

Bare Knuckles (c. 1870) by George A. Hayes

Endangered Pastimes

Sports are among the greatest of human pleasures and, in the age of Shaquille O'Neal and Emmitt Smith, constitute one of America's biggest industries. They are also, as the sociologist Norbert Elias observed, an essential part of the "civilizing process." Scanning the contemporary world of sports, our contributors explore the human value of athletic competition and discuss the challenges posed to sports by celebrity, money, performance-enhancing drugs, and technology.

WHY SPORTS MATTER

BY WILFRID SHEED

t's hard to say exactly when the new era began, but at some point lost in the smog of the 19th century, sports went from being officially a bad thing to being a very good thing indeed, virtually a pillar of state. England, where it all began, was coming into its maturity as an imperial power and the Industrial Revolution was turning country boys into city boys overnight, and society's guardians began to look at all forms of entertainment in the light of these developments, but especially at sports.

Thus preachers, who had previously considered sports the devil's work, open invitations to brutishness and gambling (how times have changed!), gradually perceived that they might be rescued and cleaned up in the service of the Lord—and what was good for God was good for England; likewise schoolteachers, who had once punished idle play, decided to join, not resist, and they began to enforce organized sports with such severity that some children grew to loathe and fear the very word "recreation."

And finally the last, because they had the most to lose, holdouts—Dickens's mythic factory owners, along with morehumane businessmen—came round too, on the understanding that if the workers must have some time off, there were worse ways to spend it than in a rule-bound, open-air, referee-dominated contest of skill and strength.

But perhaps the greatest benefit of all, to judge from the fuss that would be made about it, was that sports not only outlawed cheating but drilled its devotees to detect and despise it in each other and by extension in themselves. This was crucial. A nation on the verge of great transactions—a nation also in the midst of a population explosion that might have reduced it to Third-World, or at least downtown-Los Angeles, status overnight—needed a citizenry it could trust. Indeed, the English would go on to make such a fetish of fair play that it became an international joke. Yet the empire was sustained by this fetish at least as much as by force, and the British sportsman's knack of combining slyness and decency continued to baffle and frustrate more cynical nations right to the end.

ut in promoting sport so zestfully, the powers that be had unwittingly unleashed a small monster of their own, albeit a wholesome one. By the '90s of this century, sports worship had grown and taken on a life of its own, beyond the wildest dreams of Thomas Arnold (1795–1842), the English public school headmaster who might be considered the founding father of the Sports and Character movement. And the educational establishment, having faithfully drummed sports into its charges, must now pause at some point to tell them-and itself-that "it's only a game," and prove it to them, or else watch sports grow and grow until they bury both the establishment and its schools: a force that can take on Sex can easily roll over Education. The president of a major university, writing in the New York Times op-ed page a few years ago, said that he wanted academics to be on a par with athletics at his place, a strangled cry which suggested that the monster was already standing on his chest close to his windpipe.

Thus, too, the clergy must worry about idolatry and the sin of False Worship, and the business community about the sheer waste of time and emotional energy committed to sport. A fan, perhaps even more than an athlete, who gets some of his obsessive energy out of his system by playing can become so psychologically enmeshed in sports that the rest of life seems like a rather boring dream that must be gotten through somehow. Thus transfixed, one can sleepwalk one's way through anything from a dull job to an oppressive regime to a marriage that could possibly use some attention.

he good and the bad of sports are exquisitely balanced even at the best of times. Victory and defeat induce respectively a joy and despair way beyond the run of normal human experience. When a politician says he hates something viscerally—whether it's John Major on terrorism or Senator Windbag on flag-burning—one doubts his insides are much disturbed: as Dr. Johnson might say, he will eat his dinner tonight.

But a sports fan who has seen a sure victory slip away in the bottom of the ninth, or the work of a whole season obliterated by a referee's call in overtime, is disconsolate beyond the power of description, although Sophocles comes close. This author experienced such grief over the defeat of the Dodgers by the Cardinals in 1942 as an 11year-old should not be asked to bear. An adult inflicting such pain on a child would be thrown in jail.

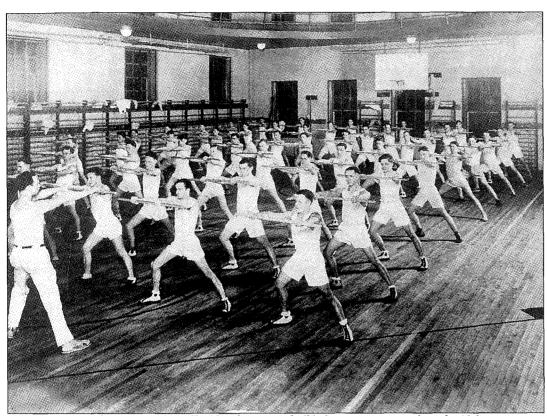
Yet I got over it, and was all the better for it, recovering sufficiently to root for the Cardinals over the hated Yankees in the World Series. This cycle of make-believe deaths and rebirths can actually be the healthiest thing about sports, or the most dangerous, depending on how you handle it. At its worst, it can cause riots and death, but at its best the pain of defeat is cleansing and instructive, a very good rehearsal for life.

Upon reading the second volume of William Manchester's life of Churchill, *The Last Lion* (1988), I was struck by the fact that the lion in question was splendidly imperturbable about such matters as the rise of Hitler and the fall of Poland, but was completely unstrung by any blow to his vanity, such as losing a by-election or failing to get a cabinet appointment. But if sports teaches you anything, it is that less important things can hurt more than important ones—but that they *are* less important, and that there are tricks for dealing with them: absorbing the pain and putting it in perspective, almost reflexively.

One of the glories of the human imagination is its capacity for alternative realities and its ability to live other people's lives to the emotional full, whether they be Oedipus or the Chicago Cubs (and that's another distinction for the civilized individual—art and sports). But if you don't learn that crying over something doesn't make it important—if you forget which reality is which for too long, or can't find your mental way out of Wrigley Field when the game is over you might be better off if you'd never heard about sports to begin with.

eeting with triumph and disaster" (Rudyard Kipling would have made a, well, interesting football coach: "I want you men to go out there *and treat those two impostors just the same*, do you hear me?") is only one of several things that sports teach, and teach better than anything else. The problem is that in school, where many of the lessons of sports are learned, sports increasingly interfere with other lessons that must be learned.

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A YMCA workout, circa 1900. The idea that sports build character owes much to the 19th-century "muscular Christianity" movement and the Young Men's Christian Association, founded in 1844.

A coach's discipline is different in kind from a regular teacher's, because the coach wants the same thing the class wants—to win. There is no such clear goal for a regular teacher. Whether a student pays attention in class is pretty much up to him. It's a one-on-one affair between student and authority figure, with the student, if anything, holding the edge, surrounded by allies, most of whom have no special desire to go where the teacher is going and are only too happy to keep the pace slow.

But the coach starts out with his class already at white heat: these kids will work for him to a degree unimaginable in a classroom, and with an eagerness and excitement that only creative kids in school ever experience. An English teacher looking at a football drill or a pep rally must overflow with envy: if he could capture just one ounce of such energy for his poetry class, his students would be the wonder of the nation. But in the classroom, the teacher is the only one who works as hard as that—like a coach doing solitary pushups and kneebends, while the students look on idly, waiting for something to interest them.

Yet sports don't have to be the teacher's enemy. At least the young athletes have learned discipline from *somewhere*, and there are no harder workers than jocks or ex-jocks if they can be made to see the point of it as clearly as they see the point of sports. Arthur Ashe, the great African American tennis player, once suggested that if making the team were made to depend entirely on one's grades, the grades would be achieved somehow or other by these highly competitive spirits.

Above all, every kind of athlete knows what many other students never will, that

nothing can be learned without discipline. The words are synonymous. And in the pursuit of what they want, athletes are already used to policing themselves and, if necessary, each other.

So all that seems to be required now is for the schools to show that they think that an education is as desirable as winning, if only by granting the student-athletes sufficient time to study and get one. The games themselves need not be a problem, providing as they do a God-given carrot, a natural incentive to cooperate with whatever the school really wants. The real problem, and it keeps coming back like a toothache, is that there is no such thing as moderation or cool judgment once you sign on for a big-time sports program. You must either keep growing helplessly with the others, or pull the plug on the whole thing, as Robert M. Hutchins did at the University of Chicago more than 50 years ago when he took his school out of the Big 10 for keeps, to a flourish of headlines. The lonely grandeur of that gesture tells you how unreal it would be to expect many more of them.

If it was hard to leave the table back in 1939, when you had nothing to lose but a few alumni contributions, it would be just about impossible to do so today with so much TV money floating around. And the TV money has also made it that much more difficult to slip any real moral wisdom or spiritual balance into the student-athlete's regimen. Since the players tend to have the impression that the school is already making a lot of money off their backs without paying them for it, except in devalued degrees, the school is the last place they are going to turn to for moral guidance.

any years ago, a famous Yale coach told his team that playing in the Yale-Harvard game that day was the most important thing they would ever do in their lives, and he has been laughed at for it ever since. But subjectively he was right: in the make-believe part of one's psyche that thinks games are important enough to work and suffer for, it was the most important thing and always would be. Until the next Big Game.

But any way you read it, no story could tell one more about the difference between sports then and sports now. In the old days, the players were paid in nothing but glory, so the authorities laid on the glory with a shovel. But no up-to-the-minute coach today would dream of telling his team to do or die for Old State U. since he knows that some of them are barely on speaking terms with the place, and it's a bit much to ask someone to die for an institution where he hasn't completed a single serious course, or made one civilian friend, or even had time for the glee club.

If all that the new athletes are getting out of a college is the privilege of wearing its colors—and presumably making them look good—simple justice demands that they get paid real money for their pains, as many people are suggesting these days. If the Big Game is just another payday, and if the most important thing about it is the scout in the stands, and if the fight song just sounds like bad music—pay the man.

But this is a counsel of despair. Outside of the mare's nest of pay scales and competitive bidding and other uncollegiate games it would open up, professionalization would also make the athlete's isolation official: whether he would henceforth be looked up to as a professional or down on as a hired hand (it would probably depend on his value to the team), the one thing he would never again be is a regular member of the student body, which emphatically does not get paid for what it does between classes. The class distinctions that universities usually try so hard to keep outside come back with a rush the moment you institute a payroll.

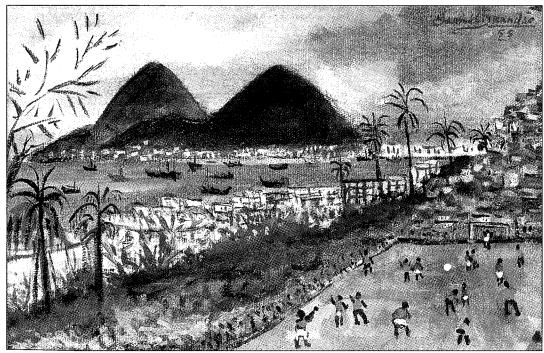
To which, of course, a critic might retort that the athlete hasn't been a regular member of the student body for some time now and isn't about to become one, so calling him a student-athlete just provides a hypocritical cover for not paying him his share of the proceeds. And the critic may be right. But if so, and if we follow his lead and give up on the very possibility of scholar-athletes, we should be clear about just what it is we're giving up.

he school that pays its students to play games for it not only loses some of its integrity as a school (i.e. as a self-sufficient exchange center for academic goods and services, ideas, and values), it is also saying some very peculiar things about the nature of games themselves and their relationship to other college activities across the board.

It is saying, for instance, that playing in the band at half time is still fun (no one has ever suggested paying the band), but that throwing and catching a ball is work—and that even this depends on what kind of ball you're using. A football equals work, a volleyball is only play. Appearing on television is obviously work, but even here distinctions are made: players work, cheerleaders have fun. Shooting baskets is work, helping to clean up afterward is its own reward.

The greatest chasm of all would open up between sports and the whole outside world of student activity, including such strenuous matters as staying up all night for a month to put the yearbook to bed, rehearsing the class play till your eyes cross, or working overtime in the lab. All of these tortures are considered so much part of the college experience that you actually pay the place to let you undergo them. But basketball is different. For basketball, the college pays *you*.

