# Original Paper

# A New Interpretation of Otzi, the Iceman

Gustav N. Kristensen1\*

<sup>1</sup> Euro Faculty, Riga, Vilnius, Tartu

\* Gustav N. Kristensen, Euro Faculty, Riga, Vilnius, Tartu

Received: July 28, 2019	Accepted: August 18, 2019	Online Published: August 22, 2019
doi:10.22158/se.v4n3p165	URL: http://dx.doi.o	rg/10.22158/se.v4n3p165

# Abstract

China is the home of acupuncture, but the origin of this treatment method is unclear. The discovery of Ötzi is a milestone in the discussion of acupuncture and has led to a new interpretation of cause and effect. An interpretation, according to which Europe is the pioneer ahead of China. The literature distinguishes between "a form of acupuncture" and "acupuncture". This distinction is superfluous in a historical context.

#### Keywords

acupuncture, stone-age, ertebølle culture, zinken, Mao Tse-Tung

#### 1. Introduction

Between Austria and Italy lies the region of the Dolomites. This is where Ötzi, the Iceman, was discovery in 1991. Ötzi was a 45-year-old man, who died in approximately 3300 BC. Ötzi had been killed by an arrow. Among his possessions were a bow, a copper axe, a knife, a quiver, and a net.

An unusual aspect of the find was the tattoos on Ötzi's wrist and in other places of his body. The tattoos had been produced by making fine incisions in the skin, after which charcoal was rubbed in. The incisions were mainly located in places on the body that can be especially susceptible to injuries and pain—a form of acupuncture or pain treatment.

The background for this article is that the discovery of Ötzi has led to a completely new way of looking at the world in terms of treatments. Herbs and fungiare now widely recognized to have been used for healing in prehistoric times.

This was in the Neolithic period (4,000-2,000 BC). Thus, 3,300 BC is between the Neolithic and the Mesolithic periods.

# 2. Method

#### 2.1 The Secrets of the Ertebølle Culture

Let us now go back to the *era of the hunters*, the Mesolithic period (8,300-4,000 BC) in Denmark. The Ertebølle Culture existed during a sub-period of the Mesolithic period, from about 5,200 BC to about 4,200 BC. This period is also referred to as the *kitchen midden era* because it is characterized by heaps of household waste, such as seashells, animal bones, pottery fragments, etc.

The Ertebølle Culture has been found in Denmark, Scania, Halland, and Blekinge as well as in Schleswig-Holstein, Mecklenburg, and on Rügen.

During that period, Denmark looked different than it does today. The ice sheet had retreated from Jutland, leaving an elevated landscape in Northern Jutland (about 2.5 meters) and a low-lying landscape in Southern Jutland (about 2.5 meters). Horsens Fjord is located right in the middle.

Two different finds from Horsens Fjord are remarkable. One is a stone needle, sharp as a razor blade. It has presumably been used for decoration of the body or possibly as part of rituals.



Figure 1. A Stone (Needle) from Approx. 5000 BC

The other is a so-called "pren of bone". The Danish Dictionary of Foreign Words (DFO) defines a pren as a "tool made of bone, wood, or metal used for punching or widening holes in, for example, fabric and leather".

It seems reasonable to change the word pren to "an instrument used for a form of acupuncture". Present-day reconstructions suggest that a pren of bone (exactly as the one shown in Figure 2) has been used to make the fine incisions, corresponding to tattoos, on Ötzi's body. Presumably, Ötzi has used this method as a "form of acupuncture" in 3,300 BC.



# Figure 2. A Pren of Bone or an Instrument Used for a Kind of Acupuncture. From Approx. 5000 BC

#### 2.2 Northern Europe

2.2.1 The Hamburg Culture, 20,000-18,000BC

We will now go back to the time when Denmark was covered by an ice sheet, and only a small part of the North Sea was ice-free.

The Hamburg Culture existed in what is today known as Holland, North-western Germany, and Denmark.

This was the reindeer era.

A special characteristic of the Hamburg Culture was the "Zinken", a small flake the size of a thumb.

