No Contest: The Case Against Competition

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The "Number One" Obsession

Life for us has become an endless succession of contests. From the moment the alarm clock rings until sleep overtakes us again, from the time we are toddlers until the day we die, we are busy struggling to outdo others. This is our posture at work and at school, on the playing field and back at home. It is the common denominator of American life.

Precisely because we are so immersed in it, competition can easily escape our notice. A fish does not reflect on the nature of water, Walker Percy once remarked, "he cannot imagine its absence, so he cannot consider its presence." Even those who think and write for a living have paid surprisingly little attention to the subject. In the last fifty years, for example, no one has written a book that explores the very idea of competition and the way it plays itself out in all the varied arenas of human life. I do not mean a lament about what has happened to sports today or a recipe for being a winner in business or a statistical operation performed on abstractions that issue from experimental games. These roll off the presses regularly. I mean a look at what it really means to try to beat other people, a careful investigation of this arrangement that requires some people to fail in order that others can succeed.

If such an analysis is long past due, the need for it is nowhere more urgent than in this country. Different cultures depend on competition to different degrees in structuring their economic system or schooling or recreation. At one end of the spectrum are societies that function without any competition at all. At the other end is the United States. Here is social psychologist Elliot Aronson:

From the Little League ball player who bursts into tears after his team loses, to the college students in the football stadium chanting "We're number one!"; from Lyndon Johnson, whose judgment was almost certainly distorted by his oft-stated desire not to be the first American President to lose a war, to the third grader who despises his classmate for a superior performance on an arithmetic test; we manifest a staggering cultural obsession with victory.

Others have used similar language. "Competition is almost our state religion," says one observer. It is "an American cultural addiction," remarks another. "Resistance to competition is viewed as suspiciously un-American," notes a third.

This does not mean that competition is found only in the United States. The examples offered in this book will likely seem familiar to readers elsewhere. But what may be merely familiar in other places has reached exaggerated, often ludicrous, proportions in this country. We can see this both in the pervasiveness of competitive activities and in the fervor with which we approach them. Our economic system is predicated on competition, while our schooling, from the earliest grades, trains us not only to triumph over others but to regard them as obstacles to our own success. Our leisure time is filled with highly structured games in which one individual or team
must defeat another. Even within the family there is rivalry--a muted but often desperate struggle that treats approval as a scarce commodity and turns love into a kind of trophy.

Not only do we get carried away with competitive activities, but we turn almost everything else into a contest. Our collective creativity seems to be tied up in devising new ways to produce winners and losers. It is not enough that we struggle against our colleagues at work to be more productive; we also must compete for the title of Friendliest Employee. The only way we can think of to socialize with the people who work for another company is to try to beat them in a competitive game. If we want to escape all of this by, say, going out dancing, we find that even here we are involved in a contest. No corner of our lives is too trivial--or too important--to be exempted from the compulsion to rank ourselves against one another. Even where no explicit contest has been set up, we tend to construe the world in competitive terms. Several years ago, to cite one small illustration, the New York Times Magazine featured a profile of Placido Domingo that declared he had "challenged Luciano Pavarotti - and, many say, surpassed him - for the title of the world's leading tenor." Opera, too, cannot be enjoyed without our thinking in terms of who is number one. Thus it is that Vince Lombardi's famous comment - "Winning isn't everything; it's the only thing" - must be understood not merely as the expression of one football coach's fanaticism, but as a capsule description of our entire culture. Our lives are not merely affected by, but structured upon, the need to be "better than." We seem to have reached a point where doing our jobs, educating our children, and even relaxing on the weekends have to take place in the context of a struggle where some must lose. That there might be other ways to do these things is hard for us to imagine - or, rather, it would be hard if we were sufficiently reflective about our competitiveness to think about alternatives in the first place. Mostly we just accept it as "the way life is."

The current celebration of business competition makes these issues particularly timely. Bookstores have been deluged with guides to winning in the marketplace largely because of the rhetoric spilling out of Washington over the last few years. The competition that has been indiscriminately encouraged actually has the effect of shifting power from elected representatives to private corporations, from those who are theoretically accountable to all citizens to those who are, at best, accountable to only the tiny fraction of people who stand to make a profit. (Half of all corporate stock is owned by one percent of the population, while 81 percent of all families own no stock at all.) But even if the mystique of corporate success becomes less fashionable after a few years--even if public officials no longer see themselves chiefly as cheerleaders for private industry--our economic system is fundamentally grounded in competition, and an exploration of the subject will continue to be relevant. Moreover, I am concerned in this book with far more than the machinations of the business world. Competition is a deeply ingrained, profoundly enduring, part of our lives, and it is time to look more closely at what it does to us.

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Let us begin with a more precise formulation of the topic. I think it is useful to distinguish between what might be called structural competition and intentional competition. The former refers to a situation; the latter, to an attitude. Whereas structural competition has to do with the win/lose framework, which is external, intentional competition is internal; it concerns the desire on the part of an individual to be number one.
To say that an activity is structurally competitive is to say that it is characterized by what I will call *mutually exclusive goal attainment* ("MEGA," for short). This means, very simply, that my success requires your failure. Our fates are negatively linked. If one of us must lose exactly as much as the other wins, as in poker, then we are talking about a "zero-sum game." But in any MEGA arrangement, two or more individuals are trying to achieve a goal that cannot be achieved by all of them. This is the essence of competition, as several social scientists have observed.

The same phenomenon sometimes has been described as a situation of scarcity. This does not explain competition but simply restates it: If I must try to defeat you in order to get what I want, then what I want is scarce by definition. We need to be careful not to confuse this sort of scarcity with the kind that refers to an objective shortage of some commodity. It is possible, of course, for two hungry people to compete for a single bowl of stew. But in most contests, the goal is simply a prized status. Structural competition usually involves the comparison of several individuals in such a way that only one of them can be the best. The competition itself sets the goal, which is to win; scarcity is thereby created out of nothing.

Structural competitions can be distinguished according to several criteria. Competitions vary, for instance, with respect to how many winners there will be. Not everyone who applies for admission to a given college will be accepted, but my acceptance does not necessarily preclude yours (although it will make it somewhat less likely). On the other hand, only one woman in a bathing suit will be crowned Miss America each year, and if Miss Montana wins, Miss New Jersey cannot. In both of these competitions, notice that winning is the result of someone's subjective judgment. In other cases, such as arm wrestling, pre-established and reasonably straightforward criteria determine who wins.

Beauty contests and college admissions also share another feature: neither requires any direct interaction among the contestants. The success of one simply rules out or reduces the chances for success of another. There is a stronger version of structural competition in which one contestant must *make* the other(s) fail in order to succeed himself. War is one example. Tennis is another. Whereas two bowlers competing for a trophy take turns doing the same thing and do not interfere with each other, two tennis players actively work at defeating each other. Which of these postures is in evidence depends on the rules of the game, the type of structural competition that is involved.

Intentional competition is much easier to define—although its nuances are quite complex indeed, as we shall see later. Here we are simply talking about an individual's competitiveness, his or her proclivity for besting others. This can take place in the absence of structural competition, as all of us have observed: someone may arrive at a party and be concerned to prove he is the most intelligent or attractive person in the room even though no prizes are offered and no one else has given any thought to the matter. The psychoanalyst Karen Horney described as neurotic someone who "constantly measures himself against others, even in situations which do not call for it.

The reverse situation—structural competition without intentional competition—is also possible. You may be concerned simply to do the best you can (without any special interest in being better than others), yet find yourself in a situation where this entails competing. Here it is the structure rather than your intention that defines success as victory. Perhaps you are even averse to competing but find yourself unable to avoid it—an unhappy and stressful state of affairs known to
many of us. The most extreme case of structural competition without intentional competition is a circumstance in which individuals are ranked and rewarded without even being aware of it. Students may be sorted on the basis of their grades even if they are not trying to defeat each other. (The distinction between the two varieties of competition is especially useful in allowing us to make sense of such a scenario.)

Finally, let us take note of the rather obvious fact that competition can exist among individuals or among groups. The latter does not rule out the former: even as two corporations or nations or basketball teams are competing with each other, it is possible that the people within these groups can be vying for money or status. Competition among groups is known as intergroup competition, while competition among individuals within a group is called intragroup competition. These distinctions will prove important in later chapters.

Competition is not the only way to organize a classroom or a workplace. This is hardly a controversial observation, but because we have come to take competition for granted, we rarely think about alternatives. In this book, following the lead of most social psychologists, I will be considering three ways of achieving one's goals: competitively, which means working against others; cooperatively, which means working with others; and independently, which means working without regard to others. Although we sometimes speak of an individual or a culture as being both competitive and individualistic, it is important to realize that they are not the same. There is a difference between allowing one person to succeed only if someone else does not, one hand, and allowing that person to succeed irrespective of the other's success or failure, on the other. Your success and mine are related in both competition and cooperation (though in opposite ways); they are unrelated if we work independently.

We sometimes assume that working toward a goal and setting standards for oneself can take place only if we compete against others. This is simply false. One can both accomplish a task and measure one's progress in the absence of competition. A weightlifter may try to press ten pounds more than he did yesterday, for example. This is sometimes referred to as "competing with oneself," which seems to me a rather unhelpful and even misleading phrase. A comparison of performance with one's own previous record or with objective standards is in no way an instance of competition and it should not be confused with it. Competition is fundamentally an interactive word, like kissing, and it stretches the term beyond usefulness to speak of competing with oneself. Moreover, such sloppy usage is sometimes employed in order to argue that competition is either inevitable or benign: since nobody loses when you try to beat your own best time, and since this is a kind of competition, then competition is really not so bad. This, of course, is just a semantic trick rather than a substantive defense of competition.