I have lingered over this hypothetical threat not simply because some strong voices are urging it but because it is so close to being here already. Collegiate athletes are already a quite distinct caste leading a



Soccer, born in Britain, spread rapidly around the world at the end of the 19th century. South American teams developed a distinctive style of play, dominating international competition for many years.

charmed but precarious life not unlike that of commandos in wartime, who live both better and worse than the regular army, but always apart. College athletes already have in many cases a potentially adversarial relationship with management. It doesn't take much to turn a sports team into a trade union, complete with grievance committee and perpetual chip on shoulder, and the latest TV packages would seem very close to being enough to do it.

Under the circumstances, it seems quixotic to talk about moral instruction at all except that moral instruction is inevitable. Sports teach, it is their nature. They teach fairness or cheating, teamwork or selfishness, compassion or coldness. A coach who runs up the score against a weak opponent has taught his team plenty. And so did the much maligned Lou Holtz when he jerked two useful players out of Notre Dame's lineup on the eve of an Orange Bowl because, in his view, they had shown contempt for the team by skipping practice. Of course, the players may have wanted the time to study. (I didn't say the lessons were simple.)

Schools and colleges also teach something by their very natures, which is that you are now playing for a whole community and not just yourself, and that if you win, the community will join you in experiencing a kind of crazy collective joy that used to more than make up for not getting paid. Although even to talk about such things now sounds anachronistic and sentimental, over the years this particular experience has helped to define the American style of sports as much as any single factor-the simple fact that even the superstars once played in front of and in the name of cheering friends whom they saw in class the next day.

To the extent that we are losing this, if we are, we are losing a real natural resource and killing a lot of fun. But the possibility of plunging the athletes back into the community without disturbing the college sports juggernaut too much edges us somewhat beyond sports and into race relations. On many campuses, blacks apparently want no part of the white community anyway, sports or no sports, and in fact the sports teams are probably the most integrated thing on campus. So the logical next move would be for the *athletes* to teach the student body the values they've learned from sports—but I doubt if the juggernaut could spare them long enough for that.

Anyhow, whatever the academics may add or subtract, the sports lesson goes on like a machine that can't be turned off, affecting the whole style of the society around it in ways the society may not even be aware of. Concerning which, I call upon my first overseas witness.

few years back, I flew to Port of Spain, Trinidad, with my father to watch a cricket match between Australia and the West Indies. (My father would have flown to Mars if the mood was on him.) The match was over early and we found ourselves with three days left to kill, so we decided to spend them at the law courts where an acquaintance of ours happened to be presiding as judge.

The weather inside was stifling, and the ceiling fans only seemed to make things worse as they dragged the wet air slowly round and round the room. Yet both the judge and the lawyers wore wigs and winter-weight gowns, and the law they practiced hour after sweltering hour was as fiendishly sharp and serpentine as anything you'd hear at the Old Bailey on a cold day in London. And one couldn't help making the connection between the decorous aggressiveness of the law court and the figures in white we'd seen the day before playing cricket in the same heat with their own brand of courteous savagery. The surface of cricket is as silky smooth as the rules of court or the opening of a classic detective story: voices are subdued, clothes are immaculate. But at the center, the atmosphere

is murderously intense. Where Americans prefer to intimidate with noise and rudeness, the English and their erstwhile colonials go for silence and tyrannical politeness, such that the incoming batsman feels he is on trial for his life.

Obviously the connection is no accident: it is one of the great imperial clichés. First we'll show you our games (says Colonel Blimp), and then perhaps you'll understand our other institutions. What was striking about the above scenes was that Trinidad had triumphantly thrown off British rule several years before, yet maintained both the game and the institution more wholeheartedly than ever.

Anyone who has encountered Trinidadians, or Jamaicans, or Barbadians, will recognize a distinctive style—polite, ironic, tough a style that has nothing to do with race and everything to do with culture. And while only a fanatic would attribute the style totally to cricket, only an equal and opposite fanatic would ignore altogether an activity to

which the area's small fry have devoted more time than they have ever spent in church and more attention than they have ever paid in school. When a local Muslim ran amuck a few years ago and tried to stage one of those hostage-holding protests common to the rest of the world, a local professor observed, "We don't do things like that in Trinidad. We are a cricket-playing nation"—a remark no Englishman has made in 50 years.



Cricket lost popularity in its native land, in part because it remained a sport of the upper class—the Gentlemen on this late 1920s schedule.

In a sense, cricket was the demonstration sport of the whole Victorian ethos: the game that instilled the most patience and the most discipline and was, for long stretches at a time, the least like fun and the most like work. The fact that it is now played best and most authentically in the lands of calypso and sun is proof positive of the power of a sport to make its own way and impose its own style anywhere it takes root unless another sport got there first. This last fact, in its turn, has recently taken on a global significance, as markets open up everywhere like spring flowers, and in each of them thousands of new TV sets are turned on to find out what the rest of us have been up to all this time and what interests us. And the latest word from America these days is sports, to an extent that might astonish the non-sports-minded, who probably think it's still things like movies, rock music, and fast food.

Each of these has served a turn at selling America, for better or worse, but our movies have been around so long by now that foreigners half-think they made them themselves. Rock music can be more or less produced locally, and McDonald's is already a cliché. (The real breakthrough will be enough food, never mind the speed.) American culture has triumphed so thoroughly that people scarcely know it's American any more.

But what's still new and different out of America is the Super Bowl, which, thanks to the extraordinary telegenic charms of American football, has swept the globe with the force of a new art movement, or at least a new dance craze: people stay up all night to watch it in Europe and Australia, and London betting parlors make book on it.

o another window opens on the American soul, and it may be the most revealing one since jazz, which introduced American blacks to the rest of the world back in the 1920s as something other than slaves—as masters in fact. Sports will do the same. But in introducing black musicians, jazz also introduced the black problem, and sports will do that too. Foreigners contemplating our football and basketball teams for the first time can only marvel at the number of blacks who seem to get a college education over here. Our problems must be solved, no?

Well, not quite. Sports serve to remind the world that there are a lot of blacks in America. But they also remind it that it doesn't see that much of them the rest of the time. People observing American blacks playing a great deal of American music and sinking so many American baskets must wonder where they keep themselves between engagements.

But race isn't the half of it. How a nation plays can tell you something crucial about how it lives. Hitler's worldview, his aesthetics, and by implication his intentions were never more eloquently or hauntingly expressed than by the Berlin Olympics of 1936, or by Leni Riefenstahl's movie Olympia (1936); and one look at the East German swimmers in the last years of that nation, perched on their diving boards all swollen with steroids and joyless, told one how easily communism had back-slid into a form of National Socialism (if it had ever left) in which winning really was the only thing, beyond anything the theatrical Vince Lombardi ever had in mind.

or another kind of corruption closer to home, witness the ecstatic savagery of British soccer crowds, riding a violence high into Europe and getting banned from the Continent for their pains during the late 1980s, like a disease or a rabid animal. This, from the mother of parliaments, and of cricket, gives one special pause and is worth a longer look, because it shows where another strand of the great Victorian sports adventure led.

Sports hooliganism is actually not so much a new development as a regression or atavism. According to legend, the original game from which soccer, rugby, and, by extension, American football all derive was a primeval affair in which one village attempted by fair means or foul—legend says nothing about rules—to move an object (nothing so fancy as a ball, I imagine) to the far end of another: it was total war, with everyone pitching in, and while it sounds kind of jolly now, we know from records that the earliest English school games were just plain bloody, and had to be toned down

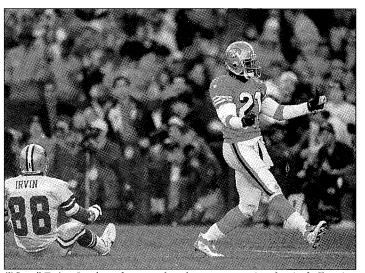
again and yet again—from kicking allowed above the knee, to kicking allowed *below* the knee, to no kicking at all—before they could begin to do the godly work that Thomas Arnold had in mind for them. (If the Battle of Waterloo really was won "on the playing fields of Eton," it must have been as much thanks to the brutality learned there as to the sportsmanship.)

Interestingly enough, Charles Dickens's description of a village election in *Pickwick Papers* (1837) makes the politics of the period sound like a not-too-distant

cousin of the mythic village Game: rough, corrupt, and of course jolly, always jolly.

At that stage cricket was actually more refined than voting, as a match described in the same book indicates. It was the country sport, in ethos, as football was the town one, but throughout the century both sports would grow side by side with elections in both sophistication and popularity, matching strides and suiting each other very well, with sports teaching the democratic virtues of fairness and team spirit, and democracy feeding back its own lessons: whatever the rest of life says to you, this game belongs to you, the players. The rules, however mystifying at times, have not been imposed on you from above, but have grown out of the sport itself and are designed to give you the best possible game each time out, so it's in your simple best interests to obey them. (The idea of shaping the rules to suit the spectators, and eventually the TV cameras, was far in the future.)

One can exaggerate the usefulness of sports to democracy, and many people have. Nothing could better illustrate how the same game can produce radically different effects in different settings than to com-



"Neon" Deion Sanders, the exemplar of a new generation that is challenging old ideas of sportsmanship, celebrates after breaking up a play.

pare India with the West Indies. When Rudyard Kipling wrote about "flanneled fools at the wicket and muddied oafs at the goal," he may to some extent have been voicing the exasperation of a myopic, sportless man, but he was also quite legitimately aiming at the smug insularity of the English, buffered on all sides by their playthings, their cricket and football and the rest. Kipling's first experience of this must have been in India, where members of the British Raj were wont to set up their wickets and disappear into cricket for years on end. Presumably, their servants would learn democracy by fielding for them.

n Barbados, which inch for inch has probably produced the finest cricket talent in the world, the game actually served to introduce the slaves to their masters, and to keep them on speaking terms through the squalls of emancipation, and leave them friendly afterward. A retired schoolmaster whom I met at the Bridgetown Cricket Club, surrounded entirely by blacks, assured me that the transition from white to black rule was as painless as it could be and that if there is such a thing as a color-blind society, Barbados is it. And both sides agree that cricket had at least something to do with it.

This is further proof, if proof is still needed, that sports should not be left on automatic pilot, but require intelligence and breadth of vision at every turn to be of any use at all. In Barbados, the white minority has learned its lesson well over the years: a society that plays together had better do a few other things together as well, whether that society be a former colony or an American university.

But finally, it comes down to what a society wants its games to do for it. The English who settled in Barbados *wanted* a stake in their new country, so the Game became a sort of preliminary town meeting; the Anglo-Indians, contrariwise, were perched on the fringe of a vast country, doing their damnedest *not* to get sucked in too far: a colonial officer who Indianized was no use at all. So the Game was just a transaction, a handshake, a one-afternoon stand, if you will. Afterward one withdrew to the club to reorganize one's Englishness.

So when the roof finally fell in on them in the 1940s, many Anglo-Indians knew almost as little about the country they had been infesting as they had on arrival. Sports, if pursued too exclusively, can narrow the imagination and sap the curiosity. At the end of a good day, one feels drained and satisfied, and certainly in no mood to learn anything, let alone reform it, and the Anglo-Indian cricketers had hardly even had time to see the countryside, let alone talk to it.

It was in this sort of sense that sports failed even Mother England. (Sports can do only so much.) The British ruling class thought it knew its own people the way colonial officers thought they knew the natives, because they had played with them. But they had only played with some of their own people, and they had only played in a certain way.

Cricket reflected neither the rest of England nor even the century it was in. With exceptions, British working-class boys didn't consider cricket their game at all, but if anything, a symbol in the class war. When I lived in Britain in the early 1950s, the crowds at Lord's cricket ground seemed as different in tone from the crowds at the Queen's Park and Fulham soccer grounds as a first-class railway carriage was from third class, or the saloon bar from the public one. (The English could divide *any*thing into classes.) Sports did not resolve the class problem but if anything hardened it, and soccer remains, vestigially, the sport of resentment, the outsiders' sport.

o sport is not necessarily a force for good, just a force, and its value as a barometer is that it is not like the changing of the guard or some other ancient ritual that tells you all you need to know about a country 300 years ago. It is more like a kitchen window flung up on the present, showing how the neighbors go about getting what they want *right now*, at white heat, in the most competitive conditions they can devise.