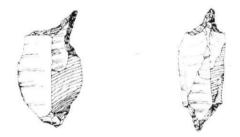


Figure 3. Zinken. Purpose Unknown. From Approx. 20,000BC

It has not been determined what it was used for. One suggestion is that it was a kind of prying tool for detaching the long bone splinters that were carved from reindeer antlers. But this theory is still unproven.

2.2.2 The Bromme Culture, 10,000BC

Characteristic finds from the Bromme Culture are (the word has two forms): stikkel(er)—sharpened flint flake(s) from the Neolithic period (DFO) stikle(r)—pointed instrument(s) or tool(s) (LL18, 100).No tools of bone have been preserved at the site of the culture (LL3,41).



Figure 4. Stikle. Purpose Unknown. From Approx. 10,000 BC

2.2.3 The Maglemose Culture, 7,500-6,000BC

Many bone tools have been found.

2.2.4 The Ertebølle Culture in Northern Jutland, 5,200-4,200BC

The bone spikes found—11 in all—are similar to the ones from Horsens Fjord; that is, "prens of bone"

or "instruments used for a form of acupuncture" (Figure 5).

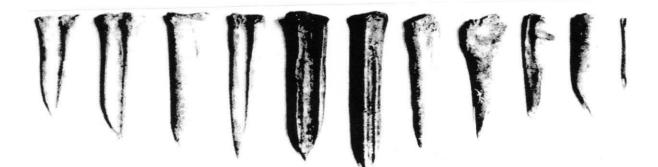


Figure 5. Eleven "Bone Spikes" (Compare to Figure 2)

#### 2.3 Southern Europe

2.3.1 The Magdale in Culture, 18,000-10,000BC

This was the culture of the reindeer hunters. *Stikler* have been found in several locations, and so have arrowheads made of bone.

The culture existed in France, Germany, the countries along the Danube, and in Northern Spain. This special tool culture seems to have developed in France around 18000-16000 BC.

### 2.3.2 Ötzi, 3,300BC

Among his possessions, Ötzi had a copper axe. But the subsequent use of bronze in the Bronze Age did not bring about metal needles. The last needle used in Europe for "a form of acupuncture" was the bone needle. In the, various ups and downs had put a stop to "a form of acupuncture".

2.4 China, Approx. 5,000 BC-2,019AD

Acupuncture—"The Chinese practice of inserting needles in the body for diagnostic and healing purposes" (LL1, 88. Approx. 1969).

The oldest acupuncture "needles" that have been found in China were made of stone. More specifically, they were sharp stones found in Inner Mongolia in 1963. They take us back to the Neolithic period. In the Chinese Sea, six stone "needles" made of stone have been found.

According to the book "Chinese Traditional", an ancient Chinese character for "stone needles used for acupuncture" has been discovered in a dictionary from about 400-300 BC. The word is *Bian*, which means "using stones for treating diseases" (Graungaard, 1990). Gradually, Bian was replaced by needles made of bone or bamboo.

2.4.1 The Shang Dynasty, 1400-1122BC

The Shang Dynasty was the first culture to introduce bronze, but this metal did not win approval among practitioners of acupuncture. Needles made of either bone or bamboo continued to be the preferred instruments.

2.4.2 The Han Dynasty, 206 BC-220AD

The metal needle was introduced during the Han Dynasty.

The first written sources on acupuncture in Europe were composed by the Jesuit monk Havieu (1671) and the Dutchman Willenten Thinje (1683).

The word "acupuncture" originates from Latin and means "needle pricks". French Jesuits working as missionaries in Peking (Beijing) 300 years ago labeled healing with needles as "acupuncture".

"In 1757 the physician Xu Daqun described the further decline of acupuncture, saying it was a lost art with few experts to instruct" (Hall, 2011).

"In 1822, an edict from the Chinese Emperor banned the practice and teaching of acupuncture within the Imperial Academy of Medicine" (Hall, 2011).

Chinese Communist Party leaders ridiculed traditional Chinese medicine, including acupuncture. The savior of acupuncture was Mao Tse-Tung (1949): "Chinese medicine and pharmacology are a great treasure house and efforts should be made to explore them and raise them to a higher level".

