Design for Sports

THE CULT OF PERFORMANCE

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Notes on an Infinity of Sports Cultures

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The Personal Meaning of Sports, Part One

When I was eleven and still lived on a Connecticut cul-de-sac named Freedom Drive, the pace of life was so slow and the town so removed from the inner-city maelstroms of the late sixties that we could play ball in the road from the time we got up to the time we went to sleep, and on many days and nights, we did just that. Occasionally, cars would drive through, and we’d glare reflexively at them, but within seconds we’d be back into our games, immersed in the all-enveloping realm of two-on-two touch football, left-handed wiffle ball, street hockey, four square, or ultimate Frisbee.

In those days, my design interests focused on the sports posters my friends and I had on our bedroom walls. If memory serves, amidst the pages torn from Sports Illustrated, I had two large posters, one of Reggie Smith, the other of Hank Aaron. Both were baseball players, and both were outfielders. One was local (Boston), the other not (Atlanta). Why them? Because of the way that they played ball. The way that they stood. The way that they moved. The way that they were. They were great at what they did, and I not only responded to them, I wanted to be them.

Looking back, I’d have to say my reaction evolved from a combination of factors: my own sense of striving against continual failure along with my realization that Smith and Aaron had a hold on something that 99 percent of the adults I knew had failed to grasp. Simply put, they were doing something they liked. Something that mattered. I decided that the lesson of sports wasn’t necessarily to be an athlete—it was to do something you really wanted to do because then you could be good at it.

It wasn’t until I was twelve that I realized a more obvious significance to the Smith and Aaron posters: both were African-American. In the aforementioned suburban Connecticut town, families of color were rarely seen. Yet photos of black athletes dominated my wall and the walls of my friends. If not Aaron and Smith at my house, then Frank Robinson at Dave’s, Walt Frazier and Connie Hawkins at Michael’s, and Lew Alcindor at someone else’s. For us, racial integration came by way of televised sports, not by bus. We watched to see who was good, and based on that, decided not only who to root for, but who we wanted to be like.

The Personal Meaning of Sports, Part Two

Around the same time, I also came to believe that my body’s physical position as a spectator—the way that I sat, stood, or lay—could influence any game’s outcome. Through an intense trial-and-error process, I discovered that my ability to affect a game was directly proportional to how much I cared about the outcome: my favorite team might lose as a result of my crooked elbow or crossed pant leg.

Looking back, I see it as a kind of cosmic ripple effect. Without thinking, I might make a slight, seemingly meaningless movement. Then, almost instantly, something disastrous would occur—an error, a fumble, a turnover, or a dropped pass for my team, or a home run, a goal, a dunk, or a
touchdown by the opposition, I’d realize what I had caused, and since I couldn’t reverse it, I’d try to
divine the next optimal position for my body and
move into it.

Years later, when I read about chaos theory,
I recognized this as a variant of what author James
Gleick called “The Butterfly Effect,” the “notion
that a butterfly stirring the air today in Peking
can transform storm systems next month in New
York.” I continually chased an ever-evolving rule
set in which my clothes and body were equipment
for an increasingly convoluted and obsessive men-
tal athleticism where what appeared inconsequential
and random was, in set, guaranteed to be the oppo-
site. If sports brought out positive traits in me and
generated a sensitivity to race, it also brought out
such tendencies as this profoundly superstitious,
even neurotic, behavior not strictly accountable
for by being raised in the WASP environs of rural
New England.

In sports, as in life, we can’t help but think in
terms of what others have done before us. The
sculptor Alberto Giacometti said of his contempo-
raries that although they could look outside, they
could see the landscape only in terms of what the
painter Camille Pissarro had done; William S. Bur-
roughs has said that after looking at sunflowers
painted by Vincent van Gogh, he could never see
nature in the same way again.

The power that such imagery has over us is
immense. It was thought to be physically impossi-
bile for a human to run a sub-four minute mile—
until Roger Bannister finally did it in the early fifties.
And being thus liberated to do it, dozens of other
athletes accomplished this feat within the next year.
Such stories offer us a rare insight into the process
of how we can exceed our limits; they demonstrate
how what we think influences what we can do, see,
experience. It wasn’t until I was able to dispel the
imagined connection between my own actions and
those on the screen that I was able to enjoy watch-
ing sports on television.

Thinking About Sports at the End of the
Twentieth Century

It wasn’t so long ago that we thought of sports as
what kids did in their spare time and what adults
did if they couldn’t grow up. Today, however, we’re
more likely to consider sports a global form of big
business. The direct and indirect sports economy
generated by Nike, for example, is larger than that of
many states and nations.