Other countries, other messages. In his splendid, funny book, *You Gotta Have Wa* (1990), Robert Whiting describes a form of baseball so arduous and fraught with painful possibilities that one wonders why anyone bothers to play it at all—if play is even the right word. In fact, Mr. Whiting compares a typical Japanese mound conference with a Mitsubishi board meeting.

What they are discussing on the mound at such nerve-racking and momentum-destroying length is the imperative to avoid disgrace, both personal and collective. Nobody wants to make a decision that will embarrass himself or his colleagues, and besides, so long as they are out there, they are not only avoiding the worst, but cementing and advertising their *wa*, or team spirit, which is an even more precious substance than victory. In the same vein, the Japanese place a premium on full attendance at practice sessions, which they insist on holding in their entirety even after

rain delays and even if doing so means postponing the game itself.

It has always been easy to laugh at Japanese manners, which Americans are peculiarly ill-equipped to understand these days, and it would be a mistake to believe that this farcical surface tells the whole story. What you see is practically never what you get with the Japanese. But so far their philosophy of baseball has not proved very effective against American teams.

Baseball is the most individualistic of team sports, such that a side which played entirely for its various selves might easily beat one which played only for the collective. (How many bunts can you use?) In other words, our national sport is, appropriately enough, tailor-made for Americans: individualism, with just a dash of cooperation and a great deal of tolerance for the other individualists, who can break your heart. And it's an enduring puzzle that the Japanese, with all their capacity for superficial imitation, can't seem to grasp the value of this, or don't want to.

But surely there are also subjects for satire in a country such as ours, where the players are so bereft of *wa* that they use a world championship not to build another one but simply as a bargaining chip to raise their own price. Although everyone contributes to an American championship in a spirit that could easily be mistaken for *wa*, the gang tends to break up the next day as everyone rushes his piece of the prize to the pawn shop. In other words, the cooperation is strictly ad hoc. No one wants to get bogged down in it.

t is like two parts of the same joke, or comedy routine, with the Japanese taking the virtues of cooperation to hilarious extremes, while the other comedian agrees to carry his independence and self-reliance as far as the law allows in the other direction. Americans have always doted on the image of the free lance, the hired gun who arrives just in time and leaves before civilization, that is, team work, gets there; and we also like a man who is willing to bet on his own value. The ballplayer who holds out for the moon is putting his heart and his nerves on the line as well as his talent, because if he doesn't deliver, he can't hide in a corner with the money; he has to go out there each day and field his position in front of thousands of noisy, quick-to-anger fans, whose sympathy he has willingly forfeited.

Americans love an underdog, but this is a top dog, setting himself up to be hated for the sake of a challenge. Half the sitcoms made in America seem to be about the mighty being humbled one way or another—the celebrity going unrecognized, the father not knowing best; it is a source of endless delight in a democracy. So the athlete who draws a crowd by baiting this taste is playing a part in a ritual game as traditional in America as the tea ceremony is in Japan.

B ut as with all rituals, there is a right and a wrong way to perform it. Lately we have had such a slew of empty boasts and champions who didn't really mean it that it is hard to remember the excitement of a genuine challenge, or the little bit extra it could add to an event, like a huge bet being placed at the last minute. Muhammad Ali's trumped-up feuds and Falstaffian boasts not only filled seats but affected the intrinsic nature of his fights: his opponents were always fighting a myth, his myth, created and directed by him, from the name on down.

By now, everyone should be getting used to the mad dances that follow touchdowns these days and the wild hugging and pounding that greet the most routine plays in football—effusions of high spirits that distract the hell out of one and deform the game's symmetry, like the banging of tin cans in a symphony, but at least remind one that these things are played for fun, and that those heavily armored automatons out there have not quite had the life drilled out of them. It's a fair exchange—perfection for humanityanyway, it's the way we do it these days.

But there is a less attractive side to these displays that also tells something about us, and that is the extent to which even team sports have become vehicles for self-assertion and promotion. At times everyone out there seems to be selling himself, as indeed many of them have been since grammar school. Just as large fleas have smaller fleas, nowadays there is no level of sports competition so low that some observer from a slightly higher one may not be scouting it and checking the talent ad infinitum. So life becomes one long quest for the phantom scout's eye.

In discussing sports, one must constantly resist the temptation to label as evil that which is merely silly. Foreigners may never grasp the extent to which Americans can have fun and sell themselves at the same time. Anyone can sell himself, of course, but to do so exuberantly and without manifest cynicism or a trace of whorishness—that's us.

But it's finally self-defeating. A stadium full of salesmen, of carnival barkers hawking their wares, will not only not provide the best football game or whatever they're playing today, it will not even sell anything.

The same overkill has overtaken Joe Namath-like boasts that don't come true, most especially in the case of the mega-boast inherent in asking for the most money in history to play your game. At first the deal used to be, "Give me the money and I'll prove I'm the best." But this has degenerated into, "If I get the money, then I must be the best, and I don't have to prove a thing."

The only hole in this reasoning, and it's big enough to drown a whole sport in, is that market value is determined by what draws a crowd, and crowds are drawn by all sorts of things besides skill.

The world is thus getting a mixed bag with the current American athlete, as it is with our values in general. The figure of an ingratiating megalomaniac is a far cry from the 19th-century ideal of sports, or from the reasons we play games in the first place. He, or she, is also something of a caricature, and a warning. The fact that we still have so comparatively few of such megalomaniacs is a tribute to the innate healthiness of sports under the incredible pressures of a celebrity culture.

sports team is a tiny parliament operating on a war footing. And what holds it together and makes it work is the much maligned cult of winning. An interviewer once asked Senator Bill Bradley (D.-N.J.), late of the New York Knicks, whether he didn't think we rather overdid our mania for winning, obviously expecting the liberal Bill to agree with him heartily. But Bradley knew too much, he had been in the trenches himself where false pieties are as useless as they are in real warfare, and he said in effect "No-if you don't emphasize winning over everything else, players tend to become selfish."

A team trying to win will clean itself like a cat of anything that slows it down. So the athlete who wants to show off must find ways to do it between plays, or between games, and in such a way that he doesn't hog the limelight totally and leave his teammates, who may also want to show off, in shadow. Thus we arrive at a breed of disciplined exhibitionists, affable egotists who like nothing better than to be photographed congratulating their *teammates*, or to be interviewed in the same capacity ("I guess I knew the Babe better than anybody")—a mixed bag indeed.

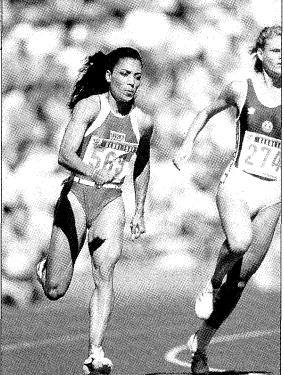
But these players are interspersed among perfectly normal young people who will probably represent their country in the sports era as attractively and accurately as anything the world has seen of ours since the GIs of World War II—who were also a mixed bag. But what is attractive about them will be precisely their unspoiled pre-money, pre-television essence, or whatever remains of it, a folk quality that sports keep alive against the odds, like an old religion in a modern



Running the 50-yard dash near Detroit in 1911 and the 200-meter run at the Seoul Olympics in 1988. Florence Griffith-Joyner took home three gold medals.

country. TV may change the look of it, and the cost of it, and even the way some of the athletes feel about it, but if you were lucky enough to see the American ice hockey team upsetting the Russians at Lake Placid in 1980, with the achievement gradually dawning and settling on the players' and fans' faces, you saw a sporting print of America as it was a hundred years ago and will be tomorrow if we don't mess up, next to which a political convention seems by now utterly contrived and synthetic, and untrue to its own nature.

hile it is tempting to say that what an athlete gets out of his sport and his life is his own affair and no special business of anyone else's, it is in fact a



matter of considerable public interest that he get as much out of both as possible, because the gap between what a fulfilled athlete can get out of life and the blinkered world of the hacker is dangerously wide,

and there are more young citizens playing around on the edge of it right now than ever before in history—ours or anybody else's.

A player who is simply going through the motions is a loose cannon even within his sport. Since he isn't quite sure why he's doing this, he leans towards the primary explanation: it must be for the money. And why not? That's why the coach is doing it, with his contract on the side with the shoe company, whose products our guy has to play in every night. And that's why the school is doing it, as it angles to get into the big-bucks tournaments and appear on TV, cutting his class time to nothing, if need be, in order to do so.

For everyone, the best way that he, the player, can make some money too is to play the game as well as he can. And this is why the system seems to work despite itself. But, as I say, a player thus motivated is a loose cannon. Because if he doesn't get that money, or some kind of payoff outside of the sheer joy of playing, the best you can hope for is a malcontent, the worst a cheat, and the usual, a dropout.

American sports are more and more geared to make it seem that everything you do is aimed toward something else—the game toward the tournament; the tournament toward a better tournament next year; toward a better high school, college, pro team, winning pro team, more money with the pro team or I'll go to another one, never mind which; endorsements; agents; job opportunities—so that it's hard to say at any one point that *this* is what it's for. The American dream as currently construed is more like an order to keep moving until you fall off the continent and don't you dare stop dreaming.

One constant throughout this is, of course, money, which appears in every chapter like Woody Allen's mysterious character Zelig, reassuring the dreamer of some continuity at least. The psychological significance of this character may be judged by the intensity with which ballplayers bargain for meaningless additions to already vast salaries in order to make the most money at their particular position: if money is what you've always played for, you can't stop now, even though who gets the most depends on whose contract has come up most recently, so you can never rest there.

The other constant through every phase of the sports branch of the American dream is the game itself-baseball, football, whatever-which, like some improbable 18th-century heroine, has usually come reeling through this maze of temptation and corruption with its virtue more or less intact, if only because no one has yet thought of a profitable way of corrupting it. Unlike movies and the other arts, games are never more commercial than when they are played exactly as they should be. Of course, if any little thing can be done to make the contests even more commercial-eliminating this, shortening that, a designated hitter here and a 24-second clock there-it will be, but the heart of sports remains pure. An athlete shinnying up the greasy pole will find a recognizably similar game at the top to the one he played as a child—and this will be the guarantor of his innocence up there if anything can be.

What it guarantees for women is a brandnew question for most of us—too fresh to answer though never too fresh to talk about. To wit, if certain sports are in some sense an apprenticeship for, and escape from, the world of politics and business, it stands to reason that great numbers of women will want to play them too, however much the games themselves seem to have been designed exclusively by men for men, for example football, whose weekly injury list seems like a benign version of a war memorial.

o maybe we can expect some new rules shortly, or even a whole new game—but if so along what lines? Women have not succeeded so far in making either business or politics "kinder

and gentler" because the material itself won't permit it: you can't be kind with shareholders' money or gentle with Saddam Hussein, or even with Margaret Thatcher, if her country needs something.

But will sports prove that much more malleable? How much reform can they stand without losing their original point? The evidence so far suggests that the tide usually runs the other way, and that the sport changes the players long before they can change it. Most games, whether played in boardrooms or stadiums, have a way of dictating not only exactly how they should be played but with what attitude, so that the mildest of citizens may suddenly find his engorged face parked in that of an umpire without being quite sure how it got there. And this goes apparently whether one's name is Andre Agassi or Martina Navratilova.

But these matters of protocol may conceivably be negotiable at that. What isn't is the other thing that sports dictate, which is that you will always play them as hard as possible, since violence is the inevitable and often exhilarating by-product of taking your foot off the brake and seeing just what your body is capable of. And this is an element of sports that can't be compromised with without losing the point for sure. You can, if you like, put helmets on the boxers to reduce the damage, and you can bench your star quarterback to keep down the score, but what you can't do is tell either of them to take it easy, or to "have a heart."

