Abstract

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METANOIC ORGANIZATIONS

Our work during the past several years leads us to believe
that there now exists a small but significant number of American cor-
porations engaged in daring experiments in organizational transforma-
tion. These companies have set about to fundamentally alter our
understanding of how a group of people can work together. They are
committed to the absolute highest in organizational performance and
human satisfaction. They view themselves as microcosmic demonstra-
tions of how society could work towards everyone's advantage.

We have come to call such organizations metanoic organiza-
tions. This term is based on the greek metanoia meaning a fundamental
shift of mind (meta: transcending; noia: of mind). The greek term was
used extensively by New Testament writers to describe "...an immense
new inward movement for obtaining one's rule of life...a change of the
inner man." ([1], p. 178). The term was classically associated with a
reawakening of intuition and personal vision.

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We use a term previously employed to describe an individual
shift in viewpoint to describe this new type of organization because
the essence of this new organization is its functioning as a higher
form of organism. The individuals within the metanoic organization
tend to assume an expanded sense of personal identification. They do
not "give up" their personal identity for a organizational identity,
they transcend their personal identity. Who they are, in a very
meaningful sense, becomes inextricably linked to a higher purpose
towards which their organizational self is committed. It is our
working hypothesis that an organization fused with this level of
commitment and participation operates with a fundamentally altered
point of view about itself and its relationship to the environment.
It transcends preoccupation with its own survival and exists to
realize a unique vision of a better world.

Although few organizations operate consistently with this
level of commitment, a surprising number seem to be moving in the
direction of the metanoic organization. A recent study by McKinsey
[2] of high performing organizations showed that a common element of
all was commitment to a "superordinate goal" that transcended standard
organizational performance criteria such as growth and profitability.
Similar interests are evident in the fascination of American managers
with Japanese methods of developing teamwork and organizational
identity [3,4].

METANOIC ORGANIZATIONS:
NEW EXPERIMENTS IN SOCIAL EVOLUTION

by

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Peter M. Senge

I. Introduction

Our work during the past several years leads us to believe that
there now exists a small but significant number of American corporations
engaged in daring experiments in organizational transformation. These
companies fundamentally alter our understanding of how a group of people
can work together. They are committed to the absolute highest in organi-
zational performance and human satisfaction. They view themselves as
microcosmic demonstrations of how society could work toward everyone's
fulfillment.

Consider, for example, a medium size ($300 million in sales) high
technology manufacturing corporation committed to the precept that
"freedom and respect for the individual are the greatest motivators of man,
especially when innovation and creativity are the intended results." In
this particular company, such lofty proclamations are backed up by a
completely decentralized organizational structure where one of the primary
responsibilities of corporate management is to limit the size of operating
divisions. When divisions grow too large, they divide into two smaller
more manageable units. Division size is determined according to the

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criterion that no division should ever be so large that each person cannot feel that their actions make a difference to the divisions' performance. In an organization of 3500 people, the corporate staff numbers 18, including secretaries. Every employee in every division shares in their division's profits, which are consistently at or above targets. Turnover and absenteeism averages less than 2% in most divisions. Investment in R&D within the divisions tends to run consistently above the industry average.

Or, consider the case of a relatively small ($20 million) organization providing extensive administrative and related support services to hospitals within a large metropolitan area. The organization strives to "promote wellness by having the institutions operate so effectively that their commitment to patient health and aliveness carries over into all aspects of people's lives." In the first year after developing this mission statement, sales doubled and services expanded dramatically without adding a single professional staff member. The organization aggressively promotes a "you and me" rather than "you or me" philosophy, with which the 20 telephone operators were so captivated that they organized a person of the week program to acknowledge and share in other employees' successes.

Or, consider the case of a large traditional New England manufacturing organization within a non-growth market that had lost money for 8 out of 10 years before hiring a CEO 7 years ago who believed that, "People can produce results beyond what is thought possible if given an opportunity to fully express themselves and be responsible for their

collective productivity." Within one year, pretax profits increased 20%

and have stayed at that level since. Turnover and absenteeism declined

dramatically over the following years and have remained low.

These are but a few examples of a much broader phenomenon the full

scope of which is impossible to judge. In some sense, this search for new

forms of organizational self-expression is rooted in the profound shift in

attitudes and values observed by many sociologists. The new type of

organization we see emerging is wholly consistent with what Yankelovitz

[1981] calls a grass roots shift from an "instrumental" to a "sacred"

world view. More and more people are seeking work experience that is

intrinsically valuable over and above providing financial security.

We have come to call such organizations metanoic organizations.

This term is based on the greek word metanoia meaning a fundamental shift

of mind (meta: transcending; noia: of mind). In particular, the greek term

was used extensively in early Christian times to describe a reawakening of

intuition and personal vision associated with a profound revisioning of

reality. We use a term previously employed to describe an individual shift

in viewpoint to describe this new type of organization because the essence

of this new organization is its functioning as a higher form of organism.

The individuals within the metanoic organization tend to assume an expanded

sense of personal identification. They do not "give up" their personal

identity for a organizational identity, they transcend their personal

identity. Who they are, in a very meaningful sense, becomes inextricably

linked to a higher purpose towards which their organizational self is

committed. It is our working hypothesis that an organization fused with this level of commitment and participation operates with a fundamentally altered point of view about itself and its relationship to the environment. It transcends preoccupation with its own survival and exists to realize a unique vision of a better world.

How widespread is the emergence for metanoic organizations? What might be their eventual impacts on management and society? Such questions are impossible to answer at this time. What is possible and important is to begin trying to making some sense out of the phenomenon. What are the fundamental commonalities uniting these innovative organizations? What principles underlie their growth? How can we begin to understand whether there is in fact a major shift in management philosophy and corporate design in the making?

As we have asked those questions, a framework for understanding has begun to emerge. The elements of this framework are outlined below. We offer it in the hope that it will aid in recognizing what is happening and in encouraging further experimentation.