Sports haven’t been “just sports” for some
time. We have more types of sports, sports equip-
ment, and sports participants than any social theo-
rist, scientist, or visionary ever imagined. The full
flowering of what social theorist Thorstein Veblen
called the “leisure class” is manifested today in
entire demographic groups devoted to conspicu-
ously consuming exercises, activities, and sundry
accessories. This new breed—call it the Lyra-
class—sees spare time and vacations as the
opportunity to participate in a series of perspiration-
infused activities, one following the other in rapid-
fire succession.

If we step back for a moment and look at the
products that support this phenomenon, it’s clear
that many of them succeed on multiple levels. These
products are different from the banal necessities of
everyday life. Their message is one of optimism and
positive democratic participation: anyone who’s
good enough can excel, and excel to the point
where they can leave their surroundings behind,
literally and figuratively. No hick town, ghetto, or
cul-de-sac can hold someone so empowered. In
such a way, sports products enable those with
kinesthetic intelligence—the kind measured in the
field instead of the classroom—to believe that they
can surmount the obstacles that birth and environ-
ment have otherwise thrown them.

The actual objects of play and the various
accessories upon which all sports are founded
have changed enormously in the last twenty years.
Sure, we still fling, tap, or slap balls into various
goals, holes, and nets, but sports equipment also
serves as the key prop in the larger drama that
sporting events have become. This equipment—
shoes, boards, gloves, bats, clothes, souvenirs—has
achieved mythological status among youth every-
where precisely because of its promise of liberation
and the attendant multimodal media spectacle that
celebrates it.

The spectacle of sport—with contemporary
participants in the age-old drama of competition—
creates events of such size, scale, scope, and
stature that they are essentially without peer in
contemporary culture. For viewers—at the track,
stadium, or television—today’s sporting events
stretch the limits of cognitive information process-
ning by challenging our capacity to absorb it all.
There’s the action on the field, the incessant music
between plays, the various cheerleaders and mas-
cots, the announcers, and the various media
streams provided by scoreboards, airborne ban-
ners, radios, and hand-held televisions. And far
from being an unpleasant visual or aural overload,
this excess of information is what we have come to
expect; it is essential to the experience of sports. On
the various fields of athletic dreams, quietude is no
longer an option; every facet in the flow of specita-
tor experience is carefully designed.

Consider that in 1993 the NCAA introduced a
day-glo yellow softball with glazed red stitching
both because it looked better on camera and was
more visible to spectators in the stands. ESPN had said
that it wanted to see more action, and the livelier ball was
born, complete with a polyure-
thane core for extra punch. Major League Baseball
also “redesigns” its ball in a transparent attempt
to woo back fans with an instant office, home-run
blitz to counter the more mediagenic properties of
NBA basketball, NFL football, and NHL hockey.
Many sports have used technology to further
engage existing viewers and to entice new ones.
Witness the “comet puck” sponsored by the Fox
network: an electronic sensor installed in a hockey
puck allows it to produce a red, cometlike tail when
Our sports gear suggests the possibility of corporeal escape—a kind of psychic involvement with something far larger, more powerful, and more perfect than any one of us could reasonably hope to be a part of.

filmed on camera. Similarly, the in-car and on-bike NASCAR, Formula One, and Grand Prix camerasanimate the viewer, unexpectedly allowing them to get inside the race car or on the motorcycle.

Then there are the logos. Logos are everywhere—fertile explosions of color and type dotting the athletic landscape. Whether applied to the products or worn by the athletes, logos no longer just sit there waiting for the eyeballs to come to them. Now the logos go after the eyeballs; they race, animate, and graphically collide with one another at breakneck visual speed, and their aggressiveness in seeking attention is matched only by their precise placement on body, equipment, or playing surface. Such logos offer us the opportunity to observe how sports graphics have chucked the standard corporate identity manual out the window, taking product imagery to a whole new level—that of the hyper-iconographic brand where the exterior of many products is transformed into a carefully composed marketing collage.

Nike practices this proactive brand architecture with particular effectiveness, building layer upon layer of exquisitely designed motifs. The company creates a multimedia mass of graphics—in-motion that operates consciously and unconsciously in a way heretofore unknown. Everything from in-your-face advertising to the total Nike Town environment is designed in an effort to transform consumer skepticism to Swoosh loyalty.

As sports continue to occupy center stage in our global culture, its equipment continues to change from nonstorytold works of functional folk art to lab-based, fully ergonomic, runway-inspired works of creative abandon, capable of captivating us as no other products can.

