



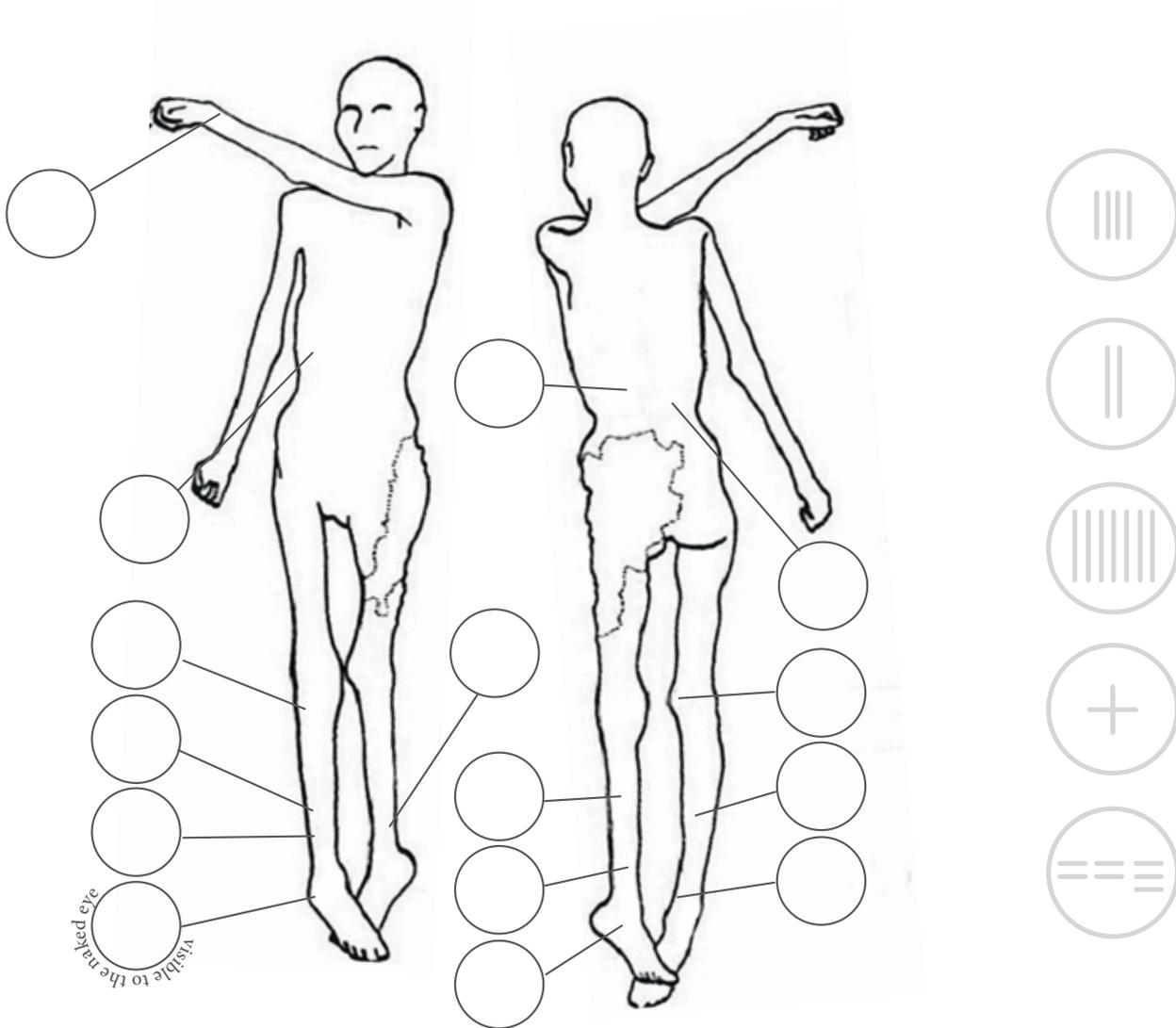
# THE MUMMY: TATTOOS

## MYSTERIOUS SIGNS

Ötzi's body was adorned with 61 tattoos in the form of line patterns and crosses. Powdered charcoal was used as a pigment.

