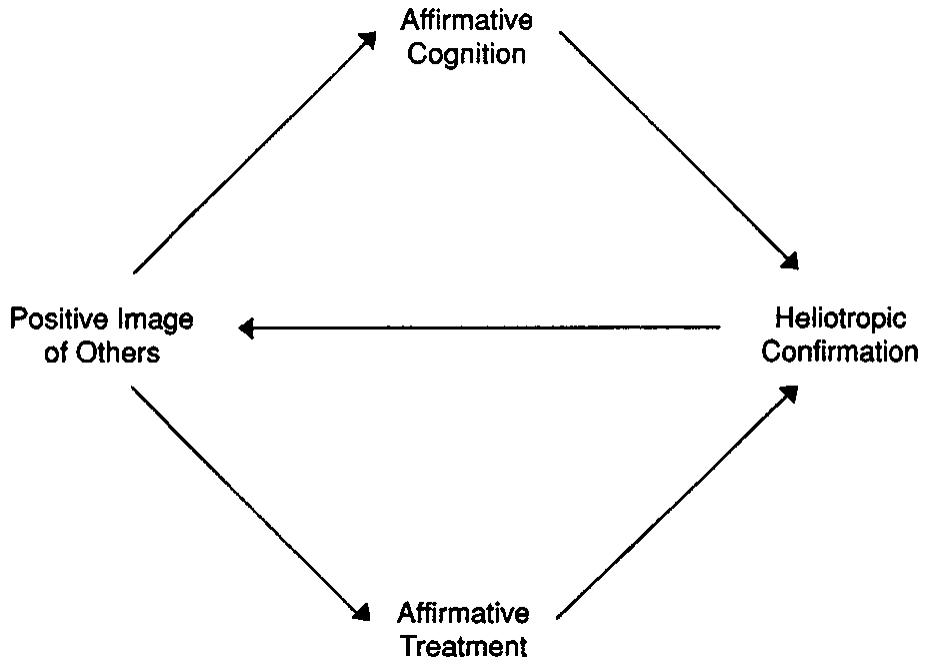
Obviously the promise of Pygmalion as a source of human development depends more on the enactment of positive rather than negative interpersonal expectancy. But how does the positive dynamic work and why?

A summary of the three stages of the positive Pygmalion dynamic is presented in Figure 4.1. In the first phase of the model, positive images of the other are formed through any number of means - for example, stereotypes, reputation, hear-say, objective measures, early performances, and naive prediction processes. As interactions occur over time, positive images begin to take shape and consist not only of ***prophesies*** but also tend to become elaborated by one's sense of **its** other ***possibilities*** as well as one's sense of "what should be," or *normative valuations.* Taken together the prophesies, possibilities, and normative valuations combine to create a broad brushstroke picture of in terpersonal expectancy that has its pervasive effect through two primary mediators-expectancy-consistent cognition and expectancy-consistent treatment.

Considerable evidence, for example, indicates that a positive image of another serves as a powerful cognitive tuning device that appears to trigger in the perceiver an increased capacity to (1) perceive the successes of another (Deaux and Emswiller, 1974), (2) access from memory the positive rather than negative aspects of the other (Hastie and Kumar, 1979), and (3) perceive ambiguous situations for their positive rather than negative possibilities (Darley and Gross, 1983).

While often spoken about in pejorative ways as cognitive bias or distortion ("vital lies," to use Goleman's popular term), it is quite possible that this affirmative capacity to cognitively tune into the most positive aspects of another human being is in fact a remarkable human gift; it is not merely an aberration distorting some "given" reality but is a creative agent in

Figure 4.1. The Positive Pygmalion Dynamic (adapted from Jussim, 1986).



the construction of reality. We see what our images make us capable of seeing. And affirmative cognition, as we will later highlight in our discussion of positive self-monitoring, is a unique and powerful competency that owes its existence to the dynamic workings of the positive image.

The key point is that all of our cognitive capacities-perception, memory, learning-are cued and shaped by the images projected through our expectancies. We see what our imaginative horizon allows us to see. And because "seeing is believing," our acts often take on a whole new tone and character depending on the strength, vitality, and force of a given image. The second consequence of the positive image of the other, therefore, is that it supports differential behavioral treatment in a number of systematic ways.

