Communication: Are You Getting the Message?
The dramatic thrust of the N. Eldon Tanner building’s framework into the BYU skyline symbolizes the School of Management’s growth and development. During preschool meetings, the college faculty and staff inspected the unfinished building, and even at that early, raw stage, it was evident that this is going to be a magnificent structure. Construction is on schedule, and we plan to move in by late 1982.

Several significant changes have been made within the Office of the Dean. Ray Andrus was approved by the administration to be our first associate dean. He will be responsible for the Graduate School of Management programs, budgets, building, and research. Bob Parsons was appointed assistant dean to replace Paul Thompson, who has returned to teaching and remains in the Organizational Behavior Department. Bob will be in charge of faculty development, undergraduate programs, and curriculum.

Additionally, Paul Timm was appointed to the new position of assistant dean responsible for Corporate Relations. We have known for a long time that much of the activity of our college is a result of a working relationship with organizations around the world. We rely on these organizations for the placement of our students, internship positions, funding, executive lectures and executive-in-residence programs, consulting opportunities for faculty, and participation on our National Advisory Council. We feel it is time to have one person at the dean’s level contacting, coordinating, and working with these organizations. Paul will fulfill that role.

We have also been concerned about ways we can help our alumni identify with and support both BYU and our college. Consistent with this concern we have taken steps to reorganize our Management Society and to connect that society with our National Advisory Council. From now on, every School of Management graduate will automatically become a Management Society member. Under NAC direction, chapters of the society are being organized in major cities around the country. The objective is to provide professional contact, stimulation, and support for our alumni and friends. Eventually, every graduate from the School of Management—in any part of the nation—will find a Management Society group that will provide him or her with a support system.

Hank Marcheschi, vice-chairman of the NAC, is responsible for growth of Management Society chapters. The society is open to all—it is not a fund-raising organization. We feel that if we provide a real service, financial support to the college will be a natural consequence.

Because of the increased enrollment pressures, the Institute of Business Management has initiated a controlled admissions program. Students must demonstrate a certain level of scholarship in order to be admitted into a major in business management.

To provide management training for the many nonbusiness students on campus interested in a career in management, we are planning a management program for nonmajors. The program will consist of general undergraduate business classes along with guidance counseling so that students can gain exposure to business management or human resource development.

Along with an increased emphasis in continuing education programs in management, our college proposes to provide training to others besides the full-time, on-campus student. Through our Executive MBA and Administrative Management programs, we hope to provide graduate-level management training opportunities for people around the state.

We are pleased with the number of women who are selecting our college as a place for study. Recently the women in our various graduate programs have organized a social unit to provide intellectual stimulation and support to each other.

We continue to attract a number of highly qualified foreign students. Through a working relationship with the BYU-Hawaii campus, we provide assistance for qualified students who complete their undergraduate work there to pursue graduate study here. When we help these people return to their countries with solid graduate training, we feel we are making a major contribution to the person, the Church, and to the country of origin.

We are pleased with honors received and professional growth of our faculty (see pages 15-17 for highlights).

A strong, active, motivated faculty is the greatest resource our college has to offer students, the Church, and the world. We will continue to upgrade our faculty through opportunities in research, professional development, and course development.

The mission of the School of Management is to train the leaders of tomorrow. Our progress with physical facilities, school organization, faculty growth, and student quality indicate that we are making positive steps to fulfill that mission.
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EDITOR'S CORNER

"Communication breakdown" has just about taken the place of original sin as an explanation for the ills of the world—and perhaps with good cause. In our fast-moving world the ripple effects of poor communication can devastate an organization.

Management must be increasingly mindful of the crucial importance of communicating well—of understanding and being understood. Peter Drucker once offered this observation to the young manager:

"As soon as you move one step up from the bottom, your effectiveness depends on your ability to reach others through the spoken or the written word. And the farther away your job is from manual work, the larger the organization of which you are an employee, the more important it will be that you know how to convey your thoughts...."

Effective communication helps organizations get things done right. Ineffective communication costs organizations and people hours and dollars. The effect is clear, though not always clearly quantifiable. Poor communication will sap personal and organizational energy and resources. Hence, our theme for this issue of EXCHANGE is "Communication: Are You Getting the Message?"

In this issue we will take a look at a variety of problems in communicating: Unclear writing in public sector budget manuals poses a major difficulty for administrators. Defensive reactions to supervision build walls among workers. "Computerese" sounds like a foreign language to many managers who need to understand their accounting systems. Econometric models serve companies only to the extent that they are understandable. And finally, our entire society may be jeopardized to the extent that we fail to communicate appropriate values to the would-be criminal. All of these kinds of issues can be viewed from the perspective of the "communication breakdown." We hope you'll find these ideas useful.

Paul R. Timm, Ph.D.
Assistant Dean and Editor

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The views expressed in Exchange are those of the various authors and not necessarily the School of Management.
Root Causes of Defensiveness

Common sense tells us each human being perceives the world differently. In spite of this fact, we seem to possess a natural desire to get other people to see things from our own point of view. Much of our communication focuses on attempting to change other people's minds and to get them to agree with our perception. While we are trying to get others to change their minds, however, they are usually attempting to defend their own way of thinking. Thus, a mental battle ensues, fought with an armory of words, in which neither side wins.

We could conclude that defensiveness occurs in humans simply because "that's the nature of the beast." However, let's take a look at some more specific reasons. One of the major tasks of our brain is to maintain order and consistency among all the knowledge, beliefs, and attitudes that it stores. Each new bit of input is evaluated according to our existing frame of reference. If new information is consistent with that frame of reference, no change is necessary for acceptance.

On the other hand, if new information is inconsistent with our frame of reference, it will be either totally rejected, distorted enough to enter our brain without upsetting things too much, or allowed to enter in a relatively unchanged state. When this last condition occurs, the brain reacts in one of two ways: (1) the discrepant information is suppressed or forgotten; or, (2) existing attitudes and beliefs are changed to comply with the new knowledge.

In most cases, a change in our attitudes and deeply held beliefs is the alternative which is least likely to occur. That's because we lose some of our self-image and must admit that we've been wrong. And since such an admission is painful to us, many times we will remain in the wrong rather than change our minds. Apparently, when we are forced to agree with the different beliefs and perceptions held by others, we feel that we are betraying our own beliefs and values.

Carl Rogers, the well-known psychologist, says it this way:

"Our first reaction to most of the statements which we hear from other people is an immediate evaluation or judgment, rather than an understanding of it. When someone expresses some feeling or attitude or belief, our tendency is, almost immediately, to feel "That's right"; or "That's stupid"; "That's abnormal"; "That's unreasonable"; "That's incorrect"; "That's not nice." Very rarely do we permit ourselves to understand precisely what the meaning of his statement is to him. I believe this is because understanding is so risky. If I let myself really understand another person, I might be changed by that understanding. And we all fear change.

This risk of being changed is one of the most frightening prospects most of us can face."

The way we react to messages is also greatly influenced by our perception of the message sender. If we trust and have positive feelings about the person sending the message, we will be much more likely to either believe the message or at least to avoid becoming defensive. On the other hand, if we distrust or have negative feelings about the message sender, we will react defensively toward the message.

Research has also shown that defensiveness seems to be consistently greater in some individuals while tolerance and patience seem to be more prominent in others. One study concluded that the closed-minded or defensive person "has been found to be less likely to tolerate impulses that he feels to be unacceptable or immoral. He tends to attribute these impulses to the outside world with moralistic condemnation of others, suspicion, and cynicism." People with a closed mind "seem to be unable to reconcile the presence of both good and bad in others; they perceive them as either all good or all bad.

Other research studies have provided additional information about defensive and tolerant individuals. The defensive person:

- Possesses a relatively narrow psychological universe.
- Is more likely to be male.
- Is more likely to be from higher-class environments.
- Likely faced a childhood of overly rigid discipline with little opportu-
nity to develop self-reliance. • Is more likely to be unduly influenced by comments of authority figures (is a conformer rather than an independent thinker). • Screens outside information on the basis of compatibility with present perceptions rather than on its own merits. • Is more likely to feel threatened or anxious in social situations.  

The tolerant person, on the other hand:  
• Seems to have a wider psychological universe and expects to find great differences in people.  
• Is more likely to be female.  
• Is more likely to be from a lower-class environment.  
• Likely experienced a childhood of reasonable discipline with opportunity to develop self-reliance.  
• Is not overly influenced by comments of authority figures.

- Screens new information on the basis of its own merits (is an independent thinker).  
- Is more likely to feel comfortable in social situations.  

In summary, defensiveness is usually caused by (1) new information that is contrary to present beliefs and feelings; (2) the resulting fear that we might be wrong and have to change; and (3) a mistrust or actual dislike for the person who originates the information. In addition, some individuals tend to be basically defensive by nature. These people find it difficult to tolerate beliefs different from their own. When changing beliefs, these individuals are also unduly influenced by authority figures rather than being influenced largely by their own independent evaluation.  

Defensiveness Begets ...  

While the roots of defensiveness are mental in nature, the branches of these mental roots exhibit themselves in readily observable behavior. Such defensive behavior on the part of the individual often causes others to react just as defensively. Indeed, an increasing pendulum effect sometimes occurs—As Person A reacts against input from Person B, Person B resists input from Person A. With each new bit of input, the resistance of the other person becomes more pronounced until those communicating become enmeshed in a self-perpetuating defensive cycle.  