II. A Framework for Understanding Metanoic Organizations

The key elements to metanoic organizations can be understood by considering what it takes to put together a championship crew team. Obviously, one starts with talented rowers. But talented rowers are not enough to make a championship crew. For one, they need something to strive for. Not just any goal--if you want great performance you need a great goal. Winning next week's race might provide sufficient motivation for a better than average performance, but championship performance only comes from striving to win the championship. To truly excel, the team must have a vision that is sufficiently challenging and sufficiently long-term to develop peak performance over an extended period of time.

But talent and vision alone are also insufficient. The rowers must learn to row together. The translation of individual commitment and resources into collective accomplishment requires alignment of individual energies. Learning to row together represents a whole new skill. Many find it difficult and frustrating. But, when the team starts to jell, something very exciting happens. Each individual becomes aware of a new dimension. One begins to sense a totally new feeling as those eight blades strike the water in unison. There comes a unique rush of power with the recognition of what the team can accomplish. When this condition of alignment is allowed to develop over an extended period, individuals in the crew often find that they become progressively more aware and attuned to one another--to the point that they may almost mystically experience themselves as the entire team during periods of exceptional performance.

But talent, vision, and alignment are still not enough. If you take the most talented, committed, aligned rowers and put them in a leaky boat, they won't win many races. Clearly, a well-designed racing shell is a fourth element necessary for a championship crew team. A poorly designed shell will more than make up for the best crew.

Setting aside talent for the moment (we will return to talent in Section VII), the crew metaphor points what we believe are three unique elements underlying metanoic organizations: (1) vision, (2) alignment, and (3) structure. Such organizations invariably have a clear sense of a shared vision, become highly aligned around that vision, and develop effective organization structure and policy to efficiently translate individual energies into collective results.

The three elements are distinct yet closely related. Organizational vision is purposeful. It represents the organization's underlying purpose or mission in a visual form that people can relate to. Vision is symbolic. It serves either to distinguish the organization from its counterparts (e.g., the "best", "number one", the "most innovative") or to represent what it is that makes the organization unique. Alignment is relational; it concerns how individuals within the organization relate to one another and to the organization itself and how they develop the commitment and natural resonance to collectively achieve their vision. A shared common vision is one of the most powerful forces causing alignment within a group. On the other hand, a highly aligned group will often evolve new collective visions around which to organize future work.

Structure is also relational but at the systemic rather than interpersonal level. By structure, we mean the basic interrelationships within an organization which cause its observed behavior over time. Our concept of structure is broader than the organizational chart and encompasses key strategies and operating policies, as well as more traditional elements of organizational design. Metanoic organizations pay special attention to structural design for exactly the same reason the crew team pays special attention to the design of its racing shell; poorly designed structure can undermine alignment and erode vision.

III. Purpose and Vision

Perhaps the most salient characteristic of metanoic organizations
is a deep and overriding sense of purposefulness in all of their actions.
It is often as if the organization appears to have some underlying noble
mission that it is called upon to perform. This mission serves not only to
set major direction for all of the activities in the organization, but also
provides, as we shall see later, for a shared sense of identity.

Some organizations attempt to capture this underlying sense of
purpose through a carefully thought out and widely disseminated mission
statement or organizational charter. Others develop catchy phrases or
mottos, all of which serve to provide the participants in the organization
with some shared sense of identity. One thing that distinguishes metanoic
organizations seems to be in the nobleness of the underlying purpose,
something which can capture people's spirits as well as their intellect.

The power of a compelling organizational vision stems directly from
its use as a vehicle for elucidating organizational purpose. Since the
underlying purposes of organizations are generally intangible, they are
difficult to talk about. And yet, a shared sense of purpose is vital for
an inspired organization. Consequently, people must develop techniques and
vehicles which will enable them to talk about these intangibles. One such
vehicle, which is adopted by organizations we have investigated, is that of
a vision of a desired state of affairs.

In the past, the notion of a vision for an organization has not
been common to management parliance. An organization which shares a common
and realizable vision of the future, which includes the organization's
place in that future, is in a remarkably powerful position. When such a
vision becomes painted in the imagination of all concerned, it cannot help
but capture their enthusiasm and spirit.

What are examples of such a vision? One might be demonstrating
that freedom and personal responsibility are nurtured by free enterprise.
Another might be to support well-being through providing the highest
quality medical service to the people of a region. Another might be the
designing and rendering of high quality products and services which also
contribute to the aesthetics of a profession. Each vision might be
different and, in fact, each person's vision within the organization might
be different than others. It's less important that everyone hold the same
picture in their mind as it is for each person to have their own picture,
which is compatible with others. The interplay and discussion around these
various visions allows discovery of the fundamental underlying purposes and
principles of the organization, which then serve to unite everyone in the
organization.

A realizable vision strikes a delicate balance between challenge
and practicality. An effective organizational vision goes beyond
"motherhood and apple pie." Neither is it the type of image which is
foregone and too easily achievable. The vision must provide some stretch.
It must afford a genuine challenge. It is probably also true that this

vision must include some noble principles such as quality, excellence, or service to the customer. These are the qualities which will lift people towards inspired performance. At the same time, the vision must be workably grounded in reality. Without such a grounding, there is no compelling reason to accept and hold the vision.

There is yet another value to holding a picture of a desired state of future affairs. This lies in the focus on desired results as opposed to process. Such a focus on results is much more powerful than a focus on the processes used to achieve results. Managers have long intuitively known this, but we suspect have sometimes wanted to believe otherwise because they become attached to the processes within the organization which produce the results. This has led, we would assert, to misplaced emphasis on process to the exclusion of results that the processes are designed to achieve.

The Apollo moon project was an excellent example of the power of focusing on results. In the beginning, many involved in the engineering, human, or administrative dimensions of the moon project felt that there were overwhelming obstacles to prevent landing men on the moon before 1970. Yet, the vision was deeply held by many in the project. In fact, the vision was without doubt the sole unifying force underlying the many varied tasks and contributors. This clear vision allowed for enormous creativity. The consequence was an array of breakthroughs of both technical and logistical nature that created wholly new "processes" that could have never been designed in advance.

Focusing on results does not imply that process should be ignored. However, by maintaining an overall focus on results, people become less wedded to the process they have used in the past. This allows them to be experimental in selecting those processes which might ultimately bring results about most expeditiously. The principle here is simple and easily understood: let the processes serve the result not the other way around. Such focus on results has been found to be a common characteristic of many high performing organizations (Peters [1980]).

