

### Climate and war

In the early seventh century BCE, Assyria – a small territory in northern present Iraq - reign throughout the Middle East. The Mesopotamia, southern Anatolia, the Levant and up to Egypt: everywhere one poured tribute to the Assyrian king, head of a centralized imperial state and supported by an army whose reputation for ferocity and invincibility tetanised his opponents. In five decades, Assyria went from the top of its power to simply disappear. In the late seventh century BC - after a so fast and so enigmatic collapse called it "historic scandal" by the great Orientalist Paul Garelli - there is nothing left from the Assyrian splendour.

In the latest issue of the Climatic Change journal, anthropologist Adam Schneider (University of California, San Diego) and Selim Assyriologist Adalı (Bilkent University in Ankara) revisited this puzzle through the prism of recent discoveries about past climates. Several analyses of sediment cores from the Middle East indeed suggest a significant decline in rainfall levels over the region, towards the middle of the seventh century BCE. In 657, in a letter to the great king Assurbanipal (669-631 BC), a priest named Akkulanu referred to "reduced rains" and stated that "nothing could be harvested" on this given year.

"Given the regional trend that severe droughts are part of multi-year dry spells, we suspect that the one described by Akkulanu (...) was included in a series of abnormally dry years", the authors write. This blip regional climate, they add, coincides with an unprecedented population explosion in the historic heart of the Assyrian territory. The practice of deporting conquered people was in full swing. During the single reign of Sennacherib (705-681 BC), there were probably half a million people, across the Middle East, that were forced to move in Assyria. The capital, Nineveh (not far from the present Mosul), developed, within a few decades, from an area of 150 to 750 hectares.

#### BIG DROUGHT WAS THE PRELUDE TO A CIVILIZATIONAL COLLAPSE

##### In the grip

Fatal caught in the grip. On one hand, an increasingly large population to feed. On the other, successive droughts that destroy crops. In 652 BC, Babylon revolts against his Assyrian master. The following year, an insurrection broke out at the heart of Assyria. The first cracks shook the empire. They were sealed, but only temporarily.

Then the decline seemed to be irreversible. After the death of Ashurbanipal, in 631 BCE, the documentation dries up and many historians suspect that it was the beginning of a period of instability punctuated by civil wars. "Several legal documents dated 620 BC testify to high grain prices during this period", write the two researchers. A few years before the end of the seventh century BCE, Nineveh was destroyed by a military raid.

#### FOR F. HOLLAND, MAJOR CLIMATE DISRUPTION " WOULD BE A SOURCE OF WAR "

It would be "misleading", and the authors themselves say so, to make drought as the major cause of the decline of the Assyrian empire. "We must assume that there were many other important factors, known and unknown, who have also influenced the historical trajectory of the Assyrian state", they write. However, their work reminds the extreme sensitivity of the region to climate upheavals.

Around 1200 BC, another great crisis shook the entire Middle East and the Eastern Mediterranean: all major political systems collapsed, amid economic destruction and warrior chaos. Again, short lines inscribed in clay tablets found by archaeologists testify to strong pressure on crops. The Hittite king - who ruled Anatolia - asked one of his vassals from Levant to deliver dozens of tonnes of grain, concluding: "It's a matter of life or death!" Again, the study of past changes in regional climate shows the installation, around 1200 BC, of large droughts as a prelude to this civilizational collapse, followed by four centuries of what historians call the Dark Ages.

It is impossible not to link with what prevails today in Syria and Iraq. Of course, the immediate present inclines us to make radical Islam, colonial past, lack of democracy and endemic poverty the major determinants of what is happening in these countries. But other forces, of geophysical nature, also work on societies. And they can suddenly help to release social or politic stresses that have been accumulated.

In January, in Middle Eastern Studies, Francesca de Châtel (Radboud University in Nijmegen, Netherlands) recalled that Syria has suffered an unprecedented drought between 2006 and 2010 and that in year 2009 alone, hundreds of thousands of Syrian farmers deserted the northeast of the country - not far from what was Assyria here twenty-seven centuries ago - unable to continue farming. The drought has been joined by the drying up of groundwater, chronically overexploited, and by the deregulation of the market for agricultural inputs ... These population displacements, too slow and not spectacular enough to be the center of media attention, were never the less an important factor of destabilization for these societies.

At the G20 summit in Brisbane (Australia), on Sunday 16 November, Francois Hollande said he was convinced that a major disruption of the global climate "could lead to war." We should succeed to convince ourselves that this is not just a figure of speech.