In this type of defensive communication situation, the individual involved spends increasingly more effort attacking the other person and defending himself and increasingly less effort really listening and trying to understand.  

Besides talking about the topic, he thinks about how he appears to others, how he may be seen more favorably, how he may win, dominate, impress, or escape punishment, and/or how he may avoid or mitigate a perceived or anticipated attack.  

Such inner feelings and outward acts tend to create similarly defensive postures in others; and, if unchecked, the ensuing circular response becomes increasingly destructive. Defensive behavior, in short, engenders defensive listening, and this in turn produces postural, facial, and verbal clues which raise the defense level of the original communicator.  

The problem with defensive behav-
ior is clear—it prevents those listening from objectively concentrating on the message being received. Instead, the focus is on defending oneself, on proving the other person wrong, and on winning the argument rather than on achieving understanding. And in such a case, neither person really wins. Rather, both lose, human dignity suffers, personal relationships are strained, and understanding fails to happen.

In recapping the effect of defensive behavior on communication, we can safely say:

- Defensiveness in one individual usually begets defensive behavior in others.
- Defensiveness causes distortion in both the messages we send and those we receive.

**Defusing the Defensive Communicator**

We've looked at the root causes and harmful side effects of defensive communication. Now it's time to get down to practicalities—how to handle the defensive communicator. Fortunately, research has identified a twofold approach that has proven itself over time. The first part of the approach focuses on the defensive individual. The second part zeroes in on the communication process itself.

**I Think You’re O.K. Plus Some**

Before we can be very effective in helping someone overcome defensiveness, we must convince the individual we have high positive feelings for him. The defensive communicator must believe we truly consider him to be important. Then and only then will the defensive barriers be let down.

Several studies have shown that the source of a message is of considerable importance to the defensive person. Going back to our opening example, if Tom feels his supervisor has a true desire to be of help, Tom is going to be much more likely to be open to his supervisor’s communication. In short, help is only help when it is perceived as such. It is definitely not help when it is perceived as being merely an attempt to change or when the person giving help has his or her own interest in mind.

To convince others that we have their welfare in mind, we must make sure our actions and our words are congruent. Only when others see that our behavior matches our words will they believe what we say. For example, consider the domineering manager who delights in firing off orders to his subordinates. During the once-a-year performance review, that manager will have a hard time convincing his subordinates he has their real welfare at heart and is willing to do whatever he can to help them achieve. On the other hand, the manager who shows concern for his employees every day of the year will spare himself a great deal of defensiveness when difficult times arise.

This is not to imply that managers should be soft. Rather, managers need to keep a proper balance between achievement of task and concern for people. Further, managers must truly feel a genuine concern for their workers—a facade of concern will be readily noticed. And the result of this incongruity will be worse than if the managers make no attempt to mask their negative feelings.

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**Defensive behavior on the part of the individual often causes others to react just as defensively.**
Defensiveness can be substantially reduced by empathizing.
If the auto industry had done what the computer industry has done in the last 30 years, a Rolls-Royce would cost $2.50 and get two million miles to the gallon, according to Computer World, the weekly computer industry publication. But as unbelievable as the last 30 years have been, the next 30 will probably be even more incredible.

Right now, IBM has begun delivery of a new computer series that will, by itself, provide four times as much processing power as all the previous computers delivered by the company. Furthermore, IBM announced a new "superconductor" that could improve computer speed and performance by a factor of 500 in the next seven years!

With extraordinary increases in computer efficiency such as these, it's no wonder computer use is on the rise. Today, worldwide expenditures for these electronic marvels stand at $75 billion annually. And this figure is growing by 20 percent a year.

Yet with all the progress of the computer industry, most people are still "computer illiterates." The aver-
age person just doesn't understand how the machine works or, worse yet, what a computer can be used for. Such computer illiteracy is quickly becoming a handicap for those "not in the know."

A recent article in the Wall Street Journal carried statistics supporting the idea that computer experience is a growing necessity for accountants and businessmen. At Robert Half, Inc., a national recruiting firm, 82 percent of the accounting job orders received by the firm in 1976 indicated a preference for some data-processing expertise. This was up from 58 percent only two years earlier. According to Robert Half, jobs where data-processing expertise is required rose from 37 percent to 55 percent in that same two-year period. Clearly, for the accountant and businessman or woman, a firm grasp of computer fundamentals has become a must.

But computer literacy shouldn't be confined to the business types. In most organizations, whether profit or not-for-profit, data processing now impacts almost everyone. From automated payroll to computer-assisted design, we see the far-reaching applications of this relatively new tool. Often, those who could use the computer most have difficulty conveying their needs to computer systems analysts because of computer illiteracy. Result: a computer system that doesn't do the job as efficiently as it could.

So much for computers in business and organizations. What about computers in the home? According to the management of Apple Computers, 140 million people worldwide could justify the use of a personal computer if they could only understand its benefits. Apple, the second largest manufacturer of microcomputers, projects that more than one million people will buy personal computers next year. Most of these people will need at least some additional training to be able to effectively use the computers they purchase. This critical need has led one large organization to say that computer literacy is fast becoming as fundamental a skill as reading or writing.

**Taking the Mystery out of the Machine: A Unique Approach to Computer Literacy**

Notwithstanding the need for business students to be better educated with respect to computers, most business curricula across the country have only one introductory data processing class. Unfortunately, this one class is often so poorly taught that many students are "turned off" by their experience. Common complaints are that the class is too abstract, too theoretical, lacking in relevance, without any real-world application, and very boring.

In an effort to combat these criticisms, we at BYU experimented with our accounting information systems class during the 1979 Winter Semester. We added a student laboratory project that required the students to design, program, and implement a computerized accounting system for a company of their choice. The general student attitude toward the term project was quite positive. In fact, one student commented:

*I have never gotten more out of a class than I have from this one. The book and reading material were junk until I applied them on the project. . . . The term project was the most valuable teaching device used. I have learned more about what the 'real world' is like through the project than all the rest of my time at college. This class has changed my mind on my area of emphasis. I think I'll go into systems.*

Because student response was so favorable, another accounting systems professor and I applied for a grant to develop further the case approach to overcoming computer illiteracy. Upon receipt of the grant from the Touche Ross Foundation, we developed a course using Apple minicomputers and case projects that provide "hands on" experience to the students.

Our BYU course approach is designed to teach students the concepts and vocabulary needed to communicate with those people who design information systems. In a classroom discussion and lecture setting, we walk the students through the entire life cycle of information systems development. For example, a list of some of the important topics we cover includes:

- Identifying the need for a new or improved system.
- Gaining an understanding of the present system.
- Analyzing and designing new systems using, where appropriate, the latest advances in computer technology.
- Selecting hardware and software. Developing in-house software.
- Handling files and processing transactions.
- Instituting controls for computer information systems.
- Handling the conversion, implementation, and operation of com-
puterized information systems.

Since there is no substitute for learning by doing, the students are given an opportunity to implement the concepts they learn in class by applying them. This is accomplished by having the students work a multi-assignment, comprehensive case throughout the semester. For example, one assignment requires students to become familiar with the existing manual system and the partially developed computerized information system. Other assignments require class participants to walk through the individual steps necessary to complete the design of the remainder of the new system. Using the microcomputers in the Graduate School of Management Apple Lab, students are required to program a portion of the information system they designed.

Although many of our students may never seek employment as systems analysts, at the completion of the course they know how an analyst thinks by having walked through the whole system's design life cycle in theory and application. As a result, students:

- can more effectively communicate their information needs to the person designing a system.
- are better able, as auditors, to understand the information system they will be required to audit.
- have an excellent foundation for further study of information systems.

Out of the Classroom and into the Workplace

One large company heard about our approach to systems education at BYU. They were having the same problems many other companies are having. Many of their accounting and management information systems were outdated and needed to be revised or replaced. Unfortunately, their systems analysts and their accounting personnel could not communicate among themselves effectively. One group spoke "Computerese," another "Accountingese." The accountants couldn't figure out what the systems analysts wanted from them. The analysts could not get the accountants to adequately specify their needs, since the accountants weren't aware of the problems and processes involved in developing an information system.

Although the organization had the in-house talent and expertise to solve this problem, we were asked to design a class to teach the accounting personnel the problems and processes of systems analysts so that the communication deadlock could be broken. In response to the request, we constructed a course based on our BYU experience, with some modifications we felt necessary to achieve optional group interaction and problem solving.

The course worked. The deadlock was broken. In fact, the course was so well received that we have been teaching it for more than two years. It is now one of the most popular courses in the company's educational program. One participant, an advanced degree graduate from a large, prestigious graduate institution, remarked that she learned more about information systems in our two-week course than she did in the three classes she had in her university program.

Is There a Micro in Your Future?