For example, it has been shown, both in the field and the laboratory, that teachers who hold extremely positive images of their students tend to provide those students with (1) increased emotional support in comparison to others (Rist, 1970; Rubovitz and Maehr, 1973), (2) clearer, more immediate, and more positive feedback around effect and performance (Weinstein, 1976; Cooper, 1979); and (3) better opportunities to perform and learn more challenging materials (Brophy and Good, 1974; Swann and Snyder, 1980).

Finally, in the third stage of the model, people begin to respond to the positive images that others have of them. When mediated by cognitive, affective, and motivational factors, according to Jussim (1986), heliotropic acts are initiated on the basis of increased effort, persistence, attention, participation, and cooperation, so that ultimately, high PIs often perform at levels superior to those projected with low-expectancy images. Research also shows that such effects tend to be long lasting, especially when the Pygmalion dynamic becomes institutionalized. High-PI students, for example, when assigned to the higher academic tracks, are virtually never moved to a lower track (the same is also true for negative-expectancy students, according to Brophy and Good's 1974 review of the "near

permanence" of tracking).

The greatest value of the Pygmalion research is that it begins to provide empirical understanding of the relational path-ways of the positive image-positive action dynamic and of the transactional basis of the human self. To understand the self as a symbolic social creation is to recognize- as George Herbert Mead, John Dewey, George Simmel, Lev Vygotsky, Martin Buber, and many others have argued that human beings are essentially modifiable, are open to new development, and are products of the human imagination and mind. We are each made and imagined in the eyes of one another. There is an utter in-separability of the individual from the social context and history of the projective process. And positive interpersonal imagery, the research now shows, accomplishes its work very concretely. Like the placebo response discussed earlier, it appears that the positive image plants a seed that redirects the mind of the perceiver to think about and see the other with affirmative eyes.

Positive Affect and Learned Helpfulness.

While often talked about in cognitive terms, one of the core features of imagery is that it integrates cognition and affect and becomes a catalytic force through its sentiment-evoking quality. In many therapies, for example, it is well established that focusing on images often elicits strong emotional reactions; whereas verbal mental processes are linear, the image provides simultaneous representation, making it possible to vicariously experience that which is held in the imagination (Sheikh and Panagiotou, 1975).

So what about the relation between positive emotion-delight, compassion, joy, love, happiness, passion, and so on-and positive action? To what extent is it the affective side of the positive image that generates and sustains heliotropic movement so often seen in human systems? While still in the formative stages, early results on this issue are making clear that there is indeed a unique psychophysiology of positive emotion (as Norman Cousins has argued) and that individually as well as collectively, positive emotion may well be *the* pivotal factor deter-mining the heliotropic potential of images of the future.

This line of research is partly predicated on knowledge growing out of studies of negative affectivity. In one of the most hotly pursued lines of research of the last decade, investigators are now convinced of the reciprocal connections between high negative affectivity and (1) experiences of life stress; (2) deficiency cognition; (3) the phenomenon of "learned helplessness"; (4) the development of depression; (5) the breakdown of social bonds; and (6) the triggering of possible physiological responses like the depletion of brain catecholamine, the release of corticosteroids, the suppression of immune functioning, and ultimately the development of disease (Watson and Clark, 1984; Seligman, 1975; Brewin, 1985; Peterson and Seligman, 1984; Beck, 1967; Schultz, 1984; Ley and Freeman, 1984). Table 4.1, for example, illustrates the linkage between negative affect and disease. In spite of diversity of subjects, methods, and measures, a salient pat-tern emerges: A host of diseases, especially various forms of cancer, are associated with chronic and persistent negative images, expressed and embodied in feelings of helplessness and hopelessness. As one physician from Yale concludes, "cancer is despair experienced at the cellular level" (Siegel, 1986).

Table 4.1. The Relationship Between Negative Affect and Disease: Conclusions from 28 Papers on Affect and Disease(adapted from Ley and Freeman, 1984, p. 57).

