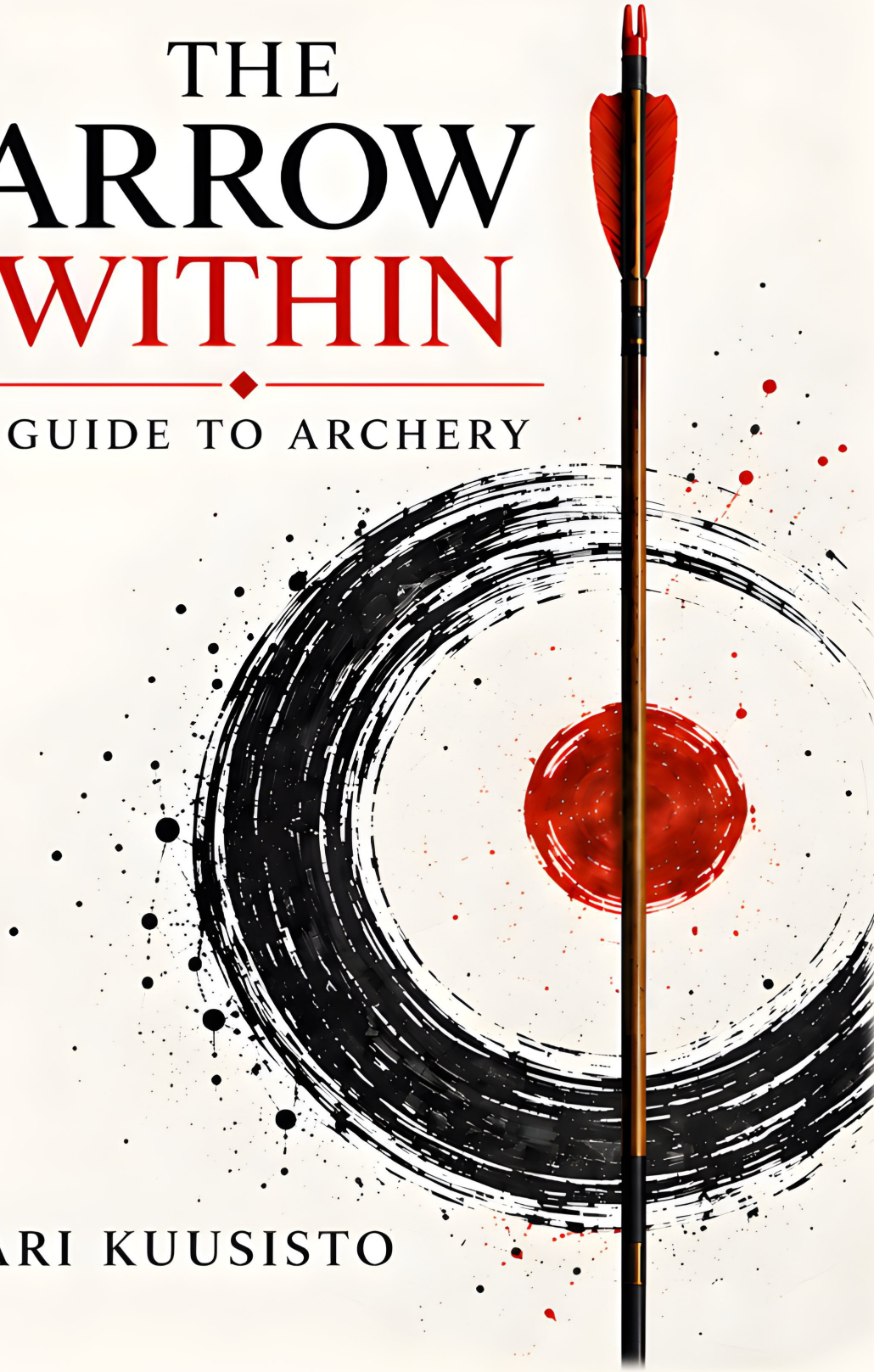
THE ARROW WITHIN

A GUIDE TO ARCHERY



JARI KUUSISTO



“To my beloved wife, Tanja, who always supports me in everything I do.