## TRAVEL OBSERVATION

What line patterns does Ötzi have and where are they located on his body?



Art or therapy?

---



---



---

DETOUR

The custom of decorating the skin with tattoos or signs can be found in every age and in nearly all cultures in the world. The use of tattoos to show group affiliation has also been a common practice in various societies and at various times.

1. TATTOOS AND THE TATTOOED

**Auschwitz Birkenau**

Tattooing prisoners was part of the inhuman system of National Socialism in Germany.



2. BODY ART

**Egypt**

In ancient Egypt, point patterns produced by pricking the skin adorned the abdomen, breasts, arms and legs of some women, as shown by the mummies of the priestess of the goddess of love, Hathor, as well as drawings of dancers and statuettes.



3. STATUS AND CLASS SYMBOL

**New Zealand**

Until well into the 20th century, only selected persons, such as high-ranking chiefs and women, sported facial tattoos (ta moko). By undergoing the painful procedure of tattooing, they signalled their willingness to accept responsibility for society.



4. PAINTED OUTSIDE - PROTECTED INSIDE

**Central Brazil**

Painting and coating the skin to strengthen the body's shell and protect it against diseases and dangers is common in many cultures and was probably practised even by Stone Age people. The **Kayapó Indians** of central Brazil, for example, believe that painting the body black protects the inside of the body and stops negative forces from entering.



5. INGROUP-OUTGROUP

**Guinea, Africa**

In Guinea (West Africa), girls from the **Loma tribe** leave their childhood behind them by withdrawing into a "bush school", where female knowledge is imparted to them. Adorned with podai paintings as a sign of their new personality, they return to their villages in a festive procession.



# THE BEARSKIN CAP

A MUST FOR THE FASHIONABLE MAN



**REAL  
BEARSKIN  
CAP!**

Naturally tanned and made by hand!  
Local raw materials. Biodegradable.

**The fashionable accessory for the stylish man.**

## TRAVEL OBSERVATION

What would have remained of Ötzi's equipment if it had not been embedded in the glacier ice?

---



---



---

## DETOUR

### It all began with Ötzi

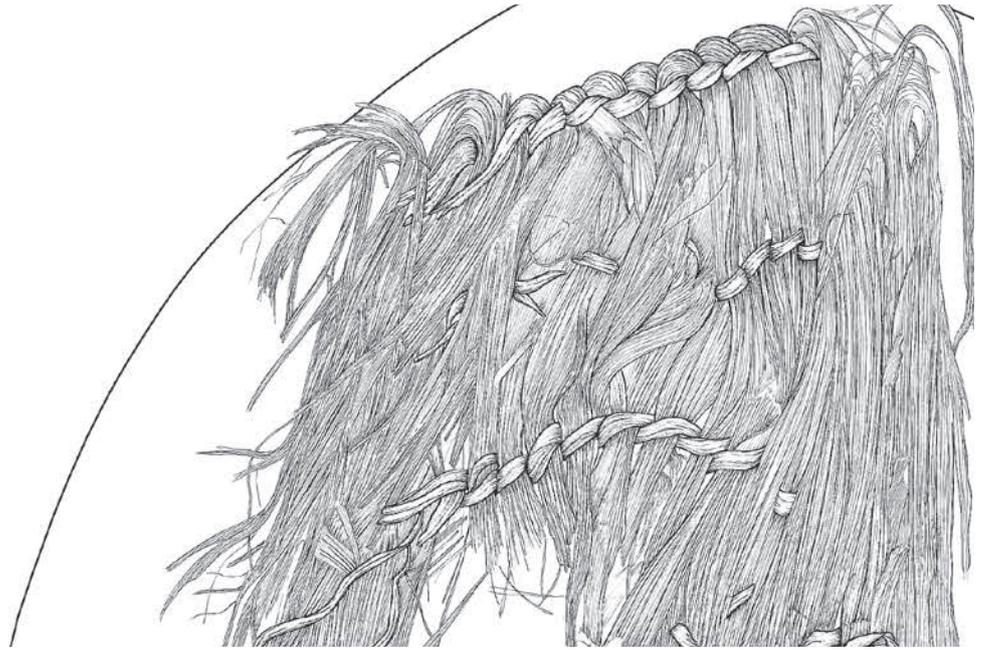
It all began with the discovery of Ötzi in 1991. Until then, scientists had believed that prehistoric people never visited sites higher than 2000 metres above sea level. Ötzi's discovery meant that researchers had to revise their thinking. Ongoing climate change and the rapid melting of glaciers called for urgent action. A new branch of science emerged: **glacier archaeology.**