Disease	*Affective State*
Cancer	Depression
Cancer	Loss of hope
Leukemia	Depression, anxiety
Leukemia -	Loss of significant other
Neoplasm	Hopelessness, despair
Cancer	Self-directed aggression
Cancer	Depression
Cancer	Hopelessness
Cancer	Depression, hostility
Lung cancer	Rigidity, repression, hostility, despair
Cancer	Decreased depression
Cancer	Lethargy, depression
Cancer	Affective disorder
Cancer	Affective disorder
Cancer	Affective disorder
Cancer	Repression of anger
Physical illness¨	Depression
Pernicious anemia	Depression
Hay fever	Helplessness
Asthma	Helplessness
Tuberculosis	Poor coping with stress
Coronary heart disease	High and frustrated aspiration
Coronary bypass, mortality	Hopelessness, depression
Psychosomatic illness	Hostility, depression, frustration, anxiety, helplessness
Various Illnesses	Helplessness, hopelessness

Probably the one finding that emerges most conclusively on the other side of the ledger is that while negative affectivity is notably linked to the phenomenon of learned helplessness, positive affect is intimately connected with *social helpfulness.* Some-how positive affect draws us out of ourselves, pulls us away from self-oriented preoccupation, enlarges our focus on the potential good in the world, increases feelings of solidarity with others, and propels us to act in more altruistic and prosocial ways (see Brief and Motowildo, 1986, for a review of altruism and its implications for management).

According to the work of Alice Isen and her colleagues, mood, cognition, and action form an inseparable triad and tend to create feedback loops of amplifying intensity.
Positive affect, the evidence indicates, generates superior recall or access to pleasant memories (Isen, Shalker, Clark, and Karp, 1978); helps create a heightened sense of optimism toward the future (Isen and Shalker, 1982); cues a person to think about positive things (Rosenhan, Salovey, and Hargis, 1981); and, as a result, predisposes people toward acts that would likely support continued positive affect, like the prosocial action of helping others (Cunningham, Steinberg, and Grev, 1980; Isen and Levin, 1972; Isen, Shalker, Clark, and Karp, 1978). In addition, positive affect has been associated with (1) increased capacity for creative problems solving (Isen, 1984); (2) more effective decision making and judgment (Isen and Means, 1983); (3) optimism and increased learning capacity-in particular, a sharpened capacity for perceiving and understanding mood-congruent or positive things (Bower, 1981; Clark and Isen, 1982).

In perhaps the most intriguing. extension of this line of thought, Harvard's David McClelland has hypothesized a rein-forcing set of dynamics between positive imagery, positive affect, prosocial action, and improved immune functioning. McClelland has even gone so far as to argue that merely watching an altruistic act would be good for the observer. He *may* be right.

For example, in one of McClelland's experiments, students were shown a film of Mother Teresa, a Nobel Peace Prize recipient, attending to the sick and dying poor in Calcutta. During the film, measures were taken of the student's immune functioning as

defined by increases in salivary immunogobulin A(I g A - a measure of defense against respiratory infection and viral disease). In all cases, it was found that IgA concentrations immediately increased during the film and for some observers remained elevated for a period of up to one hour afterward.

It should be emphasized that these findings are controversial and that we are clearly in our infancy when it comes to really understanding the role of positive emotion as it relates to individual and collective well-being. The most important fact, however, is that studies like these are even being done at all. They represent a vital shift in research attention across a whole series of disciplines and reflect a change in the mood and spirit of our times. For example, as Brendan O'Regan (1983, p. 3)observes in relation to the field of psycho neuron immunology, "We will no longer be focused on only the reduction of symptoms or the removal of something negative, and instead begin to understand health and well-being as the presence of something positive. It [the focus on the psychophysiology of positive emotion] may well be the first step in the development of what might be called an affirmative science . . . a science for humankind."

The 0 f f Balance Internal Dialogue

One of the more fascinating refinements of the notion of positive imagery comes from Robert Schwartz's development of a cognitive ethology: the study within human systems of *the* content, function, and structure of the internal dialogue. Here the image is conceptual-zed as self talk. Traced back to Plato and Socrates, cognition is seen as discourse that the mind carries on with itself. As in James's stream of consciousness, it is argued that all human systems exhibit a continuing "cinematographic-show of visual imagery" (Ryle, 1949) or an ongoing "inner news real" (Becker,1971) that is best understood in the notion of inner dialogue.