The Metanoic Viewpoint

The ongoing process of creating and realizing organizational visions eventually develops perhaps the most distinctive characteristic of metanoic organizations: the deep belief that they can create the world that they want. This viewpoint arises from a fundamental shift of consciousness. By contrast, the vast majority of organizations simply do not work as well as people in them would like. Disillusionment, dissatisfaction, nonalignment, and inefficient use of human resources are the accepted norm in most corporations. They are usually attributed to lack of commitment, communication, and talent. Yet these conditions actually arise from a point of view from which people tend to operate in their personal lives, as well as in organizations. In an extreme form, this point of view is that, "things don't work and there's nothing I can really do about it. I'm dissatisfied, but I'm stuck in a system too big, too unresponsive, or too complex to influence and control." In many organizations, this point of view has become so pervasive that it is

treated as an absolute truth. It is the air we breath, and many are no more conscious of this underlying assumption of unworkability than that air. Moreover, once accepted, it can easily become a self-fulfilling prophecy.

Metanoic organizations operate from a fundamentally different point of view. Simply put, they believe that they can create what they want. Through responsible participation, people can empower themselves, one another, and ultimately their institutions to produce astonishing results. They can create for themselves a life which is meaningful and satisfying. There is no way to overstate the importance of this shift in viewpoint. Just as a viewpoint of unworkability is self-fulfilling, so can a viewpoint of workability be self-fulfilling.

This shift in viewpoint is analogous to what happened when man first flew. Once manned flight had happened it was no longer possible to maintain the viewpoint that flight was impossible. It might be difficult, there may be a great deal that we don't know, but it is definitely not impossible. Accompanying this shift in viewpoint went a parallel shift in how failures at flight were viewed. They suddenly became useful in an entirely new way: failures became learning experiences. They revealed design flaws to be corrected. Prior to flight, every failure was one more piece of debilitating information proving that flight was not possible.

Similarly, once people in an organization begin realizing their deepest desires, they begin to realize the true depth of their collective creative capacity. They begin examining more earnestly what they really want in organizational and personal terms. They raise the stakes. And they develop a remarkable tolerance for mistake making, knowing full well that learning to fly is an inherently experimental process. But they know flight is possible.

IV. Alignment

A great deal of effort and time is being spent in organizations today setting and reaching consensus on goals and objectives. As valuable as this may be, metanoic organizations implicitly seek an even greater power, the power available to a group of people who truly work as a unified whole. We have chosen the word "alignment" to describe the condition wherein people act as part of an integrated whole as opposed to simply having a number of activities which they are all doing together. In a highly aligned organization, people recognize their commitment to a common purpose. It is somewhat similar to the use of the word in international politics to describe nations which are aligned around common ideology or philosophy. Our use of the word "alignment" however, denotes the commitment to a higher purpose and not simply an agreement about a philosophy or ideology.

Perhaps the easiest way to begin understanding the notion of alignment is to focus on the individual level. Let us postulate the existence of an individual or personal purpose in life. Of course, it would be impossible to prove conclusively that such a thing existed, but in the discussion of alignment we find it useful to adopt it as a working hypothesis. Our model would suggest, as has been suggested by many philosophers, that personal power and fulfillment come from acting consistently with one's personal purpose or higher self. People acting in this manner often seem to naturally develop the required abilities for them to manifest this purpose. The process of continually discovering one's

personal purpose and acting in accord with it is the process of falling

into alignment with one's self at an individual level.

There is an analogy at an organizational level. People being true

to themselves naturally develop the desire to look for ways of further

expressing themselves. One means is through an organization whose purpose

is aligned with an individual's personal purpose. The individual then can

more fully express their personal purpose within such an organization,

thereby furthering the manifestation of the organizational purpose. By

taking those actions which fully support the organization purpose, the

individual is more likely to achieve their personal purpose. In an

analogous way to falling into an alignment with one's personal purpose, one

then falls into alignment with the organization purpose.

What appears to happen at this point is that the individual

identity begins to expand to include the organization purpose, the

identification with something outside of and larger than one's self. In

effect, individuals operating in this special way experience an expanded

sense of themselves. Abraham Maslow described a state that might be

reached in which

"...the task, problem or purpose was totally introjected
by everyone in the situation; that is to say, that the
task or duty was not any longer something separate from
the self, something out there, outside the person and
different from him, but rather he identified with this
task so strongly that you couldn't define his real self
without including that task." (Maslow, p.)

This is quite different from sacrificing one's identity to the organization, although it may be possible to develop a degree of alignment in this way. Alignment is actually a more fundamental condition. It encompasses the full expression of individual freedom and responsibility. There is a deep sense of personal satisfaction and fulfillment which results from working within an aligned organization. Each individual is manifesting results consistent with their true nature and purpose.

Performance in a highly aligned organization can be spectacular. We have watched examples of organizations increase gross sales 600% in nine months, or reduce product development cycles by 66% after discovering their true purpose and joint commitment to that purpose.

With the phenomenon of alignment, previously wasted power and energy is released. This energy is immediately available to do the work of the organization. In effect, the organization empowers itself. It becomes resilient, manageable, and leadable. People feel empowered by their participation in the organization since their personal power is actually amplified through that participation. They come to work enthusiastically and leave each day feeling enriched and even more powerful than when they arrived. An aligned organization naturally empowers people, both the members and others who come in contact with it. Moreover, any step to develop the capacities and abilities of individuals actually contributes directly to the organization results. By contrast in an unaligned organization, any steps to develop the people's individual power often exacerbates the underlying conflict.

Alignment is created by the energy of a common vision which permeates the entire organization. This vision must be consistent with the higher values and morals of the participants so that it lifts people out of a preoccupation with themselves and unites them in the pursuit of goals and objectives worthy of their highest effort.

