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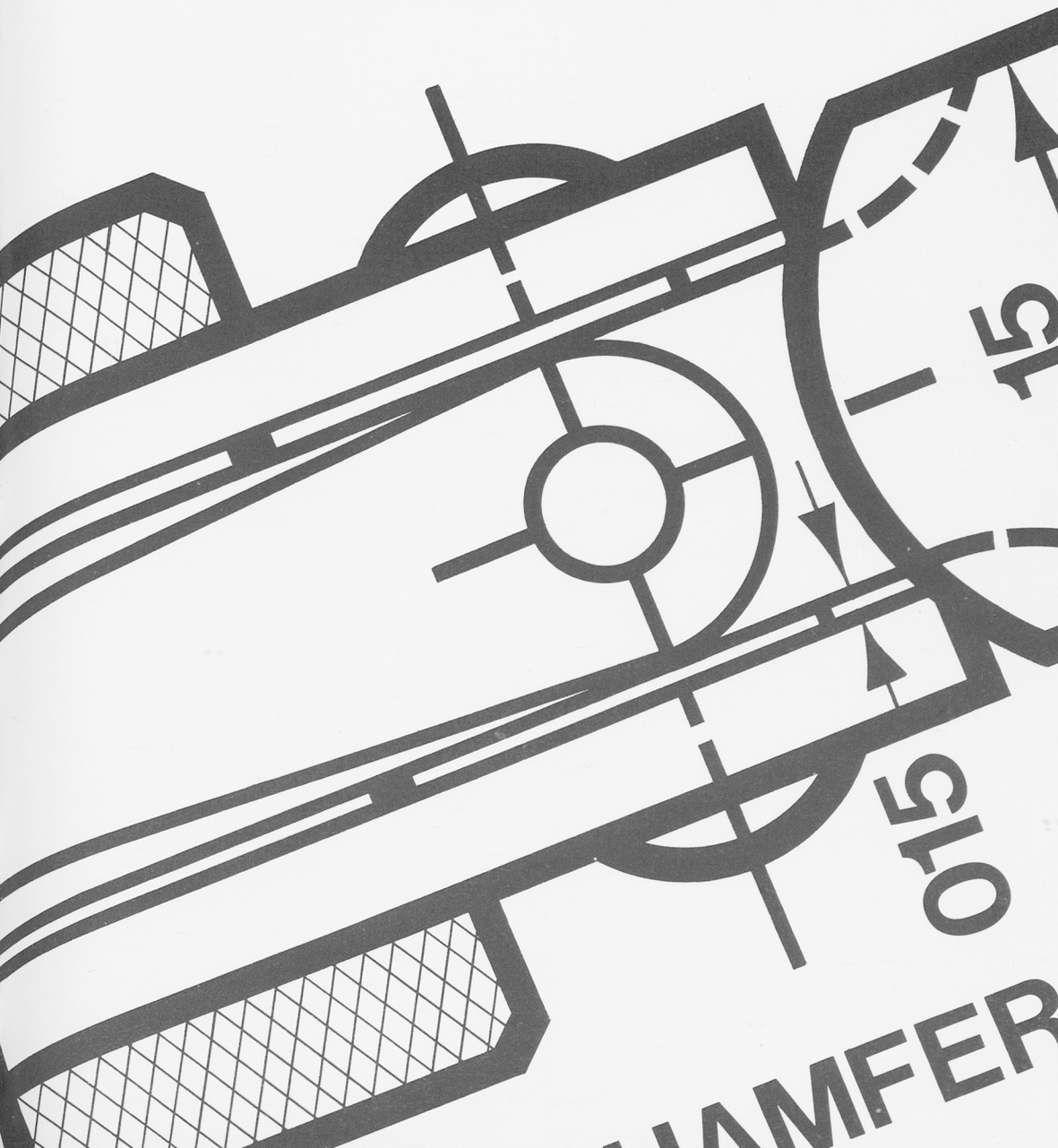

JHE William R. Torbert

Educating toward Shared Purpose, Self-Direction and Quality Work

The Theory and Practice of Liberating Structure

The question of how participants in any organization—whether school or business or government agency—can be educated toward a sense of shared purpose has received little practical or theoretical attention. This article describes and illustrates a way of organizing that devotes continuing attention to this question and to the related questions of how to encourage self-direction and quality work. The argument is that these questions cannot be addressed except with a higher quality of attention than we ordinarily bring to bear on our affairs.

To become aware of the purposes actually informing people's lives together requires becoming aware of how one's own and others' attention works. But since attention is precisely the medium in which we are ordinarily immersed, we are only rarely and partially aware of its movements. Are there higher qualities of attention which can interpenetrate our ordinary thoughts, feelings, and actions? Can we gain authority in relation to our own attention? Only a person who can choose when to pay what quality of attention is really self-directed. And only a person whose attention can interpenetrate and relate the realms of purpose, plan, act, and effect can reliably produce quality work. Central to education

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toward shared purpose is the little explored process by which persons gain access to the dynamics of their own attention as they live their daily lives with one another. Rightly understood, the search for shared purpose, the search for personal self-direction, and the search for quality work require one another. Together they create the possibility for adult relatedness, integrity, and generativity and therefore represent the essence of genuinely liberating higher education.

The authoritative axioms that frame persons' attention usually remain implicit and unexamined [11]. Even theories of human learning have occupied themselves almost exclusively with explaining observable behavior or cognitive structures and have not illuminated the dynamics of adult attention [32]. Indeed, not just learning theories but scientific studies in general, as we now conduct them, leave implicit and unexamined the axiomatic model of reality upon which the studies are based [17, 19, 37]. Thus, science itself provides neither model nor knowledge of how to gain access to the dynamics of attention in the search for shared purpose, self-direction, and quality work.

Nor do institutions of higher education, as we now know them, enact or aid in this search [28]. A study of students a decade after they had graduated from one of the best liberal arts colleges in the country (Haverford) showed that they themselves ranked their college experience only ninth among the determinants of their adult maturing [13]. A study of institutional structures in higher education [6] described them, not as purposive at all, but rather as "organized anarchies" with highly ambiguous purposes, structures, and criteria of performance. Moreover, this study described current college presidents as not self-directed: "The president's time is clearly rationed, but very few presidents with whom we talked had a serious sense that *they* were doing the rationing or that there was any particular logic to the resultant distribution of attention (p. 134).... They felt themselves to be the victims of the pressures upon them and the limitations of time and their own energies.... Too many 'trivial' activities that had to be engaged in. No time for thinking or reading or initiating action (p. 149)." Another study has suggested the relationship between lack of presidential self-direction and lack of institutional shared purpose: most presidents testified that they could not direct effort toward the area they themselves perceived as their greatest responsibility—providing purpose and direction for their institutions [21].