Sports products of the late nineties express the self-accessorization of our lives and the emergence of the occasional athlete; weekend warriors now possess an array of equipment once reserved for the elite level of world-class athletes. Such professionalization of equipment suggests that our products, for the first time in history, possess abilities far in advance of our own. The absolute high-end, let-it-all-hang-out gear designed for the world champion or gold medalist is now available to anyone off the street with a gold card. Just as many of us now cook at home with sophisticated restaurant equipment, weekend athletes of all types now invest thousands of dollars and impressive amounts of psychic energy in achieving minuscule but highly meaningful competitive advantages over their sports cohorts.

While the obvious way to consider sports equipment is either as a technologic icon or as an artifact of material culture, a more interesting way to think of it may be as a prosthetic in the process of becoming an orthotic. A prosthetic is cloaked in the language of the missing limb; it is based on absence, an inferior and artificial replacement for the real thing. It is attached to us rather than integrated with us. By contrast, the orthotic is a customized product that fuses with the body and encourages a more complete sense of mastery. In sports design, the model of the prosthetic is the past, the orthotic the future. Eventually, many athletic products, starting initially at the higher end, will be reorganized around a custom-produced component supported by a mass-produced shell, structure, or exoskeleton.

These kinds of changes suggest that we have entered into a new type of relationship with our equipment. Our sports gear suggests the possibility of corporeal escape—a kind of psychic involvement with something far larger, more powerful, and more perfect than any one of us could reasonably hope to be a part of. In a way, it fulfills some of the social promises for personal growth manifested in the fifties and sixties. The fact that it has done this so well probably means that some kind of backlash is inevitable, and indeed it has come—strongly, visibly, predictably—in the form of an aggressive punkification of sports. The effect has been to attitudinalize, hybridize, and radicalize existing sports, as well as to invent new ones. In all of this, design has played a key role.

Learning from MTV

Sports are a lot like music; teams are like bands, stadiums are like concert halls, and superstars are a lot like, well, superstars. Sports and music don't simply borrow from one another; they have entire subcultures that seem to migrate back and forth across ever-finer demographic and market lines. Sports and music are both global methods of communication for youth culture (various artists, for example, have called rap the CNN of the inner city because it tells everyone what's up). The resident site for rap, rock and roll, heavy metal, alternative, and techno, a place with its own sports show—and the place that has done the most to make the music that we hear visible—is MTV. In its heterogeneous mix of styles, brands, lifestyles, and identities, the music network offers a compelling lesson on the fluid nature of contemporary identity.

MTV's corporate identity has used the same system for a number of years. A big, blocky M and a smaller, script TV. What makes the MTV corporate identity so radically different from other corporate logos is that it thrives on change. Since the beginning, its graphics have been in motion. One day, it's the image of a hood of a car, the next a spout of paint, then state-of-the-art animation, then a celebrity impostor. Elsewhere in corporate America, identity tends to be static, but at MTV, it's never the same thing twice, though it's always the same thing over time. The changeability of the logo is incessant, the lingua franca of the whole system.

A similar propensity for movement is hard-wired into contemporary sports culture, from the mobility of free agency in professional athletics to the incredible fluidity of sneaker styles to the cross-pollination between road bicycling, mountain bicycling, BMXing, vert ramping, low-riding, and retrofitted cruising. Because sports are all over the airwaves, we'll be seeing a lot more of the I'll-take-a-little-of-this-and-a-little-of-that approach to making things. MTV heralds the ascendancy of a new, pluralistic youth aesthetic, a way of seeing the world based on hybrid thinking, on the newly appreciated beauty of multicultural children, and on the emerging sense of what might have been called confusion or chaos a decade ago is what constitutes beauty today.

Although music is central to the culture of sports, the real lesson from music, courtesy of MTV, is that change is fun, it's easy to do, and it's in print with the way thing are in life. Since it's going to happen anyway, why not ride it, surf it, play it, and
Radical Golf! Who Would Have Believed It!
Golf offers one of the most compelling examples of just how much things have changed. While golf has long been a popular sport—witness Annie's Army—who could have predicted that 30,000 viewers of every size, shape, and color would line up at the seventeenth hole of the U.S. Open. In recent years, golf has been removed from the club, repatterned, and turned upside down and inside out by a new generation of players, fans, and designers.