Due to availability and affordable prices, many small businesses are faced with the decision: Should I buy a microcomputer for my business? In response to this need, BYU Courses and Conferences requested that I, together with a professor from the Computer Science Department, develop a class to help small businessmen and women overcome the hurdle posed by computer technology. In the two-and-one-half-day course, participants are exposed to the whole system analysis and design life cycle. We teach them the fundamentals of how to operate and program a microcomputer. In addition, we cover the answers to such questions as:

- Should I buy a computer?
- How do I design the input, output, and processing to meet these needs?
- How are transactions processed on a microcomputer?
- How is information stored and retrieved?
- How do I acquire peripheral hardware and software for my microcomputer?
- How do I convert my present system to a micro?

Response to all of our attempts to provide quality information systems and computer instruction and training have been very favorable. Course participants are excited to understand the mysteries of the computing machine. It just shows that, given the proper educational framework, computer literacy can be as BASIC as ABC.
If You Can’t Read the Budget Manual, How Can You Cut the Budget?

Gary C. Cornia and Paul R. Timm
President Carter faced it, fought it, and was frustrated by it. Now it's President Reagan's turn to wrestle with it. Indeed it may well be crucial to our nation's economic recovery. The it we're referring to is readability of government writing!

The Reagan economic program and corresponding programs at the state and local level introduce a unique problem in communication. Massive tax and spending cuts call for unprecedented changes in the way government entities allocate that ever-scarcer resource: money.

"Cut the budget" has become the battle cry for the '80s. With federal government spending closing in on $600 billion a year, it is probably accurate to say that government has truly been a growth industry. When state and local expenditures are included with federal spending, total government outlays represent more than one-third of the Gross National Product. Expressed another way, the government now spends more than $3,000 annually for every person in the United States. In 1929, total per capita government spending was $29.

Washington, however, is not the only source of government spending. State and local government budgets have actually increased more rapidly than the federal budget in recent years. And despite enormous growth, state and local governments still consistently face demands that exceed their financial resources. Perhaps as many as 30 large American cities, for example, face budget situations that require them to make substantial reductions in existing services. Simply put, public officials at all levels of government face tough budget constraints—and tough choices.

Allocating Budget Dollars—A Political Process

People generally support the movement toward increased government fiscal restraint. The age of unlimited growth in government spending seems to be over. But often good intentions drop between the cracks as we translate desire or need to reorder resources into specific programs. Which resources are to be limited? How much can we cut? From where do we make our reductions?

Many elected officials find that significant changes in budget priorities are virtually impossible. The career bureaucrats—the unelected administrators—exercise enormous control. Among administrators, there continues to be a great deal of "I've supported your programs in the past, you'll need to support mine" in their thinking. The political nature of government—that is, the exchanging of support for various programs—continues to complicate the budget process. In many situations, elected officials who intend to carry out the will of the electorate are highly frustrated at any attempts to change past spending patterns.

Research on the budget process describes budgeting as essentially a game of strategy in which the goal of the line manager—the public administrator—is to protect, maintain, and, if possible, expand the agency "base" by getting his or her "fair share" of new funds. Thus, a politician confronts appointed officials who believe that their success is measured by the size of the increase in an agency budget. Furthermore, these agency heads have what has been described as unilateral monopoly on information and expertise; that is, they know all the answers, and after several years of service, most of the questions. The interplay of different motives and goals muddles the process of budgeting.

Overcoming the Politics of Budgeting

To overcome some of these political problems there have been attempts at all levels of government to shift the budget power from the less accountable appointed administrators to the elected officials who must answer to the voters. Unfortunately, most of these efforts have only been partially successful. Although many people place the blame on political and bureaucratic infighting, the cause of both the failures to reform and the difficulty of gaining budgetary control may be much more basic than that. The problem may be the inability to communicate effectively what is expected in the budgeting process.

An important element of the budget process of practically every government is the set of instructions developed to guide resource requests. These instructions, generally referred to as budget manuals, have an important influence on both the sharing of information and the use of information in determining policy.

Budget manuals serve two important functions in the development of a spending plan. First, they outline the steps each agency must go through in order to request funds. Thus they require justification of each proposed expenditure. Second, they establish guidelines for budget requests. These guidelines normally require some indication of how the funds will be used and what the anticipated results will be. When designed properly, such budget manuals can perform a vital role in the control of public organizations.

Inadequate budget instructions—
poorly prepared budget manuals—
can contribute to a virtual loss of con­
trol in the budget process. If the in­
structions given to individual
agencies are not clear and easy to
understand, a great deal of the good
intent of "belt tightening" or "budget
cutting" will be lost.

Typical Problems in Government
Writing

Government employees at all levels
often have been criticized for not writ­
ing as well as the public thought they
should. William D. Boutwell, a profes­
sor at the American University, made
a thorough study of government writ­
ing and identified several basic traits
in most poor government writing. The
results of his study were deemed so
significant that they were printed in
the Congressional Record. Among
the problems he found frequently
were these:

- Sentences were too long. Voted
  unanimously as a major fault in
  nearly all writing analyzed, the aver­
  age sentence length in poor writing
  seemed to vary from about 65 to 80
  words. In good writing, sentence
  length should vary from 15 to 25
  words.

- Too much hedging; too many
  modifications and conditional
  clauses and phrases. The amateur
  writer might say, "On the whole it
  may be said that on the basis of avail­
  able evidence the majority of our
  population is not receiving the proper
  type of nutriment." The good writer
  will say, "A third of the nation is ill­
  fed." Psychologists say that condi­
  tional clauses cause suspension of
  judgment regarding the outcome of a
  sentence, and therefore, increase
  reading difficulty.

- Weak, ineffective verbs. Writers
  overuse parts of the verb "to be."
  Hundred-word sentences with "was" or "is" as the principal verb are not
  uncommon in poor government writ­
ing. Other weak verbs found in many
  sentences include "point out," "indicate," or "reveal."

- Overuse of passive and indirect
  phrases, often in an attempt to be
  impersonal. For example: "To deter­
  mine whether retail sales have been
  out of line with expectations based on
  the past relationship of retail volume
to income, estimates of retail sales in
the first half of each year have been
charted against income payments for
the same periods, and the line of esti­
mate fitted to the resulting scatter." This horrible sentence could be
summed up by saying, “Our statisticians have charted estimates of retail sales. …”

- **Overabundance of abstract nouns.** Such nouns as “condition,” “date,” “situation,” “development,” “problem,” “factor,” “position,” “basis,” “case,” etc., dominate the writing of too many government documents. More concrete nouns allow clearer communication because they can be more clearly visualized in the reader’s mind.

- **Too many prepositional phrases.** In a study of reading difficulty, investigators found that prepositional phrases (“of the data,” “under the circumstances”) add up to reading difficulty. Yet samples of government writing show that many officials use at least one preposition for every four words. Samples from good writing contain only one preposition for every 11 words.

- **Overabundance of expletives.** “It is” and “there are” and the many variants of these ruin the openings of many good paragraphs. These terms only postpone introduction of the sentence’s main idea.

- **Use of governmentish or federal-alese.** “Shop words” serve for shop audiences. But some writers talk to the public in technical, often “office” terms.

- **Tendency to make ideas heroes of sentences.** People generally think in terms of people and things. The poor writer writes in terms of ideas and phenomena only. When a writer means “employees refuse to hire older workers in defense industry,” he may write instead: “Refusal of employment of older workers continues.” He has substituted “refusal” (an idea) for “employers” (people).

These common pitfalls in government writing often combine to result in a hard-to-read document, report, or manual. To some people, however, these criticisms seem pretty subjective. Isn’t there a more objective way to critique readability? They may ask. Yes, there is.

Some thirty years ago, educators began research on reading difficulty. They realized if they had a “yardstick” with which to measure the complexity of writing style they could save themselves many mistakes in communication. One of the best known and most successful yardsticks has come to be known as the “Fog Index” as developed by Robert Gunning.

The Gunning Fog Index focuses on two characteristics of writing:
- How long can sentences be, on the average, before they discourage or derail the reader?
- How rich a mixture of long, complex, or abstract words will the reader tolerate?

The Fog Index can be easily calculated by counting the number of “hard” words and determining average sentence length (see box, pg. 14). The resulting score represents the approximate number of years of schooling needed to readily comprehend the material analyzed. Thus, the higher the Fog Index, the harder the material is to read.

Ideally, the Fog Index score of a message should be appropriate to the readers who will use the information. When in doubt about the educational level of a readership, a lower score is desirable. One recent analysis of a variety of materials found these Fog Index scores:

- The children’s story, *Cat in the Hat* 4.25
- The novel, *Love Story* 7.64
- A 50-page sample from *Playboy* magazine 11.46
- A university catalog 16.48
- Supreme Court decision 20.30
- EEOC guidelines 25.53
- Eligibility section of Food Stamp Act 26.41

The study cited the last four examples listed above as seriously overshooting their readers’ abilities. Nobody can comfortably read a document with a score of 25 or 26!

Textbooks in business communication suggest that an optimum readability score for most functional communications—that is, directives, instructions, letters, and reports—should be between nine and eleven. The risk of miscommunicating, of course, increases dramatically as the readability index goes higher. Few people would perceive, or be insulted by, a lower readability score.

**How Readable Are Government Budget Manuals?**

Going back to our original point about the importance of cutting government budgets in equitable, non-political ways, we studied the budget...
1. Select a sample of writing. This should normally be text material (not listings or tables, etc.) with at least 100 words in it. The larger the sample, the more reliable the figure computed, but computation time may be excessive. For long reports, it would be wise to select several samples at random throughout the work. Be sure your sample ends at the end of a complete sentence.