The inner dialogue of any system-individual, group, organization, society-can be understood, argues Schwartz (1986), by categorizing its contents at the highest level of abstraction with respect to its functional role in achieving a specified aim. It is illustrated, for example, from a study of a stressful medical procedure, that people may have thoughts that either impede the aim of the clinical intervention ("the catheter might break and stick in my heart"-negative image) or conversely may facilitate the goals of the care ("this procedure may save my life"-positive image). Hence, the inner dialogue functions as an inner dialectic between positive and negative adaptive statements, and one's guiding imagery is presumably an out-come of such an inner dialectic.

A whole series of recent studies have looked at this process, and results suggest a clear and definitive pattern of difference in the cognitive ecology of "functional" (healthy) versus "dysfunctional" (unhealthy) groups.

Table 3.2 presents data showing the ratios of positive to negative image statements for functional and dysfunctional groups across a series of seven independent studies. In all cases, there is a definite *imbalance* in the direction of positive imagery for those identified as more psychologically or socially functional. As can be seen, the functional groups are characterized by approximately a 1.7:1 ratio of positive to negative images. Mildly dysfunctional groups ("high" dysfunction was not studied)demonstrate equal frequencies, a balanced 1:1 internal dialogue.

Obviously, the sheer quantification of cognition has certain weaknesses. For one thing, it is clear that just one idea or image can transform the entire gestalt of a thousand others. But the findings do have meaning, especially when linked to other studies showing that images of hope or hopelessness can affect the body's innate healing system, its

immune functioning, and other neuron chemical processes. Especially disturbing are reports indicating that many of our children today are growing up in family set tings where as much as 90 percent of the home's internal dialogue is negative, that is, what not to do, how bad things are, what was done wrong, who is to blame (Fritz, 1984).

But it is not just our children. In his powerful *Critique of Cynical Reason,* Peter Sloterdijk (1987) observes that the whole of postmodern society is living within an internal dialogue or cognitive environment of a universal, diffuse cynicism. As a predominant mindset of the post-1960s era, Sloterdijk takes the cynic not as an exception but rather as the average social character.

It is argued that at both the personal and institutional levels, throughout our society there is widespread disturbance of vitality, a bleakening of the life feeling, a farewell to defeated ideal-isms, and a sense of paralyzing resentment. Sociologically, Sloterdijk contends, today's cynicism is bureaucratic and it has become the predominant way of seeing things; psychologically, the modernist character is said to be a borderline melancholic, one who is able to keep the symptoms of depression under control and keep up appearances at both hone and work. Our internal dialogue, as a society, Sloterdijk laments, has become more and more morose, and nowhere, he argues (1987, p. 12), is this better exemplified than in the halls of academia: "The scenery of the critical intelligensia is populated by aggressive and depressive moralists, problematists, `problem holics,' and soft rigorists whose existential stimulus is no."

Table 3.2 Ratios of Positive and Negative Thoughts for
Functional and Dysfunctional Groups Across Seven Independent Studies
(Reported in Schwartz, 1986).

Focus of Study	*Cognitive Assessment*	*Functional M*			*Dysfunctional M*		
		Positive	*Negative*	*Ratio*	*Positive*	*Negative*	*Ratio*
Assertiveness							
1. High vs. low assertive	Inventory/ASST[a]	57.0	33.0	1.7:1	48.0	51.0	1:1.1
2. High vs. low assertive	Inventory/ASST	59.0	35.0	1.7:1	48.0	51.0	1:1.1
3. High vs. low assertive	Inventory/ASST-R[b]	41.8	23.8	1.8:1	38.0	33.2	1.1:1
Social anxiety							
4. High vs. low socially anxious Sample							
2: Females and males combined	Inventory/SISST[c]	54.9	33.0	1.7:1	42.7	47.3	1:1.1
5. High vs. low socially anxious	Production/thought listing[d]	1.6	1.2	1.3:1	1.5	2.0	1:1.3
Test Anxiety							
6. High vs. low test-anxious	Production/talking aloud	67.3	32.0	2.1:1	45.0	61.3	1:1.4
Self-Esteem							
7. High vs. low self-esteem	Production/thought sampling Mean ratio			1.6:1			1.2:1
		2.4	1.5	1.70:1	2.3	2.0	1:1.14