The third alternative, cooperation, will play a more important role in the pages that follow. The word refers to an arrangement that is not merely noncompetitive but requires us to work together in order to achieve our goals. Structural cooperation means that we have to coordinate our efforts because I can succeed only if you succeed, and vice versa. Reward is based on collective performance. Thus, a cooperative classroom is not simply one in which students sit together or talk with each other or even share materials. It means that successful completion of a task depends on each student and therefore that each has an incentive to want the other(s) to succeed.
When we think about cooperation at all, we tend to associate the concept with fuzzy-minded idealism or, at best, to see it as workable only in a very small number of situations. This may result from confusing cooperation with altruism. It is not at all true that competition is more successful because it relies on the tendency to "look out for number one" while cooperation assumes that we primarily want to help each other. Structural cooperation defies the usual egoism/altruism dichotomy. It sets things up so that by helping you I am helping myself at the same time. Even if my motive initially may have been selfish, our fates now are linked. We sink or swim together. Cooperation is a shrewd and highly successful strategy—a pragmatic choice that gets things done at work and at school even more effectively than competition does (as I will show in chapter 3) and can serve as a basis for creating challenging and enjoyable games that do not require us to compete against one another (as I will show in chapter 4). There is also good evidence that cooperation is more conducive to psychological health and to liking one another. Even in a competitive culture there are aspects of cooperative and independent work. In fact, a single day at the office can include all three models. The most common mix consists of intragroup cooperation and intergroup competition: working with others in a group in order to defeat other groups. Football players cooperate in order to win and employees pull together in order that their company can earn higher profits than another company. It should be clear, however, that these orientations do not appear with the same frequency. Notice how often cooperation in our society is in the service of competition—and how often we must compete without being able to cooperate at all. As Robert Bellah and his colleagues put it, "The world of individualistic competition is experienced every day; the world of harmonious unanimity is fully realized only in sporadic flashes of togetherness, glimpses of what might be if only people would cooperate and their purposes reinforce, rather than undercut, one another."

That most of us consistently fail to consider the alternatives to competition is a testament to the effectiveness of our socialization. We have been trained not only to compete but to believe in competition. If we are asked about it, we unthinkingly repeat what we have been told. Unfortunately, the case for competition, as most of us have learned it, does not stand up under close scrutiny. It is a case that relies on rhetorical gambits, such as the insinuation that people who oppose competition are simply afraid of it, or on a lack of conceptual precision, such as the confusion of competition with conflict or with success. It is a case that sometimes misrepresents itself, such as by disguising the impulse to compete as a simple need to survive. Long ago, Bertrand Russell pointed out that what is often meant by "the struggle for life is really the competitive struggle for success. What people fear when they engage in the struggle is not that they will fail to get their breakfast next morning, but that they will fail to outshine their neighbors."

Most of all, the case for competition is based on a great deal of misinformation. Specifically, it has been constructed on four central myths, and these myths, in the order of their popularity, form the basis of the next four chapters. The first myth is that competition is an unavoidable fact of life, part of "human nature." Although this assumption is made casually (and without evidence), it demands a considered response; if it were true, arguments about competition's desirability would be beside the point since there is nothing we can do about our nature. The second myth is that competition motivates us to do our best—or, in stronger form, that we would cease being productive if we did not compete. This assumption is invoked to explain everything from grades to capitalism. Third, it is sometimes asserted that contests provide the best, if not the only, way to have a good time. All the joys of play are said to hinge on competitive games. The
Last myth is that competition builds character, that it is good for self-confidence. This claim is not heard quite so often as the others—probably because it contradicts not only empirical evidence but our own experience of the psychological impact of competition.

I mean to refute each of these myths by looking at all the arenas of human life where competition is present and by reviewing the relevant evidence from such diverse fields as education, social psychology, sociology, psychoanalysis, leisure studies, evolutionary biology, and cultural anthropology. Contributions from philosophy and literature will be included for good measure. Investigating a topic like competition really seems to require this kind of interdisciplinary approach; the territorial inclinations of most scholars have often limited their effectiveness at exploring this and other important questions. These questions sprawl rudely across the boundaries that divide academic specialties.

Beginning with a definition of terms, as I have done, is fairly standard. But in this case, being clear about what competition means not only helps to keep the issue in sharper focus; it actually forms the basis of a critique. Strip away all the assumptions about what competition is supposed to do, all the claims in its behalf that we accept and repeat reflexively. What you have left is the essence of the concept: mutually exclusive goal attainment (MEGA). One person succeeds only if another does not. From this uncluttered perspective, it seems clear right away that something is drastically wrong with such an arrangement. How can we do our best when we are spending our energies trying to make others lose—and fearing that they will make us lose? Can this sort of struggle really be the best way to have a good time? What happens to our self-esteem when it becomes dependent on how much better we do than the next person? Most striking of all is the impact of this arrangement on human relationship: a structural incentive to see other people lose cannot help but drive a wedge between us and invite hostility.

Again, all of these conclusions seem to flow from the very nature of competition. As it happens, they also are corroborated by the evidence—what we see around us and what scores of studies have been finding. One may not be inclined to consider this evidence, though, until the elemental question has been asked: What do we mean when we speak of competing?

The more closely I have examined the topic, the more firmly I have become convinced that competition is an inherently undesirable arrangement, that the phrase healthy competition is actually a contradiction in terms. This is nothing short of heresy because only two positions on the question are normally recognized: enthusiastic support and qualified support. Broadly speaking, the former can be called the conservative position and the latter, liberal. Conservatives champion competition of all kinds, often coming close to Lombardi’s dictum about winning’s being the only thing. Liberals are typically more restrained, granting that excessive competition is to be avoided and lamenting that our culture now encourages winning at all costs. Competition itself, however, if it is kept in its "proper perspective," can be productive, enjoyable, stimulating, and so on.
CHAPTER 3

Is Competition More Productive?

The Rewards of Working Together

Competition, which is the instinct of selfishness, is another word for dissipation of energy, while combination is the secret of efficient production.

- Edward Bellamy,

Looking Backward (1888)

Leaf through a few popular articles about competition, engage a few people in conversation on the subject, and you will find a single conviction that appears as a refrain: Even minimal productivity, to say nothing of excellence, would disappear if we ceased competing. Competition brings out the best in us. To compete is to strive for goals, to learn competence, to reach for success. A noncompetitive society would represent, in Spiro Agnew's assorted metaphors, "a bland experience ... a waveless sea of nonachievers ... the psychological retreat of a person ... into a cocoon of false security and self-satisfied mediocrity."

Whether competition promotes "success" (however we choose to define that word) seems a rather straightforward question--one that could be resolved by the available evidence. Many people, however, do not look at this evidence because they do not see the question as an empirical one. The most common defense of competition turns out to rest on the assumption that success (or productiveness or goal attainment) means competition. Given this assumption, the assertion that no one would get anything done without competition doesn't require proof; it is self-evident. "The American mind in particular has been trained to equate success with victory, to equate doing well with beating someone," wrote Elliot Aronson.

But success and competition are not at all the same thing. Put plainly, one can set and reach goals--or prove to one's own and others' satisfaction that one is competent--without ever competing. "Success in achieving a goal does not depend upon winning over others just as failing to achieve a goal does not mean losing to others." A moment's reflection reveals this as an undeniable truth. I can succeed in knitting a scarf or writing a book without ever trying to make it better than yours. Better yet, I can work with you--say, to prepare a dinner or build a house. Many people take the absence of competition to mean that one must be wandering aimlessly, without any goals. But competing simply means that one is working toward a goal in such a way as to prevent others from reaching their goals. This is one approach to getting something done, but (happily) not the only one. Competition need never enter the picture in order for skills to be mastered and displayed, goals set and met.
Given that success and competition are conceptually distinct, how are they related in the real world? Does competition really make us more motivated to complete tasks? To do these tasks well? To learn better? Let us turn to the evidence on achievement and productivity and then speculate on the reasons behind what it reveals.

**ACHIEVEMENT AND COMPETITION**

The question posed by this chapter's title requires a point of reference: is competition more productive than what? To ask this is to realize that it makes little sense to inquire whether competition has ever led anyone to be productive. It is far more useful to determine whether we are substantially more productive in competitive situations than in other situations - or, better yet, whether competition is sufficiently superior to other arrangements as to outweigh its costs. These other arrangements, as set out in chapter 1, are cooperation (working together so that my success is linked to yours) and independent effort (working alone so that my success doesn't affect yours). Some of the studies that are reviewed below contrast competition with one or the other, but a comparative picture of all three eventually emerges.

What we want to ask is this: Do we perform better when we are trying to beat others than when we are working with them or alone? It is necessary, of course, to specify the nature of the task, the measure of performance, the age and temperament of the subjects, the setting of the experiment, and a dozen other variables. But the evidence is so overwhelmingly clear and consistent that the answer to this question already can be reported: almost never. Superior performance not only does not require competition; it usually seems to require its absence.

This conclusion, to say nothing of the near unanimity of the data, will be astonishing to most readers--even those generally critical of competition. As the preceding chapter noted, we are carefully trained not only to compete but to believe that a competitive arrangement results in superior performance. This belief has practically attained the status of received truth in our society, so a consideration of the evidence could (or should, at any rate) have a profound impact on how our schools and workplaces are structured.

The great majority of studies cited in this chapter, as will quickly become apparent, have to do with education--or, more precisely, with learning tasks (anagrams, card games, problem solving, and so forth). Some are even set in the classroom and use standard curricular material. While subjects range in age from preschool to adult, most tend to be either undergraduates or in the elementary school range. Research measuring other kinds of performance is, unfortunately, in short supply, but what does exist along these lines supports the same conclusion.