Alignment is probably best developed as a natural by-product of focusing on a lofty result rather than trying to become aligned. In the past, we have observed a number of organizations and teams who have focused on becoming a better team, with the expectation that results would naturally go up. In side-by-side comparisons, we have seen consistently that those teams which focus on a result or a vision, and who have the desire to be aligned, achieve both the results and the alignment. Those teams in organizations which focus on creating alignment and a sense of teamwork, often achieve neither the alignment and teamwork nor the result. The process seems to work in much the same way as trying to be satisfied or fulfilled in life. Satisfaction and fulfillment appear to come as a natural by-product from fully committing yourself to your own higher purposes and goals and participating fully in their manifestation. Individuals who focus predominantly on their own personal satisfaction often become locked in a self-reinforcing search for an ever more elusive target.

When you begin to see yourself as part of a larger whole, you also begin to see that you are not that different from other players on the team, on the same team. Most organizations ostensibly compete with other

organizations, yet it never ceases to surprise us that most conflict manifests within the organization. When one begins to feel a part of a larger whole, one also begins to feel far less separation and a more natural relationship with others in the organization. The organization itself takes on the quality of a well-working partnership and the potential for deep personality conflict diminishes greatly.

At the same time, a new potential for creative ideational conflict emerges. Highly aligned organizations often have _more_ open disagreement about strategies, tactics, and policies than less aligned organizations. In fact, our observation is that a high degree of alignment is a _necessary_ _condition_ for creative disagreement. The quality of interpersonal relationships existing in a highly aligned organization allow people to engage in ideational confict without devolving into damaging personality conflicts. Since effective ideational conflict is often vital for creative solutions, one often finds an increase in such conflict in successful organizations.

The feeling of working as a unified whole is exhiliarating. It's much more like being a part of a living organism than simply a mechanistic organization, a mere collection of parts. Like the organs in the human body, each person's task is unique, yet vital. There is a feeling that the whole team, that the whole organization must make it together.

Personal Responsibility for Total Organization Performance

The creation and maintenance of alignment allows individual members to accept personal responsibility for not only their own performance, but also that of the organization as a whole. It is no longer possible to operate with the viewpoint of "I'll get my part done and leave the rest to someone else." While personal responsibility requires an individual to discharge his or her accountabilities, it also demands a broader viewpoint. Individual actions must be conceived as part of a larger whole: "I'll get my part done, and I'll make sure that we all get the whole project done."

Individuals operating with the viewpoint of personal responsibility for total organziation performance have power and influence far beyond that accorded to their role or position. In effect, they have made two fundamental choices: to support the purpose and vision of the organization, and to play the game jointly rather than individually. When these choices are freely made they allow the creation and maintenance of alignment. Equally important, they result in a deep sense of personal power that comes from owning the whole game.

V. Focus on Structure

Responsibility for structure may be the most neglected dimension of leadership. Most presidents or CEO's see themselves as the "captain of the ship" or the "navigator" charting the organization's direction. This is easy to understand in light of the visibility and accountability that go with leadership. But what good is it to be the captain of a ship that takes three days to make a left turn, or, even worse, that turns right when the captain says left.

Responsibility for "designing the ship" is often neglected because (1) there is less visibility and credit for this aspect of leadership than for "captaining", (2) there are generally long lags between structural change and changes in performance, and (3) there may be great uncertainty regarding the ultimate consequences of different organizational designs. Underlying all the above reasons is a more general lack of understanding of the nature of structure in an organizational context.

To understand the meaning of structure it is helpful to return to our metaphor of the crew. The structure that determines the crew's performance includes the design of the shell. In a highly competitive race small differences in shell design can be critical. There is clearly a physical dimension to structure.

But there is more than that. In a human system, structure includes the "policies" which guide key decisions. One such policy for the

crew concerns the use of the rudder by the coxswain. Whenever the rudder is inserted in the water it creates drag which slows the shell. Hence it must be used sparingly to control direction. The ideal is to insert the rudder only during the stroke and only when it is absolutely necessary. Good coxswains develop finely tuned perceptions of lateral movement and expert judgment, so as only to use the rudder when absolutely necessary. These perceptions and judgment, integrated within a "steering policy", are also part of the structure determining the crew performance. Similar policies guide the rowers in slightly varying the stroke as another means of adjusting direction. When seen as a whole, the crew and shell constitute an elegant and highly complex feedback system continually processing information about current, direction, wind, stroke speed and synchronization to propel the shell with maximum efficiency towards its destination. When we speak of structure, we speak of this entire feedback system.

Most generally, we use the term structure to describe the complex web of interrelationships that determine organizational performance over time. This notion of structure subsumes (1) the "organizational structure" of reporting relationships represented by the organizational chart and (2) the "policy structure" created by the values, strategies, information flows, and explicit or implicit rules that determine key decisions. Understanding of dynamic systems in the physical sciences and engineering suggests that structure is organized into feedback loops—"positive loops" that generate growth and "negative loops" that are responsible for control of stability. An example of a positive loop is the reinforcing

interrelationship between new product development, sales revenues, and the

capacity for further product development. Examples of "negative loops" are

demand and supply adjustments to price or availability.* This same basic

dichotomy of positive and negative feedback is capable of explaining a

broad range of phenomena in the social systems, as in physical systems.

Past research has shown that many key organizational behavior patterns of

growth, stagnation, and instability can often be explained by clear

understanding of underlying feedback structure.**

Although few organizational leaders are formally trained in

applying systems thinking to organizations, it is our observation that

leaders in metanoic organizations share a uniquely systemic view of their

organizations. They develop a deep appreciation for the interrelationships

between key policies such as those governing capital investment, hiring,

inventory management, price setting, debt acquisition, and new product

development. They understand the significance of delays in capacity

expansion, hiring and training new personnel, product development, and

management development when altering the course of an organization. In

short, they develop an intimate personal feel for how the organization

functions as a system and how to work with, rather than against, the forces

of the system. While most managers are entangled in analyzing how to react

to the external and internal events they believe to determine

organizational performance, leaders in metanoic organizations focus on a

deeper level of causality. They concern themselves less with "who is doing

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* See, for example, Milsum, Forrester, (1961).
** See, for many examples, Roberts (1978).

what to whom" and focus more on structural design as the basis for creating
an organization capable of generating desired performance regardless of
external events.

Leverage Points.   In particular, leaders in metanoic organizations develop
a deep appreciation for the systems principle of "leverage points." This
principle provides a primary guide for the way metanoic organizations deal
with complexity.

