

A Comparative Analysis of Traditional Chinese Archery and Modern Archery

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Abstract

This article compares and analyzes Chinese traditional archery and modern archery from five dimensions: historical origin, technical characteristics, cultural connotations, educational functions, and modern transformation. Chinese traditional archery, with its profound cultural connotations, emphasizes "prioritizing moral integrity" and focuses on rituals and personal cultivation. In contrast, modern archery is oriented towards "prioritizing performance," emphasizing competitiveness and technical breakthroughs. The two differ in their educational functions, with traditional archery integrating moral education with skill development, while modern archery focuses on technical instruction. In terms of modern transformation, traditional archery revitalizes through innovative inheritance, and modern archery expands its influence through cultural integration. The future should promote deep integration of the two at the levels of "skill, art, and philosophy" to achieve complementarity and coexistence.

Keywords

Traditional Chinese Archery, Modern Archery, Comparison, Transformation.

1. Introduction

Archery, in its traditional Chinese form, transcends mere physical practice or martial skill; it embodies cultural and spiritual values. In contrast, modern archery, as one of the contemporary Olympic sports, has evolved into an increasingly internationalized and competitive discipline. This paper systematically examines the similarities and differences between traditional Chinese archery and modern archery through five dimensions: historical origins, technical characteristics, cultural connotations, educational functions, and modern transformation. By examining these dimensions, this study aims to explore the insights that traditional Chinese archery offers for the development of modern archery.

2. Historical Origins

2.1. The Formation of Traditional Chinese Archery

Traditional Chinese archery emerged within the context of Chinese cultural traditions, using bows, arrows, and related equipment as media, with the essential purpose of accurately hitting targets. Its forms of expression are categorized into "civil archery" and "martial archery". While different ethnic groups developed distinct archery styles and cultural connotations, these practices also integrated across regions, reflecting a dynamic interplay of values that evolved with historical development. As a precious cultural heritage of China, traditional Chinese archery has been historically contextualized and redefined as "Traditional Chinese Archery" through its integration with traditional cultural values and historical evolution ^[1].

According to the official website of the Chinese Archery Association, Traditional Chinese Archery is defined as an archery practice using a "bare bow" (without any auxiliary equipment), bamboo or wooden arrows, strings without sighting devices, and archery equipment without aids for drawing or releasing the bow. It employs the mainstream traditional Chinese shooting

technique of "thumb-draw" [2]. Traditional Chinese Archery is a subcategory of Traditional Chinese Archery, specifically associated with martial archery.

Archaeological evidence, such as stone arrowheads unearthed in Shanxi Province, traces the origins of Traditional Chinese Archery to hunting activities in primitive societies. It later evolved into a military skill and ceremonial tool. During the Western Zhou period, archery rituals became a key social ritual, emphasizing "archery as a reflection of virtue", where archery performance symbolized moral integrity and cultivation. In the Spring and Autumn and Warring States periods, Confucianism incorporated archery into the "Six Arts", endowing it with moral and educational functions. Confucius stated, "The gentleman does not compete, but if he must, it is through archery," advocating the cultivation of humility and focus through archery. By the Tang and Song dynasties, archery became a core subject in military examinations, while folk organizations like "bow societies" linked archery to a sense of responsibility for defending the homeland.

2.2. The Origin of Modern Archery

Modern archery, defined as the sport of propelling arrows using the elastic force of a bow to compete for accuracy over a set distance, originated in Britain [3]. Contemporary bows are categorized into traditional bows, modern recurve bows, and modern compound bows. Since the 1950s, influenced by Western competitive sports ideologies, the term "archery" has evolved to primarily refer to modern competitive archery, which emphasizes technical skill.

Archery first entered the Olympics in 1900 using recurve bows, characterized by highly standardized rules and technology that prioritize precision and competitive performance. In Olympic archery, scoring is based on ring targets, and recurve bows are equipped with auxiliary tools such as sights, arrow rests, and clicker signalers. The International Archery Federation's unified regulations have driven its global development, contrasting sharply with Traditional Chinese Archery.

In summary, Traditional Chinese Archery carries millennia of cultural heritage, transitioning from its role as a core ritual in the "Six Arts" to the internationalization of modern archery. This evolution reflects not only technological advancements but also a collision and integration of cultural values and philosophical ideas. While traditional archery centers on cultural transmission, emphasizing etiquette and morality, modern archery prioritizes competitive fairness and technical innovation.

3. Technical Characteristics

3.1. Technical Features of Traditional Chinese Archery

Traditional Chinese bows are crafted from natural materials such as bamboo, wood, and animal horns, featuring a simple structure without auxiliary devices like arrow rests or sights, and are thus referred to as "bare bows". Arrows are typically made of natural wood or bamboo, resulting in inconsistent performance. The shooting technique predominantly adopts the Mongolian style, characterized by thumb-drawing with a thumb ring, emphasizing body coordination and intuitive aiming.