Margaret M. Clifford assumed, as many of us would have, that a competitive game would help fifth-grade students to learn a set of vocabulary words. "However, contrary to prediction, neither performance nor retention was noticeably improved," she reported, and while the competition did seem to spark some interest, it did so mostly among the winners.' Morton Goldman and his associates discovered that undergraduates solved anagrams more effectively when they were cooperating rather than competing with each other. Abaineh Workic found "cooperation significantly more productive than competition" for high school students working on a card game. A well known experiment that Morton Deutsch conducted with college students in 1948 turned up the same result, and, when he returned to the topic twenty-five years later, he was able to cite thirteen other studies that replicated his findings.
A review of thirteen studies all showing that competition does not get results sounds impressive. But David and Roger Johnson and their colleagues published a far more ambitious meta-analysis (that is, review of others’ findings) in 1981. In what is surely the most conclusive survey of its kind, they reviewed 122 studies from 1924 to 1980 (only one of which overlaps with Deutsch's list, incidentally), including every North American study they could find that con achievement or performance data in competitive, cooperative, and/or individualistic structures. The remarkable results: 65 studies found that cooperation promotes higher achievement than competition, 8 found the reverse, and 36 found no statistically significant difference. Cooperation promoted higher achievement than independent work in 108 studies, while 6 found the reverse, and 42 found no difference. The superiority of cooperation held for all subject areas and all age groups.

A number of qualifications about these conclusions have been proposed, some of which appear to be valid. Cooperation is more effective when the group is smaller and when the task is more complex (particularly if it involves sophisticated problem solving). Cooperation's relative effectiveness depends on the degree to which subjects have to rely on each other in the means by which they accomplish a task. The more "means interdependent" the task, the more cooperation helps. In some instances, it is claimed, competition may produce better results--but only if the task is simple (such as rote decoding or carrying objects) and not interdependent at all. Even this caveat is questionable, however; the Johnsons contend that, at worst, the margin of cooperation's superiority is reduced in certain tasks.

Currently there is no type of task on which cooperative efforts are less effective than are competitive or individualistic efforts, and on most tasks (and especially the more important learning tasks such as concept attainment, verbal problem solving, categorization, spatial problem solving, retention and memory, motor, guessing-judging-predicting) cooperative efforts are more effective in promoting achievement.

Some of the older studies, including Deutsch's set up the cooperative condition so that the subjects were cooperating with others in their group but the groups were competing with each other. (This is similar to the arrangement in Japanese industry, which lately has attracted considerable attention in this country: employees within a given company work closely with each other and are encouraged to develop loyalty to the company, but the companies continue to compete with each other.) This cooperative/competitive arrangement led some scholars, reasonably enough, to ask whether the greater achievement levels in cooperative settings were not actually due to the intergroup competition. By now enough experimenters have controlled for this variable so that we can be quite certain the answer is no. Unequivocally, "performance benefits (from) cooperative conditions whether [they involve] additional intergroup competition or not," as Emmy Pepitone wrote in 1980. This may be because "students in an intragroup cooperation/intergroup competition situation behave primarily as if the intergroup competition did not exist.

In recent years, Deutsch and his associates have investigated not only the way tasks are set up but the way rewards are distributed. Among the possibilities are a winner-take-all system (which is what many contests amount to), a distribution proportional to accomplishment, and an equal distribution. Much as we tend to assume that competing boosts performance, so it is often taken for granted that the first two arrangements provide a crucial incentive for working hard: reserving a desirable reward for the winner is thought to promote excellence. A series of six
experiments with Columbia University students, involving tasks that ranged from decoding Japanese poetry to estimating the number of jellybeans in a jar, was devised to test this assumption. The results: When tasks could be performed independently - that is, when there was low means interdependence - the system of distributing rewards had no effect on how good a job they did. There was absolutely no evidence to suggest that people work more productively when rewards are tied to performance than when everyone gets the same reward. But for those tasks where success depends on working together, there was a clear difference. A system of equal rewards, Deutsch discovered, "gives the best results and the competitive winner-take-all system gives the poorest results.

Many of the studies I have been reviewing define achievement in a rather conventional, quantified way. Traditional examinations to measure what has been learned in a classroom, for example, are biased in favor of the competitive approach, and this may account for why some studies found no significant differences between competition and cooperation. It is remarkable, then, that even with such measures, competition does not work well.

Once we move from such measures of achievement as speed of performance, number of problems solved, or amount of information recalled, though, and consider the quality of performance, we find that competition fares even worse. Some of the rather primitive experiments in the 1920s that found people work faster at a mechanical task when they are competing nevertheless discovered that the quality of work was poorer under competitive conditions. More recent research confirms that "significantly more complex products were made in the cooperative condition than in the competitive condition" and that "the discussion process in cooperative groups promotes the discovery and development of higher quality cognitive strategies for learning than does the individual reasoning found in competitive and individualistic learning situations." Creative problem solving was similarly hampered by competition in a study of undergraduates. A 1983 German study found that the competitiveness of fourth graders (as measured by a 15-item picture test) correlated negatively with school achievement.

So far from making us more productive, then, a structure that pits us against one another tends to inhibit our performance. Children simply do not learn better when education is transformed into competitive struggle. To be sure, from the teacher's perspective it can be seductive to turn a lesson into a competitive game in order to attract and hold students' attention. But the real appeal of this strategy is that it makes teaching easier, not more effective; it circumvents rather than solves pedagogical problems. The fact that children seem to enjoy it says virtually nothing about how well it teaches them. And even the enjoyment may not be what it appears: the fact that a game is being substituted for the usual lesson-- rather than the competitive nature of this game-- could account for students' interest. Many teachers conclude that competition holds attention better even though they have never worked with cooperative alternatives. (Indeed, evidence reviewed in the last chapter shows that children tend to prefer cooperation once they have experienced it.)

Most of American education is highly individualistic, fueled by a competitive structure of evaluation. Sometimes competition (either individual or group) also finds its way into the curriculum itself. Given the unrelenting race for good grades, this more explicit use of competition strikes the student as perfectly natural. On the other hand, cooperation of the kind described in all these studies is unfamiliar--no more than an abstraction, really-- to many of us,
including teachers. It is worth considering in more detail how a cooperative classroom actually works.

Cooperation means more than putting people into groups. It suggests, rather, group participation in a project where the result is the product of common effort, the goal is shared, and each member's success is linked with every other's. Practically, this means that ideas and materials, too, will be shared, labor sometimes will be divided, and everyone in the group will be rewarded for successful completion of the task. Aronson, for example, conceived the "jigsaw method" of learning: When the task is to learn about the life of a well-known person, each member of a group is given information about one period of the individual's life. Members of the group are thus dependent on each other in order to complete the assignment. The brothers Johnson, by contrast, offered a straightforward assignment ("How many things can our group find that make a difference in how long (a) candle burns?") that involved less structured division of labor. Elsewhere they suggest setting up groups of students who represent a range of abilities and instructing them to help one another. "When everyone in their group has mastered the solutions, they go look for another group to help until everyone in the class understands how to work the problems.

Since "group performance in problem solving is superior to even the individual work of the most expert group members," it should not be surprising that students learn better when they cooperate. But the last technique--having students help one another--raises the question of whether students with lower ability are being helped at the expense of those with higher ability. Is this true? Knowledge, happily, is not a zero-sum product. Anyone who has taught or tutored knows that doing so not only reinforces one's own knowledge but often pulls one to a more sophisticated understanding of the material. The cliché about teachers' learning as much as their pupils is quite true, and the tutoring that takes place in a cooperative classroom actually benefits both the helper and the helped more than a competitive or independent study arrangement.

The evidence substantiates this view. As the Johnsons conclude:

There can be little doubt that the low and medium ability students especially benefit from working collaboratively with peers from the full range of ability differences. There is also evidence that high ability students are better off academically when they collaborate with medium and low ability peers than when they work alone; at the worst...[they] are not hurt.

Returning to the question in 1985, the Johnsons cited three studies that found gifted students are helped by such collaboration, one that found no difference, and none that found they were disadvantaged. A study Of 75 Midwestern second graders published that same year also reported that "high-, medium-, and low-achieving students all academically benefited from participation in heterogeneous cooperative learning groups." Moreover, earlier research discovered that tutoring occurred spontaneously when the consequences for learning were shared by the group--and that this "produced no long-term complaints from the participants in this experiment." Once again, "even the gifted (benefited,) possibly more than they would have under individual consequences." (The advantages of a cooperative structure in education, incidentally, extend beyond mere performance; chapter 6 will consider the interpersonal consequences of cooperation and competition.)
Most of these studies assess performance in terms of learning, with the schoolroom as the prototype if not the actual setting. But what of the rest of the world? Don't competitive conditions--or personal competitiveness--lead to better performance?

Research on productivity and competition in traditional work settings has been nowhere near as plentiful as the classroom data. The findings, however, are remarkably consistent with those on learning. One early study, which has become something of a classic in sociological investigation, was conducted by Peter Blau in 1954. Blau compared two groups of interviewers in an employment agency. In one, there was fierce competition to fill job openings. The other group worked cooperatively. Members of the first group, who were personally ambitious and extremely concerned about productivity, hoarded job notifications rather than posting them so everyone could see them, as they were supposed to do. This practice eventually was used defensively and so became self-perpetuating. Members of the second group, by contrast, told each other about vacancies. And it was this second group that ended up filling significantly more jobs--the clear index of performance.