# THE GRASS MAT

## BASIC EQUIPMENT FOR FANS OF THE GREAT OUTDOORS

Imagine you have to travel through the forest against a cold wind and lashing rain. You would be grateful to have a water-repellent cape made of grass or an insulating mat to sit or lie on.

Some of the finds are still a mystery for archaeologists, this grass mat being one of them.



## DIY CHALLENGE

You're an expert in textiles and manufacturing techniques and have been asked to replicate the woven mat. How would you go about it?

1. Take a close look at the woven grass mat!

---

---

---

---

---

---

---



# THE HIDE COAT

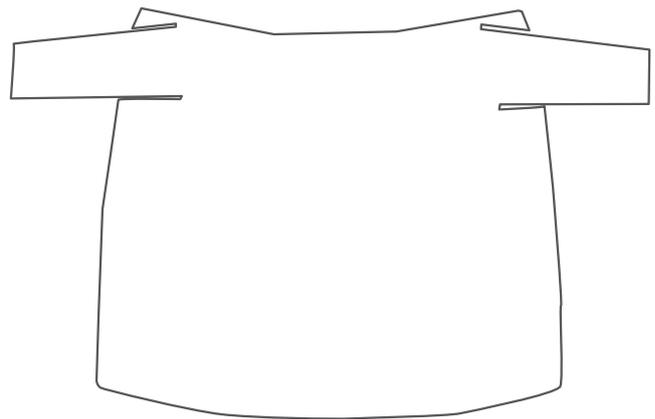
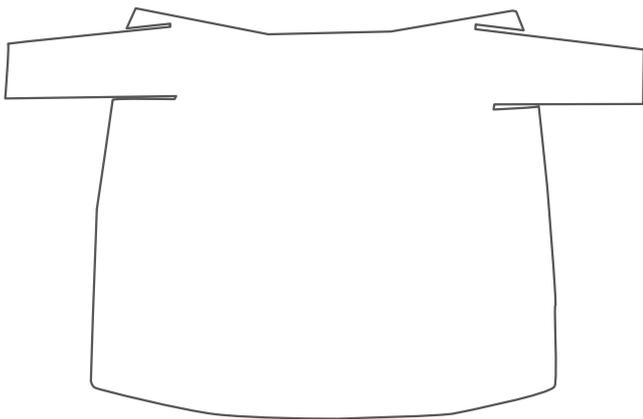
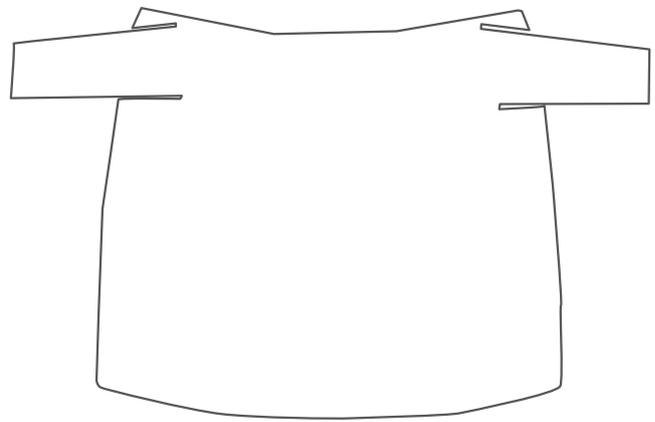
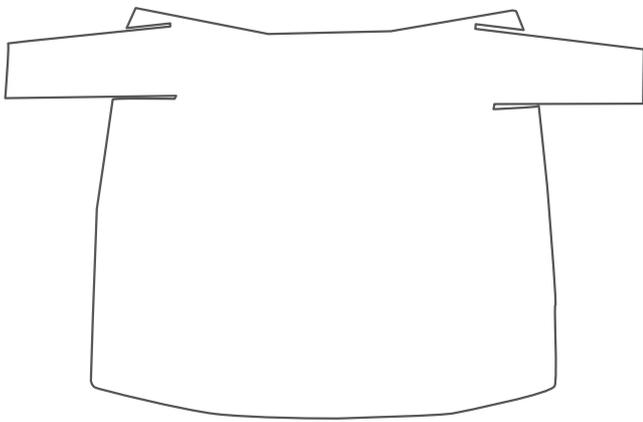
## STRIPED LOOK FROM THE YEAR DOT