Traditional Chinese archery stresses the normativity of movements and the rigor of the process. Its fundamental technical actions include stringing the bow, nocking the arrow, aligning the arrow, stabilizing the posture, raising the bow, drawing to full span, releasing the arrow, and lowering the bow [4]. These actions require archers to achieve a state of "harmony between archer and arrow," with each step demanding repetitive practice to unify precision and elegance. Beyond being a technical activity, Traditional Chinese Archery is also a form of physical and mental cultivation, emphasizing "archery as a reflection of virtue". It requires

archers to maintain a stable mindset, keen observational skills, and accurate judgment during the process.

Traditional Chinese Archery is not merely an accuracy-based sport but also a form of artistic expression, combining "archery skill" with "archery accuracy". Depending on the context, it can be categorized into accuracy shooting and performance archery. Additionally, it represents a fusion of culture and technology, serving historical roles in military defense, hunting, and ceremonial education. The transmission and development of this technique are primarily achieved through master-apprentice instruction, classical texts, and practical training, lacking a systematic pedagogical framework [5].

The scoring method and rules of Traditional Chinese Archery differ from modern archery. The target, known as the "Hou Target", is square-shaped and divided into four concentric zones: yellow ("di"), red ("zheng"), black ("gu"), and white ("hou"). Scoring is assigned as follows: "di" and "zheng" yield 5 points, "gu" yields 3 points, and "hou" yields 1 point.

3.2. Technical Development of Modern Archery

Modern competitive bows utilize advanced materials such as carbon fiber and laminated technology, equipped with stabilizers and sight bars to enhance stability and precision. Arrows are predominantly made of carbon fiber or aluminum, ensuring higher consistency and accuracy. The shooting technique primarily employs the Mediterranean style, characterized by three-finger drawing, relying on sights and standardized action sequences.

Modern archery techniques impose specific biomechanical demands across different phases, including "linear symmetry," "planar stability," "dynamic equilibrium," "simplicity," and "emphasis on back muscle engagement" [6]. These characteristics require athletes to maintain stable body postures and standardized movements throughout the process. Modern archery emphasizes simplicity, fluidity, and consistency in actions, from raising the bow to drawing, anchoring, and releasing.

Modern archery places high demands on athletes' attention allocation and postural control. Research indicates that technical performance varies under different attentional focus tasks, with postural stability directly impacting shooting accuracy [7]. As competition rules evolve—such as shorter time limits, fewer arrows, and increased competitiveness—modern archery techniques continue to adapt. Unlike the intuitive approach of Traditional Chinese Archery, modern archery requires athletes to possess stronger adaptive and anti-interference capabilities to thrive in high-pressure competitive environments [8].

The target in modern archery is circular, divided into ten equally wide rings, with colors and scores as follows: 10–9 points (yellow), 8–7 points (red), 6–5 points (blue), 4–3 points (black), and 2–1 points (white). Target sizes vary depending on competition distances.

In summary, Traditional Chinese Archery relies on experience and bodily perception, emphasizing "harmony between archer and bow" and cultural and ceremonial significance, whereas modern archery leverages technology and data to pursue quantifiable peak performance, highlighting competitiveness and precision.

4. Cultural Connotations

4.1. The Philosophical Core of Traditional Chinese Archery

Confucianism regards archery as a way of self-cultivation, using it to observe and refine personal morality. It advocates the principle of "correcting oneself before shooting," emphasizing self-reflection and moral tempering during the archery process. Taoism, on the other hand, proposes the concept of "harmony between heaven and humanity," requiring archers to achieve a state of "uprightness of mind and straightness of body" during archery. This concept of inner and outer cultivation reflects the harmony and unity between humans

and nature. Archery is not only a skill but also a cultural symbol, embodying respect for the order of nature and the universe, and achieving harmony with nature in tranquility.

Traditional Chinese archery is also regarded as a means of self-cultivation and moral establishment. Through archery practice, individuals can develop indomitable willpower and a positive attitude towards life [9]. The practice of archery not only exercises the archer's body but also tempers the mind, helping people find balance between movement and stillness, and reflecting the philosophical idea of "achieving far-reaching goals through tranquility."

Furthermore, traditional Chinese archery is not only a skill but also a culture that carries the spirit of martial arts and patriotism. Since ancient times, it has held the prestigious status of "among the Six Arts of the gentleman, archery is the most important" and has been one of the essential skills for men, possessing significant military value while also fostering bravery and a spirit of defending the country among the citizens. In modern society, the inheritance and promotion of traditional Chinese archery contribute to enhancing national cohesion and cultural confidence.

4.2. Competitive Values of Modern Archery

Modern archery centers on transcending limits, focusing on achievements, records, and medal standings. Its cultural orientation aligns with the Olympic motto of "Faster, Higher, Stronger," emphasizing the ultimate expression of individual capability. Through competition, it cultivates participants' competitive awareness and psychological resilience. For instance, the long-term Olympic dominance of the South Korean archery team exemplifies a technical and results-driven competitive logic.