Two Models of Reality

Why do the institutions of science and of higher education provide no models of active inquiry into the dynamics of collective purposes and of

personal self-direction? The general answer is that no broad cultural institutions in the history of mankind have encouraged such an inquiry, even though a few educational-political-spiritual efforts strongly suggest the quality of one [10, 15, 16, 23, 30]. An answer which relates directly to modern society is that the implicit model of reality currently predominant discourages attention to and effective action toward the development of shared purpose, self-direction, and quality work. A fundamental axiom of this implicit model of reality is that the external world and the internal world are dichotomous. The external, visible world is the realm of public, instrumentally rational, manipulative practice, and the internal, invisible world is the realm of private, emotional, nonexternally influenceable prerogative [1, 2, 4, 39].

The particular attitudes and patterns of behavior which derive from this axiom are all hostile to education toward shared purpose and self-direction. In organizational meetings, for example, economic, technological, manipulative approaches to concrete, time-specific goals are preferred as matters for discussion to critical and aesthetic conversations about intuitive, time-encompassing purposes. Indeed, the notion of a conversation about purposes at a meeting generally evokes the image of, and leads to, a boring waste of time. The preference for instrumental decision making is strongly reinforced by bureaucratic organization theory [20] and by at least one branch of language philosophy [3], which hold that human rationality is limited to instrumental, calculative thinking in action settings. Critical, aesthetic conversation will be reserved for evenings and friends, if it occurs at all. Even then, such conversation will more easily tend toward the abstract and the competitive than toward personal inquiry. One does not wish openly to influence or be influenced by others' beliefs and priorities (''Everybody's entitled to their own opinion''); one fears the vulnerability of exposing that one does not really know what one's ultimate purpose is; and one fears looking foolish, inconsistent, or inarticulate as one explores the unknown. The result is ''mystery-mastery'' interpersonal behavior, whereby the actor strives to maintain mystery about self while covertly manipulating others to his or her implicit ends [32]. The explicit ideology of this dichotomous model of reality is individualistic; the implicit dogma is that social life consists of an irreconcilable struggle between unjustifiable private preferences and unhumanizable public institutions.

An alternative, more practical model of reality identifies four different but interacting qualities of experience, all of which have both public and private aspects [32]. The outside world is one quality of experience; one's own behavior, as guided toward a goal or as unguided, is a second quality; thought and feeling, as structurable in a plan or map is a third

quality; and intuition, intention, and consciousness is a fourth quality of experience, with the potential for interpenetrating, vivifying, and providing purpose for the other three qualities of experience.

The outside world is accessible to attention through the mediation of the senses. The other three qualities of experience are, in theory, directly accessible to attention. Yet our common personal experience of being aware only of what we are focusing on either in our reveries or in the outside world, rather than of being aware of all these different qualities of experience at once, raises the question whether they really exist and whether the attention can attune itself to their interplay. Thus, this model of reality is explicit rather than implicit and demands testing rather than dogmatic adherence. The testing, in turn, is central to inquiry toward self-direction and shared purpose, for this inquiry can be pursued only by learning to flex and relax our attentional muscles as well as our intellectual, physical, and technological muscles.

At present, human attention is commonly limited to focusing on something [32]. It does not commonly extend to the tacit feelings of the focuser [25] or the ground "behind" the focal object [22], nor to the intention of the focuser [17] or the region of the focal object [14]. Organizational processes and purposes are difficult to see and control, according to this model of reality, because they occur in realms of experience not accessible to the uneducated human attention. Human rationality is limited to linear, dichotomous logic, not by nature, but rather because we do not educate our attention to commute among figure, ground, and region, among focus, feeling, and intention, among task, process, and purpose. Human reason cannot expand to include dialectical, transformational logics while a person is in action unless that person's attention gains access to the existential transformations among qualities of experience as they occur.

Of course, people are able to think about or talk about processes or purposes without seeking awareness of actual implicit processes or purposes. Statements of purpose do not necessarily reflect awareness, much less shared awareness, of actual purposes.

The Theory of Liberating Structure

The complex interrelation of purpose, process, and task in the life of an organization in our society today is not ordinarily recognized by its members. Nor are persons in any way prepared to collaborate in discovering shared purpose, since they are unfamiliar with, unpracticed in, and uncommitted to the model of reality and the kind of attention necessary to do

so. The rhetoric of collaboration alone will not promote shared purpose and self-direction among members. On the other hand, to attempt to develop shared purpose and self-direction through coercion is self-contradictory and can only confirm persons' dichotomous models of reality which identify the organizational sphere as the realm of manipulative practice. To educate toward shared purpose, self-direction, and quality work, an ironic kind of leadership and organizational structure, which is simultaneously educative and productive, simultaneously controlling and freeing, is necessary.

The author has been experimenting with such "liberating structures" in educational settings for the past nine years [33, 35, 36, 38] and has adduced eight essential qualities of liberating structure. The following pages first explicate these eight qualities briefly and then illustrate them by references to a particular organization.

One quality of liberating structure is deliberate irony. The leadership recognizes that participants will initially interpret the organizational structure and particular events based on a different model of reality from the one inspiring the leadership. Moreover, participants will not tend to interpret the resulting conflicts as caused by the difference in models of reality, nor will they be inclined to examine or test the different models. The leadership must at one and the same time succeed in "speaking the members language," introducing them to a "new language" through the organization's structure and leadership style, and motivating exploration of basic assumptions about reality by constructing tasks wherein members feel the limitations and self-contradictions inherent in the dichotomous view of reality. Structures and actions which meet these three demands are deliberately ironic: they both acknowledge and bridge a gap in world views.

A second quality of liberating structure is the definition of tasks that are incomprehensible and undoable without reference to accompanying processes and purposes. The dichotomous model of reality treats tasks as meaningful in themselves or as meaningless except in terms of external rewards, masking the operation of the model itself as the source of meaning. By contrast, liberating tasks are epistemologically transparent: the product and the process congruently embody and reflect the purpose. Members cannot successfully complete liberating tasks unless they challenge their usual ways of doing these tasks without awareness of process and purpose. Consequently, and ironically, liberating tasks will initially seem opaque, strange, and disquieting to many organizational members, even though what is strange about them is that they are actually epistemologically transparent.