Two events stand out especially regarding golf's new spirit. One is Tiger Woods' introduction to the links of a new, multi-ethnic, hybridized model for what athletic excellence could be, and as significantly, look like. It was an image instantly recognized and promoted by Nike, which signed Woods and ran a television commercial for several months that powerfully captured the sport's new demographic ambitions: youth of all shapes, colors, and backgrounds were filmed, saying "I am Tiger Woods." In much the same way that Andre Agassi shattered the Wimbledon ethos of ultramannered tennis played in classic whites, Tiger Woods has gracefully diminished the conservative country-club racial hegemony of golf.

A second event—less known, but similar in spirit to the Tiger Woods phenomenon—was the introduction of "Subpar" golfing attire by a design venture-capital firm called Astro Products. Subpar servants to the representative companies bringing new energy to the game, an energy aided and abetted on the cultural front by the release of Adam Sandler's movie, Happy Gilmore, and on the technical front by the introduction of exotic materials such as titanium and aggressive new club forms such as the famed Big Bertha.

Such events have not only given golf front-page, center-screen visibility, but they have also challenged the very spirit of the game. Suddenly, golf is a sport of the people, by the people, and for the people. Players of all creeds are flocking to the links. Long held convictions about the sanctity of golf have been steamrollered by a rock-and-rollified, rapified, and reggaefied panoply of changes. Golf is now a mix of staunch gentility and "alternative" fluidity. The new golfers—already given to a slacker-type freestyling approach to life—have raised the time machine to construct a new identity for the sport that is part fifteens suburban dad, part sixties muscle car mechanic, part seventies nerd, and part eighties successful capitalist dude. To quote the Beastie Boys—which Subpar does on its promotional postcards—"It's the new style." Subpar is but one example of the new alternative energy finding expression in golf. And if this kind of sea change, this new-found fluidity of identity can happen in and around golf, then it can happen anywhere.

Skate or Die: "Boredom is a Crime"
In contrast to golf, skateboarding has been on the radical fringe from the start; it has always been a renegade activity and probably always will be. With passionately dedicated participants and an indelible cool factor, its cultural premise exists in opposition to whatever the consensus happens to be. It has rejected most attempts at commercialization, and its most ardent adherents never quite fit in—and they work hard not to. Their graphic look and equipment design highlights this "outsider" attitude of willful disobedience.

At the turn of the century, architect Adolf Loos stated "ornament is crime," but in late-twentieth-century, skate-centric culture, it's more like "boredom is a crime." Even the underclass of the boards have become elements of the design equation, as have the wheels, which are differentiated by color, pattern, and material to address a range of riding styles and surface conditions. The killer graphics of boards range from the early surf-inspired Rat-Fink (giant head, little legs, bugged-out eyes) to seventies Retro (when urethane wheels were developed to revitalize the sport) to crazy-haired Street Punk (with its "Skate and destroy the fear" ethos and comic book-style raunchiness to nineties digital age imagery.

Beyond such graphics, though, the coolest thing about skateboarding is its open invitation to skaters to custom assemble components into a no-fuss, no-muss, totally individualized product. It's as if a consumer who wanted a car could specify parts from the optimal chassis, transmission, and engine to specific heats, paint job, and upholstery. Users get exactly the product they want, assembled on site to order. Boards are further customized through use—abrasions, calligraphy, graffiti, decals, and other assorted forms of advanced user-induced scar- ing. Skateboarders take their boards through a process of "post-market product alteration" whereby

Kryptonics Skateboard Wheels
Courtesy Kryptonics

TOP LEFT: Retro K. Classic surf graphics have been applied to the Kryptonics Retro K. TOP RIGHT: Classic K. The Classic K replicates the original skateboard wheel designed for slalom and longboard skating, updated with supercompress, high-rebound, and long-wearing urethane.

LEFT: Kryptonics Hawaii SK. This wheel is designed especially for longboard cruising.

RIGHT: Nuwood Skateboard (1995). Traditionally, skateboards are constructed with the wood of North American sugar maple trees. According to designer Tim Pumarta of Santa Cruz Skateboards, the objective of the Nuwood board was to "replicate the cellular structure of solid wood." The one-part, mold-injected, carbon fiber board has the density of wood, but is more durable, more resistant to moisture, and more slippery; it is also recyclable. Courtesy Santa Cruz Skateboards.

NOTES ON AN INFINITY OF SPORTS CULTURES
the existing, mass-produced object is personalized, over time, until it has exactly the qualities and personal fit that the owner desires.

Stephen Pearl of Vent Design Associates notes that a skateboard first communicates an image—and then develops that image into a personality through use. He suggests the relationship between a skateboarder and his board is similar to that of a musician and his instrument: intimate, trusting, mutually supportive, and about doing everything together. Pearl used this analysis—along with injection-molded, recycled nylon combined with carbon fiber in a microcellular matrix—to create the Nuwood skateboard for the industry-leading Santa Cruz company. The board is a perfect example of what the new generation of sports equipment represents: emotional commitment by the user that is then reflected back into the visual intensity of the equipment as it is envisioned by the designer.