Ötzi's model still holds some secrets.

We don't know whether sleeves were attached or how the coat was fastened.

### WHAT ARE YOUR DESIGN IDEAS?

Dotted, checked or floral: make your own pattern



ORIGINAL MEASUREMENTS  
138 X 90 CM

# THE LOIN CLOTH

## TIMELESS FASHION

According to statistics, the average man in western Europe owns 20 pairs of underpants. Today, men's underwear can be purchased in every conceivable design. The classical briefs were invented in 1934.

Ötzi wound a kind of primitive underpants around his nether region.



### COMPARISON OF UNDERWEAR

Fill in the label

#### DETOUR

In the 19th and 20th centuries, ethnologists visited native peoples in Africa, Australia and Asia and reported on their lifestyles. Archaeologists used their findings to better understand the objects they discovered and how they were used.

\_\_\_\_\_

MATERIAL

---

MANUFACTURING METHOD

---

MADE IN







# THE LEGGINGS

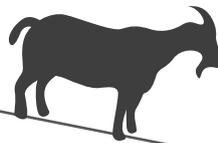
## PATCHED AND RE-USED

You'll see that Ötzi wore his leggings for a long time.

It was probably less expensive to mend his old leggings than to get new ones.



### DETOUR



#### **A brief introduction to goats**

The ancestor of our modern domestic goat was the bezoar goat, which originated in Anatolia. Neolithic people first had to find out which animals could be domesticated, meaning which animals would reproduce in captivity. For animal farming, people chose animals that are easy to look after and provide a good yield in terms of meat or other raw materials.