A quarter century later, Robert L. Helmreich of the University of Texas and his colleagues decided to investigate the relationship between achievement, on the one hand, and such traits as the orientation toward work, mastery (preference for challenging tasks), and competitiveness, on the other. A sample of 103 male Ph.D. scientists were rated on these three factors based on a questionnaire. Achievement, meanwhile, was defined in terms of the number of times their work was cited by colleagues. The result was that "the most citations were obtained by those high on the Work and Mastery but low on the Competitiveness scale."

This startled Helmreich, who did not expect that competitiveness would have a deleterious effect. Could the result be a fluke? He conducted another study, this one involving academic psychologists. The result was the same. He did two more studies, one involving male businessmen, measuring achievement by their salaries, and the other with 1300 male and female undergraduates, using grade point average as the attainment criterion. In both cases he again found a significant negative correlation between competitiveness and achievement. Of the four studies, the one involving businessmen was particularly "exciting" to him because "the stereotype of the very successful businessman is of someone who is ... highly competitive"--a stereotype called into serious question by these findings. In fact, as he and his colleague Janet Spence later observed, the data "dramatically refute the contention that competitiveness is vital to a successful business career."

But Helmreich did not stop there. As of 1985, he had conducted three more studies. The first compared the standardized achievement tests of fifth- and sixth-graders to their competitiveness. They were negatively related. The second examined the relationship between performance of airline pilots and competitiveness. The relationship between the latter and superior performance was negative. The third looked at airline reservation agents and again found a negative correlation between performance and competitiveness. Seven different studies, then, with vastly different populations and measures of success, have all determined that intentional competition is associated with lower performance.

Helmreich's research is particularly important because it does not rely on a compound personality measure such as the "motive for success." Rather, it teases out competitiveness from the other components of this variable. Before this was done, researchers simply assumed that all
of these components were associated with better performance. Now it appears that competitiveness in particular is not. Other researchers who have used a comparable methodology have found the same thing. In the German study of fourth graders mentioned earlier, just as in Helmreich’s, competitive students did not get better grades. And psychologist Georgia Sassen, in the course of looking for differences between male and female students, also found a slight negative relationship between competitiveness and achievement.

Consider the question of artistic creativity. The little research that has been done suggests that competition is just as unhelpful here as it is in promoting creative problem-solving. In one study, seven- to eleven-year-old girls were asked to make "silly" collages, some competing for prizes and some not. Seven artists then independently rated their works on each of 23 dimensions. The result: "Those children who competed for prizes made collages that were significantly less creative than those made by children in the control group." Children in the competitive condition produced works thought to be less spontaneous, less complex, and less varied. In the long run, contests do not promote excellence among performing artists, either. Here is critic Will Crutchfield on the subject of piano competitions: "The emotional stamina to tough it out through round after round, as the competition winds on and the stakes rise, does not necessarily go along with the emotional sensitivity to make five minutes worth of truly remarkable Chopin." In a win/lose framework, success comes to those whose temperaments are best suited for competition. This is not at all the same thing as artistic talent, and it may well pull in the opposite direction.

Across many fields, the assumption that competition promotes excellence has become increasingly doubtful. Consider journalism, a profession that, while no more competitive than many others, is worth exploring by virtue of its unusual visibility to outsiders. The frantic race for news generates terrific levels of anxiety (and the attendant 12 psychological symptoms) on the part of journalists. Can we at least point to better reporting as a result of this competition? Setting reporters against one another in a battle for space on the front page or the first block of a television news show probably lowers the quality of journalism in the long run, and so, too, does the contest among news organizations for subscriptions or ratings. The latter is more likely to take the form of sensationalism, arresting graphics, or promotional games. A thorough study of science news reporting, which included interviews with 27 leading science reporters, led Jay Winsten to conclude as follows:

The most striking finding which emerged from the interviews is the dominant distorting influence of the "competitive force" in journalism. …Science reporters, based at preeminent publications, stated that competition for prominent display of their stories creates a strong motivation to distort their coverage.

Having to compete for space creates an incentive not for accurate reporting but for "hyping" a story—that is, exaggerating its significance. This tendency, Winsten adds, is complemented by the competition for publicity among scientists, hospitals, and universities; the combination practically assures that reporting will be distorted.

In any sort of journalism, the ordinary pressures of having to work on deadline are exacerbated by the pressure to get a story on the air seconds before the competition or to get a fact that another newspaper does not have. The result is that the public gets less information over the long run than they would have access to if the various news organizations worked together. Moreover,
news stories are more likely to be inaccurate and even irresponsible as a result of competition. When a jet was hijacked by Shiite Moslems in 1985, one observer blamed the "distorted and excessive coverage of terrorist incidents." A second on "the highly competitive nature of network television. critic independently came to the same conclusion, noting that "too many decisions are made on the basis of beating the competition rather than deciding how to act responsibly. The structure of competitive journalism creates a situation in which a professional or ethical inclination to forgo coverage--or at least to pause in order to consider the implications of running a story (or to double-check the facts)--is invariably overridden by the fear that one's rival will get the scoop. Such competitive pressures ultimately benefit no one, least of all the public. Working against, rather than with, colleagues tends to be more destructive than productive. This corroborates the bulk of evidence on the topic--evidence that requires us to reconsider our assumptions about the usefulness of competition.

EXPLAINING COMPETITION'S FAILURE

How can we make sense of the failure of competition to produce superior performance? Most of the studies reviewed here offer at best a couple of sentences in the way of explanation for their findings. Other writers have addressed the problem, but no one has yet collected these conjectures and sorted them out. That will be the task of this section.

The simplest way to understand why competition generally does not promote excellence is to realize that trying to do well and trying to beat others are two different things. Here sits a child in class, waving his arm wildly to attract the teacher's attention, crying, "Oooh! Oooh! Pick me!" The child is finally recognized but then seems befuddled. "Um, what was the question again?" he finally asks. His mind is on beating his classmates, not on the subject matter. The fact that there is a difference between the two goes a long way toward explaining why competition may actually make us less successful. At the beginning of this chapter, I argued that excellence and victory are conceptually distinct. Now I want to add that the two are experienced as different. One can attend either to the task at hand or to the enterprise of triumphing over someone else--and the latter often is at the expense of the former.

It is true, of course, that the relative quality of performance is what determines who wins in a competition, but this does not mean that competition makes for better performance. This is partly because those who believe they will lose may see little point in trying hard. The same is true for those who feel sure of winning. But even where there is enough uncertainty involved to avoid these problems, the fact remains that attending to the quest for triumph, to victory as such, to who is ahead at the moment, actually distracts one from the pure focus on what one is doing. Helmreich proposes this as one explanation for his surprising discovery that competition is counterproductive in the real world: "Competitive individuals might ... focus so heavily on outshining others and putting themselves forward that they lose track of the scientific issues and produce research that is more superficial and less sustained in direction. And, more succinctly: "They may become so preoccupied with winning... that they become distracted from the task at hand."

Let us see how this distinction plays itself out in different fields. I have already noted, in the case of piano competitions, that artistic excellence is not promoted by making performing artists compete. This is true for the same reason that anyone who wants to run for president may, ipso facto, be a bad choice for the job: those who enjoy--and possess the skills necessary for--a
competitive campaign may not be the kind of people we want running the country. (It is theoretically possible for one person to be both a good leader and a good campaigner, but these two talents are quite different and would coincide only by accident.) We find the same phenomenon even in sports, as philosopher John McMurty explains:

Actually, the pursuit of victory works to reduce the chance for excellence in the true performance of the sport. It tends to distract our attention from excellence of performance by rendering it subservient to emerging victorious. I suspect that our conventional mistake of presuming the opposite—presuming that the contest-for-prize framework and excellence of performance are somehow related as a unique cause and effect—may be the deepest-lying prejudice of civilized thought."

Consider a different sort of example: the case of competitive debate. This is an activity as consuming and, in its own way, as brutal as football. High school and college students spend their days and evenings preparing for tournaments in which they will debate a major issue of public policy. These tournaments require them to argue in support of a resolution in one round and then against it in the next. The practical emphasis in debate is on tying logical knots, sounding persuasive, and even speaking so quickly that an opponent cannot respond to all of one's arguments. The point is not to arrive at a fuller understanding of the question at hand or to form genuine convictions. Debaters develop considerable expertise as a result of their preparations, but this is only a means to victory. As for convictions, a premium is placed on not having any; believing in something could interfere with one's ability to win on both sides of the issue. This arrangement is usually defended on the grounds that it forces participants to see both points of view, but it does so in a way that promotes a kind of cynical relativism: no position is better than any other since any position can be successfully defended. When asked whether he personally supported a guaranteed annual income (which was that year's national high school topic), one debater of my acquaintance could answer only that this depended on which side he was on at the moment. A recent newspaper feature story carried the apt headline: "Young Albany Debaters Resolve Who's Best."

Regardless of the resolution under consideration, the exclusive focus of competitive debate is to determine who is the better debater.

Since the adversarial model on which our legal system is based works the same way, we might ask whether it truly serves the interests of justice or whether here, too, excellence and competition pull in different directions. Several legal scholars have begun to ask just this question, challenging one of the most sacrosanct institutions to have emerged from our commitment to competition. Here is Marvin E. Frankel:

Employed by interested parties, the process often achieves truth only as a convenience, a byproduct, or an accidental approximation. The business of the advocate, simply stated, is to win if possible without violating the law .... [He or she] is not primarily crusading after truth, but seeking to win ... [and these two] are mutually incompatible for some considerable percentage of the attorneys trying cases at any given time.