A third quality of liberating structure is premeditated and precommunicated structural evolution over time. Such evolution reflects the movement by organizational members as they move toward conscious appropriation of the process and purpose qualities of reality and thus toward the possibility of collaboration in the search for shared purpose, self-direction, and quality work. Such evolution also counters the tendency to treat a given structure as the ultimate substance of an organization and encourages the search for a continuing thread of meaning—for a shared purpose beyond structure. The premeditated and precommunicated phasing of this evolution helps to persuade members that some discoverable rhythms underlie even the most fundamental transformations.

A fourth quality of liberating structure is that its tasks are so structured and its leadership so functions as to provide a constant cycle of experiential and empirical research and feedback on participants' different ways of constructing reality, on their changing relations to one another, and on the quality of their work.

A fifth quality of liberating structure is the use of all available forms of power by the leadership to support the first four projects. Instead of attempting either to hoard power or to give it away, the leadership uses the power granted it by its institutional status, by its members, and by its own experiential authority to perform a kind of psycho-social jiu-jitsu whereby the members gradually come to question their own assumptions about the nature of power and begin to experiment with the creative power to constitute a new world. In so doing, the members increasingly join the leadership in a community of inquiry. The leadership does not use power manipulatively—i.e. covertly and in order to maintain unilateral, exploitative structures. Instead, it uses power openly to create increasingly collaborative conditions.

A sixth quality of liberating structure is that the structure at any given time is open, in principle, to inspection and challenge by organization members. The organization requires the vigilance of all its members to determine whether its purposes are hazy and whether its specific structure, implementing behaviors, and products or services are congruent with its purposes. But members' charges of organizational incongruities may well be untrustworthy so long as the members themselves are unaccustomed to searching for incongruities among their own presuppositions, strategies, practices, and effects. Thus, especially initially, charges of organizational incongruity may mask an unwillingness to face personal incongruities. The attentive leadership will turn such conflicts into educational opportunities. To state this idea another way, the openness of the leadership is made possible by, and is limited to the service of, a principle of inquiry more fundamental than any particular structure.

A seventh quality of liberating structure is that the leadership becomes vulnerable, in practice, to attack and public failure as soon as it behaves inauthentically—when its tasks, processes, and purposes become incongruent and it refuses to acknowledge and correct such incongruities. By promising much, designing unconventional (and therefore often uncomfortable) tasks, and inviting full inspection, a liberating structure sets the stage for members' disillusionment. If the leadership exerts power in manipulative and defensive ways, members will become disillusioned with the leadership. If the leadership shows appropriate strength, vulnerability, and integrity from moment to moment, members will shed various illusions about themselves, about organizing work, and about the nature of reality.

A final quality of liberating structure, implicit throughout the foregoing discussion, is a leadership committed to, and practiced in, seeking, rec-

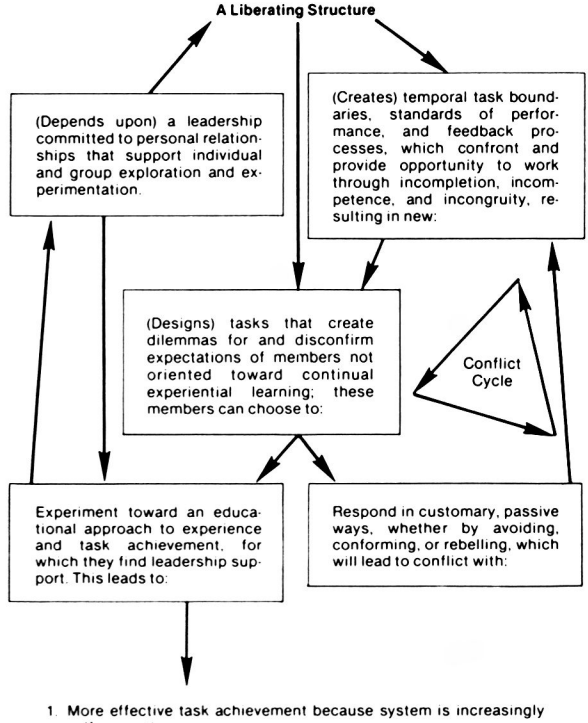

Fig. 1. Dynamic Model of Operation of Liberating Structure

ognizing, and righting personal and organizational incongruities. The leadership leads other organizational members in learning and in creating social settings that encourage learning.

In sum, the development of shared purpose is no small project for an organization. To approach shared purpose requires the prior development of liberating structures, and these, in turn, highlight a vast scale of human learning-in-action, heretofore virtually unexplored in institutional settings. Figure 1 outlines the dynamic processes and effects of liberating structure. It illustrates the "conflict cycle" that liberating structure actively promotes in order to challenge inadequate ways of organizing reality. As members increasingly develop an educational approach to their work with others, they increasingly share in the leadership of the organization.

An Illustration

The purposes, plans, implementation, and effects of a business school course for undergraduates will illustrate the theory of liberating structure. Other possible applications of the theory will be mentioned at the conclusion of the following discussion.

The course in question was the fall, 1971, version of the only required undergraduate course at the Southern Methodist University School of Business Administration in Dallas, Texas. The course membership consisted at the outset of 360 students, twelve undergraduate teaching assistants who had taken the course before, and four faculty members of whom the author was one. I was an assistant professor, newly hired from graduate school the year before.

This single, introductory required course had replaced a much larger set of required courses the year before, consistent with the dean's philosophy of preparing students to become self-directed entrepreneurs rather than passive and reactive bureaucrats. On the one hand, the dean and the task force on curriculum, which specifically recommended the course, wished to encourage self-direction within the school itself and therefore advocated the severe reduction in required courses. On the other hand, they realized that students entering the school, given their previous education, expected external direction and thus required an experience that would offer them the opportunity to begin the transition from externally directed learning to self-directed learning. In order to highlight the deliberately ironic quality of the course when describing its purpose to others, I have sometimes paraphrased Rousseau, saying that our task was "to force students to be free." In fact, of course, students could drop the course

(and not become business majors) if they wished to escape whatever forces we may have wielded before the end of the term. By the end of the term, twenty students did drop the course.

In preparing for the fall, 1971, version of the course, the course staff chose to practice a deliberate irony on itself. It chose to change the structure of the course in order to respond to criticisms that it did not regard as valid. The story of these events also illustrates in several different ways how a liberating structure builds research and feedback into its ongoing operation.