As it has also enriched other board sports, skateboarding has been newly energized by their emergence. Historically, it seems to have mainly evolved out of surfing, as a way for the surfer to practice being smooth on the board. Today, however, skateboarding and street lugging have taken skate consciousness in new directions, while snowboarding has emerged from both surfing and skating cultures and supports its own state-of-the-art board graphics. Snowboard graphics, particularly those by such companies as Burton, Option, Alien Workshop, and K2 are more subtle, wittier, and more beautiful than any other boards from other sports—with the possible exception of certain classic skateboards.

Since the late eighties, many of the K2 snowboards have emerged from the team at Modern Dog Design, Robynne Raye and Vito Costarella, who see
a more conservative, refined, and even suburban imagery coming into play as snowboarding goes mainstream. Not only does this imagery have to play to the kids, it has to appeal to the "Mom Factor" as well because she's the one who's going to pay for it. The effect has been dramatic: what was raw, naive, fresh eight years ago is now highly considered, blended, and market-tested. Both Raye and Costarella, for example, examined surfboards, and especially the classic pintail/longboard, to establish a new tradition of subculturized classicism for contemporary snowboard design. After a period of too-much-is-never-enough visual energy, the pendulum of cultural taste has swung back toward simplicity and clarity as the more radical mode of expression.6

Windsurfing equipment has taken its particularly compelling need for a highly refined and adjustable person/product interface and optimized it so that the body itself is used to trim the sail, support the mast, and steer. And surfing, in many ways the inspiration for all board sports, has been reenergized by a new breed of surfers who skate as well as snowboard, and who have brought an "extreme" attitude—along with aerial abilities—to the sport. Surfing today is in a particularly hybridized state; short, "eggos" or aggressive boards and traditional cruising longboards coexist uneasily; in extreme surfing, windsurfers or jet skiers tow surfers into enormous waves where a misstep can lead to paralysis or death.

A measure of air, exposure, and new degrees of "trick freedom" have been transferred from the sidewalk to the waves and slopes; carving has become hypercarving, whether the carving is on the wettest wave or the driest snow. Skateboarders bring their vertical play to the waves, while surfers, always more nature-bound, suggest moves that are more organically connected to the wave. These athletes, and the cultures they represent, beg, borrow, and steal from one another in an exchange that is every bit as fluid as their physical maneuvers and the medium they perform on. Skate tricks such as those by Christian Fletcher seem even more radical when they are done on water and speak to the easy fluidity of style and action now possible. Just as skateboarders moved out of parks and pools and started railsliding around town, in plazas, and taking over streets, so have snowboarders eliminated their boundaries. What began with "snurfing" in the seventies evolved into an uneasy coexistence with skiers in the mid-eighties. And just as with surfing and skateboarding, a contingent of extreme snowboarders are now pushing the limits of cross-pollination even further; some surfers now put straps on their boards, just as snowboarders have long done.

Just as skateboarding reinvented, reconfigured, and otherwise reimagined surfing, in-line skating did the same for rollerskating. Before Rollerblade pioneered in-line skating in the eighties, rollerskates (named for the company that created them, frog design) reconsidered the rollerskate in the late seventies and used injection molding to replace the leather uppers; with it came brightly colored plastic componentry that was an instant hit. In-line skates built on this precedent and crystallized the fusion of fashion and function that today typifies athletic gear of all kinds. Anyone who thinks such equipment is all show and no go should see the in-line races held at the legendary Laguna Seca auto circuit. As one observer aptly remarked, "If the Futurists were alive today, this is what they'd be doing."

In the nineties, board sports have been merging, cross-referencing, and playing off of one another in both their specific details and in their general culture. Design has become a fluid medium of exchange, a process of communication between the different board factions, a way in which color, pattern, form, and detail can be used to signify alliances and wordless understandings about what's hip and what isn't. Whether through tech-driven maneuvers or organic freestyling, board sports give the pain of youth a tangible, physical, and aesthetic release. The irony lies in the fact that while these board sports started out being all about doing your own thing on homemade rigs and hand-built gear, today there is an effort to create a collective soul amidst successes greater than the pioneers ever imagined. Even as an alternative sport like mountain biking now has an Olympic venue, "anti-heroes" ranging from Tony Hawk to Barrett Christy are beginning to challenge mainstream celebrity athletes as voices for youth culture because they seem to be about pure passion, not unmitigated greed.
Shawn Goulart, Street Luge Champion. The leather body suit worn by street lugeurs is similar to those worn by motorcycle racers. Courtesy Chris Carrel