2.5 Europe and China, "Needle Pricks"

The definition (needle prick) meets all standards for being acupuncture. "Needle pricks" are older than thewheel.Anacupunctureneedleis: "Apointedinstrumentusedforhealingpurposes". It can be made of:

1.	wood	"needlepricks"
2.	stone	"needlepricks"
3.	bone	"needlepricks"

Published by SCHOLINK INC.

4. bamboo "needlepricks"

5. metal "needlepricks"

The metal needle is the latest development in this sequence. Thus, the metal needle is just a small step in the 20,000-year long existence of needle pricks (acupuncture).

Year	Europe	China	<b>Population size</b>
- 20,000	Stone (Zinken)	Unknown	2-5 million
- 18,000	Stone (Zinken/Stikle)	Unknown	
- 16,000	Stone (Stikle)	Unknown	2-5 million
- 14,000	Stone (Stikle)	Unknown	
- 12,000	Stone (Stikle)	Unknown	
- 10,000	Stone (Stikle)	Unknown	2-5 million
- 8,000	Stone (Stikle) - Bone	Unknown	5
- 6,000	Stone (1)-Bone (2)	Stone	
- 4,000	Stone (1)-Bone (2)	Stone	100 million
- 2,000	Stone (1)-Bone (2)	Stone/Bamboo	
0	Unknown	Metal	
-	-	-	-
0	Unknown	Metal	
			500 million
500	Unknown	Metal	
1,000	Unknown	Metal	
1,500	Unknown	Metal	
2,000	(Metal)	Metal	6,000 million

	Tabel 1.	Shifts	between:	Stone.	Bone.	, and Metal
--	----------	--------	----------	--------	-------	-------------

Needles made of wood and bamboo have not been preserved.

### 3. Result

# 3.1 Global Recogniton

In France, acupuncture has been used since the 16<sup>th</sup> century with mixed success. Around 1970, acupuncture gains ground in Denmark.

In 1979, acupuncture is recognized as an effective treatment by the World Health Organization (WHO). What Ötzi used was "a form of acupuncture" for alleviation and relief together with herbs and fungi.

#### 4. Discussion

In both Europe and China, the ancient populations developed "a form of acupuncture" before inventing the wheel.

The Europeans were the first to take up this form of treatment but abandoned it again around the Bronze Age. The Chinese started later and have broadened the spectrum through the invention of the metal needle. This is where we stand today.

But why did the Europeans stop performing pain treatments through acupuncture in the Bronze Age? One possible explanation could be as follows: The population became denser and mobility increased. The wheel was invented (see the appendix). Contagious diseases arose and reduced the need for acupuncture, which was subsequently forgotten about.

Alternative explanations may be that herbs and fungi proved to be more effective methods of treatment. Modern methods are more effective than acupuncture.

#### References

Ancient mysteries-Ötzi the iceman. (1980). Retrieved from https://www.dailymotion.com/video/x6ep1mm

SKALK. No. 1. Nyt om gammelt. (1980). August Lax Hildesheim.

BBC: Death of the iceman. (n.d.). Retrieved from https://www.dailymotion.com/video/z225zgg

Dansk Fremmedordbog (Gyldendals store røde ordbøger) (DFO). (1999). *Lademanns Leksikon* (LL1, 8; LL3, 41; LL11, 290, 292; LL18, 100).

Graungaard, E. (1990). Akupunkturensgåde. Thaning & Appel.

- Hall, A. (2011). The History of Alternative Medicine: Colorpuncture, Acupuncture, Acupressure and Massage Explored.
- Holm, J., & Rieck, F. (Eds.). (1992). Istidisjægere ved Jelssøerne. Hamburgkulturen i Danmark. *SKREFTER FRA MUSEUMRÅDET FOR SØNDERJYLLANDS AMT*, 5.

Iceman murder history. (n.d.). https://www.dailymotion.com/video/x3eh0jk

Jensen, P. K. A. (2005). Menneskets oprindelse og udvikling.

SKALK. No. 1. Nyt om gammelt. (1983).

Tromnau, G. (1979). Die fundplätze der Hamburger kultur von Heber und Deimern, kreis Soltau. Verlag