The principle of leverage points suggests that in most complex
systems there are only a small number of interventions that can affect
fundamental patterns of organizational behavior. This principle contrasts
sharply with the trend toward increasingly complex solutions to
increasingly complex managerial problems. This trend was illustrated
several years ago by a government official who denied criticisms that the
administration had failed to develop a coherent national energy plan. In
response, he pointed to over one hundred energy-related initiatives that
had been sent to Congress by the administration. Such a policy viewpoint
represents the antithesis of the principle of leverage points. It grows
out of a mistaken belief that effective policy design results in an
initiative for each problem symptom. The principle of leverage points
shifts management attention away from the futile task of devising a
programmatic band aid for each problem symptom and towards the search for
"trimtabs" as Fuller calls them, the "foci of power" as described by Platt
[1973], or what Forrester [1971] calls "high leverage policies." We find
that leaders in metanoic organizations have highly developed skills in

locating high leverage policy changes <u>and</u> focusing management attention on
these few significant areas of intervention.

<u>The Assumed Proximity of Cause and Effect</u>.   Underlying the focus on
leverage points is a still more profound shift in viewpoint intrinsic to
the metanoic organization.   This shift concerns the very nature of
causality.   For most American managers, nothing is more real than the
"bottom line."   Performance measured by profits, sales growth, marketing
effectiveness, productivity, return on investment, or market share tends to
dominate attention.   Although emphasis on performance is vital for any
successful business, it also underlies most ineffective interventions in
organizational systems.

When, for example, effectiveness of current marketing efforts
decline, pressures to rapidly restore market effectiveness naturally lead
to training programs, discounts, advertising campaigns, or increased sales
commissions.   That is, a corrective action is taken that is obviously
related to the problem symptom, falling marketing effectiveness.
Similarly, declining manufacturing productivity is apt to be met by
programs to boost manufacturing skills and morale, improve equipment, or
establish quality circles.   Such interventions often represent low-leverage
changes because they are based on an underlying often unrecognized
assumption that <u>cause and effect are clearly related in time and space</u>.
The most significant implication of the principle of leverage points is
that high leverage interventions are generally <u>not</u> closely related in time
and space to the most obvious symptoms of problem behavior.   Leverage

points are generally non-obvious from the behavioral or performance perspective that dominates most organizations. Only when a structural viewpoint evolves, do high leverage interventions become understandable.

For example, consider the case of a manufacturing firm losing marketing share due fundamentally to inadequate capacity expansion causing lengthening delivery times. Such conditions often exist in a corporation that markets aggressively while maintaining tight financial controls. However, imagine that the fundamental causes of the problem are not apparent due to a host of related symptoms of decline such as falling product quality, increasing competition, and management turnover. Because the most obvious symptom of decline is falling marketing effectiveness, the firm attempts to restore effectiveness through increased incentives to marketing personnel. If that such a policy change is effective, it may actually make matters worse. If the incentives succeed in increasing orders, production capacity will eventually be overstressed even further, leading to still longer delivery times. But, the undesired consequences of the even longer delivery times will not be evident immediately, due to delays in customer perceptions and reactions. Consequently, the incentive program may become widely recognized within the organization as a success for many months before market share begins to turn down once again. In the ensuing decline, there will be strong pressures within the firm to locate blame for the decline elsewhere than the incentive program, since its success has already been established.

The above scenario obviously oversimplifies but it serves to illustrate the dangers of an assumed proximity of cause and effect. Firms dominated by this implicit assumption can literally drive themselves out of business, without ever awakening to the role of their own assumptions in causing the demise. The assumed proximity of cause and effect is rooted in an event-oriented view of causality. Such a view is behavioral not structural. It describes the causality of billiard balls crashing into one another but not the principles required to design an organization where fewer "crashes" need take place.

In metanoic organizations, structure is as "real" as performance. People realize that performance is controlled by structure, even though structure is inherently abstract and difficult to observe. Such understanding shared by a significant segment of individuals allows metanoic organizations to resist the pressures that overwhelm normal organizations to "fix" problem symptoms. They develop tolerance for recognizing but not reacting to problem symptoms, while continuing to search for changes in policy- or organization structure that could have long-term enduring consequences.

The search for structural leverage points draws people into an inherently systemic view of the organization which differs fundamentally from the "symptom-response" orientation. Problems having their most obvious manifestations in marketing and sales may have their underlying causes in capacity expansion policies. Problems in product development may ultimately stem from inappropriate growth goals or financing strategies.

As an organization develops the capacity to locate leverage points, it tends less and less to "push harder" on marketing personnel or product development engineers in response to obvious problems in those functional areas. However, systemic thinking may be difficult to assimilate into established organizations, especially ones that are traditionally organized around functional concentrations of decision-making authority. Hence, one should expect that effective implementation of systemic thinking may have radical implications for formal organizational structure and management philosophy (see inset on Kollmorgen).

VI. Balance of Reason and Intuition

But, how are leverage points located if they are truly "non-obvious"—that is, not closely related in time and space to problem symptoms. Here we come to perhaps the most difficult aspect of the metanoic organization to describe, the emergence of intuition. The philosopher and poet, Matthew Arnold explained metanoia as "...an immense new inward movement for obtaining one's rule of life...metanoia is: a change of the inner man." [Arnold, p. 178] Arnold argued that metanoia embodied the essence of the radical method of the early Christians which was aimed at "restoring the intuition."*

By intuition we mean knowledge gained by means other than sensory input and deductive reasoning. Unfortunately, common usage reflects the poor understanding of intuition characteristic of our society. Intuition is often used interchangeably with "common sense," or as a sort of short-hand to describe one's initial insights into a situation before having thought the problem through. When a manager says "Intuitively, I had expected the solution to be such and such," he or she generally is describing their state of understanding before analysis. This concept of intuition prejudices us into seeing intuition as a poor man's substitute for rationality.

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* Arnold's analysis is consistent with a great deal of recent scholarly work reassessing early Christian philosophy. (See, for example, Robinson [1977] and Pagels [1979]).