Innovations and Customization

Come from Passion

At the same time that these voices are changing, so too are the designers. Big ideas don't necessarily come from well-funded research labs, elite committees, or even the biggest brains; they come from the most passionate and iterative processes of experimentation carried out by a group or team of supportive (yet competitive) people who do it because they care and because it's cool, at least to them. Many of today's most influential products have emerged from just such modest origins, a tribute to the interwoven spirits of invention, optimism, and relentless tinkering.

Consider that Op (Ocean Pacific) started when surfers Jim Jenkins and Chuck Buttner couldn't find any sturdy trunks. So they cut up one of mom's hefty tablecloths and restitched it into swimwear. Their company brought in hundreds of millions in sales per year in its prime. Likewise, Bill Bowerman used his family's waffle iron to make a prototype for a rubber sole with improved traction, later to be Nike's waffle sole. And outdoor equipment designer Bill Moss used fiberglass when it was still an untested material in the 50s to make stronger, lighter tent poles. The high-strength, precurved aluminum tubing also used by Moss was a product of the aircraft industry, and it reconfirmed to the design community the value of the aerospace engineering tenet to do more with less. The tendency to replace mass with information appears as well in boat design. Brute functionality is being streamlined by computer modeling and high-tech materials. Canoes have gone from wood-strip construction to aluminum sheets to fiberglass strips to cast resins and plastics; the result is an unprecedented lightness, strength, and rigidity.

The great intellectual burst this provides is the realization that there is nothing in nature—and potentially nothing in any successful design—that is extraneous. Good design in sports equipment means that everything matters; every part serves a purpose; nothing is wasted. Such design offers the lessons of ecology—about mutual sustainability, about the value of interconnectedness, and about the place of appropriateness. Efficient design is an especially loaded phrase for those who carry their equipment, as climbers and backpackers do. While there has been a trend toward lighter products—the bike racer, for example, who shaves grams off his or her bike by upgrading components and even drilling parts of them out—the concurrent trend puts high value on adjustability and physical and psychological acceptability, even if it means greater cost and weight.

Efficiency—and sometimes simply the look of efficiency—has led to carbon fiber and titanium parts for products ranging from bicycles to camping equipment. Such component shopping allows consumers a new level of customization. Even if it doesn't show a measurable benefit, companies such as Mizuno now offer players of all levels the chance to get a custom, just-like-the-pros-use baseball glove, with the consumer's name embroidered along the thumb. This trend toward personalized sports products is consistent with the larger, societal trend toward customization—witness individualized news over the Internet, personalized desktop software, and have-it-your-way hamburgers, all of which represent the contemporary consumer-choice phenomenon.

It is not hard to imagine that a new type of boutique specializing in sports product change-overs, upgrades, and technical patch kits will emerge. You still may not be able to have your sneakers repaired at a pet store in the near future, but there are many restaurants where personalized products can be ordered, prepared, and quickly served to satisfy the appetite of the hungry-for-customized-novely consumer. Have-it-your-way sports equipment orders will soon be the norm.

Learning from Bicycles: How Good Can the Design of Sports Equipment Get?

Bicycles balance the stringent demands for refined aesthetic excellence with the different but even more stringent demands of functional interaction. Advances in design have shifted the paradigm from the rigid, double-triangle metal tube frame to something more organic, flexible, and open to innovation. In the last ten years, ideas that were considered classic and immutable to change have been swept away by a tidal wave of technologies that include electronic shifting, clipless pedals, Aero-componentry, front and rear shock absorbers, monocoque construction, and new frame geometries, along with the use of titanium, beryllium, fiber composites, and metal matrices.
These advances, along with the emergence of a highly competitive new generation of riders, has transformed the bicycle business. In so doing, it has elevated bicycles for many to the status of sacred object. Bicycles have become lighter, stronger, smarter, replacing mass with IQ in a way that goes beyond even what has been accomplished in boat design; physical materiality has given way to higher intelligence componentry. In short, brains have been winning over brawn.