And this, not the physical pain, will surely be the hardest aspect of competitive sports for many women to swallow: their sheer implacability and ice-cold legalism, which could break your heart even if you were playing touch football in a suit of armor. Sports are in fact as unfeeling as life itself. The ref still calls penalties against you even when you're down 50-0, and the scoreboard won't be adjusted afterward to make you feel better. Nowhere does self-esteem take a worse pounding than on a sports field—unless maybe it's at a chess board where "checkmate in three" can hurt worse than a blind-side tackle that breaks both legs. What you get in exchange for these ritual humiliations is a thimbleful of self-knowledge, a small but precious sense of how reality works, and all the self-esteem you can earn with your own muscle and sweat—and here, sports relents a little: it rewards duffers who try hard with almost as much self-satisfaction as it gives to champions.

his, for the last 150 years, is how men in the modern world have prepared themselves for life. If women decide to take this route too in significant numbers, and indications are that they are doing so, it will, if nothing else, test the sturdiest of all truisms, that men naturally are just and women merciful. Men are, it seems fair to assume, not really born just, but usually have it thrust upon them the first time they try to cheat someone, or someone tries to cheat them, and they realize that justice is the most kindness you can give to two people at the same time, if their interests differ. Any kindness you have left after you've played games long enough will be solid indeed-and of course, the generosity of athletes to teammates is legendary, and to foes only slightly less so. What one might hope women, or *somebody*, might effect is an opening up of this parochialism to let the rest of the world in.

If this should ever happen, I can only say the blessings of sports would be infinitely easier to argue than they have been in this essay.

The Technological Imperative

BY EDWARD TENNER

he road from Princeton, New Jersey, to Philadelphia passes the handsome iron-fenced grounds of the Lawrenceville School, a private institution known not only for its high academic standards but also for its ample resources. Its gracious campus could easily house a substantial liberal arts college; in the summer, its auditorium does justice to professional opera productions. Though Lawrenceville's flush financial condition is news to no one, I was still surprised when driving by one day last autumn to see how grandly the school pursued the game of football. Looming over a practice field just beyond the fence was a railed platform suspended by two tonglike metal frameworks over a wheeled base the size of a small car. Standing atop this elaborate machine was a man with a video camera recording the team's practice session 10 or more feet below. Even here, a world away from the NCAA Division I, technology was literally raising its head-vivid evidence of the lengthening reach of the apparatus of professionalism.

It is true that coaches have been analyzing film since the early days of moving pictures, that video cameras now start at only a few hundred dollars (though this one appeared to be a bigger and much costlier professional model), and that mobile lifts probably have some value for building and grounds crews as well as for the athletic department. And one would have to be Rip Van Winkle not to know that schools and colleges are working harder at sport and spending big money on new athletic technology. Only a few hundred yards from my apartment, on the banks of Lake Carnegie, Princeton rowing crews practice during New Jersey's often inclement weather in an enclosed tank. Across the road, a field of artificial turf is being installed for the lacrosse team at a cost of more than \$1 million. (Competing teams were all using them, the coaches pointed out, and a generous alumnus picked up the bill.)

Yet the Lawrenceville image stayed with me: a portable tower with an all-seeing eye, a monument to the interpenetration of sport and engineering. It is a relationship that has improved athletic performance and challenged physicists and designers. It has often, though not always, made sports safer. It has also threatened the traditional virtues of athletic life. It is often said that the infiltration of big money, especially in such high-profile intercollegiate sports as football and basketball, is killing off the amateur ideal. But nothing is doing more to undermine the distinction between amateur and professional competition than the rise of sports technology-including not only athletic gear, but training and conditioning techniques and professional management and its spread to all levels of sport.

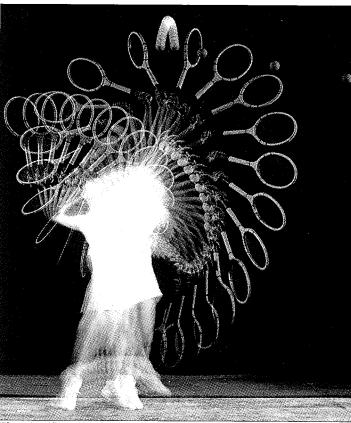
It is not incidental that I spotted the

mechanical tower at a school that was the setting for Owen Johnson's famous turn-ofthe-century Lawrenceville stories. In many ways, the stories and the school epitomized the older ideal of gentlemanly amateurism

in sports. Athletics in such corners of American life, as in similar British ones, shared the antiprofessional outlook of the old humanities curriculum. "Just as the classics trained your mind for anything, games trained mind, character and body for anything," Jonathan Gathorne-Hardy notes in *The Old School Tie* (1978).

This gentlemanly model of sport was not at all inimical to training, but it put the emphasis on other aspects of competition. In one of Johnson's episodes, Dink Stover, the hero of the series, learns "that the scientific application of his one hundred and thirty-eight pounds, well-timed, was sufficient to counterbalance the disadvantage in weight." Yet Dink succeeds on the football field not by studying videotapes but by developing his character and his innate intelligence. In a big game, the op-

posing Andover 11 play "with a precision and machinelike rush that the red-and-black Lawrenceville team did not have," writes Johnson, leaving no room for mistaking his own view of the machine. At half time it is the teenaged team captain, not the adult coach, who harangues the Lawrenceville squad, urging them to hold back the Andover line. Only then does the adult coach, the professional, give brief advice to each young man. Inspired by his teammates' comradeship and spirit, and laying an old grudge against one of them aside, Dink goes on to score the winning touchdown. In this Lawrenceville of yore, it was the athlete's desire for honor and the esteem of his peers that mattered most, not his hunger for athletic scholarships or his



The scientific study of motion in sport was born a century ago. Today, even casual players in many sports have their serves and swings analyzed.

hopes for a career in sports. In Dink Stover's world, spirit and character always triumphed over regimented efficiency.

he trouble, of course, was that in real life they neither could nor did. As sports historian Ronald A. Smith shows in *Sports and Freedom* (1988), college teams born as outlets of youthful rebellion against faculty paternalism and pedantry early in the 19th century began hiring professional coaches soon after the Civil War. On college playing fields, at least, plucky amateurs such as Stover and his friends found themselves losing to teams that practiced under close adult scrutiny. As expenses and competition both grew toward the end of the century, colleges began to bring sports under their administrative control. The coach began his ascent from student-paid specialist to college-paid star. It stretches the point only a bit to note that this rise roughly coincided with that of the professional manager in the period's emerging large corporations. And unlike business executives, some early star coaches could have it both ways: the University of Chicago's first football coach, Amos Alonzo Stagg, not only received the executive-level salary of \$2,500 when he was hired in 1891 but was made a tenured associate professor. (It was only fair that Stagg was given faculty standing, since he made the kind of original contributions-such as the end-around run and the man in motion—for which professors of any science get tenure.) President William Rainey Harper charged Stagg to send forth teams that would "knock out all the colleges."

he decline of amateurism was not the product of technological forces alone. The ideal of athletic heroism began its downward course after World War I, with its brutal deflation of gallant rhetoric. Some of the real heroes who had survived the ordeal of war felt out of place in its aftermath. Princeton hockey star and World War I ace Hobey Baker was miserable as a bond salesman (and club player) after the war. He died under mysterious circumstances, crashing a military plane he had borrowed. Baker came of age a generation after the creator of Dink Stover, but he was one of the last gentleman paragons of sport. At Baker's Princeton, the bronze statue called "The Christian Student," a memorial to a high-minded football captain named Earl Dodge who had died of typhoid in his twenties, had stood unmolested for decades. By the 1920s, this statue of a handsome youth in a turtleneck football uniform, draped in academic robes and laden with books, had become a provocation. Undergraduates vandalized and travestied it so often that it was finally removed to the Massachusetts museum of sculptor Daniel Chester French. It was not athletics that had declined but heroism. In its place there was instead, for coaches as much as for athletes, stardom.

The decline of the heroic ideal is reflected in the history of protective technology. Football players and other athletes before World War I could have used much sturdier helmets and pads than they did, but they declined to do so for the same reason that professional boxers today (unlike their amateur counterparts) still do not wear headgear: spectators would have considered such protection unmanly. Indeed, early baseball gloves were dyed a flesh color in order to make it less obvious that players were not fielding the ball barehanded. In the late 20th century, conspicuous exposure to risk has become positively unfashionable except in a few events, such as downhill skiing and automobile racing. Athletes today do push the limits of protective technologies to gain an edge. Helmeted batters crowd the plate; linebackers and linemen risk paralysis and death by illegally "spearing" their foes with their helmets. Stronger ropes, lighter gear, and spring-loaded cams have encouraged mountain climbers to attempt previously impossible routes. But the point holds: few men and women still glory in doing without available protection, as Reinhold Messner and Peter Habeler did in 1978 when they climbed

Edward Tenner is a visiting Fellow in the Department of Geological and Geophysical Sciences at Princeton University. He is finishing a book on the unintended consequences of technology. Copyright © 1995 by Edward Tenner.

Mount Everest without supplemental oxygen. A small number of climbers have emulated them, but scores of others have littered the mountain with empty oxygen canisters.

Technological change may not have been directly responsible for the decline of the heroic ideal, but it was the driving force behind the new model of sport that challenged and ultimately replaced it. This new model envisioned sport as a higher craft, assisted by science

and technolpecially after World War I. He quotes a French athlete's wish in the 1920s that his daughter would "one day recite the litany not of our battles but of our records, more beautiful than the labors of Hercules."

hat happened to sport was part of a broader movement to rationalize physical performance that had its origins in workplace time-and-motion study pioneered in the

United

Athletes in ancient Greece often resorted to special diets, coaching, and other aids in attempts to improve performance. In this 6th century B.C. vase painting, a coach instructs two long jumpers.

ogy, frankly devoted to record setting and winning. In this new world of sport, excellence was seen not as something that grows from within, but as something shaped by endless practice, refinement of technique, and analysis. Achievements were registered not in the respect of teammates and peers but in box scores and record books. An important source of this emerging perspective, according to Allen Guttmann of Amherst College, was the rise of quantification and record keeping, esStates by the engineer Frederick W. Taylor (1856–1915). Analyzing the task, the tools, and the motions of factory workers, Taylor created what he called a new kind of "scientific management." By breaking down each activity into its component parts and analyzing each motion, Taylor believed he could optimize the worker's efforts and vastly improve performance on the job.

Scientific studies of athletic performance, animal motion, and industrial pro-



duction took giant steps together in the laboratory of Étienne-Jules Marey (1830-1906), a brilliant physiologist who held a chair of "natural history of organized bodies" at the Collège de France. Anson Rabinbach's Human Motor (1990) presents Marey's work in its scientific and social milieu. Marey developed an ingenious system of stop-motion photography that resolved action into microscopic increments of equal time. Sport was one of his chief subjects, and his books containing ingenious visual representations of motions over time in fencing matches and other activities were a sensation. Marey and his American counterpart, the photographer Eadweard Muybridge, probably enjoyed their greatest fame for settling the old sporting question of whether all four legs of a galloping horse are ever off the ground at the same time. (They are.)

Taylorist methods appeared in American athletics as early as the first years of the 20th century, and they increased the emphasis on coaching (professional management) and technical specialists. Ronald Smith notes that in 1905 and '06 the young Harvard football coach William Reid, Jr., studied photographs of punting to determine an optimal style and then trained the Crimson's kickers accordingly. Reid also began to experiment with new equipment designs. And he pioneered the practice of intensive scouting, traveling around the country to recruit exceptional players. Reid even kept a file card on every one of Harvard's 4,000 students to identify the best prospects for each position on the team. After World War I, systematic study and professional coaching spread to more and more sports. As early as the 1920s James Naismith, the inventor of basketball, deplored the serious coaching that had transformed his sport.

