3.4. Migration and Colonization
The discovery of Cherchen man

Along the ancient silk road, trading between east and west took place for thousands of years.

- discovery of scripts in Buddhist monasteries → Indo-European language; Tocharian
- discovery of mummified people with Caucasian features
The Discovery of the Tarim Mummies
What is the origin of the Takla-Makan mummies?

Dried and preserved by the arid dry climate of the Takla Makan Desert.
The Silk Road

Ancient trading route between China and Rome through desert and mountains.

Are mummies perished traders?

Sir Aurel Stein
Sven Hedin
About 3000 ft Basin in Takla Makan was location of extensive lake during last ice age. The lake evaporated within the subsequent 10000 years. The early “discoverer” Marco Polo, reported on the existence of a large lake; 19th century travelers, Sven Hedin could only confirm a saline lake (swamp) in the desert. It is gone now!
Lop Nor is on the east edge of the Tarim Basin in China’s Xinjiang Province. The present structure was created by water level changes within the former lake. Concentric rings formed as water evaporated from the lake and left mineral deposits, including highly reflective salts, along the new shoreline. The former lake now resembles a giant ear. Visible are a small plateau ~ 3000 ft above the terrain south of Lop Nor and extensive sand dunes and sand ridges to the southeast.
Existence of Tarim basin lake civilization confirmed by 2001 Chinese expedition

- salt encrusted lake bed
- boat shaped coffins
- burial place at western edge of Lop Nor

Dozens of mummified bodies discovered
The Dating of the Mummies
Radiocarbon data from different sites point to a period of <3200BC-1000AD.
Evidence for ancient Caucasian Tribe in Tarim Basin

Radiocarbon dating gives age for Cherchen man to ~1900 BC, other mummies have been dated back to 3000 BC. Between 100 – 1000 mummy sites found but many have not been analyzed
Evidence of Caucasian origin

- Outer appearance
- Weaving pattern in clothing
- Linguistic patterns: Tocharian A, (känt)
  Tocharian B, (kante)
- DNA analysis (1 sample)
Weaving patterns

Comparative analysis of weaving pattern and technique showed close relation to Celtic techniques in Europe.

What is the origin of Caucasian people in Central Asia? Migration of “celtic’ people from common origin (Black Sea)?
Weaving Analysis
twill and tartan

similarities with Hallstatt textiles (Celtic population) Scottish plaid pattern? Distinct differences with other local textiles.

plain weave

twill weave

radiocarbon dating ~850BC
Tocharian influenced scripts
Indo-European language patterns

the centum - satem division

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Indo-European language tree

linguistic analysis of language patterns and core words to identify similarities in languages.

Tocharian related to Celtic branch confirmed with weaving pattern analysis
DNA-Analysis as new Technique
DNA testing

DNA samples were taken from 11 mummies. 1 sample only received export permission.

Result: DNA type of Haplogroup H, which is largely associated with Europeans (40%) and only slightly with near East pop (15%). More data were needed!

Up to 2006 no DNA testing allowed for political reasons due to Chinese fear of Uyguran independence movement. New DNA results from 53 samples are now available. Comparison with surrounding populations indicate eastward migration of people of European origin.

Tocharians disappeared with sinking water level, moved into the northern water rich mountain regions, mixed with the later Uygur tribes. Remaining are, burial places, monastery ruins, & bronze statues in the Takla Makan desert.