High-performance bicycles achieve what author and essayist Owen Edwards calls “quintessence,” in a book of the same name, a kind of radical purity of form and essential clarity of function where nothing can be added or subtracted without losing harmonious balance. By demonstrating a more intimate partnership between user and machine, bicycles now epitomize what we all thought-out product design aspires to. Such products tend to offer feedback and encourage customization. They make it easy to make them our own. We attach ourselves to them and foster these attachments for years because the bicycle is our energizing in a powerful way. Objects such as this suggest the center can hold, contrary to the claims of W. B. Yeats; they suggest that the design of experiences around a product are as important, or more important, than the design of the product itself. Most of all, they suggest that optimism may be the most important product designers can create; and that the single most convincing explanation for the success of sports products may lie in designers’ abilities to imbue said athletic artifacts with a powerful transformative sense of possibility.

The social critic Ivan Illich once remarked that an equitable world would conform to the scale of a bicycle, a view that presents the bicycle as a matrix for deciding what shape the world is in. The bicycle, particularly those driven by the demands of sport, is part sculpture-in-motion, part tricked-out life-style machine, and part multipurpose omen for our future—the best symbol yet of our hope for a whirring, nonpolluting, and technologically beneficent age.

**Performance as Image/Performance**

We live during a transcendent moment in the history of our culture’s visual expression. Our sports products are so powerfully designed that we practically create their own sensory overload, but without the accompanying disorientation. Sports equipment—simply in appearance—is a performance enhancer, a kind of drug that we can psyche ourselves up with.

We accept that we don’t want to just play a sport: we want to look as though we’ve mastered it. Traditional ideas about the discipline of practice have given way to a more lenient notion that it’s enough to wear the appropriate style, look, or image of the highly paid professional. Imagistic prowess and the ability to turn heads and capture the gaze of those around you is as important as pure physical prowess and skills achieved through repetition. As a result, a great deal of effort is put into looking like a spectacle—being spectacular—even on the most mundane plays; the concomitant result is an increase in needless mistakes for the sake of transforming an ordinary play into a memorable one.

This points out the fact that we’re confused about how we relate to ourselves and how we want to be seen by others. At times, it seems we want people to see our new glasses more than our eyes; our flashy racket more than our belly; our tennis togs more than our legs. We use our sports products to redirect the vision of others. We want people to know us by our expert mix of athletic poses and possessions. We aspire to the right collection of products—a pair of sunglasses, that pair of sneakers. All of which is part of the general psychology of sports in which it’s not just about going out and doing it—it’s about having a certain attitude that states, as does Andre Agassi’s camera commercial, “Image is everything.”

Selling athletic images to nonathletes—that is, to most of us—is a way of offering us partial identities that we, as consumers, use to create part of our image of who we are. We use the graphics of sports—in the form of caps, logo-laden clothes, shoes, uniforms, and equipment—to inhabit different personas, though only temporarily before we move on to cross-train in our next athletic costume.

This fluidity of identity—apparent in sports equipment, sports culture, and in our own personas as sometime-athletes—may also be in part due to the propensity of Baby Boomers and Generation Xers to experiment with meditation, fasting, and mind-altering drugs. Pharmaceuticals have probably done more to subconsciously legitimate notions about the shifting nature of reality than any single movie, book, program, exhibition, or other cultural production. Sports products, then, simply continue to build on this theme of the ongoing melding and morphing of identities.

Part of coming to terms with the performance phenomenon also has to do with understanding sports as warfare. From the spectator’s viewpoint, many athletes embody the larger-than-life aspects of a transcendent mythological warrior, thanks in large part to media hype and better living through life at the gym. Historically, of course, sports have always been associated with contests and combat-like exercises—consider Roman gladiators, and the

**Sadler Safety Jacket (1904).** The safety jacket by Marc Sadler was designed as a piece of high-fashion armor for such varied activities as horseback riding, skiing, and motocycling. It combines soft padding for the chest area and more resistant, harder padding made from composites for the back, shoulders, and elbows. Courtesy Studio Sadler Design

plastering and fencing of medieval times. Today’s star athletes continue those traditions, interpreting them, twisting them, subverting them. Many hardly seem real; they’re puffed-up like extraterrestrials or a whole new species of man, in pads and weight-reduced armor for highly designed millennia of combat, replete with carefully crafted team crests, logos, patches, hats, and helmets.

The battle is staged everywhere—from pristine ski slopes to the muddy mountain bike trail, from the Grand Prix motorcycle course to the local park’s bicycle path. Gear such as the multisport safety jacket designed by Marc Sadler demonstrates how a singular, combat-ready solution can address the physical aggressiveness of nearly any activity. With articulated, all-in-one-piece, muscle-like stomach ribbons, proteborer composite elbow and shoulder padding, and a highly integrated, skinlike material like that used in high fashion, this groin-to-neck suit seems to
have come from the pages of a super-hero comic book. Its radical look is matched only by its equally radical concern for the wearer’s physical safety.