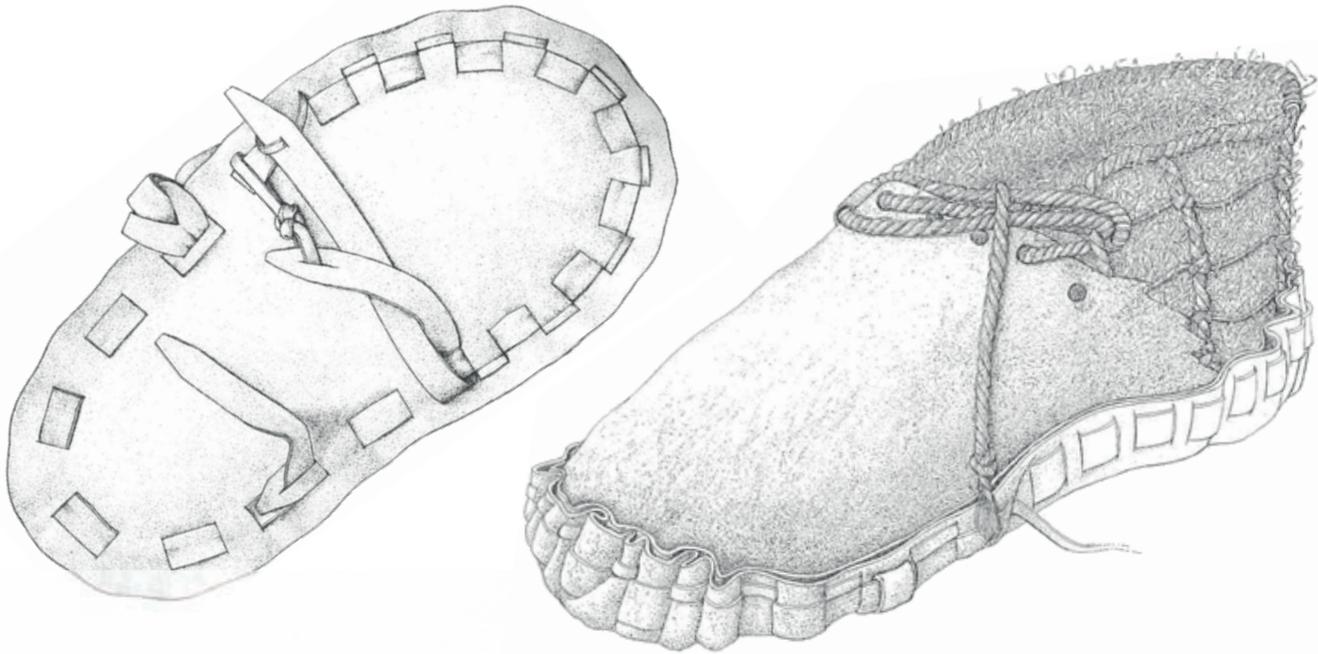


# THE RIGHT SHOE

## SOPHISTICATED HIGH TECH: MATERIALS

This shoe clearly shows that people were already highly skilled at making things around 5300 years ago. The clever design of the shoe became apparent during the restoration work.

This is how the right shoe may have looked:



### MOUNTAIN SHOE TEST

You work as a product tester for an outdoors magazine.  
Take notes for your test report based on the usual evaluation criteria:

Fit / comfort:

Laces:

Non-slip soles

Waterproof:

Weight:

Cushioning on hard ground:

Heel fit:



# THE BOW

## AN UNFINISHED PRODUCT OF OLYMPIC QUALITY

After carefully selecting a suitable piece of wood, Ötzi began to fashion a bow from a thin tree trunk or branch. The tool marks can still be clearly seen. After several hours of work, the bow was still unfinished.

### TRAVEL OBSERVATIONS

Comparison between the reconstructed bow and the original bow.

What work did Ötzi still have to do on the bow?