Without you, this book would not have been possible”.

Lund, Sweden, 18 October 2026

Jari Kuusisto

The Arrow Within

A guide to archery

2026

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Preface

This guide is intended for archers who are just starting out or who have already been practicing archery for some time. The main focus of the book is on developing a shooting technique that is easy to repeat and on improving physical fitness. Properly adjusted equipment and choosing the right equipment naturally also play a role in achieving good results, but they should never become the main focus. At its core, archery technique is actually quite simple, as long as you don't make it unnecessarily complicated from the start.

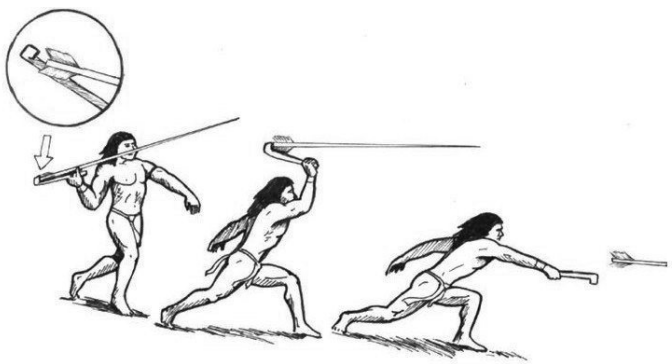
It is particularly important for an archer to learn the fundamentals of good shooting technique while also remembering to develop their physical performance. Learning archery entirely on your own from the very beginning is not easy, so it would be beneficial if you knew an experienced archer who could watch you shoot and give you pointers on how to improve. Find the closest archery club, and by joining one you can get guidance without even needing to own your own equipment right away. If joining a club is not an option, following the advices in this book will still give you a good start on your journey as an archer. Although this book focuses somewhat more on recurve and compound archery, many of the same principles can also be applied when shooting a barebow or traditional bows.

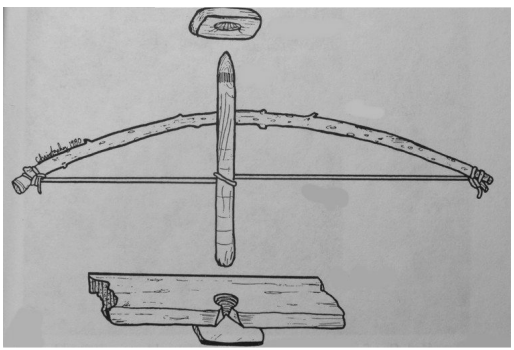
Whatever path eventually brings you to archery, the most important thing to remember is to have fun!

1. History of the Bow

Archery is one of the oldest weapon systems used by humans, and at the same time one of the oldest sports. The importance of archery in human history and development cannot be overstated, and its ancient forms continue to fascinate us even today. The bow has served an important role in hunting and as a weapon of war for thousands of years. In **Finland**, for example, the bow was still an important hunting weapon for small game as recently as the beginning of the 20th century.

The name archery (from the Latin **arcus**, meaning “bow”) is derived from the Latin language. Exactly when and how the bow was developed is not known. It is generally believed that the bow may have evolved from technologies such as the **spear-thrower** or the **bow drill**, which was used as a tool for starting fires.





1.1 The Paleolithic period

The oldest evidence of the use of bows has been found in South Africa, at Sibudu Cave. Arrowheads excavated from the cave were initially dated to approximately 72,000–67,000 years ago. Traces of various poisons have been found on the arrowheads.