Toward the end of each term the previous year, we had administered a short questionnaire to students, asking them how much they had learned in general and in particular respects in this course, as compared to how much they had learned in an average course that term.[1] The results both terms showed that a large majority of students perceived themselves as learning *less* theory and facts in this course than in an average course. At the same time, a large majority perceived themselves as learning *more* than in an average course in the areas of self-direction, action competence, awareness of interpersonal process, and awareness of personal learning style. They also judged that they were learning significantly more in general in this course than in an average course. These extremely limited findings (see Dunbar and Dutton [9] for related empirical findings) indicated that the course was generally succeeding in generating outcomes congruent with its purposes. Based on more direct experience of the course, both the school's administration and the course staff had evaluated the course as basically successful. Another event that might be interpreted as faintly confirming the success of the course was the selection by students of one of its faculty members as the outstanding professor at the School of Business.

Another research and feedback process had yielded more negative evaluations of the course. The course staff had convened a conversation among the school's faculty about the course at the end of the previous spring. During the conversation five criticisms of the course emerged: (1) it was not hard enough—there were too many A's; (2) it was too frustrating for students—many did not seem to know what was expected of them

[1]The concrete comparison to an average course provided students with a specific reference point against which to judge how much they learned in the course. This methodology was based on earlier findings that people more reliably make relative judgments against concrete criteria than absolute judgments on abstract dimensions [7]. A similar questionnaire was also used in other courses. The overall results showed that students were able to discriminate among aspects of a given course and that they were as likely to give "below average" ratings as "above average" ratings.

nor how course activities related to business skills; (3) there was not enough emphasis on facts and theories (the data presented in the preceding paragraph had already been made available); (4) the emphasis on working in groups in the course was generating conformity rather than encouraging individual entrepreneurship; (5) there was too much emphasis on learning issues in the course and too little on business. The course staff heard these criticisms in the context of knowing that all but one of the critical faculty members had received tenure before the arrival of the current dean and disagreed with much of what he advocated and did.

Even though the course staff sometimes disagreed with both the factual basis for and the implicit assumptions of these criticisms (the only one we accepted without reservation was "not enough emphasis on theories"), we decided to try to restructure the course for fall, 1971, in such a way as to respond to *all* the criticisms, thus testing their validity. Instead of deciding, as we were initially tempted to do, that to respond to these criticisms would violate the integrity of the course, we decided to respond to the criticisms without so doing.

How we did so will become evident, but will not be explicitly discussed, as the plans and implementation of the course unfold in the following pages. After presenting the plans and implementation and showing how they illustrate various qualities of liberating structure, we will return to an explicit consideration of the foregoing criticisms in assessing the effects of the course.

The Plan of the Course

The design of the fall, 1971, version of the course consisted of three premeditated phases. This design, communicated to students the first meeting of the course as in Table 1, exemplified the third quality of liberating structures: premeditated evolution over time. Overall, the course progressed from a relatively high degree of external direction by the faculty toward increasing self-direction by the students. During the first third of the term, the faculty took primary responsibility for structuring all class time and homework assignments, seeking to introduce students to the scale of, and skills involved in, learning from experience. In the middle of the term, the faculty continued to provide overall designs for each session, but now the teaching assistants took primary responsibility for implementing these designs, seeking to help arbitrarily formed small groups to generate creative, responsible, individuality enhancing, effective group processes, rather than conformity producing environ-

TABLE 1

PURPOSE, PROCESS, AND TASK—CENTRAL ISSUES IN HUMAN ENTERPRISE
Their Phasing and Attributes in AS_1 Fall 1971

	Sequence of Primary Emphasis	Successful Completion Indicated by	Basic Question	Fundamental Modes of Learning	Ultimate Resources
Purpose	Early in term	Organizational consensus on model for common effort	What is each student's optimal learning style?	Abstract generalization and active experimentation	Faculty
Process	Middle part of term	Honest assessment in groups leading to diverse structures and roles	How to make conscious, creative group decisions?	Reflective observation of patterns and active experimentation	Teaching assistants
Task	End of term	Completion of freely created projects	How to operate with administrative effectiveness?	Concrete experience with visible results and active experimentation	Students

ments. During the final third of the term, students contracted for and carried out self-defined projects, either individually or in groups of their own choosing.

The structural evolution of the course was also reflected in the grading procedures. During the first third of the course, the course staff did all the grading. Each week each student wrote a short "learning paper" which the staff graded, and students' performance in some class sessions was also graded. During the second third of the term, students conducted peer and self-evaluations structured by the faculty. This process occurred in two rounds, the first a practice round during which many of the habits and fears that usually inhibit honest peer and self-evaluation were confronted and overcome. During the final third of the term, the contracts for students' self-defined projects included standards and methods for evaluating whether the projects were completed effectively. Thus, students moved from working within predetermined criteria of evaluation to taking responsibility for the purposes and processes of evaluation as well as the task to be evaluated. It should be noted, however, that even during the last third of the term, the staff designed the contract itself and reserved the right to confront and negotiate with students if, for example, a proposed method of evaluation seemed unlikely to yield impartial and valid information.

The "learning papers" themselves deserve further description because they represent so many different facets of the spirit and practice of liberating structures. The first learning paper concerned a specific experience

shared by all the students, but thereafter students could choose in each paper to describe any experience they wished from their past or present lives. Moroever, students could choose any theory they wished to try to shed light on that experience. Thus, the assignment provided more freedom of choice than students were accustomed to in papers. But the assignment also included more different kinds of constraints than students were accustomed to. The constraints were that a student must describe (at least some of) his or her *behavior* and *feelings* in the experience chosen, must refer to some *theory* in the literature in seeking generalizations about the experience, and must propose a way to *experiment* with new behavior if a similar situation were to arise again. To receive a grade of satisfactory, students had only to include two of the four required qualities, no matter how ineptly they did so (later in the term they would have to include all four qualities to receive a satisfactory). The grade of honors was reserved for work judged to be of unusually high quality.