[a] Assertiveness Self Statement Test.
[b] ASSR-Revised generalizes to broader range of assertion situations.
[c] Social Interaction Self-Statement Test
[d] Scores averaged across high and low anonymity conditions

Whether one agrees with Sloterdijk or not, it is important to recognize that all human systems are conditioned by their internal dialogue. Our minds are bathed within any number of cognitive environments-family, school, church, play, and even the environments created by our research methods and problem-solving technologies-that provide cues to the ways we perceive, experience, and imagine reality.

So the question must therefore be asked, What kinds of cognitive environments maximize the "human possible"? What kinds of cognitive ecologies are we generating, and why? Can cognitive ecologies be developed, transformed, or enhanced? And what kinds of cognitive ecologies do we want?

The Positive Image as a Dynamic Force in Culture

As various scholars (for instance, Markley, 1976; Morgan, 1987) have noted, the underlying images held by a civilization or culture have an enormous influence on its fate. Ethical values such as "good" or "bad" have little force, except on an abstract level, but if those values emerge in the form of an image (for example, good = St. George, or bad = the Dragon), they suddenly become a power shaping the consciousness of masses of people (Broms and Gahmberg, 1983). Behind every culture there is a nucleus of images - the "Golden Age," "child of God," "Enlightenment," "Thousand Year Reign of Christ," or "New Zion"-and this nucleus is able to produce countless variations around the same theme.

In his sweeping study of Western civilization, the Dutch sociologist Fred Polak (1973) argues essentially the same point concerning the heliotropic propensity of the positive image. For him (1973, p. 19), the positive image of the future *is the* single most important dynamic and explanatory variable for under-standing cultural evolution: "Any student of the rise and fall of cultures cannot fail to be impressed by the role played in this historical succession of the future. *The rise and fall of images of the future precedes or accompanies the rise and fall of cultures.* As long as a society's image is positive and flourishing, the flower of culture is in full bloom. Once the image begins to decay and lose its vitality, however, the culture does not long survive."

For Polak, the primary question then is not how to ex-plain the growth and decay of cultures, but how to explain the successful emergence or decay of positive images. Furthermore, he asks, how do the successive waves of optimism and pessimism or cynicism and trust regarding the images fit into the cultural framework and its accompanying dynamics? His conclusions, among others, include:

1. Positive images emerge in contexts of "influence-optimism" (belief in an open and influenceable future) and an atmosphere that values creative imagination mixed with philosophical questioning, a rich emotional life, and freedom of speech and fantasy.
2. The force that drives the image is only part cognitive or intellectual; a much greater part is emotional, esthetic, and spiritual.
3. The potential strength of a culture could actually be measured by the intensity, energy, and belief in its images of the future.
4. The image of the future not only acts as a barometer but actively promotes cognition and choice and in effect becomes self-fulfilling because it is self-propelling.
5. When a culture's utopian aspirations die out, the culture dies: "where there is no vision, the people perish" (Proverbs 29:18). Of special note here, anthropologists have shown that certain tribes have actually given up and allowed them -selves to die when their images of the future have become too bleak. Ernest Becker (1971) notes the

depopulation of Melanasia earlier in this century as well as the loss of in terest by the Marquesan Islanders in having children. In the second case it appears that the isla nders simply gave up when, in the face of inroads from white traders and missionaries, everything that gave them hope and a sense of value was eroded.

