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Foreword
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The culture of sports engages us as avid viewers and knowledgeable consumers in a form of national theater. This work sets out to examine those ways in which design is a lively—indeed essential—player in this theater.

Historians of design have traditionally treated the artifacts of sport as either objects of science or objects of sculpture. To be sure, both are valid approaches. New technologies, new materials, and human kinesiologies intersect with grace and energy in the study of sports science. Similarly, the inventive form and graphics of much of this new equipment legitimizes its study in purely aesthetic terms.

But it is the intent of this volume to look at sports equipment not simply as objects of art or science, but as persuasive documents of contemporary culture. Insofar as the ordinary objects of everyday life reflect our needs, our desires, our national character at large, so then can a hockey mask, bicycle frame, or snowboard reveal facets of our cultural identity. While a basketball shoe may enable a player to jump higher, it may also serve as a potent expression of personal identity. A machine-made soccer ball may suggest an increasing sensitivity to ethical issues of Third World labor, while synthetic climbing walls suggest a radically revised relationship to the natural world. These concerns are central to the mission of the Cooper Hewitt, National Design Museum, which seeks to explore the complex relationship of design to everyday life.

The study of design is, so often, the study of the relationship between people and things. In the realm of sports, that relationship is, by nature, lively, dynamic, and energetic. Indeed, the very nature of sports equipment makes it among the most tested and documented products of design. These essays set out to document that energy. And just as digital cameras monitor the runner’s speed at the finish line down to the millisecond, just as an accelerometer inside a punching bag calculates exactly the force of the boxer’s punch, so does this work set out to record and reflect upon those less quantifiable values that the artifacts of sport suggest we hold as a society.

I am grateful to editor Akiko Busch and Steven Langelohouh, her partner on this project at the National Design Museum, for their enthusiasm and diligence. Their comprehensive understanding of a broad and complex topic allowed them to focus this study on some of the most fascinating manifestations of design today: sports equipment. I also thank Sheri Sandler for her dedicated efforts in raising the funds to make this book possible. The National Design Museum acknowledges the critical support of Conde Nast/Sports for Women and The Sara Lee Foundation for their early support for this project.
Introduction

Aiko Busch

Objects, like people, can live double lives. And contemporary sports equipment—vivacious, vivacious, vivacious — on its rich double life.

The new materials and technology of such equipment have redefined the way sports are played, enhancing speed, force, distance, height. At the same time, however, their forms spell out clearly and consistently our cultural profile. For all the energy and vitality this equipment represents, what it may do with the greatest agility and grace is serve these two functions at once.

Sports—and sports figures—engage our cultural imagination because they thrive in an arena in which human physical ability and technology intersect precisely, powerfully, and gracefully. Whereas elsewhere in modern life technology may be perceived as overpowering or in some way capable of diminishing the human, in the realm of sports it is empowering. Stronger, more durable, and more lightweight materials—such as Kevlar, titanium, graphite, and assorted other fiber-reinforced composites—are reshaping sports equipment. Oversized tennis rackets, double-kicktail skateboards, parabolic skis, and reconfigured golf clubs have all changed the very nature of their respective sports, setting new standards of technical performance and what the human body can accomplish.

Perhaps more than any other category of artifact, sports equipment underscores the fact that design—the form and material of physical objects—has increased the potential for human physical ability.

At the same time, however, these artifacts serve as metaphors for our cultural values. The shatterproof, thermoplastic face mask used by hockey goalies, hand-painted with the image of a Bengal tiger, has a threatening quality that serves as its own psychological weapon; the helmet outfitted with a video camera efficiently films the maneuvers of sky surfers; that a sport can be fully appreciated both by the athlete and spectator only once it has been recorded on film suggests an intersection of self-reflection and performance that is truly modern. Both of these articles of headgear have a symbolic content that supplements their technical performance. Indeed, as sports artifacts become reshaped, they have also become increasingly potent symbols expressing a variety of societal and cultural themes.