Africa,
Sibidu Cave

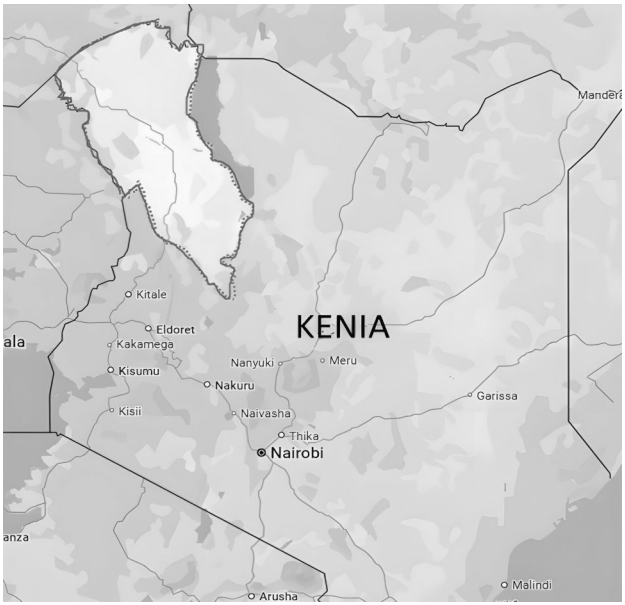


Outside Africa, the oldest finds have been made in Sri Lanka, where bows appear to have been used primarily forhunting monkeys and squirrels. Remains of these animals have been found embedded in sediment, together with arrowheads.

Sri-Lanka,
Fa Hien Cave



The next oldest evidence of bow use has been found in Kenya, in the lakes of Turkana County. Human skulls have been discovered at these sites with fragments of obsidian arrowheads still embedded in them. This suggests that bows and arrows made using obsidian were used in the region. The arrowheads have been dated to approximately 10,000 years ago.



Turkana County



Obsidian

Rock paintings have also been found in the Sahara, depicting people shooting arrows. These paintings have been dated to approximately 5,000 years ago. More recent evidence has been found in Eurasia, suggesting that the bow was “rediscovered” independently several times in different regions of Eurasia and North Africa.

Bows are believed to have reached Europe most likely from the **Levant**. The Levant is a historical, rather than strictly geographical, term generally referring to the eastern Mediterranean region, including parts of modern-day Syria, Lebanon, Israel, Palestine, Jordan, and surrounding areas.

The first reliable evidence of bow use in Europe has been found in Germany, at Mannheim-Vogelstang, where flint arrowheads have been discovered, including one embedded in the spine of a bear. The arrowheads have been dated to approximately 17,000 years ago.

Tools believed to have been used for straightening arrow shafts have also been found in the Levant. At the same sites, ceramic objects resembling arrowheads have been excavated. These tools and objects have been dated to approximately 11,000 years ago.



Levantin alue



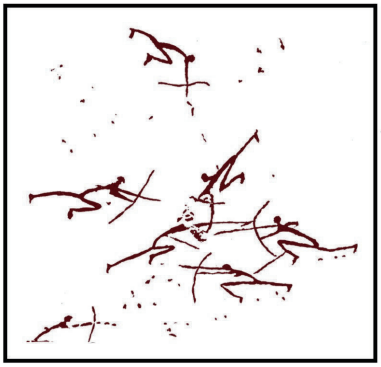
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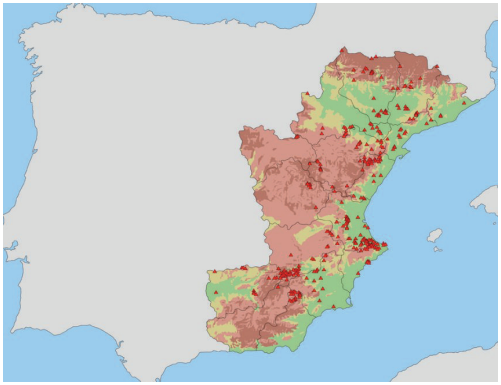
Other evidence, including arrowheads and other points, has been found in Hamburg. These finds have been dated to approximately 11,000–9,000 years ago. In a layer corresponding to the coldest period of the region's climate, 20-cm-long, uniformly shaped arrows made from pine have been discovered, with flint arrowheads. A groove at the opposite end of one of the arrows suggests that it was used with a bow.

Mesolithic-style bows made from woods such as hazel and wayfaring treehave been found in England, Sweden, and Denmark. The arrows were approximately 120 cm long, and some still have their original flint arrowheads in place. Some of the arrows also show evidence of fletching. Remains of feathers have been found in burial sites where they were used to attach the fletching. Some arrows also had blunt tips, which were used for hunting fur-bearing animals without damaging their valuable pelts.