The cult of the coach has become one of the leading features of late-20th-century sport. In certain professional sports, such as tennis, the coach enjoys a status akin to that of a guru, and in team sports the coach (or rather the coaching staff) functions not only as a technical specialist and master mechanic of the sport's techniques but as a master planner and field marshal-in a word, the team's brain. How many professional quarterbacks today are allowed to call the plays for their team? And now pro football is experimenting with radio communications between the sideline and the playing field. The rise of the omnicompetent coach is another one of the forces working to erode the distinction between amateur and professional sports. Not only are advanced training techniques and other methods being disseminated down to the lowest levels of many sports, but coaches themselves move freely between the pro and amateur ranks. And thanks to summer training camps and other special arrangements, youngsters who show promise in some sports are now exposed to the influence of highly trained coaches before they reach their teen years.

f today's superstar coaches are the heirs of William Reid, the era's sports scientists are direct descendants of Marey and Taylor. Taylorism in industry has largely run its course, long since superseded by other theories of management. The scientific study of time and motion still matters in American industry, and even more in Japan. But the frontier appears to have shifted from maximizing physical performance to minimizing the new injuries of the postindustrial age, such as carpal tunnel syndrome, an affliction of constant computer users. Now it is the software developer who makes workers more productive. But the early-20th-century dream of the worker as a human motor, operating at top efficiency and approaching a theoretical minimum of fatigue, remains very much alive in sport. Records continue to fall. No one can predict the limits of human performance. This excitement has attracted a striking number of leading scientists and engineers to sport. The physicist Howard Brody

has published a tennis handbook; the engineer Enoch Durbin has designed a revolutionary tennis racket bearing his name; another engineer, Thomas McMahon, has developed "tuned" tracks with optimum springiness that help athletes set running records; another physicist-author, John Adair, consults on scientific questions for baseball's National League. Visiting the technical department of the United States Golf Association (USGA) in Bernardsville, New Jersey, recently, I saw researchers using digital television cameras to record golfers' drives for analysis on a powerful Sun work station.

ports scientists have also produced enormous quantities of new equipment over the years. Sporting goods (including clothing) is a \$45 billion industry—though it is often hard to tell whether it is competition in sports or in fashion that moves consumers to buy. The impact of all this new gear varies from sport to sport. Studies of professional performance in golf, for example, show a perceptible but very slow decline in average scores over the years. For ordinary players, however, the payoff is probably more psychological than ballistic. Frank Thomas, the USGA's technical director, believes that new equipment can keep the conscious brain from spoiling the unconscious brain's natural performance-for a while. Then golfers become self-conscious again and revert to their old problems.

Golf may be unusual for its gradual approach to technological change. New technologies have drastically altered certain sports: the fiberglass pole transformed pole vaulting during the 1960s; echolocators have given tournament bass fishing the quality of a video game. But again the overriding fact is that the same technology has been as readily available to amateurs as it has been to paid athletes. The professional's edge is mainly in service and customization, often provided without charge as part of an endorsement package.

The heroic approach to athletics still has many partisans. The Yale classicist Donald Kagan rejects the idea of elite athletes as highly skilled workers. He holds up baseball during the 1950s as an idyll of power and grace: "The Yankees ruled this world as the Olympian gods ruled theirs. . . . with steadiness, serenity, and justice, and only the unworthy gnashed their teeth in envy and prayed for chaos to shatter the unwelcome order." He prizes baseball's greatest players not for their "smarts" or perseverance but for "the qualities of courage, suffering, and sacrifice." And as any admirer of aristocracy must, he exalts inborn excellence over acquired proficiency.

Kagan wrote in good-natured reaction to George F. Will's best-selling Men at Work (1990), which is in many ways the distillation of modern attitudes toward sport. Will begins his book with a discussion not of a great hitter or legendary pitcher but of a manager, Tony La Russa of the Oakland Athletics. And there is not much that is heroic or inspiring about him. He is an intense and supremely watchful executive, armed with copious information about each opposing player. He pursues the game methodically and presides over a corps, not of heroes, but of master artisans in various specialties: third baseman, catcher, etc. Baseball La Russa–style is not pursued on a field of chivalry but in a kind of patriarchal athletic factory.

ith the rise of sports science and technology, however, the modern athletic ideal is no longer the hero of Kagan or even exactly the artisan of Will, but something else: the professional. Reviewing a book on the rise of professional society recently, social historian Jose Harris observed that "work and play, brutally estranged from each other by the early stages of industrialization, have now reconverged." Harris went on to note that play is returning to work

through the rise of business lunches and other job-related social events, but it could be said with even greater force that work is rapidly finding its way into play. The tower at Lawrenceville, for example, points to a new incarnation of Taylorism. Once imposed on a recalcitrant working class, Taylorism has become the plaything of elites who are adopting it in their leisure time, voluntarily, for the sake of winning. Middle-aged tennis players even pay stiff fees to attend grueling "vacation" tennis camps conducted by famous coaches. As technology, training, and sports science improve performance, contests in many sports depend on smaller and smaller margins of superiority. In the Tokyo World Athletic Championships of 1991, Carl Lewis sprinted 100 meters two-hundredths of a second faster than Leroy Burrell, and all of the other four runners were less than 0.2 seconds behind Burrell. Because small differences can translate into immense differentials of reward, the athlete can no longer function as an autonomous agent, as the fictional Stover did, but must depend on the contributions of more and more people. He or she needs the help of many others-not just coaches and trainers but psychologists, shoe and equipment manufacturers, trainers, financial managers-the invisible teammates.*

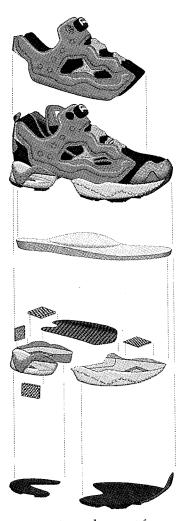
It isn't only the flood of money into college and Olympic sport that has undercut amateurism. As preparation becomes more arduous and intense, as standards rise, accomplishment requires a professional level of commitment. In the end, the rules and forms of amateur qualifications persist, but in many sports maintaining amateur status is a preprofessional ritual rather than a value in itself. Future contracts, signing bonuses, and endorsement income are subjects of open speculation. The line between philanthropic support of sports and commercial sponsorship blurs hopelessly. Is it any wonder that amateurism has become a hollow ideal, tainted by social exclusivism, a concept that went out with Avery Brundage and tennis whites? (The 11th edition of the *Encyclopaedia Britannica*, published in 1910, reported that the Amateur Rowing Association of Great Britain disqualified anyone who had ever earned a living as a "mechanic, artisan, or labourer.")

In the postamateur world of sport, more and more participants are happy to be part of a technological system. About the same time that Lawrenceville adopted its hydraulic lift, there appeared at a local shopping center a new indoor golf practice range where players could have their swings videotaped. Some critics fear that we are "taking the play out of play"; some players seem happier than ever, though, with the latest oversized golf club or tennis racket. Will this continue, or will there be a traditionalist counterrevolution in sport as part of a more generalized reaction against professionalism in society?

n a sense, technology has restored some of the importance of the "natural," if not the hero. It has encouraged national and international talent searches that have turned up athletes whose body types are more and more precisely matched to the demands of their sports. As was noted recently on a public television show, swimmer Mark Spitz electrified the world by winning eight gold medals at the Munich Olympics of 1972, yet 20 years later none of his Olympic records would have been good enough to get him a place on the U.S. Olympic swimming team. In 1992, Spitz still had the world's most efficient technique by the standard test; his successors were just stronger and more powerful.

If a return to the cult of the natural player is unlikely, a cultural reaction against the rationalization of sport is more plau-

^{*}Technology does not just introduce new materials and techniques. It develops extended networks of people. And that, paradoxically, is one reason for the absence of major new sports based on new technology. It takes a long time to build a network of athletes, manufacturers, and coaches, not to mention spectators. Better to refine existing sports. The end of this technology-rich century has no innovation to compare with the creation of basketball at the end of the last one.



sible. German sport may be most famous for the Nazi spectacle of the 1936 Olympics in Berlin and for the former East German training machine, but it also has a powerful romantic tradition. German gymnasts long resisted competitive scoring, as Allen Guttmann has pointed out, and refused to participate in Pierre de Coubertin's first Olympic games a century ago. Adolf Hitler, always a ruthless modernizer, had to dissolve the Deutsche Turnerschaft (German Gymnasts' Society) for its opposition to—in one writer's scornful list-"concrete stadium, cinder track, tape-measure, stopwatch, manicured lawn, and track shoes." In our own time, the romantic tradition in sport remains powerful-and not only

among the genteel. Sylvester Stallone's *Rocky IV* (1985) has Rocky Balboa confronting the Russian champion Ivan Drago, a steroid-filled colossus who trains with technicians in a futuristic wonderland of sensors and monitors. Rocky, "all heart" as his trainer puts it, prepares for the fight in the homely seclusion of an Old Russian dacha, jogging through snowdrifts with logs in tow. Ultimately Rocky wins a rousing triumph against the giant's machinelike attack.

Some modern sportswriters speculate about the coming of a new age of cyborg athletics, pitting genetically selected or manipulated superathletes against one an-

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Manufacturers now use the language of engineering to sell their wares—in this case, Reebok's new Instapump[¬] Fury running shoe. Americans spend more than \$6 billion annually on athletic shoes.

other. Their predictions may turn out to be correct. But no technological change is inevitable. Change is shaped by the law, by politics, by public opinion, and by many other diffuse influences. Decades of fantasies about synthetic food, clothing, and shelter were shattered by the growth of the popular taste for all things "natural" since the 1960s. In sports, spectators and athletes want to win as badly as ever, but the desire for a more humane style of sport and for the old sporting virtues remains strong. On the golf course, amateur players are perfectly free to agree among themselves to allow the use of asymmetrically dimpled balls banned by the USGA from tournament play, but they rarely do. They likewise spurn the meticulously engineered putters that swamp the Patent Office. And professional baseball years ago rejected the aluminum bat. The renaissance of minor league baseball in the 1990s suggests that many people will forego world-class play for a friendlier setting. As a rule, the biggest sports stars are still those who, like Michael Jordan, are capable of breathtaking feats that are prized precisely because they would be impossible without some great gift of nature. And a few new sports, such as ultimate frisbee, rollerblading, and wind surfing seem to have benefited by purposely keeping their distance from big-time college athletics.

hat is important about amateurism is not its fastidiousness about money. If writers and artists can accept corporate commissions without losing their souls, why can't athletes? It is the focus on the whole person, the refusal to let sport or work or anything else take over one's existence, that is most important. Technological intensification does not rule out this amateur spirit, but it does set traps, just as computer power does. The steroid-pumped colossus and the caffeine-and-sugar-braced computer hacker are stereotypes with bases in fact. The burden cannot rest only with individual athletes. Governing bodies in all sports must look harder than ever at new technologies and their likely effects, positive and negative, on the spirit of the game. The most sophisticated of these bodies, such as the USGA, have been able to walk the fine line between innovation that enhances the enjoyment of a game and escalation that robs it of its challenge.

Over the last 200 years, the typewriter and computer have not made writers better or even more prolific than Jane Austen or Charles Dickens. Even in major branches of science, from pure mathematics to evolutionary biology, today's best minds still revere and profit from Karl Gauss and Charles Darwin. Among the professions, only medicine and dentistry are unquestionably and consistently better than they were long ago. But thanks in large part to technology, athletes are still surpassing the accomplishments of their greatest predecessors. And many athletes at the highest levels are reaping unprecedented financial rewards from the power of television and other media to fuel the machinery of money and stardom.

But athletes have also found themselves embedded in an athletic-technological-entertainment complex that has them always in its sights. Like it or not, they have found themselves under the eye in the sky.

LISTENING TO STEROIDS

BY JOHN HOBERMAN

or a decade after his reign as the premier American marathoner of the early 1980s, Alberto Salazar failed to win a major race, and no one could figure out why. His years-long quest for medical advice that might salvage a distinguished career became well known among those who follow the running scene. Finally, the long-awaited breakthrough came with a victory in the 56-mile Comrades Marathon in South Africa in June 1994. But this personal triumph was accompanied by an odd and, for some observers, unsettling piece of news. After consulting with a sports physician and an endocrinologist, Salazar had concluded that years of intensive training had "suppressed [his] body's endocrine system." The treatment that he and his advisers chose was a drug that had no previous association with athletic performance and did not violate international rules: the now-legendary antidepressant Prozac.