Learning from Sports—Where Does It Go From Here?

Designers from all disciplines can learn a great deal from the world of sporting goods. Unexpected juxtapositions of color, texture, and materials occur regularly here. Many products—televisions, computers, and office products, for example—are “boring” in a way that sports products aren’t. Teal blue, for example, came in through the NBA via Alexander Julian and the Charlotte Hornets; from Major League Baseball’s Florida Marlins; and from the San Jose Sharks of the NHL. Likewise, Nike has incorporated various meshes, molded polyurethanes, elastic fabrics, reground foams, a medley of fastening hardware, and even the incorporation of air itself (the ultimate free, antimaterial) into a series of products unlike any others previously seen.

The energy of these material trends is coupled with—and amplified by—youth-inspired social trends. Among them, the trend to conspire against one’s own image; the trend to defy easy interpretation, the trend to willfully and purposefully misinterpret oneself, and the trend to get it wrong just right.

Sports designs that are tapped into such trends enhance life by being in step with where people are going. They embody an anticipatory, idiosyncratic, warped sense of humor; an implied sense of speed and movement; and a biomorphic, organic language that has been super-tweaked to fit the body and given an ironic kick-in-the-ass to match our mental state. Throw in irrepressibility, irreverence, insolence, and an “I am what I am so accept me” approach to the world, and you begin to get the picture. Embedded in this is a motto for sports design: “Innovate or Die”, which was actually the tagline of Specialized Bicycle Components, and was put on their team vehicle—a hearse—in one-foot-high letters before they got their Humvee. Boards, bikes, and sneakers of every type exude exuberance, deccive in-your-faceness, and a relentless abundance of visual calories.

The new millennium’s mandate for sports equipment will acknowledge the multiple personalities of users; and it will recognize that the best...
way to reach these users may be through designs that highlight provocation, malleability, and ephemerality. Sports products will become much more personalized, reflecting the desirability of unique solutions and the fluidity of interchangeable information; their emerging international organic language will be based on regional and subcultural design dialects drawn from the visual study of muscles, molecules, movies, fish, nature, and bodies of all types. Such newly conceived sports equipment will articulate a variety of messages; it will increase desirability rather than simply meet demand; it will promote stylistic diversity rather than predictable homogeneity; and finally, it will attend to psychological nuance rather than physical fact.

While global current events offer one absurd juxtaposition after the other of our postcredible culture, sports offer a model for embracing the chaos that defines and surrounds us. Given the barrage of information that flows over, around, and through us everyday, we don't have the benefit of living in a time of static clarity. But ours is a time of distinct opportunity, and the design of sports equipment is capable of addressing these new benchmarks of complexity, confusion, and contradiction, in the end offering its own new form of clarity. Such a process of integrated yet strategic design points toward a future where sports equipment is created not as a sequence of individual items, but as systems of thought sending either a strongly unified signal or a purposefully fragmented message about the product owner's benefits.

In the future, both players and spectators may have customized screens, projection surfaces, heads-up display glasses, multiple real-time performance measuring displays, and communication-based orthotics of all sorts as part of their playing or spectating gear. Call it the trend to augment and customize our sports realities, to actually feel as if the fan is at one with the athlete. Legions of passionate fans already go to live games with portable radios and televisions so that they can more fully immerse themselves in the entire experience that sporting events have become. Such shifts will increasingly position sports as a creative as well as an athletic profession, and in the process, redefine what sports, marketing, media, and design can do together.

As Tom Wolfe noted when he was writing about the culture of hot rods, these combinations of behaviors, emotions, and ideas produce capital-A Art, the kind where money and a slavish devotion to form converge in paradigm-shifting moments of cultural revolution. Sports equipment of all types now offer technological proficiency far in advance of most of our abilities, further raising the stakes for what it ultimately represents. The practical result of this cultish obsession with all manner of things athletic is that the eighties and nineties have been a golden era for sports design in general—and objects such as bicycles, boards, and sneakers have benefited in particular. Just as the fifties and sixties were a pernicious period for appliance and automobile design, our present era's focus on personalized sports and lifestyle products that can empower us, allows us to become more of who we are and who we want to be.

The best sports equipment of today has a transparent quality that is immediately apparent to users and observers alike; its naturalness communicates an integral relationship with the human body and the consumer in no uncertain terms. It fuses the design of motion and emotion with indelible fidelity. It makes for a transparent and tighter inter-

Notes
2. Stephen Pearl, telephone interview with the author, 24 October 1996.