I. Nelson Rose, in a law review essay entitled "Litigator's Fallacy," takes the argument a step further: "it is a simple step for an individual to move from the belief in [the adversarial] system of justice to the belief that he has justice on his side. A litigator has to convince himself of the rightness of his client's case, how else can the gladiator go into battle?",. This invites unethical
behavior--using any means in the client's behalf - and, in the long run, makes for an inefficient and unjust method of resolving disputes. One writer has ridiculed the underlying assumptions of the adversarial system, for example, "Mutual exaggeration is supposed to create a lack of exaggeration. Bitter partisanship in opposite directions is supposed to bring out the truth. Of course," he continues, 64 no rational human being would apply such a theory to his own affairs."

Perhaps the tension between trying to do well and trying to win is most straightforward in the classroom. In his novel A Separate Peace, about competition between boarding school students, John Knowles contrasts two markedly different styles of learning:

I wasn't really interested and excited by learning itself, the way Chet Douglass was.... But I began to see that Chet was weakened by the very genuineness of his interest in learning. He got carried away by things; for example, he was so fascinated by the tilting planes of solid geometry that he did almost as badly in trigonometry as I did myself. When we read Candide it opened up a new way of looking at the world to Chet, and he continued hungrily reading Voltaire, in French, while the class went on to other people. He was vulnerable there, because to me they were all pretty much alike - Voltaire and Moliere and the laws of motion and the Magna Carta and the Pathetic Fallacy and Tess of the D'Urbertilles - and I worked indiscriminately on all of them.

Chet is "weakened" and "vulnerable" only from the perspective of a competitive individual, buttressed by a competitive system. While Chet, unconcerned with his grade point average, attends to what he is studying, the narrator is more concerned with strategy than with learning. His aim is to win, and this goal is necessarily achieved at the price of regarding the ideas he encounters as interchangeable. If this seems to describe many of the most "successful" products of our educational system, competition may have something to do with it.

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Actually, it may well be that genuine education, which is decidedly not the consequence of our schooling, may not even be its chief purpose. The point of competition, suggests education critic George Leonard, is "not really to help students learn other subjects, but to teach competition itself."

David Campbell similarly observes that "the whole frantic, irrational scramble to beat others is essential for the kind of institution our schools are ... [namely,] bargain-basement personnel screening agencies for business and government.... Winning and losing are what our schools are all about, not education." just as standardized testing chiefly prepares one to be a competent taker of standardized tests, so competition perpetuates itself - and often does so to the exclusion of the subject supposedly being taught.

Forcing children to compete is sometimes defended precisely on these grounds - that is, that early experience with competition will lead to more effective competition in later life. To some extent, this is true: one does learn strategies of competing by virtue of repeated exposure, just as one learns to regard other people as so many barriers to one's own success. But the distinction
between competition and the task at hand will be present in the future just as it is today, so competition will not be any more effective then than it is now. Moreover, many people's early unsuccessful experiences with competition will cause them to try to avoid competitive situations for the rest of their lives.

The idea that trying to do well and trying to do better than others may work at cross-purposes can be understood in the context of an issue addressed by motivational theorists. We do best at the tasks we enjoy. An outside or extrinsic motivator (money, grades, the trappings of competitive success) simply cannot take the place of an activity we find rewarding in itself. "While extrinsic motivation may affect performance," wrote Margaret Clifford, "performance is dependent upon learning, which in turn is primarily dependent upon intrinsic motivation." More specifically, "a significant performance-increase on a highly complex task will be dependent upon intrinsic motivation." In fact, even people who are judged to be high in achievement motivation do not perform well unless extrinsic motivation has been minimized, as several studies have shown.

Competition works just as any other extrinsic motivator does. As Edward Deci, one of the leading students of this topic, has written, "The reward for extrinsically motivated behavior is something that is separate from and follows the behavior. With competitive activities, the reward is typically 'winning' (that is, beating the other person or the other team), so the reward is actually extrinsic to the activity itself. This has been corroborated by subjective reports: people who are more competitive regard themselves as being extrinsically motivated. Like any other extrinsic motivator, competition cannot produce the kind of results that flow from enjoying the activity itself.

But this tells only half the story. As research by Deci and others has shown, the use of extrinsic motivators actually tends to undermine intrinsic motivation and thus adversely affect performance in the long run. The introduction of, say, monetary reward will edge out intrinsic satisfaction; once this reward is withdrawn, the activity may well cease even though no reward at all was necessary for its performance earlier. Money "may work to 'buy off' one's intrinsic motivation for an activity. And this decreased motivation appears (from the results of the field experiment) to be more than just a temporary phenomenon." Extrinsic motivators, in other words, are not only ineffective but corrosive. They eat away at the kind of motivation that does produce results.

This effect has been shown specifically with competition. In a 1981 study, eighty undergraduates worked on a spatial relations puzzle. Some of them were asked to try to solve it more quickly than the persons sitting next to them, while others did not have to compete. The subjects then sat alone (but clandestinely observed) for a few minutes in a room that contained a similar puzzle. The time they voluntarily spent working on it, together with a self-report on how interested they had been in solving the puzzle, constituted the measure of intrinsic interest. As predicted, the students who had been competing were less intrinsically motivated than those who had originally worked on the puzzle in a noncompetitive environment. It was concluded that trying to beat another party is extrinsic in nature and tends to decrease people's intrinsic motivation for the target activity. It appears that when people are instructed to compete at an activity, they begin to see that activity as an instrument for winning rather than an activity which is mastery-oriented and rewarding in its own right. Thus, competition seems to work like many other
extrinsic rewards in that, under certain circumstances, it tends to be perceived as controlling and tends to decrease intrinsic motivation.

Competing not only distracts you from a task at a given moment; it also makes you less interested in that task over the long run, and this results in poorer performance. In an article about female athletes, Jenifer Levin cited two studies showing that "when one does compete, intrinsic motivation tends to dramatically decrease, especially for women."

Again, this effect is especially salient in the classroom. The late John Holt put it well:

> We destroy the ... love of learning in children, which is so strong when they are small, by encouraging and compelling them to work for petty and contemptible rewards--gold stars, or papers marked 100 and tacked to the wall, or A's on report cards, or honor rolls, or dean's lists, or Phi Beta Kappa keys--in short, for the ignoble satisfaction of feeling that they are better than someone else.

This process is shameful for many reasons, but the one I want to stress here is the resultant decline in learning. Performance ultimately suffers from competition just as it suffers from the use of any extrinsic motivator.

One final observation: to the extent that an extrinsic motivator can have a positive effect, one of the most powerful motivators is not money or victory but a sense of accountability to other people. This is precisely what cooperation establishes: the knowledge that others are depending on you. The only stake others have in your performance under a competitive arrangement is a desire to see you fail.

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The distinction between trying to do well and trying to beat others is not the only explanation we can come up with for competition's failure. Competition also precludes the more efficient use of resources that cooperation allows. One of the clear implications of the research conducted by David and Roger Johnson is that people working cooperatively succeed because a group is greater than the sum of its parts. This is not necessarily true for all activities, of course; sometimes independent work is the best approach. But very often - more often than many of us assume--cooperation takes advantage of the skills of each member as well as the mysterious but undeniable process by which interaction seems to enhance individuals' abilities. Coordination of effort and division of labor are possible when people work with each other, as Deutsch saw.

Noncooperative approaches, by contrast, almost always involve duplication of effort, since someone working independently must spend time and skills on problems that already have been encountered and overcome by someone else. A technical hitch, for example, is more likely to be solved quickly and imaginatively if scientists (including scientists from different countries) pool their talents rather than compete against one another.

Here it is not competition that is peculiarly unproductive; any kind of individual work suffers from this drawback. But structural competition has the practical effect of making people suspicious of and hostile toward one another and thus of actively discouraging cooperation. (The evidence on competition and affiliation will be reviewed in detail in chapter 6.) This occurred to both Peter Blau and Robert Helmreich as they tried to make sense of their respective findings.
Blau's competitive employment agency workers "in their eagerness to make many placements ... often ignored their relationships with others"; their noncompetitive counterparts, meanwhile, enjoyed more "social cohesion [which] enhanced operating efficiency by facilitating cooperation." Helmreich likewise proposed that "highly competitive individuals may alienate and threaten others who are in a position to assist and support them in their activities."

The dynamics of cooperative effort make this arrangement far more efficient, while competitors hardly are predisposed to like and trust each other enough to benefit from it. Moreover, as the Johnsons point out, people who feel accepted by others also feel safe enough to explore problems more freely, take risks, play with possibilities, and "benefit from mistakes rather than [endure] a climate in which mistakes must be hidden in order to avoid ridicule." None of these is likely to occur when a potential partner has been transformed into an opponent--which is, of course, what competition entails.

Beyond the greater efficiency of cooperation, it is also true that competition's unpleasantness diminishes performance. While many people apparently enjoy competitive games--a subject to which we will return in the next chapter--it would seem that most of us find competition distinctly unpleasant in most circumstances. Recall, for example, the data indicating a preference for cooperation in both recreation and learning on the part of preschoolers through undergraduates (see pp. 31-32). Largely because it is more fun, but also because it is more productive--thus setting an auspicious cycle in motion - cooperation induces people to perform better. In the classroom, it also "promote[s] more positive attitudes toward the subject area and the instruction experience," thereby promising more intrinsic motivation and continued superior work in the future. The pattern that keeps appearing, in which competition not only fails to contribute to success but positively inhibits it, turns up again here. Not only is competition not enjoyable enough to elicit high achievement--it is a distinct cause of anxiety. Even if the tangible stakes (money, job, trophy, grades) are not always high when people compete, the psychological stakes invariably are. In any given competition, most people will lose. Anticipation of failure combined with--and fueled by--memory of previous failure is a recipe for agitation, nervousness, and similar emotional states that interfere with performance when they occur to any significant degree. Ruth Benedict describes Japanese adults who

began to make mistakes and were far slower when a competitor was introduced. They did best when they were measuring their improvement against their own record, not when they were measuring themselves against others .... They felt the competition so keenly as an aggression that they turned their attention to their relation to the aggressor instead of concentrating on the job in hand.