In fact, studies into the process of scientific inquiry and creative management have repeatedly pointed to the essential role of intuition. Intuition is the vital resource that <u>directs</u> the gifted scientists's rational analysis. In a recent interview, Nobel Laureate physicist Steven Weinberg said that the development of intuition represented a key advance underlying his capacities as a scientist. He described how he has come to rely strongly on incentive hunches in directing his research rather than pure rational analysis.

A recent Fortune article (Rowan 1979) describes how successful businessmen rely on intuitive powers more than they usually admit. David Mahoney, Chairman of Norton Simon observes that "The chief executive officer is to supposed to say 'I feel.' He's supposed to say, 'I know.' So we deify instinct by calling it judgement." Professor Henry Mintzberg of McGill University concludes from extensive study, that the top CEO is a "holistic, intuitive thinker who...is constantly relying on hunches to cope with problems far too coplex for rational analysis.

A key to developing creative skills is to view intuition as a developable ability. In general, Western education systematically thwarts the development of intuition through emphasis on factual information and rational analysis. If undeveloped, intuition does indeed become a second class intellectual capacity—so, in that sense, the common meaning of intuition is an accurate description of most people's current abilities, if not their ultimate potential. Metanoic organizations reverse this imbalance. They create an environment that nurtures intuitive development. They do so through continual emphasis on (1) the uniquely personal intuitive source of vision, (2) alignment, (3) and systemic thinking about structure.

Intuition and Vision

The source of the type of vision that transforms an organization lies in the confluence of personal purpose and unique insight into the future. Intuition appears to be the channel that mediates purpose and insight. Personal purpose can never be determined rationally. In a very real sense, one never knows his or her true purpose. Rather, one develops progressively enhanced capacity to recognize which of a variety of possible activities are most consistent with one's purpose. In just the way Weinberg describes the scientist's intuitive sense of when to pursue a particular research track, our work clearly shows that people can develop a sharpened intuitive sense of the consistency of alternative objectives with their personal purpose. This intuitive capability extends to a visionary capacity concerning organization and environment. The capacity to see into the future with uncommon accuracy has often been attributed to highly successful business leaders. In a test of senior executive's precognitive powers conducted at New Jersey Institute of Technology, researchers found that 80% of company presidents who had doubled sales in the past 4 years scored abnormally high on precognition tests. A control group of presidents from companies with modest performance records exhibited no such special skills.

Intuition and Alignment. Intuition is equally important for alignment. Alignment manifests as the functioning of a group of people as one. In organizations, this is often created by focus on a common vision. But, if one observes the functioning of a highly aligned group, one glimpses the

inherent role of intuition. As individuals deepen their awareness of each
other, individual activities fall into an easy, almost unconscious,
synchronization with each other. Various projects come together in a
natural and extraordinarily efficient way that simply couldn't be planned
rationally in advance. It is almost as if each individual knows what is
going on in the rest of the organization and unconsciously executes their
part so as to maximize the efficiency of the whole.

To explain this phenomenon, we have adopted the working hypothesis
that people are fundamentally connected at a level only intuition can
comprehend. This is ultimately what makes it possible for highly aligned
groups to develop a deep sense of common vision and the seemingly magical
capability to literally operate as a unifed whole. Philosophers have for
ages discussed the existence of deep values that unite all people. Huxley
[1945] calls this undercurrent of human consciouness the "perennial
philosophy" and shows how it runs as common thread through the diverse
religions and philosophies of the world. We would suggest that the source
of the perennial philosophy is the intuitive comprehension of mankind's
fundamental unity.

Lest this sound too abstract to possibly be relevant to
organizations and businesses, it is important to recognize that each of us
probably has at one time or another, experienced this transcendent
characteristic of alignment. Unfortunately, for most of us the experience
has not been in an organizational context. For most people in our culture,
the clearest alignment experiences have been in sports and the performing

arts. Nonetheless, these experiences are valid sources of insight into the nature of the phenomenon and the role of intuition.

The former basketball star Bill Russell describes the experience of alignment as it can emerge on a world-championship sports team.

> Every so often a Celtic game would heat up so that it became more than a physical or even mental game, and would be magical. That feeling is difficult to describe, and I certainly never talked about it when I was playing. When it happened, I could feel my play rise to a new level. It came rarely, and would last anywhere from five minutes to a whole quarter or more. Three or four plays were not enough to get it going. It would surround not only me and the other Celtics, but also the players on the other team, and even the referees.
> At that special level, all sorts of odd things happened. The game would be in a white heat of competition, and yet somehow I wouldn't feel competitive--which is a miracle in itself. I'd be putting out the maximum effort, straining, coughing up parts of my lungs as we ran, and yet nothing could surprise me. It was almost as if we were playing in slow motion. During those spells, I could almost sense how the next play would develop and where the next shot would be taken. Even before the other team brought the ball in bounds, I could feel it so keenly that I'd want to shout to my teammates, "It's coming there!" ---except that I knew everything would change if I did. My premonitions would be consistently correct,..."

Russell goes on to describe the unique sense of personal relationship that pervaded those special times.

> "...I always felt then that I not only knew all the Celtics by heart, but also all the opposing players, and that they all knew me. There have been many times in my career when I felt moved or joyful, but these were the moments when I had chills pulsing up and down my spine."

People often report similar experiences in chamber music ensembles, theater troupes, or symphony orchestras that rise to "special" levels of performance.

As an organization becomes more open to intuitive modes of comprehension, alignment can develop in ways completely appropriate to an organizational context. For example, people may leave a lengthy business meeting in which a large number of important problems were effectively dealt with unable to remember who said what or who adopted what position. Their feeling of teamwork was so keen that who contributed what was irrelevant.

Intuition and Structure. By focusing on the systemic nature of an organization, metanoic organizations subtly emphasize intuition as a necessary complement to rational analysis. Developing a viewpoint that recognizes that cause and effect may be distant in time and space counteracts common pressures to extensively analyze the pieces of an organization in isolation from one another. Synthesis becomes the necessary complement to analysis, and holistic modes of understanding are legitmated. Concomitantly, deep respect for intuitive understanding develops. This appears to be essential to an organization's capacity to identify and focus on leverage points.