---



---



---



---



---

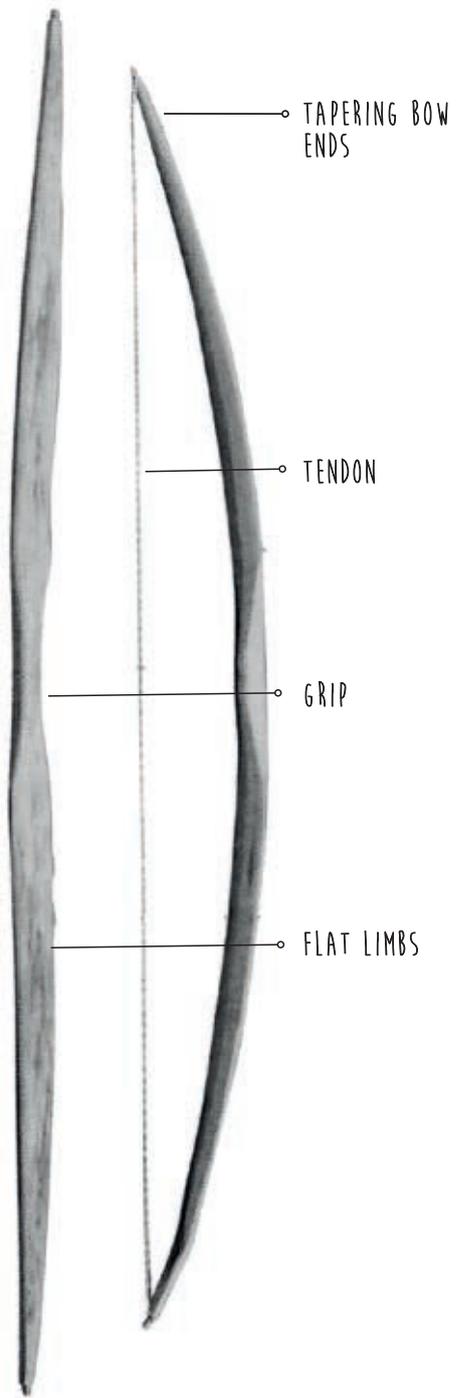


---



---

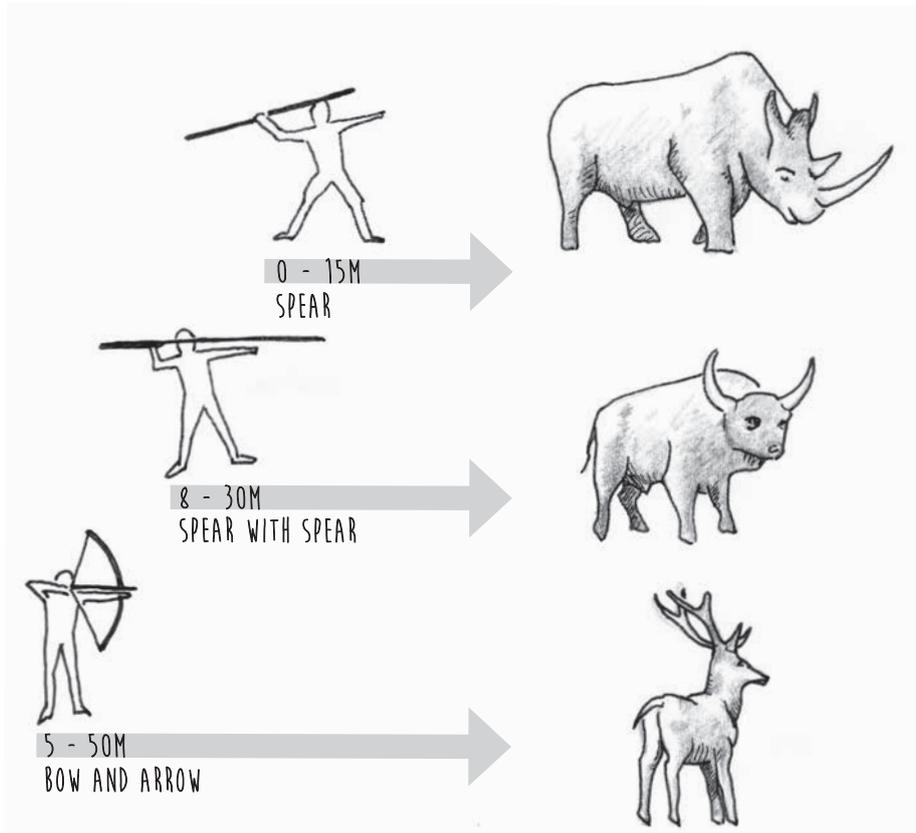
Reconstruction of a finished bow



DETOUR



An experimental archaeologist reconstructed and tested Ötzi's hunting weapon: Ötzi's bow certainly measures up to a modern sports bow!!