Of course this effect is far from uniform across all cultures or all individuals. It does, however, appear to be a widespread phenomenon even in a highly competitive society like ours, where one might have expected people to have become inured to the effect. In his study, Blau pointed to the reduction of anxiety in the cooperative group as another explanation for its higher productivity. Other studies, too, have discovered higher levels of anxiety among subjects who compete, which is, in turn, correlated with inferior performance. One line of research within behavioral psychology, in fact, regards competition as an aversive stimulus, rather like electric shock. To the extent that some people complete a task more rapidly in a competitive condition, then, it may be because they are attempting to end the competition as quickly as possible so as to escape from its unpleasantness.
Those who defend competition typically do not deny that it produces anxiety; instead, they insist that anxiety motivates us to perform better. It is true that slight anxiety can be productively arousing. The "Yerkes-Dodson law," as it has come to be known, states that there is an optimum level of arousal for every task, and that this level is lower for tasks that are more complex and difficult. But it would seem that competition often produces inhibiting levels of anxiety. At best, the stressfulness of a competitive situation causes us to try to avoid failure. And trying to avoid failure is not at all the same thing as trying to succeed. On the contrary, as the well-known motivation theorist John Atkinson wrote, "The tendency to avoid failure ... functions to oppose and dampen the tendency to undertake achievement-oriented activities." The need to cut one's losses often results in reluctance to enter the competitive arena in the first place: deciding not to apply for the job or promotion, staying away from competitive recreation, remaining silent in the classroom, and so on. The person trying to avoid failure who is forced to compete may, paradoxically, become so agitated as to bring on failure--and this can happen irrespective of the task's nature or difficulty. In any case, he or she certainly will not be in an ideal state for creative problem solving.

While this effect is very widespread, it will naturally be most pronounced among those who believe, rightly or wrongly, that they stand little chance of winning. Competition will lower achievement markedly for such individuals--which seriously affects the performance of the whole group (class, corporation, society). One way a competitive culture deals with those who find competition unpleasant, of course, is to accuse them of being "afraid of losing." This language typically is used for purposes of derogation rather than explanation. The people who use such language often imply that fear is the only reason competition is opposed. Michael Novak, for example, refers to "those who deplore (and secretly dread) the intense competitiveness of American life,,, while Christopher Lasch transforms criticism of competition into "distrust" and then asserts that this distrust "seems to originate in a fear that unconscious impulses and fantasies will over-whelm us if we allow them expression."

This is really a fancy version of taunting one's playmates by calling them chicken. It impugns the courage of critics--and perhaps their manliness, too, if one reads between the lines. But it is also a clever rhetorical move: it counter poses those who can offer reasons for their advocacy of competition with those who oppose it solely because of their emotional state. Furthermore, those who refer to a "fear of losing" mean to imply that this is a shameful reason for avoiding competition or for allowing it to adversely affect one's performance. Many support a system that elicits such fear, saying, in effect, "Let the losers drop out if they can't take the pressure." Here I will not belabor the cruelty of this position--which is considerable in light of the number of people to whom it applies - nor attempt a psychological analysis of those who offer it. Instead, let me merely observe that the state in which many people find themselves during competition--whatever we choose to call it--apparently reduces the quality of performance and goes a long way toward explaining the evidence offered in the last section that competition does not promote excellence.

**PRODUCTIVITY: BEYOND THE INDIVIDUAL'S PERSPECTIVE**

The fact that we do not generally do our best in a competitive situation will strike some people as being beside the point. Here are two hungry individuals; there is one dinner. Here are ten unemployed laborers; there is one job. How can the individuals involved be expected to do
anything but compete? Isn't competition the most productive response--indeed, the only rational one?

The answer, I will argue, is that it depends on the perspective we take and even on our definition of rationality itself. Calling our basic assumptions into question tends to make habitual solutions seem much less obvious. Consider the question of whether a person being shot at is morally permitted to shoot back. We can offer a definite opinion--or any opinion, for that matter--only if we have accepted at face value a hypothetical situation (condensed into one sentence) that freezes the action. When we watch the whole film, so to speak, other questions present themselves: Is the first person a marauder invading the second person's home? Are there less deadly means of self-protection? Will returning fire result in the deaths of many others?

The case of competition is analogous. Competing for a job or a plate of food is a reasonable choice only if we restrict our vision to the situation as it exists in a given instant--if we disregard causes, consequences, and context. Really, we should want to know why the desired object is in short supply, what might have prevented this situation from having developed in the first place, how a competitive response will affect the two individuals tomorrow (as well as what other consequences it will have), and so forth.

Let me propose two different shifts in perspective, one radical and the other moderate, both of which will have the effect of making competition seem far less necessary or productive. The first shift proceeds from a question that very few of us ever ask: Whose advantage is being considered? In the traditional Western picture--and specifically that of classical economic theory--the very idea of rational behavior pertains to the individual. Decisions are based on the costs and benefits to the single actor, and a society is construed as just a collection of such actors. An individual theoretically chooses to accept the burdens of belonging to a society if it is in his or her own personal interest to do so.

This point of view has become second nature to us in the Western world, but as with so many other values and behaviors, there is no evidence to show that it is an inevitable feature of human life. Even contemporary China and Japan--to say nothing of less industrialized societies--contain elements of a qualitatively different world-view in which the group's well-being is the standard by which decisions are made. The singular self is thought to be an illusion in certain cosmologies; the costs and benefits to any particular individual are seen as irrelevant in certain social systems. "But what do I get out of it?" - a question posed continually and unashamedly in the West--seems appallingly selfish or even difficult to understand in other parts of the world.

This collectivist or holistic perspective, incidentally, has at least as much claim to the title of "natural" as the individualist perspective to which we are wedded. The biologist V. C. Wynne-Edwards has proposed that evolution can more usefully be understood at the level of the group instead of at the level of individual organisms. Much animal behavior--including sacrifices and other acts that have been likened to altruism--makes sense when interpreted in terms of benefits to the whole group.

When we compete, we do so out of a primary concern for our own welfare. If the welfare in question is instead that of a group of people, then cooperation follows naturally. Working together as a group would not be a strategy for maximizing individual gain but a logical consequence of thinking in terms of what benefits all of us. Will I lose in order that the group
will gain? Sometimes such a tradeoff will occur, but it will not be seen as catastrophic. More to the point, this question would not even occur to someone whose worldview is different from our own. It would seem as odd as your feet asking whether the body as a whole benefits from jogging at their expense.

Shifting to a concern for the group's welfare, which constitutes a change of goals, involves a radically different way of looking at the world. But even if we keep our individualism intact, an inquiry into various strategies for satisfying ourselves suggests that competition still makes little sense. The practice of trying to beat others, which derives from the assumption that my success depends on your failure, is productive only in the short run. If we evaluate our success over the long haul—a relatively modest shift in perspective that continues to ignore the question of what is best for the group—working together often benefits us as individuals.

Consider Garrett Hardin's notion of the "tragedy of the commons." From the perspective of each cattle farmer with access to a public pasture, it is sensible to keep adding animals to his herd. But the same reasoning that makes this decision seem sensible to one individual will make it seem sensible to all individuals. Each will pursue his self-interest, the grass will be depleted, and everyone will lose. (If the farmers competed to feed more of their own cattle, or to get there first, the process would simply be accelerated: the more competition, the faster everyone loses.) In order to see this, we must adopt the perspective of the group. But even if we adopt this perspective temporarily, with our ultimate purpose still being to benefit each individual, it becomes clear that cooperation is more productive.

There are countless other examples of how cooperation works better than the competitive or independent pursuit of private gain. To cite a few:

- The economist Fred Hirsch pointed out that each individual in a crowd is able to see better by standing on tiptoe, particularly when others are doing so. But everyone would do better if no one stood on tiptoe.83
- Each individual thinks it in her interest to rush for the exit when fire breaks out, but a cooperative escape protects everyone's interests and saves lives.
- Each hockey player is reluctant to wear a helmet when others are not doing so, since it restricts his vision. But a group decision to wear them benefits everyone by reducing the risk of serious injury.
- Social change that will benefit all workers can take place only if collective action supersedes the quest for individual rewards. "The achievement of short-run material satisfaction often makes it irrational [from an individual perspective] to engage in more radical struggle, since that struggle is by definition against those institutions which provide one's current gain." This is precisely why "divide and conquer," along with the practice of co-opting activists, is such an effective strategy for maintaining the status quo—and why the individualist worldview is a profoundly conservative doctrine: it inherently stifles change.

The most thoroughly documented example of how cooperation is a more effective means to personal gain - and how working at cross-purposes has the paradoxical effect of hurting
everyone--comes from the Prisoner's Dilemma (PD) game that is so popular among psychologists (see footnote on page 29). Each of two players--you and another--simultaneously chooses to "cooperate" or "defect," and your decisions, taken together, determine the reward.