No one familiar with the history of drug use in sports will be surprised by an athlete's innovative use of a medication, especially one that is prescribed to create courage and self-confidence in timid, lethargic, or demoralized people. Over the past century there have always been athletes willing to ingest substances, including potential poisons such as heroin and strychnine, to boost their performance. That many of them have been assisted by physicians and pharmaceutical companies reminds us that sports medicine has always been part of what one German sports scientist has called "a gigantic experiment on the human organism." At the same time, we must not overlook the quasi-scientific or pseudoscientific character of most experimentation. Consider, for example, the fuzzy medical logic employed by Alberto Salazar and his counselors. While Dr. Peter D. Kramer's phenomenal best seller *Listening to Prozac* (1993) makes many claims for the drug, the treatment of endocrinological disorders is not one of them. Equally revealing is the vagueness of the self-diagnosis that pointed Salazar toward the world's most popular antidepressant: "It wasn't that I was depressed or sad," he told an interviewer. "I just never had any energy or zest. I knew there was something wrong with my whole system."

lberto Salazar's encounter with Prozac forged a high-profile link between doping in sport and the wider world of pharmacology that affects us all. The existence of powerful drugs forces us to think about human nature itself and how it can or should be transformed. As modern science increases our power to transform minds and bodies, we will have to make momentous decisions about how the human beings of the future will look and function, how fast they will run, and (perhaps) how fast they will think. To what extent do we want to preserveand to what extent do we want to alterhuman traits? It is already clear that in an age of genetic engineering advocates of the medical transformation of human beings sound reasonable, while the proponents of preserving human traits (and, therefore, human limitations) are likely to sound naive and opposed to progress in principle. The unequal contest between those who favor experimentation upon human beings

and those who oppose it will be the most profound drama of 21st-century postindustrial society. Yet few people are aware that its essential acts have already been rehearsed during the past century of scientific sport.

Drugs have been used to enhance sexual, military, intellectual, and work performances as well as sportive ones. Yet sport is somehow different. Its exceptional status as a realm of inviolable performances becomes clear if we compare it with some other vocations. Consider, for example, another group of performers for whom mental and physical stress is a way of life. Their life expectancy is 22 percent below the national average. They suffer from tendinitis, muscle cramps, pinched nerves, a high incidence of mental health problems and heart attacks, and anxiety levels that threaten to cripple their performance as professionals. These people are not fire fighters or police officers or athletes; they are orchestral musicians, and many use "beta-blocker" drugs to control their stage fright and thereby improve their performances. The use of these same anti-anxiety drugs has been banned by the Medical Commission of the International Olympic Committee as a form of doping.

hat accounts for this discrepancy? What makes sport the one type of performance that can be "corrupted" by pharmacological intervention? One might argue that an orchestral performance, unlike a sporting event, is not a contest. Since the performers are not competing against one another, deceit is not an issue. Yet even if we leave aside the prominent international music competitions, this argument overlooks the fact that an entire field of equally doped runners who knew exactly which drugs their competitors had taken would still violate the ethics of sport, which require both fair competition and the integrity of the performance itself—an untainted, and therefore accurate, measure of human potential. But why is the same requirement not imposed on the orchestral musician? Indeed, one would expect "high" cultural performances to carry greater ethical and anthropological significance than sportive ones. Sport's role as a special index of human capacity makes drug use by athletes uniquely problematic.

The "doping" issue within pharmacology thus originates in a tension between the licit and the illicit, a conflict that is inevitable in a society that both legitimizes and distrusts pharmacological solutions to human problems. The enormous market for substances that are supposed to boost the human organism in various ways benefits from the universal presumption that almost any attempt to expand human capacities is worth trying. Technological civilization always tends to turn productive activities into measurable performances, catalyzing an endless search for performance-enhancing technologies, from psychotherapy to caffeine tablets.

The modern obsession with performance enhancement is reflected in the wide range of substances and techniques enlisted on behalf of improving the human organism and its capacities. Commercial "brain gyms" employ stress-reduction devices such as flotation tanks, biofeedback machines, and somatrons (which bombard the body with musical vibrations) in an attempt to affect the brain waves and thereby inintelligence, boost memory, crease strengthen the immune system, and combat phobias. So-called "smart drugs," none of which have been proven effective in scientifically valid trials, are sold to promote

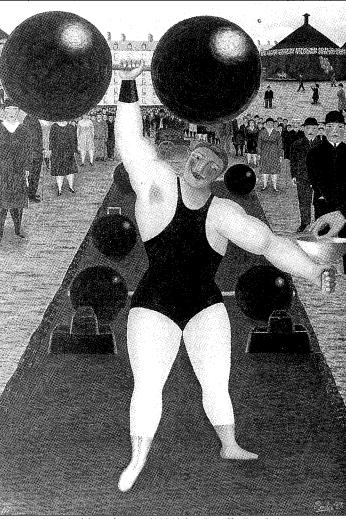
John Hoberman is professor of Germanic Languages at the University of Texas at Austin. His most recent book is Mortal Engines: The Science of Performance and the Dehumanization of Sport (Free Press). His current projects concern race and sport and the future of drugs and other performance-enhancing technologies. Copyright © 1995 by John Hoberman.

"cognitive enhancement."

The never-ending contest between the performance principle and the cultural restraints that work against it blurs the line separating the licit and the illicit. Consider, for example, the response in 1993 to charges of steroid doping among Chinese swimmers. A Chinese newspaper responded that the swimmers' worldclass performances had been made possible by a "multifunctional muscle-building machine" that sends electronically controlled bursts of electricity through the muscles. That is to say, an accusation of illicit performance boosting of one kind was met with earnest assurances that Chinese athletes had succeeded by employing an equally artificial (but still legal) procedure. Few anecdotes could better illustrate the prevailing opportunism in the field.

Doping in sport has been banned for the past 25 years, yet less than a century ago European scientists were discussing pharmaco-

logical aids to athletic performance without any qualms. The physiologists of that time understood that the pharmacologically active substances they worked with displayed a range of effects: they could be medicines, stimulants, depressants, intoxicants, antiseptics, narcotics, poisons, or antagonists of other drugs. But during this phase, physicians and others had little interest in using drugs to improve athletic performance. Sports simply did not have the social and political importance they have today. At the same time, the athletic world did not yet rec-



L'athlète forain (1930) by Camille Bombois

ognize drugs as a threat to the integrity of sport. The distinction between performanceenhancing and therapeutic medications—a prerequisite of the doping concept—was not yet established.

The absence of such a norm explains why the French scientists who gave experimental doses of drugs such as alcohol and kola nuts to cyclists in the 1890s were untroubled by ethical doubts. The pioneering sports physician Philippe Tissié, for example, could both carry out experiments on human subjects and warn against the medi-

cal dangers of stimulants. Tissié saw athletic physiology as one approach to the study of the human organism. His attempt to pro-

long a cyclist's endurance by feeding him rum and champagne during a 24-hour distance trial may have been the first scientifically controlled experiment of its kind. Yet he was consistently cautious on medical grounds about the use of stimulants.

Tissié's attitude toward athletic stimulants appears strangely conflicted to those of us accustomed to the antidrug propaganda of the sports world today. How could the same physician who had urged his cyclist around the track for the purpose of identifying effective stimulants also condemn them as dangerous? To dissolve this apparent contradiction, we must abandon our conditioned reactions to the idea of doping and project ourselves back into Tissié's world. If he had no qualms about energizing his cyclist, it was because his experiment occurred before stimulants had come to be regarded as a threat to equitable competition. In any event, Tissié was not interested in producing recordbreaking cyclists. It was medical prudence, not morality, that prompted his frequent cautionary remarks about stimulants. Indeed, his in a 1913 article, "Sport and Stimulants," by the early German sports physician Ferdinand Hueppe. Modern life is impos-



High ideals in international sports, some critics argue, are not matched within the sports establishment by a strong commitment to drug testing.

condemnation of alcohol is immediately followed by a recommendation that "the better beverage" for boosting performance is sugar water.

A similar ethical nonchalance is evident

sible without stimulants, he wrote, and the task of the physician is to replace harmful substances with more benign alternatives. Hueppe's disapproving references to "doping"—an internationally understood term

even at this early date—concerned the uselessness or potential dangers of drugs, not their possible use as illicit performance-enhancers.

ondemnation of doping on ethical grounds appeared during the 1920s as sport became a genuine mass-cultural phenomenon. The growth of international sporting events after the first modern Olympics, held in Athens in 1896, created a new arena for nationalistic competition that served the interests of various governments. Larger financial investments and the prominence of sport in the emerging mass media gave elite athletes a new social and political significance, which helped foster new suspicions about the competitive practices of others. Having left its age of innocence behind, sports medicine was now embarked upon a new experimental phase involving the collaboration of athletes, trainers, physicians, and the pharmaceutical industry. At the same time, a new international sports establishment arose championing an ideal of sportsmanship that was threatened by the use of drugs.

The debate over doping in Germany during the 1920s and '30s anticipated today's doping controversy in almost every respect. Drug use among German athletes was widespread and openly discussed. The German sports literature of this period offered antidoping sermons, justifications for the use of various substances, and rationales for drawing lines between what should and should not be forbidden. Some German physicians clearly believed that certain substances did improve athletic performance, and they were not reluctant to prescribe them. The prominent sports physician Herbert Herxheimer, for example, claimed in 1922 that the commercial product "Recresal" (primary sodium phosphate) produced a detectable increase in physical fitness. More interesting than his endorsement, however, were the verbal gymnastics that followed. With the approach of the spring sports season, he said, the aspiring athlete would need his full dose of phosphates. Without mentioning the word "doping," he went on to assure his readers that this ergogenic "aid" was not comparable to the many "stimulants" in use, since it merely "supported" basic physiological processes. Echoes of Herxheimer's argument have been heard in recent years from former East German sports scientists who still seek to portray steroid use as a form of beneficial "hormonal regulation" for athletes under stress.

By 1930 a less restrained attitude toward the use of Recresal was evident. W. Poppelreuter, a professor of medicine in Bonn, claimed that wartime tests on German troops and later experiments on mountain climbers had confirmed positive laboratory results. Feeding this substance to horses, cows, and pigs had caused them to grow larger, look better, sweat less, work harder, give more milk, and produce better litters. Poppelreuter's own experiments indicated that Recresal also improved arithmetic performance: the speed of mental calculations rose while the number of errors went down-an important finding, he said, because the mental dimension of athletic performance had become increasingly clear. He was adamant about the propriety of Recresal therapy, which he called "a normal hygienic procedure" that merely supported basic physiological processes.

he most controversial technique in Germany at this time was the use of ultraviolet radiation (UV) to invigorate all or part of the athlete's body. From one standpoint, UV was about as invasive and "artificial" a procedure as standing in sunlight. But from another perspective, UV light was the product of "technical and machine-like devices" that threatened to destroy the "honorable competition" sport was meant to be. The debate over UV became a textbook confrontation between the antidoping purists and their more up-to-date opponents for whom performance was the first priority.

Such problematic distinctions between "nutrients" and "stimulants," between supplemental nutrition and more ambitious regimens, constitute the core of the "doping" issue. The sports medical literature of the interwar period is filled with arguments over variations on this fundamental dichotomy: the "natural" versus the "artificial," rehabilitation versus performance enhancement, restoring the organism versus boosting it, and so on. Then as now, debates over specific drugs or techniques were less important than the larger question of whether society should impose limits on athletic ambition and certain methods that serve it, whether athletes should attempt to improve performances by resorting to what one German physician of this period called "deviations from a natural way of life."

edical objections to doping in Germany did not command universal support among physicians for two reasons. Some of these medical men, like their modern counterparts, were simply spellbound by the prospect of boosting athletic performance in ingenious new ways. But the more fundamental problem, then as now, was that there were simply too many ways to rationalize the use of what were believed to be performance-enhancing drugs within the standard guidelines for medical practice. The line between healing the organism and "improving" it could not be drawn in a clear and definitive way.