## IMAGINE YOU ARE A HUNTER

What do you think is the advantage of hunting with a bow and arrow?

Unlike a spear and spear thrower, an arrow is not thrown but \_\_\_\_\_, so that it reaches a \_\_\_\_\_ acceleration and flies \_\_\_\_\_. This means that animals can be targeted with \_\_\_\_\_ accuracy and from a \_\_\_\_\_ distance. The bow and arrow is suitable for hunting both \_\_\_\_\_ and \_\_\_\_\_ animals. The bow and arrow has an important advantage for hunting in the forest: \_\_\_\_\_

## DETOUR

When the climate in central Europe started to warm up 11,600 years ago, forests began to spread. Extensive steppe landscapes and large animals such as mammoths, bison and woolly rhinoceroses disappeared. They were replaced by new animal species such as deer, wild boars and beavers. These new environmental conditions radically changed people's hunting practices and methods. The most important innovation was the widespread use of the bow and arrow.



# THE AXE

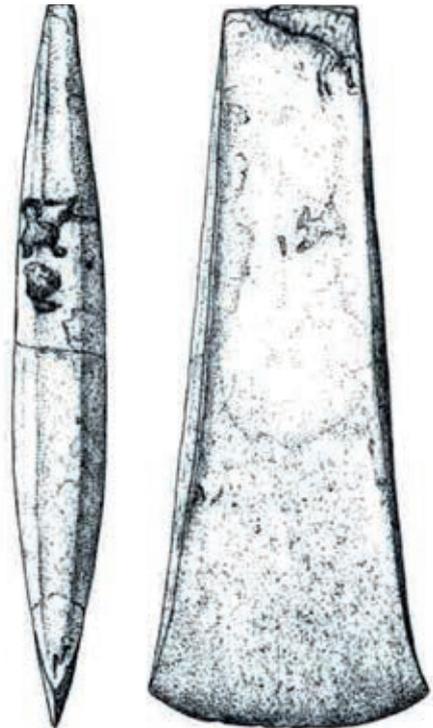
## FOR SHOW-OFFS, NOT FOR THE MODEST ...

An axe with a copper blade makes a good impression – especially if the raw material, copper, is rare and comes from far away. Of course, few people were able to afford such a copper axe. Besides being a weapon and tool, it probably also served as a badge of social rank.

Drawing the objects (artefacts) they find helps archaeologists to interpret what they were used for.

## TRAVEL OBSERVATIONS

What details can you see on the drawing that are not visible on the original?



### DETOUR

#### Discovering ancient trade routes

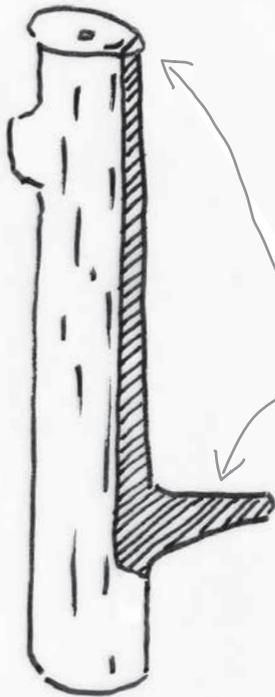
Contacts with central Italy

The identification of the origin of the ore used to make the axe head was surprising. Contrary to what had been assumed, the copper for the blade did not come from the Alpine region but from central Italy. The Archaeometallurgy Research Group headed by Professor Gilberto Artioli (University of Padua) determined that the metal ore was mined in southern Tuscany.

ACTUAL SIZE = 1:1

LENGTH: 9.5 CM

WEIGHT: 174.21 GR



## TRUNK-AND-BRANCH SHAFTING

Ötzi carved the haft from a piece of trunk and the shafting for the blade from a branch which stuck out almost at right angles. The natural connection of trunk and branch gave the axe handle maximum durability.