Consider, for example, the hybrid nature of contemporary sports equipment. Whereas skates, skis, and surfboards all developed independently in a relatively linear manner, board sports today are more changeable, thriving on appropriation. In-line skates, skateboards, airboards, snowboards, wakeboards, street luge boards, and snow skates—all of these pieces of equipment—and the cultures they represent—beg, borrow, and steal from one another in a fluid exchange that is purely contemporary.

Indeed, all of these different board sports are capable of morphing into one another with the same agility and grace of the athletes maneuvering them. What makes this relevant, of course, is that elsewhere in our lives we have come to accept the notion that identity is fluid. That the self can be
reinvented is a conventional wisdom of the times; ours is a culture that celebrates transformation—and the faster it can be made, the better. We resculpt our bodies at health clubs and gyms, and the advent in recent years of "esthetic surgery" demonstrates the appeal of physical metamorphosis at the hands of the surgeon. Tattoos, body piercing, and other assorted graphics of the human body have rarely held out the popular appeal they enjoy today. Just as the exterior self can be redefined, the interior self can be reconfigured with as much selection from a host of modern therapies. If we were introduced a generation ago to the notion that the nature of reality might be shifted with mind-altering and illegal drugs, we are today of such prescribed medications as Prozac suggests that we accept the idea that the chemistry of the brain—and the behavior it generates—can be easily amended. That the appeal of personal reinvention has reached an all time high is reflected further in children's literature. A favored series of books among young children today is Anamorphs by K. A. Applegate. Throughout the series, children are morphed into creatures of all sorts—eagles, bears, tigers—all of which transform their identities and abilities, imbuing them with new powers in the process.

As Steven Skov Holt points out, the culture of sports reflects our ease in morphing (or perhaps our need to morph). In his essay exploring the theme of fluidity, "Notes on an Infinity of Sports Cultures," he writes:

Change is fun, it's easy to do, and it's in synch with the way things are in life. Since it's going to happen anyway, why not ride it, surf it, play it, and make it part of sport? Whereas earlier generations embraced a more rooted lifestyle (growing up in the same community) and rooted workstyle (staying employed at the same company), the new generation welcomes diversity, variety, flexibility. For this reason alone, the new generation of sports equipment is some of the most fluid and accommodating gear yet devised for any human activity.

If our identity is capable of taking on these myriad guises, how we express them is no less significant. Steven Lengheough observes that the shoe has always been a symbol of identity, capable of conveying us to an assortment of different psychic landscapes. The photoessay he has assembled here investigates how the contemporary athletic shoe serves as an especially compelling vehicle of self-expression. As he observes, "If the automobile captured the popular imagination of the fifties, symbolizing the new prosperity of that time, today the athletic shoe has become a more democratic symbol of identity and prestige in multicultural America."

The identities of the individual, of the team, and of the street subculture are frequently spelled out by the graphics of shoes and how they are worn—faced or unaltered for example, tied or untied. Lengheough tours a variety of sports subcultures, focusing on how they are revealed through the graphics of their shoes, using images of sports equipment as well as the language and graphics of sports commercials and marketing programs. He also examines the emerging roles of the woman athlete and how the graphics of athletic footwear and marketing reflect evolving perceptions of women in society.

Former marathon swimmer Diana Nyad and journalist Candace Lyle Hogan reflect further upon the emerging role of women in sports as seen through the lens of equipment and apparel. If the development of sports technology has represented speed and strength and sometimes safety for men, for women it has signaled freedom. Higher achievements in athleticism and growing public acceptance have together empowered women athletes and led to the heightened visibility of women's sports. Increasingly lightweight equipment has also made some women's sports faster and therefore more appealing to spectators. That the 1996 Olympics were dubbed the Women's Olympics, that the WNBA and ABL—competing women's professional basketball leagues—enjoyed widely celebrated inaugural seasons in 1997, and that a number of new sports magazines published exclusively for the female athlete have been introduced in the last several years all suggest we have entered a golden age for the sportswoman.