Lacking a systematic definition of doping, biomedical conservatives adopted a position based on a kind of moral intuition. Dr. Otto Riesser, director of the Pharmacological Institute at the University of Breslau, was one of the few who understood the biochemical complexities of doping and its uncertain effects. In an address to the German Swimming Federation in 1933, he deplored widespread doping in German sport and blamed physicians for their collusion in these unethical practices. Riesser's response to the problem of defining doping was to say that in difficult cases "common sense and conscience must be the final judges." Such homespun wisdom, though it could not always prevail over the temptation to cheat, was an important statement of principle. Similarly, when Riesser wrote about digitalis in 1930, he speculated that it might help the long-distance skier. "I don't know whether that sort of thing has been tried," he commented. "But all of us feel a healthy inner resistance to such experiments in artificially boosting athletic performance, and, perhaps, a not unjustified fear that any pharmacological intervention, no matter how small, may cause a disturbance in the healthy organism."

The history of doping tells us that our "healthy inner resistance" to such temptations is constantly being subverted by the problem of distinguishing between licit and illicit techniques. The idea of doping—and its notoriety-are, after all, cultural constructs. The rise of an antidoping ethos during the 1920s shows that the culturally conservative response to drug use in sport required about a generation to formulate itself. The culturally conservative response to performance-enhancing drugs, in society at large as well as in sport, is today under siege as it has never been before. In Listening to Prozac, Peter Kramer makes a point of undermining what he calls "pharmacological Calvinism," defined as "a general distrust of drugs used for nontherapeutic purposes." Pharmacological Calvinism, he suggests, "may be flimsy protection against the allure of medication. Do we feel secure in our irrationality—our counting on antiscientific prejudice-to save us from the ubiquitous cultural pressures for enhancement?" As Kramer (and his critics) well know, we do not. Indeed, the transformation of Otto Riesser's "healthy inner resistance" into "antiscientific prejudice" is one more sign that Kramer's enormously popu-

lar brief on behalf of "cosmetic psychopharmacology" has benefited from (and strengthened) an increasingly activist view of therapeutic intervention.

The rise of the therapeutic ideal has made the stigma attached to performance-enhancing drugs seem increasingly implausible. In the therapeutic model, the distinction between enhancement and the treatment of specific disorders is blurred. Therapy aims at human improvement, not necessarily the curing of a specific malady. Precisely because we now treat the legitimacy of "therapy" as self-evident, we overlook its expanded role in modern life. Drugs in particular have a vast range of applications that extend far beyond the treatment of organic diseases. Drugs now in wide use help people cope with such "normal" challenges of daily life as work performance and mood control. The elastic concept of therapy easily accommodates the physiological conditions and psychological stresses experienced by highperformance athletes, and the fusion of everyday stress and extreme athletic exertion makes it difficult to condemn doping in sport on a priori grounds. We simply do not employ a typology of stressful experiences that distinguishes on a deep enough level between the pressures of everyday life and sportive stress. The modern English (and now internationalized) word "stress" homogenizes an entire spectrum of experiences and simultaneously implies the need for "therapies" to restore the organism to its original healthy state.

The power of this therapeutic ideal is already transforming the status of the male hormone testosterone and its anabolic-androgenic steroid derivatives. These hormonal substances have been leading a double life as (legitimate) medications and (illegitimate) doping agents for almost half a century. Over the past three decades, steroid use by male and, more recently, female elite athletes has become epidemic, covertly supported by a prosteroid lobby among sports physicians that has received almost no media coverage outside Germany.

The legitimate medical career of synthetic testosterone compounds began within a few years of the first laboratory synthesis in 1935. By the early 1940s, methyl testosterone and testosterone propionate were being promoted by pharmaceutical companies and administered to patients as an experimental therapy for a variety of disorders both real and imagined: to treat the "male climacteric" (fatigue, melancholia, and impotence) in older men, to deal with impotence in younger men, to treat hypogonadism (testicular deficiency), to restore libido in women, and to reverse homosexuality---a particularly problematic use of testosterone, as was recognized at the time. Early practitioners groped toward safe and effective treatments, sometimes administering megadoses (for breast cancer) that dwarfed the lifetime consumption of the most heavily doped East German athletes of the 1970s and '80s. These clinicians divided into more and less cautious factions, but no one questioned the legitimacy of hormonal therapy as a medical technique.

ven at this early date, ambitions for testosterone transcended strictly clinical uses. The idea that synthetic testosterone might become a restorative therapy for millions of people dates from the early period of its commercial development. In 1938 a Yale scientist told a meeting of the American Chemical Society that testosterone propionate "rejuvenated" old men by relieving depression. While the idea of using testosterone to boost athletic performance does not appear in the medical literature, it was becoming apparent to this generation of scientists that testosterone played a role in physical fitness. In 1942, for example, three American researchers correctly guessed that the combination of megadoses and exercise would alter "responses to fatiguing exercise"—an early harbinger of steroid use in elite sport.

Paul de Kruif's popular book *The Male Hormone* (1945) promoted the idea that testosterone would soon become a mass therapy for the fatigue and waning sexual potency of aging males, and pharmaceutical companies advertised testosterone preparations in professional journals during the decade. Yet testosterone never caught on as a mass-market drug.

half-century later, new developments are again encouraging the widespread use of testosterone. For one thing, hormone therapy is now a conventional procedure, even if certain applications remain controversial. Pediatric endocrinologists, for example, treat thousands of children of subnormal stature with synthetic human growth hormone (HGH). At the same time, they face increasing demands from parents to prescribe the same therapy for children who are only somewhat short. Such pressures are likely to legitimate the wider use of HGH. Inevitably, some parents will want HGH to boost the athletic potential of their children. Others have already requested steroids for the same purpose. A National Institutes of Health (NIH) plan to recruit healthy children to test the efficacy of biosynthetic HGH is yet another sign that social barriers to hormonal treatments are falling. According to the NIH panel that approved this clinical trial several years ago, "There is substantial evidence that extreme short stature carries distinct disadvantages, including functional impairment and psychological stigmatization." The commercial interests of drug companies also play a role in promoting hormone therapies. In October 1994, less than a week before the federal government was to outline complaints at a congressional hearing against the two major manufacturers of synthetic HGH, Genentech and Caremark, Inc., both companies agreed to curtail aggressive marketing campaigns.

Testosterone therapy is now a standard

treatment for hypogonadal males. The resulting demand has stimulated a growing market for testosterone patches that athletes (among others) can use for nonclinical purposes. But again the significance of hormonal therapy extends far beyond the clinic and into the public sphere, where medical "disorders" and "crises" are defined in accordance with social and commercial demands. Thus in 1992 the National Institutes of Health requested research proposals to test whether testosterone therapy can prevent physical ailments and depression in older males. We may now ask whether the aging process itself is about to be officially recognized as a treatable deficiency disease. "I don't believe in the male midlife crisis," commented Dr. John B. McKinlay, an epidemiologist at the New England Research Institute who is a specialist on aging. "But even though in my perspective there is no epidemiological, physiological or clinical evidence for such a syndrome, I think by the year 2000 the syndrome will exist. There's a very strong interest in treating aging men for a profit, just as there is for menopausal women." The emergence of such a syndrome would bring with it new definitions of physiological normality and male identity, and it would help to legitimize other grand ambitions to "boost" the human organism.

he advent of mass testosterone therapy would represent a dramatic cultural change. The use of sex hormones as a "popular nutritional supplement" (as one German expert has put it) to strengthen aging muscles would be a major step toward equating therapy with performance enhancement. And if testosterone products proved to have a restorative effect on sexual functioning in the elderly, this would surely foster a new ideal of "normal" sexual capacity that many people would regard as a "health" entitlement. The certification of low doses as medically safe would transform the image of these drugs, "gentrifying" testosterone products and paving the way for wider use by athletes and body builders.

The meteoric career of Prozac is culturally significant because Prozac is regarded not strictly as a treatment for a specific disorder but as a performance-enhancing drug for a competitive society. The history of Prozac is a case study in how the legitimization of a performance-enhancing drug proceeds. Listening to Prozac is a fascinating book because it presents in autobiographical form the entire cycle of initial discovery, ethical doubt, therapeutic concern,



Scandal du jour: after a string of surprising performances, several members of the Chinese women's swim team tested positive for steroids in 1994.

and transformative ambition that constitutes the history of doping in the 20th century. (Whether Prozac has actually transformed the lives of a large number of patients remains a matter of dispute.) The author's periodic references to his own doubts about the ethics of prescribing Prozac function as evidence of his bona fides: "I became aware of my own irrational discomfort, my sense that for a drug to have such a pronounced effect is inherently unnatural, unsafe, uncanny." The resolution of this ethical discomfort is an important aspect of Kramer's narrative, and it is achieved by witnessing the relief afforded his patients by Prozac therapy. The transformative phase is where real ethical peril lies, and once again Kramer sees himself swimming with the historical tide: "If I am right, we are entering an era in which medication can be used to enhance the functioning of the normal mind." It will take bravery for human beings to decide to change themselves, he suggests, but history is on the side of Prozac and psychobiological transformation.

By now the voice of a famous cultural diagnostician from the last century has become faintly audible. We return to the text for further clues and read that Prozac "seemed to provide access to a vital capacity that had heretofore been stunted or absent." The trail grows warmer. We read on and find that Prozac "lends people courage and allows them to choose life's ordinarily risky undertakings." Now the voice is more distinct. Finally, on the last page of the book, the missing theme falls into place. The most profound moral consequence of Prozac, we learn, will be "in changing our sense of constraints on human behavior, in changing the observing self." The idea of human selftranscendence has been the key all along. Now we understand that Kramer is the prophet of a Nietzschean pharmacology that exalts a more dynamic, biochemically enhanced human type.

Doping is Nietzschean pharmacology because it defies biomedical conservatism in the name of a biochemically engineered superperson. But the legitimization of doping takes place not under the charismatic banner of the Nietzschean superman but under the humane rubric of therapy. The use of doping substances is driven by the ambiguous status of drugs that have (or may have) legitimate medical applications as well as performance-boosting value for elite athletes. The "dual-uses" of such drugs make it difficult to argue that they should be banned from sport as medically hazardous. Medical researchers have already confirmed the benefits of human growth hormone for AIDS patients. The amino acid Lcarnitine, which appears on a list of legal "steroid alternatives" compiled by the U.S. Food and Drug Administration, is another "dual-use" drug that is targeted at both the physically powerful and the physically enfeebled. Sold to athletes in Europe as "supplementary nutrition," it has also been promoted by researchers who claim that it may play a role in preserving mental and physical capacities in the elderly. Making Lcarnitine a standard part of geriatric medicine would certainly promote its legitimacy as a performance-enhancing drug for both athletes and the general public.

he gradual "gentrification" of such drugs will have diverse effects. Testosterone products will be more available to the elderly and thus more acceptable to everyone, creating a market much larger than the estimated one million American males who now buy these drugs on the black market. Gentrification will also undermine the campaign against doping in sport. At the same time, destigmatizing these drugs will enable physicians to treat large groups of patients in new ways. Ironically, the criminalization of steroids has been an obstacle to their use for legitimate purposes. At the Ninth International Conference on AIDS, held in Berlin in 1993, physicians urged that anabolic steroids become a standard treatment for AIDS patients and people who are HIVpositive. The potential market represented by these patients already numbers in the tens of millions around the world.

The official pharmacological Calvinism of organized sport is thus under siege from within and without. While drug use has been epidemic among elite athletes since the late 1960s, the new respectability of testosterone products will put international sports officials in an unprecedented bind. How will the Medical Commission of the International Olympic Committee maintain the official notoriety of steroids once these drugs have become a standard medical therapy for millions of ordinary people? In a word, the hard line against doping is not likely to survive the gentrification process. This outcome of the contest between our "healthy inner resistance" to doping and ambitions to "improve" the human organism will have fateful consequences. New roles for drugs will promote the medicalization of everyday life at the expense of our sense of human independence from scientific domination. It will certainly affect our thinking about licit and illicit applications of genetic engineering.

hile it is easy to endorse the medical wisdom of warnings against the widespread use of steroids and other potentially dangerous drugs, the history of athletic doping in this century shows that it has been very difficult to enforce such pharmacological Calvinism in the face of growing demands for the "therapeutic" benefits of enhanced performance. The elastic concept of therapy will help to legitimize hormonal manipulation as a mass therapy of the future. It is interesting to speculate about how the advertising experts will promote these products. It is hard to imagine that they will not turn to elite athletes, portraying them as pharmacologically improved examples of supercharged health. One can see the athletes now, lined up at the start of an Olympic final early in the next century, their drug-company logos gleaming in the sun.