In providing both more freedom and more constraint, the task exhibited the first quality of liberating structure: deliberate irony. The task also exhibited the second quality of liberating structure: it was incomprehensible and undoable without reference to the process it represented—namely, the process of actually learning while writing a paper—and to the purpose—choosing to reflect upon experiences from which one intuited one could learn something significant. If a student chose an experience in order to show competence or avoid struggling with difficult issues, the exercise not only became meaningless, but the student could rarely identify a future experiment. Nevertheless, the reader may feel that the task is hardly incomprehensible or undoable as a sheer exercise in conning the teacher. Certainly, the students themselves did not anticipate much difficulty. If, however, the reader considers how rarely students are asked to write about their own behavior and feelings and how rarely students are asked to integrate personal experience and scientific theory in a paper, it may come as less of a surprise than it did to the students themselves to hear that in their first learning paper 44 percent of the students in the course included no more than one of the four qualities asked for. This 44 percent received a grade of "no credit" as well as extensive written feedback and an invitation to discuss the four criteria with a staff member if they wished.

The way grades were used on the learning papers illustrates the fifth quality of liberating structure: the use of coercive-legitimate-expert power in a way that encourages collaborative inquiry and the gradual obsolescence of unilateral exercises of power. At the beginning of the term a grade of "no credit" motivated further inquiry more often than any

amount of feedback. But many students went through several "no credits," confident each time that they had discovered the key to the staff's game, before their inquiry came to include attention to the staff's written and verbal feedback. In general, as students struggled to master what seemed like strange, external requirements to pass the course, they began to experience the logic of the steps, the excitement of actually learning as they wrote, and the joy of searching conversations with staff members and other students in response to their writing. Consequently, students very quickly mastered the requirements, and the grades ceased to be a significant aspect of the process. At the end of the term, less than 2 percent of the class received an overall "no credit" for their learning papers.

As the term progressed, many students challenged the structure of the learning papers, and the way the staff responded to these challenges illustrates the sixth characteristic of liberating structure: conditional openness to challenge. A typical complaint early in the term was that it was unfair to "grade people's feelings." Our reply—that we did not grade the content of people's feelings, only whether their paper explicitly described *any* feelings—might well be met by the charge that, obviously, a student could not expect a good grade by expressing negative feelings about the course. In response to this charge we could always offer numerous examples of papers that had received full credit for expressing negative feelings about the course. We also offered to regrade and rediscuss any paper over which students had doubts. In actuality, the grades almost never required revising because the staff regularly traded papers among themselves, before handing them back to students, in order to test their validity and reliability. As this kind of concern subsided, a few students challenged the adequacy of the learning theory on which the learning paper itself was based [18]. The staff invited these students to write papers which explicated, illustrated, and were structured by alternative learning theories. For these students the whole structure of the learning paper assignment became a useful foil against which to clarify how they really learned. Thus, the staff did not change the learning paper structure simply because students did not like it initially, but only when some students demonstrated that their challenge was based on a commitment to deeper inquiry.

Finally, the learning papers also exemplified, in two different ways, the fourth quality of liberating structure: a constant cycle of experiential and empirical research and feedback. Most obviously, the papers represented experiential research by and feedback to each individual student. Also, as the term progressed, about half of the students' papers concerned

events in the course. Consequently, the papers became an unsystematic but extremely potent form of empirical research and feedback for the staff about what was happening to groups and individuals within the course.

Implementation of the Course

The discussion of the design of the learning papers has already moved beyond a description of plans into a description of the implementation of the course. This movement occurs almost unnoticedly because the theory of liberating structure is not just a theory about the qualities of liberating organizational designs, but also suggests the qualities of liberating purposes and liberating actions. The theory of liberating structure is not a neutral technique that can be put to the service of any purpose, nor does it prescribe actions in a way that makes them mechanically deducible from a given design. Quite the contrary, the theory of liberating structure provides guidance in creating a special kind of social arena—a kind of social theater in which everyone is both participant and observer—and this arena, in turn, requires of the leadership the most profoundly spontaneous inquiring behavior. Only authentically inquiring behavior succeeds in "converting" others to the practice of inquiry.

The events of the very first meeting of the course yielded an example of the eighth quality of liberating structure: the leadership's moment to moment commitment to inquiry. The staff had organized a multimedia "show" in an initial attempt to convey the special qualities of the course. This show included not only the usual media—such as music, movies, and slide-tapes—which render the "audience" passive, but also such additional media as conversation and decision making, which render everyone participant. At some point in the sequence—after the laughter at the Frankenstein slides that accompanied an interviewed student's description of the previous term's course as monstrous, after the groaning that greeted the announcement of an exam on the assigned reading next week, and after applause for the Alleluia chorus accompanying a movie about the raising of a plastic, student-built coffee house the previous spring—one of the faculty members, using an overhead projector, introduced a series of statistical tables as part of his explanation that active, experimenting students enjoyed and learned more from the course than passive students [9].

Perhaps the incongruity between the message and the medium was too great in this case, although I seriously doubt that any of the students consciously analyzed the discrepancy. In any event, the previous balance

of tension and excitement quickly began to dissipate into irate confusion, inattention, and side conversations as the faculty member talked. After questioning what was appropriate for what felt like an eon, I interrupted my colleague, causing an immediate, shocked stillness among all 380 persons in the auditorium. But the other faculty member said he would finish briefly and continued, to growing grumbles of discontent. I interrupted again, more forcefully, and this time he actually listened to what was going on and stopped. One of the teaching assistants began to introduce the film of the steel foundry research team of which he had been a member the previous spring, but this time a third member of the faculty interrupted to suggest we discuss the previous incident for a few moments, since he saw it as symbolic of the courage, skill, and mutual trust required to learn in action.

While the rest of the evening was entertaining and informative, a skeptical person might dismiss it as slick public relations. This incident, by contrast, could alert students to the possibility that they were encountering a rare sort of social system dedicated to something beyond short-term goals, easily definable objectives, and saving face. In their first learning paper two weeks later, more students spontaneously referred to this incident than to any other event in the course.

The second week we gave an examination as promised, but, to the students' surprise, it was an experiential examination. That is, we asked them to enact the ideas about education in the assigned reading, thereby beginning to become more directly aware of the possibility of learning from immediate experience. Whereas the first session of the course had introduced students to a new verbal and visual language while more or less leaving them in their accustomed behavioral positions as audience and occasional respondents, the second session initiated students into new attentional and action "languages," asking them to observe themselves as well as what was going on around them as they acted, and to act in an inquiring rather than a dogmatic mode. The structure of the tasks during this session placed students in paradigm conflicts. Whereas the dichotomous model of reality divided their attention between the private, cognitive-emotional realm and the public, external realm, the tasks of this session asked them to observe and discuss the interplay among their feelings, actions, and effects. We fully expected conflict, discomfort, and unresolved issues worthy of a term's further inquiry.