2. Determine the average number of words per sentence. Divide the total number of words in the sample by the total number of sentences. Independent clauses (i.e., clauses separated by semicolons) are counted as separate sentences.

3. Determine the percentage of hard words. To do this, count all words in the sample that have three or more syllables except (a) proper nouns; words that are capitalized; (b) words that are made up of two or more short, easy words like manpower, or bookkeeper; and (c) verbs which become three syllables by adding -es or -ed such as repeated or finishes. Divide this total by the number of words in the sample.

4. Add these two calculations and multiply by 0.4. The product is your Fog Index score—the minimum grade level at which the sample could be easily read.

Let's say that your writing sample has 129 words and an average sentence length of 13 words. Twenty-six of the words in the sample are hard words. Your Fog Index would be computed:

- Average sentence length: 13
- Percentage of hard words: 20
- Multiply by: 0.4
- Grade level of readership: 13.2

The overall Fog Index was 14.3 for the 50 manuals (with a standard deviation of 2.6). The highest manual's score was 18.1, the lowest was 11.3. More than 70 percent of the manuals were written at at least a college level of reading difficulty (13 or higher). Ten percent of the manuals were written at greater than 16. Two percent of the 300 individual pages reviewed had Gunning Fog scores that exceeded 20. In the table below we list the ten highest and ten lowest scores achieved.

<table>
<thead>
<tr>
<th>City</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pomona</td>
<td>18.2</td>
</tr>
<tr>
<td>Denver</td>
<td>18.0</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>17.6</td>
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<tr>
<td>Newark</td>
<td>17.5</td>
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<tr>
<td>Winston-Salem</td>
<td>16.6</td>
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<tr>
<td>Oklahoma City</td>
<td>16.2</td>
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<tr>
<td>Fort Worth</td>
<td>15.7</td>
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<tr>
<td>Los Angeles</td>
<td>15.5</td>
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<tr>
<td>Long Beach</td>
<td>15.4</td>
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<tr>
<td>Hartford</td>
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<tr>
<td>Davenport</td>
<td>12.9</td>
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<tr>
<td>New Haven</td>
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<tr>
<td>Tacoma</td>
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<tr>
<td>Wilmington, NC</td>
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<tr>
<td>Portland, ME</td>
<td>12.6</td>
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<tr>
<td>Allentown</td>
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<tr>
<td>Wichita</td>
<td>12.2</td>
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<tr>
<td>Portland, OR</td>
<td>12.1</td>
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<tr>
<td>Fort Wayne</td>
<td>11.5</td>
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<tr>
<td>Montgomery</td>
<td>11.3</td>
</tr>
</tbody>
</table>

The authors appreciate the work of Terry Frasier, a recent MPA graduate, in compiling data reported in this study.
### Rick Bookstaber: Fulbright Winner

**Richard Bookstaber** is a BYU professor who is of Jewish heritage, will teach at the Hebrew University of Jerusalem in Israel this fall on a Fulbright award.

Bookstaber, an associate professor of economics and finance in the Institute of Business Management, was raised in the Jewish faith until he joined the Mormon church.

He is one of nine American scholars chosen to go to the Israeli university.

**Bookstaber will teach two graduate courses, supervise master's degree theses, and participate in research projects in international finance.**

The Fulbright award encourages mutual understanding between nations through an international exchange of scholars.

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### Ongoing Support

Dean Dyer expresses his continuing appreciation to all of you who are providing ongoing funding support for the School of Management.

Could we ask just one other favor? As you send in your donations, please send them directly to our office, and identify where the money is to be used. We have several separate funds including a General School of Management fund, the Tanner Building fund, the Management Society fund, and specific funds for the various academic programs in the college (Public Management, Organizational Behavior, Business Management, Accounting, Business Education and Administrative Management, MBA, etc.). We want to put the dollars to work where you want them to be used. Please let us know. And again, our sincere thanks.

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### International Executive of the Year

We are pleased to announce that the recipient of the 1981 International Executive of the Year Award will be Reginald H. Jones, recently retired Chairman of the Board and Chief Executive Officer of the General Electric Company. This award will be presented at a dinner honoring Mr. Jones in conjunction with the National Advisory Council meetings in November.

We are delighted that Mr. Jones has accepted this award and that he will attend our NAC meetings. Further details on this award and the recipient’s remarks will be reported in the next issue of EXCHANGE: Update.

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### Management Society: A New Look

Exciting changes are taking place in the Management Society. First, all alumni and friends of the School of Management are now considered members of the society. There are no dues, yet lots of benefits are offered, including affiliation with local chapters which organize luncheons and social gatherings. Members will be able to participate in continuing education programs. All will receive regular communications from the School of Management, and all members will be invited to attend annual seminars at the BYU campus.

Second, the new Management Society will be designed to enhance the careers of its members. Placement and relocation assistance will be provided. Local members will be alerted to the arrival of new graduates, and information and service will be available. Local chapters will seek internship opportunities for students, thereby helping future alumni and the companies that will eventually employ them.

Obviously, the thrust of the new Management Society is service—service to BYU’s alumni, students, and School of Management.

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### BYU’s Prestigious Maeser Award Goes to GSM’s H. Keith Hunt

Eight BYU faculty members received Karl G. Maeser awards September 1, 1981, recognizing their outstanding teaching, research, or creative accomplishments.

Among the recipients was Dr. H. Keith Hunt of the Graduate School of Management. Nancy B. Rooker, president of the Alumni Association, presented Hunt with the Karl G. Maeser Research and Creative Arts award.

Hunt, a professor of business management, has written more than 40 professional publications on marketing and research. He is widely known for his consulting activities.

Hunt holds a bachelor’s degree and master’s degree in business administration from the University of Utah. He received his doctorate in business from Northwestern University.
BRIEFLY

Management School Administrative Positions Filled

Andrus  Parsons  Timm  Davies  Jackson

Five faculty members have been appointed to key positions in the School of Management for fall semester.

Dr. William G. Dyer, dean of the School of Management, recently announced that Dr. R. Ray Andrus, Dr. Robert J. Parsons, Dr. Paul R. Timm, Dr. Kenneth Davies, and Dr. Burke Jackson assumed new positions in the organization.

Andrus, formerly assistant dean of the School of Management, will be associate dean of the school, which consists of the undergraduate College of Business and the Graduate School of Management. He will have responsibility for the Graduate School of Management.

Parsons, who has been serving as the chairman of the Department of Managerial Economics, will become assistant dean with responsibility for undergraduate programs and faculty development.

Timm, associate professor of Business Education and Administrative Management, will occupy a new position as a second assistant dean. He will have responsibility for developing the School of Management Affiliate program and building and maintaining contacts with businesses that donate funds and cooperate in educational programs.

Davies, a professor of managerial economics, will be the new chairman of the Managerial Economics Department. Dr. Davies replaces Robert Parsons, the new assistant dean.

Jackson, who has been on leave this past year, replaces Dennis Hunter as associate director of the MBA program. Dr. Jackson is an assistant professor of business management.

Upcoming Management Seminars

Communication, Motivation, and Persuasion
Dr. Stephen R. Covey
January 13, 1982
Scottsdale, Arizona

Seven Basic Habits of Highly Effective People
Dr. Stephen R. Covey
December 3, 1981
Portland, Oregon
December 4, 1981
Seattle, Washington

Other dates and locations:
February: Hawaii
March: Washington, D.C.; Chicago, IL; Phoenix, AZ
April: Salt Lake City, UT; Los Angeles, CA; San Francisco, CA
June: Idaho Falls, ID

Productivity Improvement
Dr. William J. Sawaya

December 9, 1981
Scottsdale, Arizona
December 10, 1981
Los Angeles, California

Marriage, Family Management, and the Gospel
Dr. Stephen R. Covey
November 18-19, 1981
Salt Lake City, Utah
January 5-6, 1982
Phoenix, Arizona

Typing for Young People
October 10-December 12, 1981
(weekly) BYU Campus

Other Seminars: (Dates and locations not yet finalized)
Financial and Estate Planning
Real Estate Seminars
Fundamentals of Data Processing for Non-Data Processing Executives

To receive brochures and complete information, contact the Management Programs Office:
118 HRCB
Brigham Young University
Provo, Utah 84602
Phone: (801) 378-4784

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Kent Colton Joins President Reagan’s Commission on Housing

Dr. Kent W. Colton, a professor of public management and finance at Brigham Young University, has been appointed staff director for the President’s Commission on Housing in Washington, D.C.

Dr. Colton has been granted a one-year leave from BYU to work on the commission which will report to the president and the secretary of Housing and Urban Development on federal government interaction in the nation's housing picture.

The commission will also recommend needed changes in federal programs.

He said the panel was organized because of a widespread realization that "there is a need for dramatic change."

As an example of the inadequacy of current programs, Colton cited the $250 billion commitment to help provide low-income rental housing units over the next three or four decades. Despite this commitment, government programs have not solved housing problems for low-income families, he pointed out.