The earliest evidence of battles in which bows were used has been found in Spain. The walls of several caves contain rock paintings depicting people engaged in combat with bows.





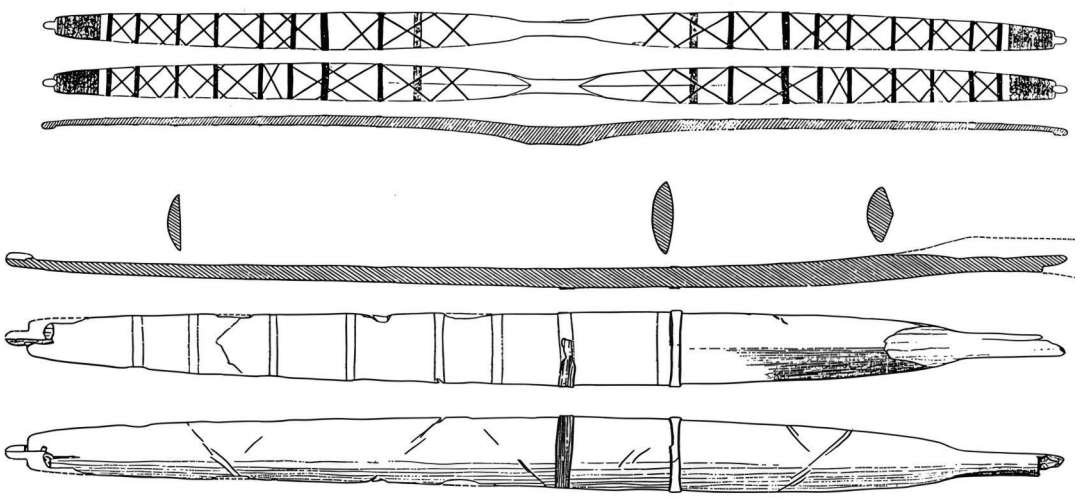
Archery appears to have reached North America via Alaska as early as 6,000 years ago. During the following thousand years, the use of the bow spread throughout the northern and southern regions of North America, and by around 2000 BCE, Indigenous peoples across the Americas were using bows extensively for both hunting and warfare. By approximately 1500 BCE, the use of the bow had spread among Indigenous peoples throughout the entire American continent.



The bows were generally short, approximately 100–120 cm in length, and relatively simple in construction. One likely reason for this was the extensive use of horses, both for hunting and warfare. This created a need for bows that were short and easy to handle

1.2 The Mesolithic period

The oldest nearly complete bow ever discovered was found at Holmegaard in Denmark. The bow was preserved in a peat bog, which kept the wood in remarkably good condition.



Reconstruction of the Holmegaard Bow

The bow was made from elm and already closely resembled many modern bows, as well as bows used by various indigenous peoples around the world. It had a relatively narrow center section and wider limbs, with a length of approximately 150 cm. The limbs were flat and became narrower toward the tips, giving the bow additional flexibility when drawn. This increased the arrow's launch speed and thus potentially allowed hunters to shoot over greater distances. This type of bow remained in use in Europe until the Bronze Age. The bow has been dated to approximately 8,000 years ago, placing it in the Mesolithic period.

1.3 The Neolithic Period

A bow dating from the Neolithic period (approximately 6000–3500 BCE) has been found in Spain. Its construction resembles that of the previously mentioned Holmegaard bow. The bow was found almost completely intact. It is approximately 108 cm long. The drawing below shows not only the shape of the bow, but also its cross-sections at different points along the bow.

An ancient arm guardwas also found at the same site. It was made of stone and has two holes for attachment straps.