The dissemination of modern archery is facilitated by technology and education systems, including school curricula, club training, and virtual reality. These platforms expand access to archery, fostering focus, patience, and self-discipline among participants. As an international competitive sport, modern archery promotes global cultural exchange and the spread of sportsmanship through events like the Olympics.

In summary, while Traditional Chinese Archery prioritizes moral and ethical values, modern archery emphasizes performance and results. This divergence reflects differing Eastern and Western understandings of the essence of sports.

5. Educational Functions

5.1. Educational Value of Traditional Chinese Archery

Traditional Chinese Archery has been incorporated into university education systems, emphasizing "uprighting the body and refining the mind". Through archery practice, it cultivates focus, etiquette awareness, and cultural identity among youth. Studies have confirmed its health benefits, aiding in self-cultivation and emotional refinement [10].

From a physical perspective, it enhances coordination, muscle power, and endurance. Mentally, it fosters calmness, composure, and spiritual integration. Morally, it cultivates traits such as seriousness, rigor, resilience, and humility. Thus, Traditional Chinese Archery guides students toward healthy lifestyle and psychological concepts, aligning with contemporary university students' pursuit of well-being.

Historically revered, Traditional Chinese Archery offers unique health values—physical, mental, and ethical—that distinguish it from other traditional sports. It also strengthens cultural heritage. The Confucian idea of "archery as a reflection of virtue" addresses the modern educational tendency to prioritize technical skills over moral development.

5.2. Role of Modern Archery in Physical Education

Modern archery, as a sports course, focuses on physical training and competitive skill development, emphasizing athletic ability and psychological resilience. Through scientific training and competitions, it enhances students' focus, confidence, and competitive awareness. Its standardized teaching system facilitates widespread adoption, though it rarely delves into cultural dimensions.

Modern archery employs scientific and systematic teaching methods, leveraging technology such as sighting aids and data analysis to improve techniques. Often included as an outdoor activity in international schools, its historical context is typically downplayed.

In summary, Traditional Chinese Archery serves as an "invisible classroom," integrating moral education with skill development, while modern archery functions as a "visible classroom," focusing primarily on technical instruction.

6. Modern Transformation: Revival and Integration of Traditional Archery

6.1. Adaptability of Traditional Chinese Archery in Modern Society

In recent years, traditional Chinese archery has been revitalized through innovative inheritance. Under the Party's "moral and intellectual development" requirements, traditional Chinese archery has been widely promoted in modern education, becoming an important component of cultural heritage and quality education in universities and secondary and primary schools. By incorporating archery courses into the school education system, not only archery techniques are taught, but also traditional culture, etiquette, and philosophical ideas are integrated, achieving the educational concepts of "correcting the body" and "cultivating the mind" [11].

Traditional Chinese archery continues to innovate and develop in modern society. It absorbs excellent cultural elements from home and abroad, and has developed new archery styles, such as "speed shooting", archery combined with roller skating or unicycling, or integrating traditional Chinese archery with martial arts footwork to create a set of bow exercises, thereby expanding the vitality of traditional Chinese archery. In some traditional Chinese archery competitions, participants wear ethnic costumes and use traditional bows, promoting cultural export. Additionally, some ethnic minorities combine archery competitions with traditional customs and festivals, making them a bond for ethnic unity.

6.2. Cultural Inclusivity of Modern Archery

International competitions now permit the use of traditional bows, fostering cross-cultural exchanges. Modern archery has also attracted younger audiences by integrating with contemporary popular culture. For instance, the Shanghai Citizens' Archery Carnival combines archery with modern cultural elements such as street dance performances, cultural exhibitions, and interactive games.

Moreover, modern archery has become an important tool for promoting local culture through its integration with tourism and cultural industries. For example, Gangcha County in Qinghai Province has adopted a "sports + tourism + culture" model, linking archery competitions with ecological protection and cultural tourism. This approach showcases regional and ethnic characteristics, boosting local economic development while enhancing cultural diversity and inclusivity.

Notably, some German athletes visiting China have adopted Mongolian-style shooting due to their admiration for Chinese thumb-ring culture, exemplifying the fusion of tradition and modernity.

In summary, Traditional Chinese Archery revitalizes through localized innovation, while modern archery expands its influence through internationalized rules. Together, they enrich the ecosystem of sports culture through mutual interaction.

7. Conclusion: A Path of Complementarity and Symbiosis

Traditional Chinese Archery and modern archery are not mutually exclusive but rather embodiments of cultural diversity. The philosophical underpinnings of Traditional Chinese Archery can infuse modern competitive archery with humanistic values, while the scientific training methodologies of modern archery can enhance the dissemination efficiency of traditional techniques.

Moving forward, it is essential to promote a deep integration of the two at the levels of technique, artistry, and philosophy through initiatives such as educational outreach, innovative competitions, and cultural transmission. This dual-track approach will ensure that archery not only preserves its historical depth but also vibrantly reflects the dynamism of contemporary society. By fostering complementarity and symbiosis, archery can continue to evolve as a culturally rich and globally relevant practice.

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