The examination was conducted in a large open space. Students were given an examination sheet (Fig. 2) and were told they would be led through a series of concrete experiences, reflections, generalizations, and experiments, which they were to summarize on the examination sheet and

Concrete Experiences
1 _____. 2 _____. 3 _____. 4 _____.

Reflective Observations
1 _____. 2 _____. 3 _____. 4 _____.

Abstract Generalizations
1 _____. 2 _____. 3 _____. 4 _____.

Active Experimentation
a Planned experiment:
b Actual behavior:
c Feedback from group:
d Conclusion:

Fig. 2. Experiential Examination Sheet

on the basis of which they were to write their first learning paper the following week. For their learning papers, they were asked to consider such questions as which of the four types of learning had seemed easiest or most eye-opening or most risky to them and which aspects of this learning cycle they wished to concentrate on during the remainder of the semester.

Since students were to explore how to encourage individual creativity and collective effectiveness in groups beginning the following week, the particular theme to be examined during the second session was how feelings and their expression affected interpersonal relations. Students were asked to pair with someone they did not know, to report their initial feelings toward one another, and to enter their first four comments verbatim as their four "concrete experiences." Now definitions of feelings and of opinions were offered, and each pair was asked to reach agreement about whether to classify each of their four concrete experiences as "feeling" or "opinion" in the section of the examination sheet entitled "reflective observations." (A straw poll determined that only about 20 percent of the original statements had in fact been expressions of feeling, whereas about 80 percent had been opinions.)

In the next period of time, the pairs were asked to form groups of six and to discuss what generalizations they thought they could make about the relative interpersonal effects of expressing feelings or opinions. Each individual was then asked to formulate a behavioral experiment that would test the generalization about effective behavior most plausible and

interesting to him or her. The final activity of the session consisted of another conversation within each group of six, sharing feelings about the examination and about one another's performance. Each person was to attempt to carry out his or her planned experiment during the conversation. Afterwards, they were to share what their experiments had been and what effects these experiments had on the other group members.

Throughout the examination the faculty and teaching assistants wandered among groups, offering help when requested, sometimes confronting groups that seemed to be shirking the task. The overall reaction of staff members to the session was highly enthusiastic. They felt that the design, along with their interventions, provided significant leverage in acquainting students with new kinds of learning, with personal responsibility for learning, and with active participation in learning. The students were understandably more ambivalent, but generally agreed, even though they had begun the session anticipating very little learning. At the outset, on a scale of 1 (no learning) to 7 (extraordinary amount of learning), students expected 2.86 learning on the average, and only 6 percent expected a great deal of learning (6 or 7). At the end of the session, students reported 4.14 learning on the average, and 21 percent reported a great deal of learning. At the same time, 12 percent of the students reported learning less than they had expected to learn.

During the third to sixth weeks, the students were formed into arbitrary groups, focusing on what kinds of behavior facilitate individual creativity and collective effectiveness. Readings on this topic were put to use analyzing tape recordings of each group's own behavior as it struggled to make various decisions. The kinds of decisions the groups were to make were specified. They were to divide the readings among the members, choose a time to meet outside class, tape the meeting, discuss the readings, choose one behavior-categorizing procedure they wished to use, and decide how to prepare multiple copies of two pages of transcript for analysis during the following class. At the same time, the content of the decisions was up to the groups.

When the staff reviewed groups' scoring of transcripts after the next class, we discovered that, in general, when a conflict began to develop in the transcribed conversations two things happened. First, the group would avoid facing the conflict insofar as possible during the remainder of the transcript. If one member advocated facing the conflict, he or she would tend to be derided or ignored. Second, the group would seriously misscore the part of the transcript during which the conflict threatened to emerge when they analyzed it later. These findings led us to change our plans and create another structured group exercise, in facing and resolv-

ing group conflict openly. This exercise began with staff members' feedback to each group about its current characteristic process.

Meanwhile, students who had received "no credit" for their learning paper about the experiential examination moved through their incredulity at failing in such a "rinky-dink" course; and through their denunciations of the teaching assistants; and through their rewriting of the paper and their next "no credit"; and their first really serious talk with the staff; and their third rewrite; and their gratification at receiving some positive comments and a "satisfactory" for their third try. By this time, some students had been through as many as eight different kinds of experience in and out of class in relation to the learning cycle theory. And, of course, they were writing additional learning papers following the learning cycle each week. The two series of experiences, within the groups and with the learning papers, demonstrate the "conflict cycle" an organization member finds himself or herself in if he or she responds to a liberating structure in a customary, passive, or defensive way.

During the final third of the term, students contracted for projects of their own creation, working either as individuals or as self-constituted groups. Whereas during the first two-thirds of the course the staff generally had to take primary responsibility for confronting individuals or groups operating in ways that inhibited learning or effective performance, students themselves initiated such confrontations as they internalized values and skills consistent with self-directed learning and collaborative responsibility. For example, in one group five of the twelve members ended up doing most of the work on the preliminary three-week project done in the arbitrary groupings. Despite confrontation, other members seemed content to remain passive and do the minimal amount of work. Nevertheless, the group as a whole enjoyed the preliminary project and judged it successful, as did the teaching assistant who monitored that group and one other. When it came time to plan the six-week project, everyone agreed that they wished to continue working as a group rather than to break up. But, as the planning session continued, the same division between the five active and the seven passive members became evident. At that point, the five active members agreed openly that they didn't trust the commitment of the others. The five decided to form their own group and decided to create a market for arts and crafts on the campus. The group struggled with all aspects of a business enterprise, including efficiency and profit, and finally broke even financially (despite losing the cash box at one point!). Meanwhile, the remaining seven found themselves stranded, with no one but themselves to rely on for further transportation. Since they had no positive sense of identity as a group,

they each went their own way, some to significant learning experiences, which they would probably have avoided if the active members had been "kind enough" to carry them through the project.