BACKGROUND BOOKS

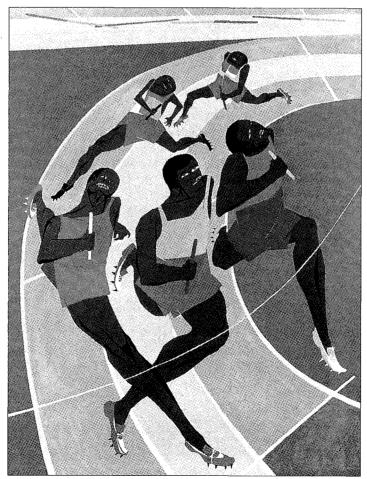
SPORTS AND SOCIETY

A generation ago, scholars interested in the history of sports were so few, and their publications so infrequent, that there was scarcely a book to recommend to readers who wanted something more than the sports pages of their daily newspaper. Today, scholars specializing in sports history are so numerous and their output so prodigious that it is difficult to limit one's recommendations to a manageable number.

Richard D. Mandell's **Sport: A Cultural History** (Columbia, 1984) has to be among the first studies that come to mind. A grand master of the significant an-

ecdote, with an artist's eye for striking illustrations, the University of South Carolina historian moves from the funeral games of Homer's Iliad to the massed gymnastic displays of the Soviet Union. He investigates the role of sports in societies as different as ancient China and modern Germany. Sports in the Western World (Univ. of Illinois, 1988) by William J. Baker, a historian at the University of Maine, is narrated with similar flair and illustrated with an equally fascinating set of images. Here, too, one encounters every conceivable kind of athlete, from gladiators to golfers. Both authors are perceptive analysts of sports as thrilling demonstrations of extraordinary physical skill and prowess, and both also have an informed sense of the ritual contexts and aesthetic appeal of sports.

Nowhere have the ritual and aesthetic aspects of sports been more in evidence than at the ancient and the modern Olympic Games. Given the innumerable studies of antiquity's most important sports event, readers disinclined to take on thousandpage tomes in academic German are advised to turn to M. I. Finley and H. W. Pleket's **Olympic Games: The First Thousand Years** (Viking, 1976). In this brief, beautifully illustrated book, Finley and Pleket describe the mythic origins of the ancient athletic festival, and they dispel a number of modern myths, such as the notion that Olympic athletes were amateurs. (The concept of the amateur athlete is a 19th-century invention



Study for the Munich Olympic Games, by Jacob Lawrence.

of the British upper middle class, which was anxious to exclude the lower classes from the Henley Regatta and other old-boy events.) As for the modern games, my own book, The Olympics (Univ. of Illinois, 1992), is an attempt to describe briefly what happened-between Athens in 1896 and Seoul in 1988-to Pierre de Coubertin's dream of sports as the embodiment of international harmony and good will. Despite the many boycotts and the horrors of commercialization, there are still reasons to be hopeful about the Olympic spirit. Richard D. Mandell's Nazi Olympics (Univ. of Illinois, 2nd ed., 1987) demonstrates why the 1936 games (where Adolf Hitler did not snub Jesse Owens) were a triumph of pageantry and drama-and a travesty of Olympic ideals. William J. Baker's Jesse Owens (Free Press, 1986) is, incidentally, a model biography of the man whom even the Germans acknowledged to be a Wunderathlet.

Modern sports, as I attempted to show in From Ritual to Record (Columbia, 1978), are very different from those of earlier times. In the ancient world, for instance, neither times nor distances were measured, and contests were never decided by "points." We moderns find it hard even to imagine sports without the ubiquitous quantified results that are the basis of the uniquely modern concept of a sports record.

Since modern athletic games are essentially British inventions-Americans contributed basketball and volleyball at the end of the 19th century—it is appropriate that British sports are the subject of many fine books, among the best of which are Sport in Britain, edited by Tony Mason (Cambridge, 1989), and Richard Holt's Sport and the British (Oxford, 1989). The first is an encyclopedic illustrated account of the gamut of British sports. The second subtly examines the ramifications of social class in athletics. In Barbarians, Gentlemen and Players (New York Univ., 1979), Eric Dunning and Kenneth Sheard trace the evolution of modern soccer and rugby football from the almost murderously violent traditional game of folk-football.

Americans are, inevitably, likely to be most interested in American sports. To indulge that interest, one can hardly do better than to begin with A Brief History of American Sports (Hill & Wang, 1993), by Elliott J. Gorn and Warren Goldstein, historians at Miami University of Ohio and the State University of New York at Old Westbury, respectively. Emphasizing the ways that sports have reassured American men about their masculinity in a world where women have increasingly challenged them in the political and economic realms, the authors also cover such conventional topics as the creation of sports leagues and the achievements of sports heroes (and heroines). My own book, A Whole New Ball Game (Univ. of North Carolina, 1988), which makes no claim to comprehensiveness, takes up some specific problems. Why was it, for instance, that the South, which prided itself on its hardy sportsmen, was the last part of the United States to accept modern sports such as baseball, football, and basketball? How can economists claim that black baseball players are the victims of discrimination when their average salary is higher than that of white players? (The answer: if one calculates salary on the basis of "productivity," as measured by such things as batting average, yards gained rushing, and rebounds, African-American athletes are underpaid.)

What about America's leading team games? Gorn and Goldstein have interesting things to say about football's evolution from the British sport of rugby and about the game's spread from the campus to the television screen. But there is, unfortunately, no definitive history of American football. Basketball enthusiasts have the advantage here; they can satisfy their curiosity with Robert Peterson's Cages to Jump Shots (Oxford, 1990). The first word of the title refers to the wire mesh that surrounded the court in the days before the out-of-bounds rule; the ball was kept in play and the players, who ran or fell or were shoved against the mesh, were kept in bandages.

Baseball has attracted an immense army of sportswriters, ghost writers, fiction writers, and historians. The most detailed account of "the national game" is Harold Seymour's magisterial three-volume Baseball (Oxford, 1960-90), a study comprehensive enough to satisfy all but the most insatiable fan. The best one-volume social histories are Charles C. Alexander's Our Game (Holt, 1991) and Benjamin G. Rader's Baseball (Univ. of Illinois, 1993). Readers of all three books will have to surrender their childhood belief in the myth of Abner Doubleday—he did not invent baseball but they will be rewarded with exciting narratives that lend some perspective on Ken Burns's public television series. Hero-worshipers can also choose from hundreds of biographies and autobiographies. One of the best is Robert W. Creamer's Babe (Simon & Schuster, 1974).

If the covers of *Sports Illustrated* are any clue, boxing ranks with baseball, football, and basketball among the most important American sports. The best social history of "the fight game" is Jeffrey T. Sammons's **Beyond the Ring** (Univ. of Illinois, 1988). The New York University historian tells (and interprets) the stories of John L. Sullivan, Jack Johnson, Jack Dempsey, Joe Louis, Muhammad Ali, and many others.

The lives and careers of black athletes are discussed in many comprehensive histories and detailed biographies, but it is rather a scandal that there is no really good general history of African-American athletes. The late Arthur Ashe was a great tennis player and an admirable person, but his three-volume survey, A Hard Road to Obey (Warner, 1988), is long on facts and lamentably short on interpretation. The scholarly deficit in this area is partially overcome by a body of books on African-American baseball players in the Negro National League and (after 50 years of exclusion were ended) in the major leagues. The story of the move from segregation to integration is told, movingly, in Jules Tygiel's Baseball's Great Experiment (Oxford, 1983). Jackie Robinson is, of course, the central figure of the stirring drama, but Tygiel, a historian at San Francisco State University, provides a full cast of characters, villains as well as heroes.

Jewish athletes have been luckier than their African-American counterparts. Peter Levine's Ellis Island to Ebbets Field (Oxford, 1992) is hagiography of the highest order. His argument that American Jews have been able to devote themselves to sports with no sacrifice of their traditional religious identity is questionable, but his narrative is masterful. Nat Holman leaps from these pages to sink another twopointer, and Hank Greenberg emerges for another run around the bases.

ntil very recently, female athletes were almost totally neglected, by historians as well as by sports spectators. At best, they were given a separate chapter in the histories that purported to tell the "saga of American sports." Now, in addition to innumerable biographies and special studies of women in cricket, soccer, baseball, golf, tennis, track and field, mountain climbing, and almost every other imaginable sport, there are many books that attempt a more comprehensive view. My own Women's Sports (Columbia, 1991) begins with Queen Hatshepsut of ancient Egypt and ends in the era of Florence Griffith-Joyner and Katarina Witt. En route, I discuss Spartan girls at the Heraia (games sacred to the goddess Hera), Roman matrons who mimicked gladiators, medieval huntresses, 18th-century Englishwomen who fought in bare-knuckle prizefights, Vassar College undergraduates who formed baseball teams, and female physical education instructors who appealed to the International Olympic Committee to exclude women from the Olympic Games. The book concludes with speculations on the erotic appeal of female athletes, an ideological hornet's nest in this age of feminist protest. Susan Cahn's Coming on Strong (Free Press, 1994), concentrating on American sports, is, as her subtitle indicates, a detailed study of "gender and sexuality in 20th century women's sport." Cahn is a historian at the State University of New York at Buffalo. Mariah Burton Nelson's lively, controversial work is more radically feminist (and more positive about the erotic element in sports): **The Stronger Women Get, the More Men Love Football** (Harcourt Brace, 1994).

Another way to approach sports is to examine their institutional context. Economic historians have produced a number of fairly technical studies of American sports. Most of them require a strong background in economic theory, but Andrew Zimbalist's Baseball and Billions (Basic, 1992) is an exception. Zimbalist is a wizard at explaining such matters as the legal technicalities of baseball's famed (and now largely defunct) "reserve clause" and the intricacies of cartelization, arbitration, and the baseball owners' exploitation of the tax shelter. Zimbalist, an economist at Smith College, is ready to practice what he preaches: he is among those planning to launch a new baseball league to rival the strike-crippled major leagues.

The debate over ethics in intercollegiate sports has been as bitter as the struggle over money in professional sports. Ronald A. Smith's inappropriately titled **Sports and Freedom** (Oxford, 1988) is an account of the beginnings of intercollegiate sports. The Pennsylvania State University sports historian proves conclusively that most of the infractions punished today by the National Collegiate Athletic Association were familiar on 19th-century campuses. College sports were full of athletes who lacked the ability or the motivation to benefit from the curriculum, under-the-table payments, coaches who earned more than the college president, and a determination among players and coaches to win by fair means or foul. Of the many analyses of the woes of intercollegiate sports today, College Sports, Inc. (Holt, 1990), by Indiana University English professor Murray Sperber, may be the best. He describes, among other abuses, the extraordinary fiscal and administrative autonomy enjoyed by many athletic departments at NCAA Division I universities.

Finally, for readers curious about the people in the stands and in front of the television screens, there is my Sports Spectators (Columbia, 1984), which moves from antiquity, when the most violent sport (gladiatorial games) had the most peaceful spectators, to the present, when British, European, and Latin American soccer games are occasions for violent rampages by young, unemployed, working-class men. But readers worried about the disorderly behavior of contemporary spectators will be comforted to learn that today's tumults are nothing compared with the Nike riots of A.D. 562, which began at Constantinople's chariot races and left 30,000 dead.

—Allen Guttmann

Allen Guttmann is a professor of English and American Studies at Amherst College. His most recent book is Games and Empires: Modern Sports and Cultural Imperialism, published by Columbia University Press. Copyright © 1995 by Allen Guttmann.

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