Colton said the commission will review all federal housing programs. Its work will focus on four major areas:

- The state of the housing market, and how housing can be provided for all who need it. He suggested that the commission could recommend meeting the nation’s low-income housing needs through block grants to state and local governments for construction of new units, or through housing vouchers that would help pay the cost of existing housing selected by individual recipients. "We’ll be reviewing all alternatives, but I think it will mean major changes in the delivery of housing."

- The changing housing finance market. Colton said the commission will be studying alternative financing arrangements that will probably replace the old fixed-rate, long-term mortgage, and how these will affect both buyers and lending institutions.

- The effect of federal regulations on housing. Colton said studies have shown federal regulations drive costs up by adding 18 to 25 percent to the price of a house.

- The needs of the first-time buyer. Single-family dwellings are rapidly moving beyond the reach of those who do not already have an investment in some kind of home.

Before coming to BYU, Colton taught at MIT and was also a White House Fellow who served as special assistant to the secretary of the Treasury. In addition, he has served as a consultant to a number of public and private agencies, and is the author, coauthor, or editor of a number of scholarly papers and books on management of public programs.
From a speech by Mark W. Cannon before the Southwestern Judicial Conference, Santa Fe, New Mexico on June 4, 1981. Mr. Cannon is a member of the School of Management's National Advisory Council. Mitchell Edwards, a BYU Kimball Scholar, assisted with research for this speech during an internship with the United States Supreme Court.

Matthew Cossolotto, aide to Congressman Leon Panetta, recently wrote in the Washington Post about walking up to the front door of his home on Capitol Hill late one night:

It was then that I heard the gate squeak open behind us. I felt the hard cold steel of a handgun against my head. I realized that my world of values, of reason—in fact, my life itself—counted for little. I opened the door and turned off the burglar alarm.

We were at the mercy of the two men with the gun. We did not know what they wanted from us, nor whether the next few moments might be our last.

Then suddenly they disappeared into the night, taking $31 and credit cards. Such was the extent of our tribute to the terrible god of crime, who for some unknown reason spared us.

The experience of the Cossolotto family is not an isolated one. Last year, virtually one-third of all families were victimized, and 23,000 Americans needlessly killed by crime. This was up from 16,000 in 1970 and...
Crime Deterrent: 
Using Ethical Values
Cannon*

was four times as many Americans as were killed in combat per year in the Vietnam War.

A Newsweek survey revealed that 53 percent of Americans were afraid to walk in some areas within a mile of their homes at night. Crime, and fear of crime, is changing our lives. Anything which may reduce it requires our attention.

Instead of attempting to eradicate crime, we often rely on law enforcement, but as Cossolotto says, “Police are society’s bouncers, there to rid us of antisocial behavior after it occurs.” Thoreau long ago stressed prevention, saying “For every thousand hacking at the branches of evil, there is one striking at the roots.” Yet to understand the roots of crime is perplexing.

The Relationship between Values and Crime

Countless theories attempting to explain the causes of crime and delinquent behavior have been advanced. Some assert that antisocial behavior is often “neurological” or “psychological,” and hence essentially uncontrollable. Others maintain that sociological and cultural factors, poverty and class-based frustrations contribute heavily to crime. Crime is even viewed by some to be a “rational response” to the inequities of our economic system. The sheer profitability of crime is also cited as a cause as is the use of alcohol and drugs. One study showed that 71 percent of law offenders had taken drugs or alcohol before the offense.
Though alcoholism, poverty, and perceived social injustice all contribute to crime, perhaps there is a deeper force that is causing a breakdown of our society. These merely tip the raft of social order, while a deep current has been moving the entire raft at a startling speed. That deep current is our failure to transmit positive values, norms, and virtues from one generation to another.

As Justice Powell has written, “We are being cut adrift from the type of humanizing authority which in the past shaped the character of our people.” He was not referring to governmental authority, but to “the more personal forms we have known in the home, church, school, and community which once gave direction to our lives.”

The U.S. Constitution, perhaps the most enduring product of Western democracy, assumed two parts: a political system which prescribed how people should live, and a metaphysical theory that explained why they should thus comport themselves. One necessitates the other. James Madison urged that in the approval of the Constitution, people should “perceive a finger of that Almighty hand which has been so frequently... extended to our relief.” But much of our intellectual community has in recent decades dismissed the metaphysical part as superstition or imagination. They have set aside the significance of the fact that the organic laws of the United States begin with the Declaration of Independence—one of the greatest of all Western documents—which draws its inspiration from “the laws of nature and of nature’s God” and which was cast with “a firm reliance on the protection of DIVINE PROVIDENCE.”

We consequently live in a society where spirituality is denigrated. Arianna Stassinopoulous writes:

The relegation of religion and spirituality to the irrational has been one of the most tragic perversions of the great achievements of Western rationality, and the main reason for the disintegration of Western culture.

Not only has spirituality declined, but families have been weakened. Thirty percent of all children under six years of age live with just one parent or no parents at all. Writing in Harpers, Michael Novak observes:

The family nourishes “basic trust.” From this spring creativity, psychic energy, social dynamism. If infants are injured here, not all the institutions of society can put them back together. Familial strength that took generations to acquire can be lost in a single generation, can disappear for centuries. If the quality of family life deteriorates, there is no “quality of life.”

Ironically, the very system that depends upon families for its subsistence too regularly undermines them with its lifestyles, institutions, and legislation. “Almost everything about mobile, impersonal, distancing life in the United States—tax policies, real state policies, the demands of corporations, and even the demands of modern political forms—makes it difficult for families to feel ancient moral obligations,” writes Novak.

Concomitant with the weakening of the family structure is the diminishing emphasis on ethics and values in our public schools. The Thomas Jefferson Research Center, a nonprofit institution that studies America’s social problems, reports that in 1775, religion and morals accounted for more than 90 percent of the content of school readers. In 1926, the figure was only 6 percent, and today it is almost nonexistent.

Do Criminals Have Values?

Is it conjecture that values relate to crime, or is there evidence? Sean O’Sullivan of Columbia University, in a study of families in the Bedford-Stuyvesant area of New York, concluded that law abiding youth most often came from homes where the father is present and the mother is active in church.

“Discipline in a family cures the chances of drug addiction in half,” reported O’Sullivan. He also found a close link between drug addiction and fighting, school truancy, drinking, and driving without a license. O’Sullivan concluded that the “complete nuclear family,” combined with discipline and religious faith, is the best insulation from antisocial behavior, so efforts at prevention of drug abuse and delinquency should concentrate on strengthening such families.

Other studies (including the following four) support O’Sullivan’s conclusions.

Albert Rhodes and Albert Reis, in their significant article “The ‘Religious Factor’ and Delinquent Behavior,” after elaborate statistical analysis found that boys with
no religious preference committed twice as many crimes per thousand as those "having a religious preference."

A thorough investigation by Peter O. Peretti indicates that when parents separate, youngsters tend to "lose interest" in their values. Peretti adds, "It might be assumed that religion does play a part in inculcating youth and adults alike with the socially desirable values of a society."

Alberta Siegel of Stanford University maintains:

Every civilization is only twenty years away from barbarism. For twenty years is all we have to accomplish the
task of civilizing the infants who know nothing of our language, our culture, our religion, our values, or our customs of interpersonal relations.

The vitality of traditional values is shown by their relationship to achievement. Many people are astounded to learn that most young achievers hold much more traditional values than others their age. A 1980 poll of Who's Who Among American High School Students, with 24,000 responding, revealed:

- Eight out of ten belong to an active religion and 71 percent attend services regularly.
- Nearly half don't drink and 88 percent have never smoked cigarettes.
- A vast majority (94 percent) of these teens have never used drugs, including marijuana.
- Eighty percent do not think marijuana should be legalized and 90 percent wouldn't use it if it were.
- Seventy-six percent of these teens have not had sexual intercourse.
- A good number (52 percent) watch less than ten hours of television a week.

Who Is Filling the Value Void?

Historically, families, churches, and schools perpetuated societal norms and values. The deterioration of these institutions, however, has left a void which is being filled by such institutions as television and motion pictures. Do the mass media influence behavior?

Television brings into our homes some outstanding programming like the voyage of the space shuttle, Pavarotti and the Met, the Adams Chronicles, and in-depth features on most important issues. But these are not the primary shows watched by youth.

A child entering school has seen television more hours than would be spent in the classroom during four years of college. By the age of fourteen, the average child has witnessed on television the destruction of more than twelve thousand human lives.

An emerging body of scholarly literature indicates that violence is idealized on television; violent methods are the ones used most frequently for goal attainment. Many shows promulgate and encourage instant gratification. Deferment of gratifications, often essential to the attainment of a larger reward later, is subtly denigrated by many shows. One study showed that only half as many frequent television watchers are concerned about planning for the future as nonfrequent watchers.

A staff report to the National Commission on the Causes and Prevention of Violence in 1969 went so far as to state:

Concerning probably no other issue in the social sciences has the evidence been so overwhelming or convincing as that regarding the influence of media violence on values and behavior. Television and motion pictures are powerful teachers of values, behavior, and social conduct.

Crime and delinquency cost us at least 125 billion dollars per year, forcibly alter our lives, destroy our people, frighten and demoralize us, and do much to threaten our civilization. The vast resources we commit each year to law enforcement, the courts, correctional institutions, rehabilitation, and crime prevention efforts have unfortunately not enfeebled the surge of crime. We must therefore regroup and explore additional methods to reduce and prevent crime.