Research and Feedback throughout the Course

The constant cycle of experiential and empirical research and feedback characteristic of liberating structure has already received several illustrations in the foregoing episodes. What is perhaps not yet clear is how the staff itself used empirical and experiential research to analyze and improve its own performance as the term progressed. Twice during the term, in the middle and at the end, students were asked how much they were learning in the course as compared to their other courses. In the middle of the term, when conflict was high, students reported learning about as much as in an average course (3.9 on the 1–7 scale), but groups associated with different staff members reported significantly different amounts of learning on the average. Before presenting the specific results of the research to the staff, I asked it whether it saw any common characteristics among the three with whom (I alone knew) students perceived themselves as learning most and among the three with whom students reported learning least. The staff characterized the three members with whom students perceived themselves learning most as warm, personal, and encouraging of identification. On the other hand, the staff characterized its three members with whom students perceived themselves learning least as relatively distant, task-oriented, and encouraging of internalization. The staff did not evaluate the first three as more competent and the second three as less competent. In fact, ultimately we preferred to encourage students to develop an internalized value system, rather than to encourage them to identify with us as models. But these findings seemed to confirm Harrison's theory [12] that students come to expect to *comply* to external directives in learning and must go through a stage of *identifying* with an alternative model of behavior before they can *internalize* their own individual learning values. As a result of discussing the results in this way, both the apparently successful and the apparently less successful staff members found directions for further experimentation in their teaching styles.

Staff members also administered semantic differentials about their teaching style to their groups. Before analyzing the results, each staff member made his or her own judgments about *ideal* teaching style and attempted to predict what student perceptions of his or her *actual* teaching style would be. In this way, existing discrepancies were highlighted as

areas for future reflection and experimentation. Beyond formal empirical measures of performance, staff members invited other staff members to observe and criticize their performance. Indeed, in one case where communication between staff member and group seemed to have seriously broken down, two staff members switched groups.

It should be obvious that persons can invite and learn from formal empirical research only in a fundamentally friendly and caring atmosphere, the informal aspects of which are also dedicated to learning about how one organizes one's attention. To put this another way, the leadership of a liberating structure must experience itself as a community of inquiry if its members are to become increasingly objective, impartial, and mutually trusting, rather than increasingly defensive, through the conflicts and failures they will encounter. It will suffice to offer here the barest outline of the different ways staff members engaged one another in continuing experiential research and feedback. Staff members would meet for beer at a nearby pub after each week's session to begin the process of assimilating our experiences. Then, the next afternoon we would meet more formally and compare our experiences to stories about other personal and collective adventures of inquiry (e.g. [5, 16, 27]). Very often someone would give a party over the weekend. Then early the following week teaching assistants would meet individually with faculty members to calibrate final plans for particular groups.

Outcomes

At the end of the term, 20 of the initial 360 students had dropped the course and another 52 received "no credit." Thirty-six students received "honors," the rest "satisfactory." By contrast, slightly over half the course had received "A's" the previous year. Although the grading system as a whole had changed, it seems clear that the grading was harder, as had been requested by the critical faculty the previous spring. Two weeks before the end of the term a higher percentage and absolute number of students (300 of 340) than ever before responded to the questionnaire on learning and judged the course to be generating significantly more learning in general than their average course (5.4 on the 1–7 scale) and significantly more than the same course earlier in the term or either term the year before.

In response to the criticism that the course had been too group-oriented, too frustrating, and too weakly related to business, the six-week project had provided an arena for more overtly businesslike enterprises than had tended to occur the first year and had encouraged both individual and

group entrepreneurship. Seventy-one percent of the 300 students answering the questionnaire reported predominantly enjoyable experiences in the course, and 76 percent reported that it was an appropriate or more appropriate for the business school than their average business course.

The questionnaire results also seemed to indicate significant improvement in regard to communicating facts and theories, another area criticized by some faculty. Whereas at the end of the previous spring only 9 percent of our students regarded themselves as learning more facts than in an average course and only 20 percent reported more than average learning about theories, at the end of the term described here 33 percent reported more than average factual learning and 67 percent reported more than average theoretical learning.

The staff was pleased, of course, with these quantitative findings and even more pleased with our own qualitative impressions of having introduced many students to radically new approaches to their work, their relationships, and their life-aims. We also felt pleased that this introduction was not merely to a verbal language, but to attentional and behavioral languages as well, and that the introduction did not merely paint a rosy picture, but actually confronted and worked through many conflicts. Nevertheless, we did not believe that our students had so deeply internalized the model of reality, theory, and events of the course that they could now describe or enact liberating structures for others. There was no evidence, for example, that more than a few students picked up the language or logic about the interrelations among purpose, process, and task. Indeed, we decided to drop this language from our design for the following term's version of the course even though the logic continued to play an important role in the staff's planning. That the course itself did not "move" students to the point of enacting liberating structures can serve as a small reminder of the scale of the project of educating toward shared purpose and self-direction. I myself required seven years of very intense and diverse existential learning experiences with remarkable teachers and colleagues, as well as the previous two terms experimenting with the particular conditions of the S.M.U. business school, before I could take a role in enacting the well-defined liberating structure reported here.

Implications for Other Settings

The theory of liberating structure presented in the first half of this essay is formulated at a very high level of generality, yet the illustrations presented in the previous pages derive from a single, very particular

setting. This distance between general theory and particular setting implies the fundamentally educational quality of this way of organizing. Knowledge of the theory of liberating structure does not lead mechanically to the design of certain kinds of structures or to the practice of certain kinds of behavior. In planning practice, knowledge of the general theory does not replace, but rather requires, personal knowledge of the ongoing dynamics of attention and empirical knowledge of the particular setting in question. The theory of liberating structure challenges the leadership as well as the membership of an organization to inquire more and more precisely into its particular purpose, boundaries, and ecology and into one's own particular assumptions about the nature of reality. Liberating structures in different settings will appear very different from one another, reflecting each leadership's unique concerns and inventions.

A liberating structure is not a fixed structure at all, but rather gradually reveals itself really to be a meta-structure within which an infinite number of structures can be sculpted. For example, whereas this essay is structured in part by its use of the language of the social sciences to explicate the theory of liberating structure and to describe its application to business education, a liberating structure need not use social science language at all and need not apply to professional education. In devising liberating structures for courses in the humanities and the natural-physical sciences, each teacher could consult the body of knowledge in the course for inspiration about how to organize, not just the curriculum, but also the administration of a given course. Each arena of knowledge is structured in some way by a teacher in the process of presenting it to students. What we did, in effect, in the S.M.U. business course was to ask how our structure of knowledge about learning and organizing might apply to the sequencing of the tasks and processes of evaluation in the course itself. A teacher of English could just as well ask what are the implications of an ironic Donne love poem or of a strictly conventional Shakespearean sonnet about originality for the structuring of a given class or course. Or a teacher of biology could just as well ask what are the implications of form and variety in plant growth or of the missing links in the theory of evolution for creating classroom structures that encourage qualitative growth. In each case, such questions can lead to organizing structures that put the curriculum not only at the focus of a student's attention, but also at the horizons of attention (cf. Runkel et al. [27], for numerous specific examples from different disciplines). In one sense, this procedure is diabolical: a student trying to escape learning will run into the very structures he or she is trying to escape at the horizon. Tangled in the teacher's web, the student may become infected by the teacher's questions. In another sense, this procedure is highly symbolical: the teacher

seeks not only to convey symbols, but to create a symbolic situation, a social sculpture. The teacher seeks, in Schiller's words, to "surround them with noble, great and ingenious forms, enclose them all around with symbols of excellence" [29, p. 110].