Nyad and Hogan, however, provide a historical perspective for this change, pointing out that a previous golden age for the female athlete occurred in the late nineteenth century, and they suggest that the diminished role of the American sportswoman in the following decades tells its own social and political story. They also address how contemporary sports equipment continues to acknowledge and address the growing numbers of women who take their sports seriously—and reflect as well upon those areas in which the equipment fails to recognize the emerging woman athlete.

How we, as occupants of the late twentieth century, view the natural world, is reflected in the changing playing field of sports. Our relationship with nature, it seems, is in transition. Traditionally, we have played our sports outdoors. Today, however, fitness machines, indoor golf, and a whole realm of virtual sports equipment all relocate—and at times dislocate—the athlete. Wave machines can be installed in swimming pools to create "a surf;" golf clubs can be reassembled as shafts of light; towers of ice cooled by liquid nitrogen can be sculpted into vertical speed climbing walls without the extremes of wind and temperature associated with conventional alpine climbing; we can breathe thin mountain air in urban fitness spas and ride bikes on traffic-free video monitors. All of these would suggest an estrangement from the conditions of nature, conditions that were once integrally connected to the practice of sport.

In sports, the synthetic realm may be safer, more entertaining, more egalitarian. It offers us more choices and more control. In sport and in life alike, nature, it seems, is no longer a governing condition, but simply a component in modern experience. And insofar as the artifacts of the physical world are documents of civilization, the sports equipment we use today reaffirms a broader cultural view that the natural world is, if not disposable, then certainly negotiable.

In her essay on tradition and technology, J. Nadine Gelberg examines how our cultural ambivalence toward new technologies is expressed and handled in the realm of sports. While titanium bats, diamond-coated golf clubs, and assorted other space-age materials may give the impression that sports embrace technological innovation, the truth is that sports organizations regularly prohibit creative new designs in their efforts to preserve sporting tradition. By examining the role of tradition in the design of sports equipment, focusing in particular on the design of tennis rackets, golf balls, baseball bats, and bicycles, Gelberg suggests that nostalgia and a tenacious hold on sporting tradition—rather than performance—still govern the design of some equipment. Gelberg observes that technological innovation has frequently compromised both the sporting
challenge and the traditions of games, and catalogs a variety of sports equipment that, while enhancing performance, also transforms the nature of a sport in ways that are deemed unacceptable. How advances in technology may compromise tradition and how we choose to accept or reject these compromises are, of course, larger questions we routinely face as occupants of the millennium.

The equipment of sports engages our cultural imagination. But it also engages us because we find ourselves increasingly engaged in a world of immateriality. The appeal of the intangible realm is growing on us—whether it is in the anonymous exchanges of cyberspace, the competitive environment of an online game, or the professional affiliations we may find in an Internet community. No surprise, then that we also look to the very physicality of sport to balance these out. If we seek our identity on Web sites, of course we must look for it as well on the soccer field and the basketball court. For all the abstract, intangible benefits offered to us by contemporary electronic technology, we long as well to be satisfied and nourished by the physical realm—to touch, hold, catch, throw. And therein lies the enduring appeal of contemporary sports.

As these authors observe, the equipment of sports serves as a clear lens for broader societal issues. The new materials and technology of sports are indeed empowering. Parabolic or sidecut skis, introduced on the market only a few years ago, have redefined skiing, giving users a new degree of control and precision in carving mountain trails. A ten-ounce Kevlar bike helmet can save a biker’s life. Soft boots bring the casual comfort and style of a basketball shoe to in-line skates. High-performance fabric gives swimmers a virtual second skin, allowing them to shave seconds off their lap times. All of this equipment and material surely empowers the athletes who use them. But what they may empower us to do most of all is recognize ourselves.

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