But it is probably also true that intuition alone is insufficient. What most distinguishes metanoic organizations is not simply their openness to intuition, but the unique balance they achieve between intuitive and rational modes of understanding. This balance is necessary in communicating intuitive insight and, in developing intuitive capabilities. One person's intuitive insight into organizational structure has little impact within an organization unless that insight can be transferred to

others. Few CEOs, no matter how strong their position, can effect basic

changes in policy or organization structure by fiat. They must have tools

to clarify and communicate intuitive insight, so that insight can be

shared.

Even more importantly, our work has shown to the absence of

appropriate analytic tools can actually stifle intuitive development. This

problem is best illustrated by the brilliant student who consistently

"intuits" the correct answers to complex problems but who has not yet

mastered the appropriate analytic tools to show that the answers are

correct. First, he will be unable to convince others that his answer is

correct. Second, he will lose confidence in his intuition as his answers

go unaccepted or, if his analysis contradicts his intuition, he will

actually convince himself out of his intuitive insight. This points to

what we believe are the two basic causes for the generally poor level of

intuitive development in our society in general and in our management

education in particular: (1) direct discouragement of the intuitive mode

in favor of the analytic mode, and (2) emphasis on "reductionistic"

analytic techniques inappropriate to systemic understanding. If, as much

research has indicated*, intuition is inherently holistic and oriented

towards comprehension of inter-relationships, analytic methods that focus

only on understanding parts of a system in isolation from one another are

fundamentally inimical to development of intuition.

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* For example, see Ornstein [1973].

Hence, appropriate methods of systemic analysis can assume a

critical role in the development of metanoic organizations. It is not

surprising that many of the most advanced organizations we have worked with

are run by individuals with strong systems engineering backgrounds. Their

engineering background prepares them to think more effectively about their

organizations as a complex living system. They frequently analyze complex

problems metaphorically, by comparison to similar dynamics in complex

engineering systems. However, few are skilled in use of nontechnical

conceptual tools for systems thinking, primarily because those tools have

not been widely available in the past.* As such tools become more

accessible to senior managers, we expect them to have considerable

impact.**

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* It is important to note that most so-called systems analysis and
operations research techniques fall short of providing the general systems
thinking skills called for. They can be useful, but all to often are
technically sophisticated and conceptually primitive. What we are talking
about are tools for the senior manager that aid in clarifying his or her
own thinking, and serve as a communication vehicle. When effectively used,
such tools can draw on more technical analysis to buttress clear thinking
not replace it. For similar thoughts, see some of the recently published
reflectives on the state of operations research and management science
[references].

** Several new systems thinking books point in the right direction of what
is needed. See, for example, Kauffman [1979] and Roberts [1978] although
designed for high school students, is excellent for senior managers as
well.

VII. Implications for Leadership

Metanoic organizations require a different type of leadership. Leaders in metanoic organizations can truly lead, rather than cajole, coerce, or manipulate people into desired patterns of performance. Leaders in metanoic organizations do not need to motivate people, rather they must attend to the variety of barriers that can de-motivate. Leaders in metanoic organizations are able to operate with the certainty that people truly want to produce outstanding results and are committed to producing those results with one another. In particular, leaders in metanoic organizations are responsible for (1) a generation of and communication of the organization's vision, (2) keeping the organization on course when obstacles arise, (3) organizational and policy design, (4) maintaining an environment that empowers people, and (5) articulating the organization's societal role.

Vision

In metanoic oganizations, the leader's primary job is to catalyze the discovery of and alignment around an underlying purpose. Initially this may entail traditional management techniques of setting directions, goals and objectives. Ultimately, one moves to the state where the organization continually discovers its direction. This implies that one might initially be focused on creating and articulating a vision for others to capture and enroll in, but eventually everyone's vision is equally important, since the juxtaposition of differing visions allows the

discovery of underlying purpose. By each sharing his or her vision, everyone participates in a critical leadership function and develops a sense of "ownership of the game".

As this process develops, each individual begins to establish a very special relationship with the vision, that of a custodian or caretaker. It's not so much vision as their vision. Individuals experience themselves as a vehicle or channel for their own higher purpose, they embody it and breathe life into it. It is the leader's role to see that each individual in the organization has the fullest opportunity to discover, what George Bernard Shaw called,

> "...the true joy in life, the being used for a purpose
> recognized by yourself as a mighty one; the being a
> force of nature instead of a feverish selfish little
> clod of ailments and grievances complaining that the
> world will not devote itself to making you happy."

Staying on Course

Once a course is set and the organization has imparted on the course, it invariably encounters opposing forces, some external like competitors and some internal like dissidence (well-meaning or otherwise). These are the times that test the clarity of the vision and the courage of those holding the vision. Because an organization is invariably off course when it is moving towards a reality which has never existed in the past, leaders in metanoic organizations assume responsibility for re-establishing the vision and re-enrolling and aligning people around that vision when the going gets tough.

Times when the vision is tested are among the most difficult tests of a metanoic or any organization. A vision that is easily adjusted in the face of external pressures is hardly a vision. Continual changes in course will only dissipate alignment and underline the entire visioning process. On the other hand, blind and rigid pursuit of a vision can be equally disastrous. Ultimately, leaders in metanoic organizations develop the wisdom to know when it is appropriate to alter a vision. Whereas leadership in most organizations frequently adjusts goals in the face of evidence that the goals are difficult to achieve, leaders in metanoic organizations have a greater tolerance for the uncertainty that is required in achieving grand visions.

Organizational and Policy Design

Leaders in metanoic organizations naturally assume broad responsibility for organizational and policy design. They view as one of their major tasks that of developing and maintaining ways of thinking about the organization as a unifed organism. One of the functions of vision is that of defining the organization in terms of what it, as an entity, seeks to accomplish. Leaders of metanoic organizations continually keep before the people in their organization the key questions "Who are we?", "What is our vision or purpose?", "How are we different?", and "What are our major strategic objectives and our strategies for accomplishing those objectives?" Leaders in metanoic organizations likewise work continually to reinforce systemic thinking.