HAFT

SHAFT

## DETOUR

### Ötzi was not alone

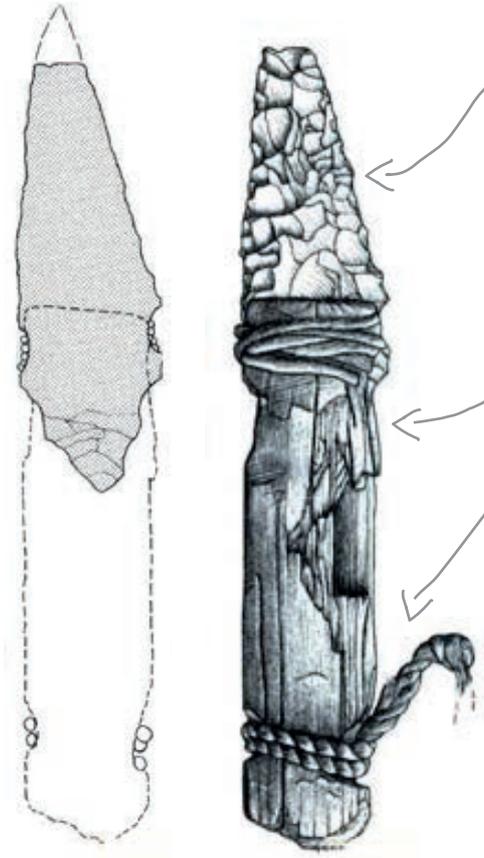
In 1998, an oak axe haft was discovered on Tisenjoch around 50 m from where the Iceman was found. This haft is several hundred years more recent than the Iceman and shows that Ötzi was not the only one to use the pass.



# THE DAGGER

## WHO INVENTED IT?

### INSTRUCTIONS FOR MAKING A WORKING POCKET KNIFE



#### MAKE A SHARP BLADE FROM FLINT

Shaping flint is a fine skill: one false strike, and the blade will shatter into a thousand pieces. The entire process – from quarrying the flint to transporting it to the work site to shaping it – would then all be in vain.

#### CARVE A STURDY HAFT FROM ASH WOOD

#### MAKE A LENGTH OF STRONG TWINE BY TWISTING BAST FIBRE FROM A LIME TREE

Pull long strips of bast fibre from a lime tree and soften them in water for several weeks so that the fibres can be separated. After drying them, twist the fibres into a twine to attach the blade to the haft.

#### ⇒⇒⇒ TIP:

You can make bast-fibre twine yourself in the Discovery Room.

### DETOUR

#### Prehistoric steel

Humans have been using flint as a material for around two million years. Flint dominated all facets of everyday life from the Neolithic to the Bronze Age: hunting arrows, scrapers, sickles, axes, knives ...



# HIGH ALPINE HIKE TO THE DISCOVERY SITE

A spectacular hike through the Ötz Valley Alps. The hike to the discovery site on Tisenjoch (3220 m) isn't easy, but in the end you will be richly rewarded with a spectacular view of the surrounding area.

**Length of hike:** about 8 km  
**Hiking time:** about 4.5 hours steeply uphill  
**Ascent:** around 1600 m  
**Recommended period:** July – September

## TRAVEL OBSERVATIONS

Ötzi's survival kit:

For making fire →

For punching holes →

For fine carving and cutting work →

Energy bar →

Precision tool →

First aid kit →

Backpack →

## DETOUR

### The border question

According to the 1919 Treaty of St.-Germain, the border between Austria and Italy follows the watershed between the Inn and Etsch valleys. However, in the Tisenjoch area, the watershed could not be precisely defined at the time of the treaty because it was covered by glacial ice.

A new land survey was ordered on 2 October 1991. The survey settled the matter once and for all: the discovery site is located 92.56 metres from the Austrian border on Italian soil.