Building Better Bonds for Youth

If Americans earnestly attempt to fortify the foundations of prosocial behavior, rather than simply combat the symptoms of antisocial behavior, some embryonic crime will end. We must focus on the origins of the

In 1775, religion and morals accounted for more than 90 percent of school readers content. In 1926, the figure was only 6 percent; today it is almost nonexistent.
By the age of fourteen, the average child has witnessed on television the destruction of more than twelve thousand human lives.

problem—some of which are the beliefs, values, and attitudes being adopted by the young.

Since the family, the church, the school, and the community have traditionally encouraged prosocial behavior by teaching values of integrity, truth, future planning, service, personal accountability, and respect for others' rights, efforts should be made to strengthen people's affiliations with these entities. Theories which maintain that people "stay out of trouble" because of their association with traditional institutions, termed "bonding theories," are becoming increasingly accepted by sociologists and criminologists.

Recently, the Harvard Public Health School (HPHS) reported a study showing one way an established institution can help our young people. As part of its preventive medicine program, the HPHS targeted smoking in junior high schools. Dr. McAllister, working with non-smoking student leaders, conducted classroom discussions, showed films and set up role-plays dealing with such problems as resisting taunts to smoke. As a result, in some schools the number of new smokers was cut in half. Encouraging results are also being achieved in reducing alcohol and drug use.

Schools should strengthen and expand programs that encourage broad student participation, particularly of those who generally hang back, thereby providing more students with a sense of personal achievement. Successful involvement in meaningful activities, with clear and consistent reinforcement for positive behavior, strengthen the bonds which help prevent delinquent behavior. Such activities may be athletics, music, student government, special-interest clubs, drama, or dance. Major goals of these activities should be to increase students' success experiences, attachments to school and teachers, and their belief in moral order.

Community-focused youth participation projects can increase attachments to the neighborhood and community and, thereby, help delinquency prevention. Community planning committees, composed of adults and young people, should organize activities and seek to provide an environment for prosocial behavior. If Americans do not help youth develop attachments to schools, civic organizations, churches, and employers, youth will too often find reinforcement from less desirable sources.

Schools Should Teach More Than the Three Rs

One of the most effective ways to offset negative norms and behavior is to promote positive values in our schools—even though this is difficult in a pluralistic society. A recent Gallup poll found that 79 percent of the public favored "instruction in the schools that would deal with morals and moral behavior." Only 15 percent were opposed. As the Center for Action Research points out, such instruction could be carried out "completely within Constitutional limitations."

The first Values Education Commission in America, recently established in Maryland, found that there is "nothing in court decisions that would preclude the teaching of ethical content. It has been made equally clear that schools have both the right and the duty to instill into the minds of pupils those moral principles which are so necessary to a well-ordered society."

In 1967, Sandrah L. Pohorlak published a study conducted at the University of Southern California. She found that in over half the states, schools were required to teach ethics. Yet, although many laws require instructors to teach ethics, 42 states provided nothing in the way of texts, guides, or other materials to help teachers deal with ethics and character in the classroom.

Amoral America, published in 1975, is a book summarizing a study by political scientists George C. S. Benson and Thomas S. Engeman. "Contemporary Western society," wrote Dr. Engeman, "suffers from inadequate training in individual ethics. Personal honesty and integrity, appreciation of the interests of others, nonviolence, and abiding by the law are examples of values insufficiently taught at the present time." Dr. Engeman continued, "Our thesis is that there is a severe and almost paralyzing ethical problem in this country. . . . We believe that we can demonstrate that unlawful behavior is in part the result of the absence of instruction in individual ethics."

The Thomas Jefferson Research Center has identified case histories where dedicated, competent teachers have achieved remarkable improvements in discipline and deportment by emphasizing ethics and character in the classroom. For example, the Character Education Curriculum, developed by the American Institute for Character Education, is a systematic program
in ethical instruction for kindergarten through sixth
grade which has been tested in more than 400 schools
in 19 states with dramatic success in a number of in-
stances.

The Character Education Curriculum has been in
continuous use at Wendell Phillips High School # 63 in
a poverty area of Indianapolis since September 1970.
Principal Beatrice M. Bowles describes the school be-
fore character education: "The building resembled a
school in a riot area. Many, many windows had been
broken, and the glass had been replaced with maso-
nite. . . . Most of the pupils were rude, discourteous,
and insolent to the members of the faculty. . . . The chil-
dren had no school pride, very poor self-image, and
were most disgruntled because they had to attend 'that
old school.' "

Mrs. Bowles reports surprising results after all of the
teachers began using the character development pro-
gram. "Since September, 1970, there has been less
than $100 of glass breakage, and this has been acci-
dental. Student attitude has greatly improved. . . . There
is a feeling of one for all and all for one." Six years later,
in April of 1976, Mrs. Bowles reported that "discipline
and vandalism are no problem. . . . Our children are
well behaved, courteous, and, with a few exceptions,
achieving at maximum potential. . . . The program has
been a tremendous success for us and our children."

Thus Frank Goble, president of the Thomas Jefferson
Research Center, concludes that, "based upon tens of
thousands of hours of research, an increase in quality
and quantity of ethical instruction in our schools and
other institutions is the only practical method to bring
present exploding crime, violence, and delinquency un-
der control."

A backup to the more immediate socializing in-
stitutions of our society—the home, school, and
church—is the community. Communities influence the
development of their citizens by offering general norms
and expectations for deviant or conforming behavior.
Crime rates are associated with characteristics of com-
munity areas.

What Can the Community Do?

In recent years nineteen thousand Neighborhood
Watch programs have been created, providing unique
protection for residential areas. Their social strategy of
engaging neighborhood members in shared activities
around the common goal of crime prevention develops
a community pride and establishes community norms
against crime. A report by the Center for Law and Just-
ICE at the University of Washington hypothesized that
these norms can "contribute to a climate in which crim-
inal actions are viewed by community youths as both
risky and unacceptable rather than as a routine part of
growing up." Furthermore, some junior watch pro-
grams in schools have been highly effective against
drug dealers.

The National Neighborhood Watch Association has
taken on the important challenge of fomenting these
programs, which encourage close cooperation be-
tween law enforcement officials and citizens, and allow
communities to overcome sentiments of frustration and
helplessness with regard to rising crime. A county po-
lice officer was quoted in the Washingtonian magazine
as saying, "Ninety-nine percent of all arrests depend on
citizens giving us information." Whatever the actual
percentage, the value of alert neighbors who inform po-
lice cannot be overstated.

There Is a Way to Reduce Crime

In summary: Violent crime and juvenile delinquency
are in ascendency. Attempts to explain and fight crime
have been only partially successful. We are in jeopardy
of becoming a valueless society and of encouraging de-
cision making by aggression instead of reason and
democratically established law. If this is the case, then
some possible avenues to pursue in the prevention and
elimination of crime are:

- teach values in our schools
- promote law-related education to youth so that they
  understand both the rights and the responsibilities of
  our Constitution and legal system
- increase activities reaching youth by providing an ar-
  ray of constructive organizations
- guide children to quality media productions
- increase the number of potential bonds or attach-
  ments that our citizens have with prosocial in-
  stitutions
- strengthen families and communities
- educate and constructively counsel delinquents

We must, in short, revitalize and strengthen the moral
and ethical foundation of our society. Hopefully, this will
not only deter law breaking, but will also enrich the
quality of life and happiness of our citizens. May we all
rise to the challenge ahead!  EOF

Contemporary
Western society
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inadequate
training in
individual
ethics.
Mention the word economist to a group of businessmen or women and visions of GNP, interest rates, and unemployment rates are likely to spring into view. Further, the vision is likely to be crowded with forecasts of these and many other elements of the "macro" economic picture. After all, in the eyes of much of the business community, that's what economists do!

Lately, however, macroeconomic forecasting has fallen on hard times. The smoothly growing U.S. economy of the mid-1960s was rudely shocked by the oil embargo of the mid-1970s, and things have just not been the same since. Major unforeseen events have conspired to wreck economic forecasts about growth, inflation, interest rates, and unemployment, to name a few. Consequently, economists, once viewed with some awe, equivocate a bit when asked about their profession.

Does this imply the twilight of the business economist? Not at all! It simply means that economists—and particularly business economists—must spend less time developing massive models of the economy and more time on the nuts and bolts of the business decision process.

Richard M. Oveson

The major macroeconomic models, such as those developed at DRI (Data Resources Incorporated), Wharton, and Chase Econometrics, were built in the early sixties. These models were specifically designed to forecast major elements of the U.S. economy and, incidentally, to increase understanding of interactions within the economy. Growing out of the pioneering work of Lawrence Klein at the University of Pennsylvania (the Wharton Model), these macro "services" were directed by eminent economists such as Otto Eckstein of Harvard (DRI) and by brilliant newcomers such as Michael Evans (Chase Econometrics).
The success of these macro forecasting services can be measured by the financial gains accruing to their directors. Evans sold his interest in Chase Econometrics for several million dollars. Eckstein's 1974 sale of DRI to McGraw-Hill for $100 plus million enabled him and a number of his colleagues to remain indifferent regarding annual cost of living increases in their salaries. Nevertheless, as these sales were being completed, it was becoming increasingly apparent that the market for such major macro services was, at best, leveling off.