Both cooperate: You cooperate; the other defects:

You: 3 You: 0

Other: 3 Other: 5

You defect; the other cooperates: Both defect:

You: 5 You: 1

Other: 0 Other: 1

Here is the intriguing part: if the other person has defected, your losses will be cut if you defect, too. On the other hand, if the other person has cooperated, you can maximize your gain by defecting. From a strictly individual perspective, then, it seems rational to defect in either case. But seen as a unit, the two players do best when both cooperate. In the long run, each player does best when both cooperate. The game is somewhat contrived, of course, but its point is readily applicable to real life. Many of us pursue strategies that appear to be productive just so long as our standard remains what is in our own immediate best interest. When our perspective is widened we can see how this strategy is self-defeating to the community and, ultimately, even to ourselves.

Political scientist Robert Axelrod used the PD game to help determine whether individual nations would do better by cooperating or competing--a question firmly rooted in conventional Western individualism. He invited game theorists to submit computer programs with PD strategies; each program was then matched against all the others. The most successful entry (TIT FOR TAT) was the one that began by cooperating and then simply reciprocated the opponent's last move. A second tournament elicited more devious strategies, many of which included frequent defections, but TIT FOR TAT won again. Axelrod notes that this program "succeed[ed] by eliciting cooperation from others, not by defeating them," and he concludes that cooperation based on reciprocity can get started in a predominantly noncooperative world, can thrive in a variegated environment, and can defend itself once fully established." He stresses that people (or nations) are most apt to cooperate when they are relatively likely to have to deal with each other again in the future. (Other research with PD demonstrates that players do better--that is, cooperate more consistently--when they are given the chance to talk with each other beforehand.)

The first shift in perspective--from considering what benefits me to what benefits the group--entails seeing most of Western political science and economics as fundamentally misconceived. Adam Smith asserted that when each person endeavored to further his or her best interests, each person gained. To someone who has rejected an individualist ethic, this proposition rests on a faulty assumption--namely, the a priori belief that our analysis should be based on the solitary actor. The second, more moderate shift in perspective--which leaves our worldview similar to Smith's but offers a long-range view--leads us to conclude that the prime theorist of capitalism was simply wrong. Everyone does not benefit when we struggle against each other for private
gain. It is a simple matter of examining the evidence. To distinguish between what is rational for the individual and what is rational for the group is finally misleading because the former is "not rational, period. It is damaging not just to the group, but to the individual."

But even this modest conclusion seems radical in light of our current zero-sum mentality. Having thoroughly assimilated the attitude that the better I do, the worse you do (and vice versa), we are not open to mutually advantageous agreement or cooperation of any kind. The costs can be high. The nightmarish problems now facing Mexico City, for example, are explained by its mayor as follows: "With our attitude in the past and perhaps also in the present, we have disordered this city because we have put individual interests before the collective interest."89 Similarly, although nuclear war benefits no one, some Americans take Soviet endorsement of any arms control agreement as sufficient reason to oppose it: if it's in their interest, it automatically must be against our interest. The enormous potential in mutual benefit (cooperative) strategies will not be tapped—or even understood—until we broaden our perspective beyond the narrow prejudice that we always do best by trying to beat others.

**ECONOMIC COMPETITION**

In considering the social features of productivity, this chapter already has broached the matter of economic competition. This is a subject almost impossible to avoid in the course of exploring the effects of competition in our culture—particularly inasmuch as our economic system may well be the prototype of competition from which other varieties derive. (Capitalism can be thought of as the heart of competitiveness in American society.

Interestingly, most critics of capitalism are concerned not so much with the competitive basis of the system as with the fact that this competition is, in practice, unfair. Surely this criticism is well earned: it is a curious race indeed in which one competitor must try to scramble up from poverty while another starts out with a huge trust fund. A multinational corporation, similarly, has the capital and the tax advantages that allow it to trounce—or simply acquire—a small competitor. Once a business becomes large enough (e.g., Chrysler, Lock-heed, Continental Bank), it simply cannot be allowed to fail. The result is that most sectors of the economy are becoming ever more concentrated, with a handful of concerns controlling the lion's share of business. Other profound inequities exist in an economy whose competition is so grossly unfair—or, to use the euphemism of choice, "imperfect." More than half of the largest 250 corporations paid no taxes (or received rebates) in at least one of three years in the mid-1980s, while forty to fifty million Americans live in poverty.

Despite the enormous discrepancy between perfect competition and the actual state of our economic system, competition is still the stated ideal. Businesspeople and public officials use the term as an honorific, discussing ways in which they can make their companies and countries "more competitive" and never pausing to ask whether a competitive system really is the best possible arrangement. Even progressive thinkers have come to identify true competition as the (rarely realized) ideal and cooperation, manifested as collusion, price fixing, and so on, as the salient evil.

When critics see things this way, they do not mean to repudiate genuine cooperation; they are simply accepting (often unconsciously) the premises and vocabulary of corporate capitalism. Within this framework, the word cooperation signifies little more than violation of antitrust laws.
But critics of our economic system have, I think, made a serious mistake in accepting competition as a theoretical good and directing their energies to the question of how best to attain it. This not only has a stultifying effect on the discussion of economic issues; it spills over into other realms. Competition becomes generally identified as desirable and alternatives are regarded with suspicion when they are regarded at all. We need to develop a critique that will question the productiveness of competition itself and not simply assume that we are going about it in the wrong way. The following discussion will take this tack, although it will not provide anything like a comprehensive critique. It will simply raise a few questions about the value of a competitive economic system.

* * * * *

Economics is the study of how commodities are produced, distributed, and consumed. Most economists see their job as finding the most efficient means of satisfying demand for these commodities. Competition is justified on the grounds of its putative efficiency and, further, its usefulness at stimulating growth. The first question one could ask - although in practice almost no one does - is whether economic growth is always desirable. Paul Wachtel, in his book *The Poverty of Affluence*, shows how such growth entails significant costs to our health and safety, makes our working lives unhappy (for all we might gain in quality of life as consumers, we lose as producers), fails to bring about greater equity, and actually represents a desperate and futile attempt to compensate for psychological and social deficiencies.

But let us assume for the sake of the argument that producing more goods is a legitimate goal. Does a competitive system represent the best way to meet this goal? We have considerable reason to doubt that it does.

- Working to maximize individual gain by competing against others can be counterproductive in the long run, as the last section suggested.

- The evidence already reviewed from Robert Helmreich demonstrates that competitiveness does not make people more productive--even when productivity is measured by a businessman's earnings. Other data confirm that structural competition promotes achievement less well than cooperation in a variety of settings. The obvious question is why this should suddenly cease to be the case when we turn our attention to the economic system as a whole.

- At least one study has found that competitive behavior appears more frequently and more vigorously on the part of children with lower socioeconomic origins. We should be cautious in interpreting this finding: it may be that competition is a socialized response to poverty, an attempt (however misguided) to improve one's condition. Alternatively, it may reflect the fact that competition appears to be particularly stressed in lower-income schools. But such a finding, considered alongside Helmreich's, suggests that competition may just be counterproductive.

- Margaret Mead's cross-cultural studies led her to conclude that cooperation is more effective than competition at maximizing production. A more recent review of the research forced Roderic Gorney to acknowledge that achievement on the part of a society did not depend on its competitiveness (see P-38)
The case for the desirability of economic competition is usually made as a result of assumptions about scarcity. Mead emphasizes that it is cultural norms and not objective scarcity that determine whether a society's economic system is competitive, but one could still argue that competition is the best arrangement for dealing with scarcity. The subject deserves attention.

By "scarcity," most of us mean that goods are in short supply: there isn't enough of something to go around. While there often is no clear-cut understanding of what constitutes "enough," the simple fact is that there is more than sufficient food to sustain everyone on the planet. The same is true of land and renewable energy. The important question, then, is why the staples of life are so egregiously maldistributed--why, for example, the United States, with a little more than 5 percent of the world's population, uses something like 40 percent of the world's resources. What appears to be a problem of scarcity usually turns out, on closer inspection, to be a problem of distribution. But mainstream economists are notably unconcerned with distributional issues: they talk only about whether a given system is productive or efficient, and it is up to us to ask, "For whom?" A high gross national product tells us nothing about who has access to the goods; likewise, the absence of goods on the part of particular individuals or nations raises the question of whether someone else has a surfeit.

The point is this: if there is enough of the necessities to go around but they are not going around, the debate must shift to the impact of competition on matters of distribution. Can the inequities be blamed on competition itself? Even if not, the key question is whether more competition would rectify the situation. It is hard to imagine how it could. Whoever has more resources is far more likely to win a contest, thus giving her even more resources for the next contest, and so on until the opponent is utterly vanquished or someone steps in to stop the competition. Government regulations and income transfer mechanisms--which free-market apologists correctly identify as limitations on pure competition--are all that prevent inequities even more pronounced than those now in existence. To take another kind of evidence, Gorney demonstrated a significant correlation between competition in a culture and the presence of sharply delineated "have" and "have-not" groups (see p. 38). On whatever grounds competition might be defended, equity simply cannot be considered one of its benefits. Thus it would seem to be precisely the wrong strategy for dealing with the maldistribution of goods, which is perhaps the most critical economic reality to be addressed.

When economists talk about scarcity, however, they generally are not using the word to mean that goods are in short supply. Their technical use of the term refers instead to (1) the fact that choosing one commodity involves giving up the chance to have another, or (2) the presumed failure of people to be satisfied regardless of how much they have. Let us take these in turn.

The first usage defines a scarce good as one for which a consumer would give up something else. Scarcity, then, concerns the exclusive relationship between commodities. This may be a useful way of looking at the world in some respects, but it tells us nothing about the absolute status of a given commodity. The model is set up so all finite goods will always be considered "scarce"; the availability of each is being evaluated vis-a-vis the others. By definition, no economic system can remedy this state of affairs, so competition is no more sensible a way to deal with scarcity than any other arrangement.

