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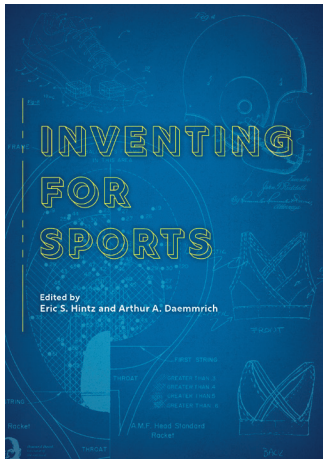
BOOK REVIEW

Inventing for Sports

Hintz, E. S., & Daemmrich, A. A. (Eds.). (2025). *Inventing for Sports*. Washington, DC: Smithsonian Institution Scholarly Press. ISBN 978-1-944466-77-0 (print), 978-1-944466-76-3 (online, open access).

Reviewed by Larry Jinkins, PhD, Indiana University Kokomo



In *Inventing for Sports,* editors Eric S. Hintz and Arthur A. Daemmrich curate a timely and engaging volume that explores how invention and innovation have shaped, and continue to reshape, modern sport. Rooted in years of public programming and research at the Smithsonian Institution's Lemelson Center for the Study of Invention and Innovation, the book serves as both a standalone scholarly resource and a complement to the museum's 2024 exhibition *Change Your Game / Cambia tu juego*.

Spanning seven chapters, the book investigates sports innovation through multiple lenses: performance, safety, officiating, inclusion, governance, and future trends. At its core is a four-part motivational framework: sports inventors are often driven by the desire to (1) enhance performance, (2) prevent injury, (3) increase fairness and accuracy in officiating, or (4) make sports more accessible and enjoyable. These motivations emerge not from detached R&D labs, but from the lived frustrations and aspirations of athletes, coaches, and users who personally experience the shortcomings of current technologies.

The editors ground the book in innovation studies theory, especially concepts such as user innovation (von Hippel), recombinant innovation (Hargadon), and the social construction of technology (Pinch and Bijker). However, these frameworks are often applied more implicitly than explicitly. Readers encounter a wide range of case studies, including Mike Schultz's Moto Knee prosthetic, Lisa Lindahl's Jogbra, and Paul Hawkins's Hawk-Eye tracking system. Each story showcases how problem-solving, often born from exclusion or injury, catalyzed transformative innovation.

The strongest chapters are those that highlight human-centered innovation. In particular, Chapter 3 ("Health and Safety") and Chapter 5 ("Fun for Everyone") vividly illustrate how invention arises from a desire not only to improve performance, but also to preserve the body, expand access, and foster belonging. The inventors profiled are not always engineers or scientists by training. Many are passionate amateurs, para-athletes, or athletes-turned-entrepreneurs who exemplify the democratization of innovation.

The book's tone is accessible and narrative-driven, making it suitable for general audiences, undergraduates, and professionals alike. That accessibility is one of the book's primary strengths, especially given its availability as an open-access publication. However, readers seeking deeper academic engagement may find some analytical threads underdeveloped. While the editors gesture toward ethical and regulatory dilemmas (e.g., governing the use of full-body swimsuits, or adjudicating the role of high-tech prosthetics), they stop short of sustained engagement with critical theories of justice, equity, or access in sport. Similarly, the iterative and often nonlinear nature of the innovation process, particularly the role of prototyping, failure, and redesigning, is largely overlooked in favor of outcome-oriented storytelling.

Moreover, the regulatory framework outlined in Chapter 6 ("Fair or Foul?") introduces timely debates around self-regulation and institutional oversight. Still, it could benefit from greater integration of global comparisons or legal scholarship. As sports governing bodies increasingly grapple with technologies that blur traditional boundaries between human and machine, able-bodied and disabled, or fair play and enhancement, these issues warrant more rigorous interrogation.

Nonetheless, *Inventing for Sports* succeeds in its mission to reposition sport as a site of invention rather than merely a form of entertainment. The concluding chapter underscores this point, reinforcing that the desire to play, compete, and belong can spark meaningful technological and social change. Whether through 3D-printed racing gloves or smarter helmets, sports innovation reflects deeper cultural values around fairness, inclusion, and human potential.

In sum, *Inventing for Sports* offers a welcome and needed contribution to both sports studies and innovation scholarship. It will appeal especially to those interested in inclusive design, STEM education, and the broader cultural implications of athletic technologies. While it leaves room for future scholarship to explore deeper philosophical and systemic critiques, it plants important seeds. It invites the reader to consider not only how sports are played but also how they can be reimagined.

Reviewer disclosure: Dr. Larry Jinkins is an assistant professor of sport and recreation management at Indiana University Kokomo. He is also is the inventor of U.S. Patent No. 11,234,473 B2 (Whiplash Reduction Systems and Devices) and U.S. Patent No. 11,234,474 B2 (Protective Helmet Liner Apparatus), which relate to innovations in athletic safety and injury mitigation.