Several reasons may be suggested for this pattern. First, the forecasting record of the major macro models has not been very good over the past few years. (It should be quickly added that no one has done a very good job of forecasting the economy over the past few years). In any case, past erroneous forecasts tend to raise doubts in the minds of forecast subscribers about the accuracy of current forecasts. Consequently, subscribers hesitate to pay much for such information. The second reason for the declining interest in macro models is embodied in the plaintive declaration of one prospective client of the macro services who said, "I don't need a forecast of 7,000 variables—only about 10. But, I do need to know what all these variables mean to my company!!"

The key remaining steps require that company decision makers receive the training and orientation necessary to apply basic economic theory to this newly available data and to link company performance to simple, easily manipulated models of the macro economy. This emphasis on the application of microeconomic theory to business decisions, supplemented and suggested by analysis of the macro economy will certainly, over the next few years, replace the current emphasis of major macroeconomic models and time sharing. Should this forecast prove accurate, training in the area of microeconomics will be a future key to business success.

In Search of the Relevant Relationships

It is important to note that economics is the mother discipline of the business school. Economists since Alfred Marshall have taught the principles related to profit maximization, optimal pricing and output, and efficient resource allocation in the production process. These concepts can be used by decision makers to plot total revenue and total cost across a range of prices and output levels. Consequently, profit and market share across that same range can be calculated on a "what if" basis. Obviously the corporate planner can then select the price-output combination best designed to achieve company goals. Further, accurate specification of demand relationships allows the planner to evaluate various advertising and promotion policies. Finally, since both revenues (from the demand curve) and costs are affected by events outside of company control, accurately specified demand relationships and cost relationships can show the impact of changes in the business environment on the firm. For example, such relationships should show the degree to which rising new materials prices can be passed on to customers or must be absorbed within the company.

The emphasis on the link between the business environment and models built within the company would seem at odds with earlier doubts about the forecasting ability of macro models. In fact, the future of macro models lies not so much in forecasting such shocks as oil embargoes or droughts (which is largely impossible), but in building smaller, more simple models of both national and regional economies which can be linked to individual company models and which can be used to simulate possible shocks. Such models have two major advantages: first, they allow decision makers within the company to provide their own forecasts of economic trends. Second, they allow a much more rapid assessment of proper company policy response to unexpected events. This first point does not imply that the macro models should not forecast—they should. It simply suggests that alternative scenarios should be available for analysis and that some of these should be generated by the user. In short, the macro model customer should be allowed to ask all desired "what if" questions.

All of this should raise an interesting question. Why hasn't the business community been engaged in demand-cost analysis for years? The answer is simple—no data. Companies have been understandably leery of putting proprietary data involving prices and sales into large time-sharing systems in which security might be suspect. In addition, many companies simply have not organized their data-collection processes to facilitate economic analysis. A major factor working to overcome these difficulties is the advent of minicomputers and microprocessors. These new machines are coming onto the market in such numbers and at such reasonable cost that almost all companies can afford sufficient computing power to collect, store, and analyze data within the company, thus solving the security problem.

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Recently a concerned manager I was working with expressed dismay that many of the middle managers in his company really believed that top management followed the philosophy: "The employee can do no wrong." This concern is captured by a story about an event that had occurred three years earlier. It seems that one manager had written a formal complaint about an employee which he put in the employee's personnel file. The disgruntled employee went over his manager's head and complained to one of the corporate vice presidents. The vice president immediately went to the personnel office and ripped up the complaint before even conferring with the manager.

The concerned manager was dismayed because, in his almost three years with the company, he hadn't seen anything like this event repeated. "Why is the story so powerful?" was his question. "Why do people continue to believe that what happened three years ago is still the way we do things now?"

Stories are one of the most important sources of information for people in organizations about "how things are done around here." When told by several people, organization stories reflect the beliefs and values of those in the organization. Occasionally these beliefs can inhibit organizational effectiveness. On the other hand, organizational stories may become the best way of passing on a distinctive competence or philosophy which is the key to a company's success. The following story from the 3M company is a case in point.

At 3M the eleventh commandment is: "Never kill a new product idea." This orientation toward innovation is supported and passed on by a story about the discovery of transparent cellophane tape. The story relates how an employee accidentally discovered the tape but was unable to get his superiors to buy the idea. Marketing studies predicted a relatively small demand for the new material. Undaunted, the employee found a way to sneak into the board room and tape down the minutes of board members with his transparent tape. The board was impressed enough with the novelty to give it a try and experienced incredible success.

Contemporary 3M employees are thus encouraged to be entrepreneurs, to put trust in trying ideas out in the marketplace rather than trusting market forecasts, especially concerning novel products. The story-supported culture at 3M has made the company a leader in new product development.

**Why Stories?**

For the new employee, learning the organization is like learning how to fit in and avoid major blunders in a foreign culture. When traveling in a foreign country, it is of course useful to have a map which shows you how to get from one place to another. However, avoiding social blunders and really understanding the foreign culture requires another kind of map—a social map. You need to know how to get where you want to go socially.

Similarly, fitting in and being able to get things done in a new organization are not just a matter of learning how to find one's way around the building. And it isn't just a matter of having technical "maps" about how to be an engineer, or how to type, or how to advertise. The new employee needs a social map which will point out the dangerous areas and the safe turf. Organizational stories are an important way to map this social territory.

Shortly after starting a new job, most new employees learn that the policy handbook and the standard operating procedures only go so far. New employees soon learn that there are exceptions to the rules. Some rules can be violated without great repercussions and others are sacred. Even more important, the new employee learns that certain ways of thinking and acting (we are a "conservative company," "look busy," "don't kill a new product idea") are really more important to know than rules.

One scholar has suggested that these different maps or ways of directing behavior can be categorized into three orders of control:

- **First-order controls**—direct control by a supervisor who tells an employee what to do
- **Second-order controls**—more remote control deriving from standard operating procedures and organizational incentive systems or from an assembly line layout
- **Third-order controls**—control through directing the attention or assumptions of employees.

An example of the subtlety of these third-order controls comes from the experience of a high-ranking personnel executive of a company I conducted research for. When he was working in the Far East, he and the land manager were confronted one day with an emergency decision. They tried to get some help on the novel problem—a problem for which formal rules and official policies were inadequate—but were unable to get through. They sat down together, and the first question was, "Well, what would the company president do?" The personnel executive then recalled an experience he had heard the president relate and the conclusion the president had drawn. The example and framework from the president gave these men a sense of where to start and a basis for agreement from which they derived a decision.
I KILLED A NEW PRODUCT IDEA AT 3M

THE MISSING MONEY CAPER RUST WINS AFTER ALL

VELVET ON STEEL HEADS WILL ROLL AS MANAGEMENT GETS TOUGH
checking later with headquarters, they found management was in complete agreement with their actions.

This kind of control works by restricting what decision makers consider as relevant, the form of logical reasoning that is deemed appropriate, and the kinds of solutions that are seen as acceptable.

**Stories as Symbols**

Stories, then, are symbols. They are concrete events which exemplify internal states like ideas, values, or beliefs. One anthropologist, Emile Durkheim, claimed that shared symbols are necessary for cultural cohesion. Contemporary organizations are in many ways much more complex than Durkheim's clans. These organizations also need to obtain some cohesion so that the various subunits cooperate for the good of the company. Stories like the one about the inventor of Scotch tape at 3M serve to symbolize an orientation and values which can unify participants from diverse organizational subunits.

Tom Peters, a principal at McKinsey & Company, reported that in a study of 70 successful U.S. companies the key commonalities were simple structure, avoidance of number-driven bureaucracy, and a focus on a "key business theme." Peters' study of successful executives in these companies suggests that managers have more control over their organizations through a simple overarching theme than through strategic planning, structural rearrangements, or organizational development efforts. Examples of such themes are Geneen's (ITT) "search for the unshakable facts," Clausen's (Bank of America) "laying pipe" (shorthand for anticipating and preparing for events), DeButt's (AT&T) "the system is the solution," or Jones' (Northrop) "everybody at Northrop is in marketing." Further examples come from the biographies of Cordner at GE, Vail at AT&T, Greenwall at DuPont, and Watson at IBM, all of whom stress their quest to give operational force and meaning to a dominant, though imprecise, idea.

My research on stories in industrial organizations suggests that a key business theme is most useful as a third-order control when it is exemplified by shared stories. That is especially the case when the stories are not seen as rules but rather as examples. In two electronics companies where I collected stories and surveyed employees, the company which had widely shared stories exemplifying the management philosophy had much higher levels of commitment to the company and sense of community with people in other parts of the company than was true of the company with no shared stories exemplifying management philosophy.

**Stories as Scripts**

My research suggests that stories often tell the people in the organization more than just the company orientation or theme. Many stories become scripts which help employees know what behavior or attitudes are acceptable or what they can expect the organization to do in the future. In one company, for example, new lawyers learn something very important from a story about a predecessor. In this story, the predecessor was asked to be the first speaker in a meeting for the top 50 company executives. His topic concerned government regulation. During his speech he explained how the company was able, given current regulations, to "steal legally." The company president was next to speak and began with, "Apparently Mr. X (the previous speaker) has not fully understood how we operate here. Rest assured that he and I will discuss the matter." From the story, the new lawyers learn there are certain things which lawyers must not say, at least publicly, in the company.