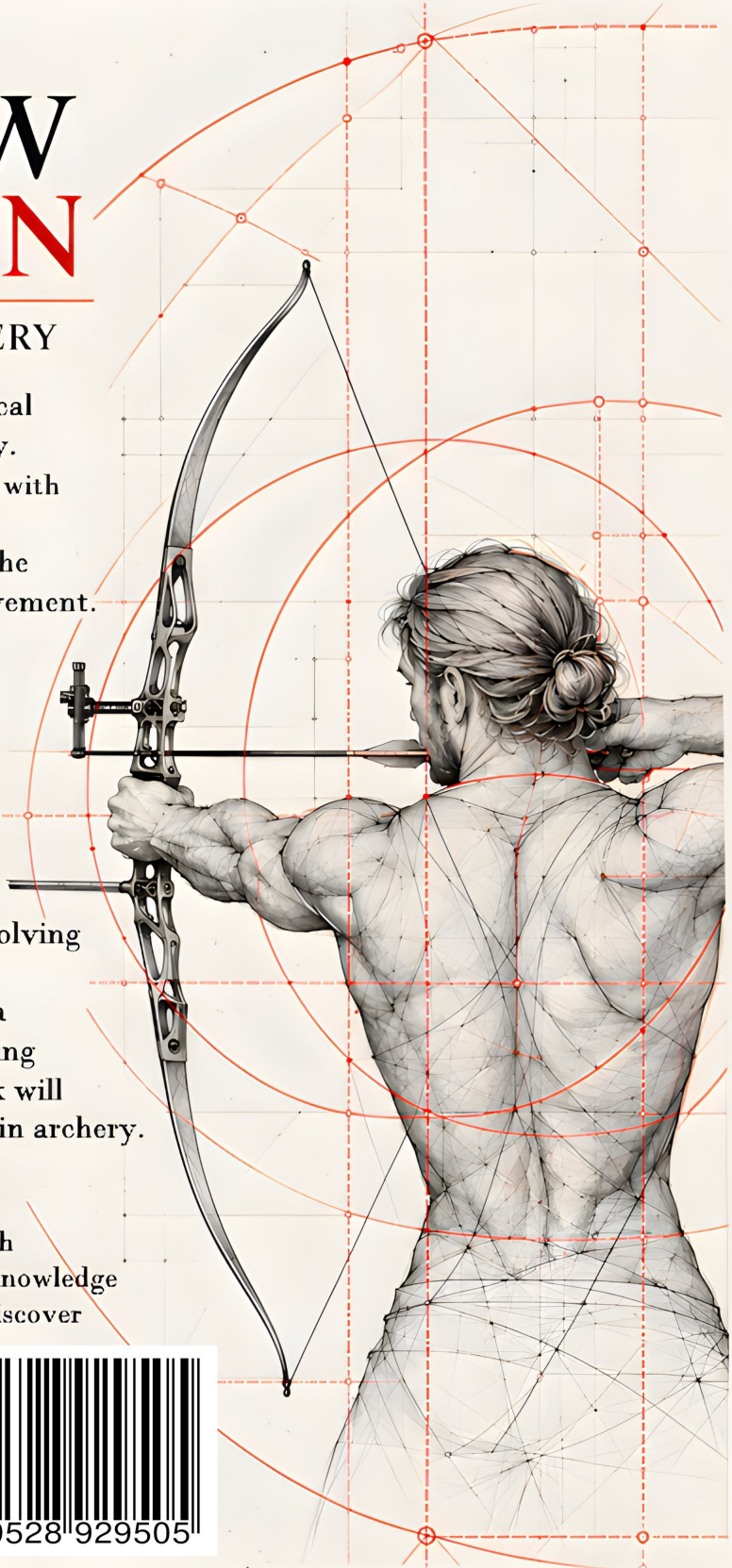


Neolithic bows have been found extensively in the ruins of fortifications and in graves, indicating that the bow was a valued weapon and hunting tool that people wanted to take with them into the afterlife.

THE ARROW WITHIN

A GUIDE TO ARCHERY

The Arrow Within is a practical and inspiring guide to archery. It combines clear instructions with the deeper aspects of the sport – focus, discipline and the journey of continuous improvement.



INSIDE YOU WILL FIND:

- Equipment and setup
- Shooting technique
- Tuning and maintenance
- Practice methods
- Mental training
- Progression and problem solving

Whether you are picking up a bow for the first time or looking to refine your skills, this book will help you find your own path in archery.

JARI KUUSISTO

Jari Kuusisto is an archer, coach and enthusiast who shares his knowledge and experience to help others discover the art of archery.

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