Leaders in metanoic organizations understand that the foundation of systemic thinking is appreciation of the nature of complex systems. For example, one organization has developed an elaborate demonstration involving a series of roller skates interconnected with springs of different "spring constants" (i.e. strengths) and with different weights on the different roller skates. Individuals are encouraged to attempt to control the movement of the roller skate at one extreme end of the string only by moving the roller skate at the other end of the string. The demonstration starts with two roller skates and then a third roller skate is added, and then a fourth, and so on. Usually, somewhere between 2 and 4 roller skates, people begin to get the message that it's impossible to control the behavior of even a slightly complex system through manipulating a few of its external inputs. Senior managers in this organization use this demonstration to (1) show the futility of attempting to rigidly control the behavior of complex systems, and (2) to underscore the fact that they, cannot in any sense manipulate organization behavior from "on top."

Responsibility for organizational and policy structure includes both developing appreciation for the characteristics of complex systems and deepening understanding of the specific relationships between different functional areas in one's own organization. Leaders in metanoic organizations naturally see understanding interrelationships as one of their primary functions. They devote considerable amounts of their own time to understanding interrelationships and sharing that understanding. The important point to emphasize is that the senior management in metanoic

organizations does not delegate analysis of organizational structure purely to in-house consultants or technical analysts. While consultants and technical analysts may play an important part, the leaders themselves must learn to think and communicate more systemically in order to effectively lead.

Sustaining an Environment that Empowers Individuals

A championship crew requires championship rowers. But personal skills are often only fully realized within the context of a championship team. Effective teams create an environment that empowers individuals to their fullest potential. One of the major skills of leaders in metanoic organizations is empowering others. They become the sort of people around whom others simply naturally grow and develop. Implicit in the nature of the metanoic organization is the continual pressure for the leaders to "give the game away" to the people they lead, to empower others to run the organization. They are committed to the discovery and realization of the full potential and capacity of each individual. They see each individual as possessing their own personal greatness, the full expression of which is vital for the organization. The organization is built around the peculiar talents of the individuals. It continually challenges those talents and encourages those people to give the fullest of themselves.

While many of the above are ideals espoused in most organizations, the metanoic organization has a unique capacity to realize ideals of empowerment. This capacity grows from the relationship between alignment

and empowering. In an unaligned organization, empowering individuals can

intensify conflict and disunity. To take a simple analogy, if two

individuals are attempting to go in the opposite direction, increasing

their personal power only increases the wasted energy caused by their

conflict. On the other hand, if two individuals are attempting to go in

the same direction, their collective ability to move in that direction is

only increased by increasing their personal power. Similarly in an

organization, alignment is a necessary precondition for individual

empowerment to translate into organizational empowerment. Hence, only in

the highly aligned organization, can the individual's quest for growth

align with the organizational's quest to obtain its vision.

Leaders in metanoic organizations utilize a repertoire of

behaviors conducive to interpersonal development, such as positive

reinforcement and acknowledgement, but they also become expert in subtler

forms of interpersonal relationship. Our work with gifted leaders suggests

that there is an underlying principle or key to the ability to empower

others. Simply put, people who empower others have the capacity to truly

see other people's greatness and to hold that greatness as part of their

personal vision. This is not to say that they merely try to build up each

other's confidence. The particular behaviors they employ are those which

are appropriate to the individuals with whom they are working. In some

cases they might be extremely harsh and critical and in others very gentle

and encouraging. But beyond the behavior they employ, they continually

stand in the light of the other person's true nature and purpose. Their

relationships with other people grow out of their recognition of the

other's true nature and purpose. Everything they do is done to allow others to more fully realize their underlying purpose. In this sense, their commitment to the people around them is absolute.

Leaders in organizations often establish norms for interpersonal relationship within the organization. In the metanoic organization, the norm truly becomes knowing one another and demanding the highest from one another. It is not always comfortable for people to operate within the context of such relationships. When people demand the highest of one another they often are less tolerant when they know the highest is not being reached for. Many people find that they would prefer to be comfortable in their working relationships rather than to strive for the highest. These people usually find their way out of metanoic organizations. Those who are left are the "real players". They play the game to the fullest, knowing full well that it is a game. But it is a game they have chosen to invest with meaning and relevance.

Societal Role of the Organization

Metanoic organizations develop a unique source of social responsibility. Societal responsibility develops in most organizations because it appears to be necessary. Everyone wants to be a good "corporate citizen" and to avoid the difficulties that arise from being a poor corporate citizen, particularly in the contemporary political environment. In metanoic organizations people are operating out of a deep sense of their own personal purpose and vision. They naturaly come to view the organization as a vehicle for expressing their personal purpose. Consequently they naturally demand that the organization manifest their own deepest values in its relationship with society at large.

Leaders in metanoic organizations may spend a substantial amount of their time dealing with non-corporate societal issues. Oftentimes, they do this because they feel they have a voice that needs to be heard, a viewpoint on how organizations can work which is relevant to understanding how society at large can work. They do this in much the same way an elected representative of any constituency represents his or her constituency in public forms. They feel they are a spokesman for the people who work with them, and one of their primary responsibilities is to effectively articulate their corporate philosophy and vision. In many instances, leaders of these organizations are quite active in national politics. Often, surprisingly, they advocate policies which do not directly improve the economic opportunities for their particular industry but which they feel are important for the overall vitality and health of the economy as a whole. This again is consistent with their role as a

representative of their constituents, doing what they can to provide for the security of future generations. In a political environment which has great difficulty focusing on long-term issues and resource allocation, enlightened business leaders with a deep sense of commitment to their organization and their people can be one of the most powerful voices for longer-term thinking.

Interestingly, leaders in metanoic organizations also often have more time to engage in the role of societal activist than leaders in traditional organizations. The very nature of their management philosophy is to turn over control to others within the organization. This tends to free up more of their time for activities which are simply not possible for leaders in traditional organizations to engage in. Thus, it seems to us entirely possible that the emergence of metanoic organizations will concomitantly bring an important new voice in public policy debates. To the extent that these leaders engage societal issues from the viewpoint of creating what we want rather than protecting what we might lose, theirs' may be a very different voice than the voice we have grown accustomed to hearing from the business community. In essence, these leaders will be attempting to bring the philosophy of the metanoic organization to the society as whole.

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