The second definition rests economic theory on a very questionable (but rarely questioned) assumption about "human nature"--namely, the belief that we will always want more of
something than we had before or more than the next person has. Far more reasonable is the proposition that insatiability and competitiveness reflect cultural mores. As Wachtel saw, "Our obsession with growth is the expression of neither inexorable laws of human nature nor inexorable laws of economics.... It is a cultural and psychological phenomenon, reflecting our present way of organizing and giving meaning to our lives ... [that] is now maladaptive.

This position defines scarcity as a matter of psychological state (perception or desire) rather than objective fact. Some social critics have gone along with this approach but have shown that this state, which is often used to justify competition, actually is a product of competition. Specifically, it is argued, capitalism manufactures scarcity's Capitalism's driving force is the quest for profits; its alleged success at satisfying human needs is merely a fortuitous by-product. This goal requires the continuous--indeed, constantly expanding--consumption of goods, and these goods will be purchased only if they are desired. The advertising industry exists to create this desire, to produce a continual dissatisfaction with what we currently have and to tell us of the fulfillment that purchasing yet another product will bring. *We must be "educated" as to the desirability of low-caloric TV dinners, cordless telephones, and this year's model of video recorders. ["The cost of this advertising is, of course, passed through to the consumer, often accounting for a substantial proportion of the total purchase price--and offering yet another reason to doubt claims of competition's efficiency.] The sociologist Philip Slater has written lucidly on this topic, and he is worth quoting at length:

Scarcity is spurious.... It now exists only for the purpose of maintaining the system that depends upon it, and its artificiality becomes more palpable each day.... Inequality, originally a consequence of scarcity, is now a means of creating artificial scarcities. For in the old culture (the dominant disposition of American life), as we have seen, the manufacture of scarcity is the principal activity. Hostile comments of old-culture adherents toward new-culture forms ("people won't want to work if they can get things for nothing .... people won't want to get married if they can get it free") often reveal this preoccupation. Scarcity, the presumably undesired but unavoidable foundation for the whole old-culture edifice, has now become its most treasured and sacred value, and to maintain this value in the midst of plenty it has been necessary to establish invidiousness as the foremost criterion of worth. Old-culture Americans . . . find it difficult to enjoy anything they themselves have unless they can be sure that there are people to whom this pleasure is denied.... Since the society rests on scarcity assumptions, involvement in it has always meant competitive involvement."

A competitive economic system offers itself as the best way to deal with scarcity (here defined as the inability of consumers to get enough) while quietly promoting scarcity. The result is the perpetuation of the system and, not incidentally, the encouragement of intentional competition. Capitalism works on the same principle as a glass company whose employees spend their nights breaking people's windows and their days boasting of the public service they provide.

Manufactured scarcity, of course, is not limited to economic matters. Every contest that is staged (the most facts memorized, the fastest runner, the most beautiful) involves the creation of a
desired and scarce status where none existed before. Social psychologist Emmy Pepitone emphasizes the artificiality of this status:

There seem to be exceedingly few essential objects that are so unique that they can be possessed only by one person. In the state of nature, most objects come in a form that can be shared by a large number of people.... Uniqueness seems to be invented by humans, who invent activities deliberately designed to allow en" into the goal region to one individual only.

This process can occur even without formal contests. Charles Derber, for example, has described at some length the competition for attention in a conversation. "While attention is not intrinsically 'scarce,"' he argues, "it tends to become so under ... individualistic conditions of allocation and distribution." To ask whom I listen to or care for the most is to turn attention or love into a finite commodity.

To return to economics, neither a specialized nor a commonsense definition of scarcity leads us to accept competition as the most rational or appropriate system. If we view scarcity as a function of expanding human desire, this situation is largely created by the very system recommended to us as its solution. If we view scarcity as a situation of objective insufficiency, then the real problem turns out to be one of distribution--something that competition is more likely to exacerbate than remedy. In any case, the assumption that a competitive economic system is productive presupposes that competition stimulates optimal performance--something we now know to be false.

If any benefits can still be claimed for economic competition, they must be weighed--as any economist should insist on principle--against the disadvantages. The psychological and interpersonal costs of competition, per se, will be discussed in later chapters, but there are some unique problems with competition in the economic sphere that should be sketched here. I have already suggested that competition may contribute to an inequitable distribution of resources. But there is also the matter of its failure with respect to the standards favored by economists: competition may be unsuccessful even on its own terms.

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In 1940, Lawrence Frank listed some of the costs of economic competition. He included business failures, copious litigation, idle equipment, a reduction in quality, unsafe working conditions, and the need to regulate the private sector in order to keep all of these problems under control. These problems were experienced most dramatically in the laissez-faire economy of the last century, which, according to economist John Culbertson, "performed badly, provoking general demands for reform and regulation. The country's 'production miracle' occurred in the Second World War, under the wartime economic controls."

When regulation is cut back in order to bring more competition to the marketplace, we again witness the true consequences of this competition: its advantages often prove illusory or short-lived or selective. A few examples:

- The recent deregulation of the airline industry, has, it is true, led to lower fares on busy routes (e.g., New York to Los Angeles), but service to less heavily traveled cities is either
much more expensive or no longer available. Precisely the same thing happened when bus companies were able to compete without regulation: they "cut out less-profitable routes, and the cheap service that the young, the elderly and the poor have historically depended on (was) less, available."

- Increased competition for large depositors has led banks to offer high-interest accounts. But how do banks pay for this? They have either had to make riskier, high-interest loans or jack up fees and minimum requirements on small accounts, thus penalizing poorer people.
- Is it advantageous to have book publishers compete for the rights to publish a desirable manuscript? The author may receive extravagant sums, but this often means that there is less money for other authors (whose names cannot guarantee enormous sales); arguably, the reading public loses, too.
- States compete fiercely for business investment by lowering their taxes. The corporations benefit, but citizens lose critical services when the tax base declines.

Examples of this sort are limited only by the varieties of economic competition. I am intentionally calling attention to cases where it is competition itself--rather than unfair competition--that is involved. A fierce price war between two giant conglomerates often has the effect of driving small businesses out of the market, and even apologists of capitalism usually acknowledge this is not desirable. I would contend that this is the rule rather than the exception in our economic system - as rapid concentration in virtually all sectors demonstrates--and I would also argue (though I will not follow through %ere) that such unfairness inevitably develops as a result of competition itself.

This aside, competition is of questionable value. The watchword of classical economics, that competition keeps prices down, is far from obvious. When economists are presented with counterexamples, they sometimes respond by saying that the higher price (for, say, an airline ticket) is perfectly appropriate since this is its "natural" price. But in what sense is it natural? In that the market (i.e., a competitive system) decrees it. Since the value of the competitive system is precisely what is at issue, it begs the question to say that anything resulting from the system is ipso facto justified. We need to ask whether it is really true that competition is the most efficient arrangement across the board. A comprehensive investigation is beyond the scope of this book and my competence, but these few remarks may at least open this dogma to question.

Beyond the matter of prices, let us ask what effect competition has on quality. Even if the race for profits results in a higher speed of production and greater volume, this may well come at the expense of quality. Norman Lear, for example, insists that the dreadful mediocrity of television programming is a direct result of competition among the networks. Earlier I noted that trying to be number one and trying to do a task well are two different things; here we may observe the relevance of this distinction to economics. "The aim of competition often becomes one of winning the market rather than producing a better product," argues Arthur W. Combs. "Competition seeks to prove superiority, even if it does not exist. It places the emphasis upon capturing the buyer rather than producing a better product." It is exactly in this vein that Sinclair Lewis has Babbitt hear a confession from his friend in the roofing business: "'You know, my business isn't distributing roofing--it's principally keeping my competitors from distributing roofing. Same with you. All we do is cut each other's throats and make the public pay for it!'" Similar examples can be found in virtually any competitive sector.
Competition may reduce not only quality but safety. With airplanes, as with most products, "the best design from an economic standpoint is the worst thing for safety";... the more ferocious the competition among manufacturers, the less consideration we can expect that safety will receive. "While no manufacturer would build an unsafe aircraft intentionally," argues Frederick C. Thayer, "competitive pressures can affect judgments.... The race to 'keep up' may have introduced hidden dangers." What is true of the shoddily assembled DC-10 is true of the dangerous drug that a pharmaceutical firm has marketed hastily in order to beat its rivals or of the wastes spewed out by a business that feared installing pollution control equipment would cause it to lose its competitive edge.

Let us not overlook, finally, the noneconomic costs of economic competition, which have been said to include a loss of community and sociability, a heightening of selfishness, and such other consequences as anxiety, hostility, obsessional thinking, and the suppression of individuality." In all, we may conclude from this admittedly incomplete discussion that economic competition of any kind may be a more dubious proposition than is generally assumed. This, let me emphasize again, is not to suggest that criticism of unfair competition is misplaced or that all kinds of economic competition are equally harmful. (The typical competition among workers for jobs and the atypical competition among employers for workers are hardly equivalent, and neither are competition between a small family business and a giant corporation, on the one hand, and between two family businesses, on the other.) Let me also acknowledge that this discussion, intended to raise questions about the fundamental bases of our current economic system, does not include a consideration of alternatives. It may well be that a centralized economy--even one based on group-interest rather than self-interest principles--cannot function without some kind of competition. But this should lead us to investigate decentralized possibilities--small-scale cooperatives, for example--rather than to shrug our shoulders and accept the inevitability of competition. There is good evidence that various cooperative models in the workplace are considerably more productive than competitive businesses. 114 This search for noncompetitive alternatives will be informed not only by this consideration of productiveness in the economic realm but by all the research reviewed in this chapter--research that challenges the myth of competition's contribution to achievement. The End