But stories do more than suggest what employees should or should not do or believe—stories also provide a way to map the future using the past.
For example, most employees in a large West Coast electronics firm have been told the story about how the company avoided a mass layoff in the early 1970s when almost every other company in the industry was forced to lay off employees in large numbers. The company had managed to avoid a layoff of 10 percent of their employees by having everyone in the company take a 10 percent cut in salary and by having the employees come to work only nine out of ten working days.

This experience became known as the "nine-day fortnight" and is apparently used as a script by the company. In 1974 the company was again confronted with a drop in orders, and it went to the "nine-day fortnight" scheme for a short period. When other companies in the industry begin layoffs, the oldtimers use this story to quiet the anxiety of concerned newcomers. The story is a script employees use to predict the behavior of the company and which managers use to make decisions when layoff pressures mount.

Can Managers Use Stories?

Stories are important, then, because they symbolize important values and beliefs. They also help us use history to learn and prepare for the future. Of course, not all stories will be as useful to the organization as they are to the people in the organization. Some stories teach participants how to beat the system.

An example of system beating comes from another electronics firm for which I have done research. An important personnel officer near the top of the company told me how the current company president had made it to the top. The story goes back to the time when the president was an executive vice president in the company. The company faced a serious drop in orders due to a softening economy. The then-president had just left the country for a working vacation. The ambitious executive vice president took advantage of this opportunity to fly to the distant board of directors meeting and offer the directors an ultimatum. He announced that he had an offer in his pocket to become the president of a competitor, and he planned to accept the offer unless they made him the new president of the company. The then-president was a bright man, but he just wasn't tough enough to make the kinds of decisions needed to compete in such a difficult economic situation. The board of directors took some time to discuss the ultimatum but eventually decided in favor of making the then-president vice chairman of the board in charge of research and development, and they installed the executive vice president as the new president.

Interestingly, the man who told me this story was even at that moment enacting the same script by bargaining with the personnel vice president for a raise and some additional security and stock option opportunities by mentioning that he had recently received an offer from a competitor. He
feared that the well-placed executive vice president whom he had followed in a rapid rise to the top might soon be challenged, and he wanted to "insure" his position.

This story is a very nice symbol for the climate in this organization. It represents how many managers feel about their relationship to the company and teaches them some specific ways to protect themselves. It is, however, not conducive to a company culture where long-term innovation and cooperative development of ideas across divisions can occur. Officials in this company complained to me on several occasions that they just couldn't seem to increase their sales. The story and its popularity in the organization suggest many of the reasons.

We have seen, then, that stories can be useful to the organization as in the nine-day fortnight or dysfunctional as in the cut-throat electronics executive. Though I cannot offer a cookbook recipe for how to achieve a successful story-supported culture, I do have some observations on what I feel is important.

**Being Fair Is More Important Than Being Efficient**

The most common themes in the stories I have systematically collected have to do with the perceived relationship between an employee and the organization. When employees felt that the organizational representatives were fair and had the interest of the employees at heart, the stories reflected that feeling. These stories were used to persuasively pass on to newcomers the self-fulfilling prophecy that things could be worked out if there were problems. When employees felt that they were mere "hands" and not whole "human beings," they were very cautious, and they shared stories which helped them prepare for confrontation or escape.

An example of this idea comes from an experience which Dick Walton of Harvard reported to me. He was studying a new plant start-up and was surprised that as he interviewed employees about the progress of the plant, they all told him the same story. Before the plant opened, managers and employees had met to jointly derive a statement of principles which would guide their relationship. One of the most important of these principles was that employees and management would trust one another and treat one another as partners in the plant. One way they chose to symbolize this was by establishing an open cash box. Anyone could put in an IOU and borrow cash and then pay the box back within some period of time.

When the plant manager arrived at work one morning, the whole plant was abuzz. He discovered that they were all talking about the fact that someone had taken $60 from the cash box without leaving an IOU. Several employees were predicting that this would be the beginning of the end for the new trust policy. Three managers held a quick meeting and then called the employees together. The plant manager said he was sorry the money was gone and hoped it would be returned. Further, he pulled $10 out of his own pocket and said he wanted to personally contribute to replenishing the cash.
Several others quickly followed suit and the trust policy was given a clear symbol. Everyone in the plant used the story to say, in a way that abstract philosophizing couldn’t, that the management gave them a fair chance and that the idea of trust was alive at their plant.

**Emphasize the Symbolic over the Script**

T. J. Watson, Jr., a past CEO of IBM, claims that creating a successful, long-run company involves three steps:

- start by describing your beliefs—what you feel are the important themes (“IBM means service”) and values (“the dignity of the individual must be maintained”),
- next, operationalize those beliefs in programs, policies, organizational structure, and incentive systems which are consistent with the beliefs,
- change the operationalizations whenever necessary to remain competitive while still being consistent with the beliefs. The important idea here is that the beliefs, not the programs, are enduring.

As decision makers, we learn that we can reduce the time and effort spent on decisions if we develop routines or scripts which can be used like an automatic pilot. We therefore create stereotypes of people and habitual ways of thinking about them. These “automatic pilot routines” are useful as long as the world doesn’t present us with new variations—people who don’t fit the stereotype. The point is that managers need to keep in mind bedrock beliefs, and never be willing to let programs become empty routines which are kept beyond their usefulness. Managers ought to exemplify the values in many ways rather than launching a single major program. Thus, by pointing to the value rather than the programs, employees are able to adjust to changes which leave values intact. Managers who become sensitive to symbols and stories realize that they are managing meanings and not just numbers or bodies.

**Dramatic Action in the Name of Values Creates Stories**

The nine-day fortnight story mentioned earlier typifies my observation that popular stories about management philosophy are the result of decisive management action in pursuing a value—especially in the face of difficulty. Management in this case acted against short-term economic motives and demonstrated the priority of concern for employee welfare. The result is that this story is a dramatic illustration of management philosophy which is known by virtually every employee. Once management personnel have reached a consensus about beliefs, it is crucial that they be willing to act decisively to establish those beliefs as living and effective ideas.

Top management at the company experiencing the nine-day fortnight work at taking dramatic steps to ensure that the right ideas are communicated. One employee reported an experience she and several other engineers had with the president in which she learned that deep concern for employee welfare was not laissez-faire management. The group she was working with at the time had committed to deliver a mock-up and design of a large system by a certain date. They missed the date and were behind schedule on their follow-up commitment when the president heard about their progress. He promptly appeared at their work area for an inspection. When they showed him the mock-up, he, an engineer too, pushed a few weak points and the model fell apart. The president, with real emotion, hurled the model to the floor and announced emphatically: “I want to see a working model in two weeks or heads will roll!” The employee ended her story with a wry smile and said: “Somehow we came...
up with a working model before the two weeks were up."

It took some time for the engineer to explain to me the moral of this story. This was not management by intimidation. The dramatic threat had to be understood against the backdrop of the president's philosophy. "Heads will roll" meant that some people might be found "miscast in their roles" in the company. Incompetence was not an automatic cause for firing. The feeling was that this company was large enough to find a place for someone who wanted to work hard even if they weren't competent in their present job. The story was also a statement about the president's patience and understanding. He was patient but not infinitely so—"velvet on steel," according to folklore. More than a few stories documented his concern for results as well as his "management by wandering around," where he spent most of his time patting people on the back, seeing pictures of their family, and listening to their concerns. There is no question that the stories have been embellished. This man is by some measures legendary. But the legend had its start with a group of executives who clarified a philosophy, tried to operationalize their beliefs, and then kept at their efforts over time to keep the perspective alive through occasionally dramatic action.

**Establishing Effective Stories Requires Consistent "Mundane" Action**

Tom Peters reports that in a McKinsey study they found that employees were very sensitive to how serious management seemed to be and how consistent they were. One group of employees observed that it was hard to get very interested in the ideas management was pushing because management seemed to come up with a new slogan every month. In another Fortune 500 firm, employees complained that though their president was pursuing innovation as the key theme, they could tell he didn't really mean it. When McKinsey looked at where the president spent his time, they found that only 5 percent of his day was spent on things related to innovation. A contrasting example comes from an ex-CEO of Texas Instruments who would stop by the R and D labs on his way home from work every day and who spent great amounts of time in division reviews focusing on new products. T. J. Watson, Jr., wrote almost daily memos on the subject of customer service until the day he left IBM.

**Summary**

My message is that stories are particularly useful vehicles for transmitting values because they exemplify and give concrete context to abstract values. They also provide scripts about how to get things done and what to expect in organizations. In a day of diversification, large-scale organizations, and worker alienation, it seems appropriate that we pay more attention to what many successful U.S. firms already do well: the creation of productive company cultures.

It seems to me that a major implication of my research on stories is that managers must be more sensitive to organizational tales. Stories can be used as effective third-order controls. Rather than deny or dismiss stories they hear, managers should seek to know what the stories mean to employees. Through such knowledge, the manager can provide a meaningful focus for the story and thereby, promote company beliefs and orientation.
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