On this final point, Polak was intrigued with the following conclusion: Almost without exception, everything society has considered a social advance has been prefigured first in some utopian writing. For example Plato's *Politeia* opened the way, shows Polak, for a series of projections that then, via Thomas More's *Utopia,* had an impact on England's domestic and foreign policy. Similarly, Harrington's *Oceana* had immediate impact on France through the work of Abbe Sieyes, who used Harrington's model as a framework for *his Constitution de /An VIII* (about 1789). Later, these themes were "eagerly absorbed" by John Adams and Thomas Jefferson and emerged in a variety of American political institutions, not to mention the Declaration of Independence. While the word *utopia* has, in our society, often been a derogatory term, the historical analysis shows utopia to be, in Polak's words (1973, p. 138) "a powerhouse": "Scientific management, full employment, and social security were all once figments of a utopia-writer's imagination. So were parliamentary democracy, universal suffrage, planning, and the trade union movement. The tremendous concern for child-rearing and universal education, for eugenics, and for garden cities all emanated from the utopia. The utopia stood for the emancipation of women long before the existence of the feminist movement. All the con cepts concerning labor, from the length of the work week to profit-sharing (and sociotechnical systems design and QWL), are found in utopia. Thanks to the utopists, the twentieth century did not catch humanity totally unprepared."

Metacognition and Conscious Evolution of Positive Images

To the extent that the heliotropic hypothesis has some validity--that human systems have an observable tendency to macrodeterministically evolve in the direction of those "positive" images that are the brightest and boldest, most illuminating and promising-questions of volition and free agency come to the fore. Is it possible to create our own future-determining imagery? Is it possible to develop our metacognitive capacity and thereby choose between positive and negative ways of construing the world? If so, with what result? Is the quest for affirmative competence-the capacity to project and affirm an ideal image as if it is already so - a realistic aim or merely a romantic distraction? More important, is it possible to develop the affirmative competence of large collectivities, that is, of groups, organizations, or whole societies affirming a positive future together?

With the exception of the last question (there just has not been enough research here), most of the available evidence suggests quite clearly that affirmative competence can be learned, developed, and honed through experience, disciplined practice, and formal training.

Reviews on this topic, for example, are available in the areas of athletics and imagery, psychotherapy and imagery, imagery and healing, hypnosis and imagery, imagery and sexual functioning, and others related to overall metacognitive capacity(see Sheikh, 1983, for ten excellent reviews on these subjects)-.

In the case of athletics, as just one example, imagery techniques are fast becoming an important part of all successful training. In *Super learning,* Ostrander (1979) discusses the mental methods used by Soviet and Eastern European athletes who have had such success in the Olympics in recent decades. Similarly, Jack Nicklaus's book *Golf My Way* (1974) offers a compendium of mental exercises to sharpen the affirmative function. For Nicklaus there is an

important distinction to be made between a negative affirmation (for example, an image that says "don't hit it into the trees") and a positive affirmation (for instance, "I'm going to hit it right down the middle of the fairway"). Here again we find that the whole body, just like a whole culture, responds to what the mind imagines as possible. The important lesson, according to Nicklaus, is that affirmative competence. can be acquired through discipline and practice and that such competence may be every bit as important to one's game as sheer physical capability.

Recent experimental evidence confirms this view and suggests something more: It is quite possible that the best athletes are as successful as they are because of a highly developed meta-cognitive capacity of differential self-monitoring. In brief, this involves being able to systematically observe and analyze successful performances (positive self-monitoring) or unsuccessful performances (negative self-monitoring) and to be able to choose between the two cognitive processes when desired. Paradoxically, while most in our culture seem to operate on the assumption that elimination of failures (negative self-monitoring) will improve performance, exactly the opposite appears to hold true, at least when it comes to learning new tasks. In one experiment, for example, Kirschenbaum (1984) compared a set of bowlers who received lessons on the components of effective bowling to those who did not receive the lessons (controls) and to groups who followed the lessons with several weeks of positive self-monitoring or negative self-monitoring (that is, they videotaped performances, edited out the positive or negative, and then selectively reviewed the corresponding tapes with the appropriate groups). As predicted, the positive self-monitors improved significantly more than all the others, and the unskilled bowlers (average of 123 pins) who practiced positive self-monitoring improved substantially (more than 100 percent) more than *all* other groups. Since then, these results have been replicated with other athletic activities such as golf, and evidence repeatedly indicates that positive self-monitoring significantly enhances learning on any task and is especially potent in the context of novel or poorly mastered tasks.