The reference first to other courses and other disciplines as settings for inventing diverse liberating structures is not accidental, for the theory of liberating structure derives from the practice of education and claims to be an intrinsically educational mode of organizing. But the relevance of liberating structure reaches beyond schooling alone. Based upon the search for an attention interpenetrating thought and action, liberating structure is the missing link between schooling and the rest of social life, and between social life as we now know it and a just society. The field of education can currently be riven by debates between proponents of liberal education and proponents of career education only because we have not yet discovered the bridge between culture and economy, between mind and hand, between inquiry and effectiveness. So long as our families, our work, and our laws, as well as our schools, are not liberating structures based on the authority of an inquiry that permeates principles, rules, deeds, and effects, testing their integrity, we cannot succeed in establishing even the most primitive form of public ethics—what Rawls calls the morality of authority. For the morality of authority is established only when authority figures (e.g. parents, teachers, administrators) act with integrity—in Rawls's words, only when authority figures "exemplify the morality they enjoin, and make explicit its underlying principles as time goes on" [26, p. 465]. When authority figures act incongruously, and seek to hide such incongruities rather than to learn from them, as is the norm under the dichotomous model of reality, their authority is purely arbitrary from an ethical point of view. Persons who grow up under arbitrary authority will not advance to what Rawls calls the morality of association and the morality of principle. Instead, such persons will tend to accede to whatever twisted norms their peer groups exemplify and will attempt to twist principles to their own convenience. Such persons will not take continuing responsibility for clarifying higher principles with others and testing whether their own actions serve such principles.

A liberating structure surprises persons accustomed to arbitrary forms of authority, for it provides a genuine morality of authority, an authority based on inquiry, which opens toward the morality of association and the morality of principle. The three sequential stages of the S.M.U. business course can be thought of as introducing students to the three stages of moral development (all within the umbrella of the staff's authority). During the first third of the term, the faculty strove to define tasks clearly, to clarify the principles of learning and organizing implicit in the tasks, and

to enact the principles they enjoined. The middle of the term was committed to the development of the morality of association—of a peer culture dedicated to clarifying purposes, to evaluating whether given norms, actions, and outcomes were congruent with purposes, and to confronting and correcting incongruities. During the last third of the term, individuals and groups in effect experimented with the morality of principle (again, at the instigation of the leadership): they defined and carried out their own purposes, processes, tasks, and standards for evaluating whether their outcomes were congruent with their purposes. As the course progressed, the morality of authority receded as an influence over the decisions students made at particular moments. Over a still longer period of time, the development of shared purpose, self-direction, and quality work could conceivably progress far further, and a community could emerge based on the morality of principle, a community of inquiry.

In a general way, the three sequential stages outlined above can be generalized to any setting where the leadership sees some value in encouraging principled work in a community of inquiry, yet doubts whether the participants are, at the outset, deeply dedicated to or prepared for active inquiry and principled work. For example, in choosing a staff for a collaborative poverty program, I developed a selection process consisting of three similar stages [33]. On the basis of written applications and interviews, the applicants were first evaluated by core staff members. Next, the applicants were given an opportunity to discuss, confront, and internalize or revise the initial selection criteria in small group meetings. Finally, the applicants were invited to collaborate in their own selection. In this way, the selection process itself at once clarified and enacted the very principles of organizing to which the program as a whole was dedicated, without assuming that applicants were capable of effective collaboration at the outset. This selection process very clearly differentiated between those applicants who tended to be open to inquiry and learning amidst stress and conflict and those who tended to obstruct inquiry and learning in tense and ambiguous situations. The selection process was too brief and too stressful, however, and the leadership group itself too inexperienced in active inquiry for the applicants to develop a conceptual map of what had occurred clear enough to influence their future actions [36]. Like the S.M.U. business course, this selection process was an introduction to a whole organization. It tried to achieve essentially the same ends, but in about one-tenth the shared time, and in this aim it failed.

The unknown art of governing a liberating structure would minimize the time it takes to succeed in making the transition to a community of inquiry.

Conclusion

For the past several centuries, Western society has been enchanted by its supposedly value-free exploration of the power of methodologies in the world of knowledge and of technologies in the world of action. Unfettered, these powers enhance man's manipulative capacity and diminish his moral capacity. The twentieth century illustrates increasingly vividly the ecological, political, ethical, and ontological horrors and dilemmas to which such a narrow preoccupation with "efficient," "impersonal" causes and effects leads. Bureaucracy is the organizational form that reflects a concern for impersonal efficiency, and bureaucracy is at present the most prevalent organizational form in the worlds of work, education, and the administration of research.

By contrast, the theory of liberating structure reintroduces a wider exploration, the inquiry into what is truly practical. The way to what is truly practical destroys illusions. The inquiry that moves this way requires what Nietzsche considered the ultimate human power, the power of self-overcoming. The name "praxis" can refer to this inquiry into the relationship between the ultimate purposes and the ultimate effects of personal and collective actions. Praxis embraces concerns for method and technique, but is preeminently dedicated to personal responsibility and effectiveness rather than to impersonal efficiency. Praxis, as understood here, requires a self-overcoming attention which opens, again and again, to what is actually happening, thereby spanning human ends from purposes to effects and integrating knowledge and action.

Marx stressed the importance of praxis in the development of valid knowledge and effective action, but offered no theory about how to organize praxis. The theory of liberating structure is such a theory. Its practice offers the opportunity to reconcile the age-old dualism in Western society between knowledge and action. Together, theory and practice represent an intrinsically educational mode of organizing. How prepared are we to investigate such a theory and practice within our institutions of higher education and within the invisible university of our daily experiences?

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