

The Wisdom of the  
**White Elephants**

*in Honor of*  
**Gottfried Konecny**



**From Laussedat to Learning Machines**  
*What can we learn from History ?*

*Laurent Polidori*  
*CESBIO, Toulouse, France*



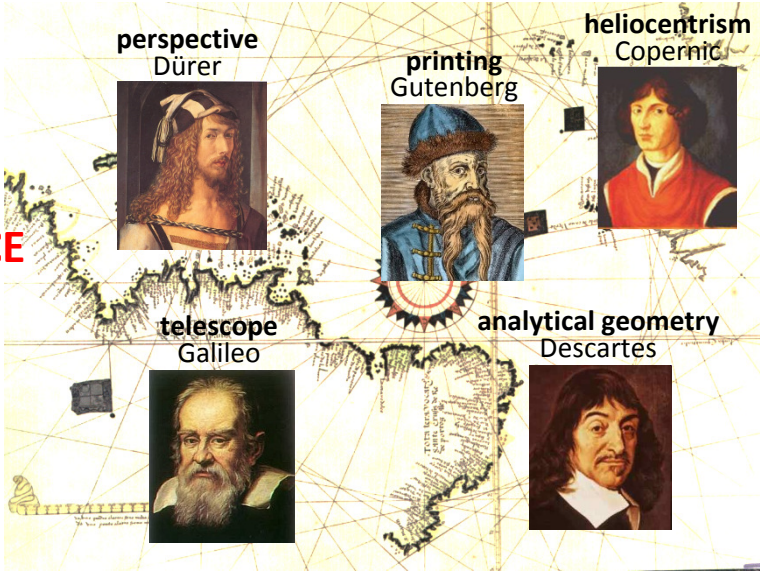
# Laussedat's bicentenary (1819 - 2019)

a collective book ►

a workshop ▼

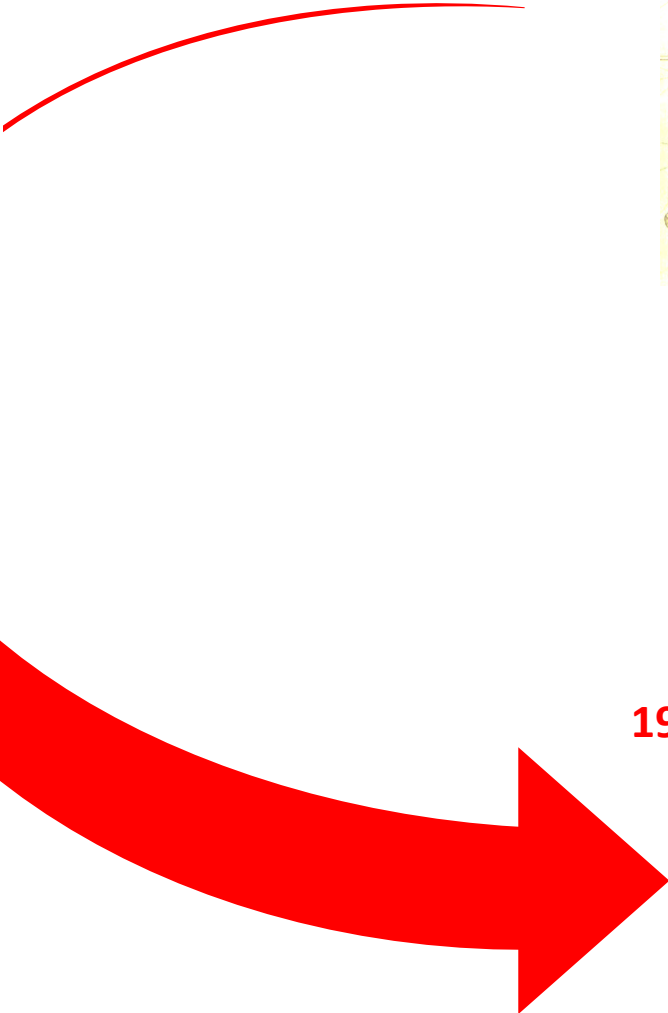


**RENAISSANCE**



**Captain Laussedat**

1852



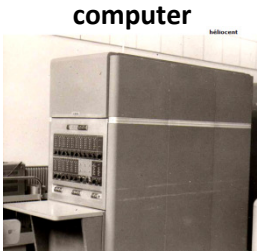
**1950-60**



**Non-Euclidean geometry**



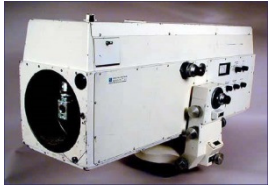
**Daguerreotype**



**computer**

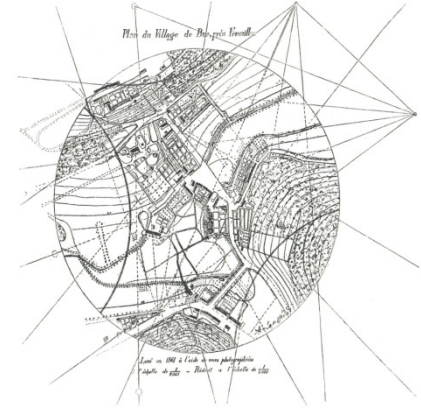
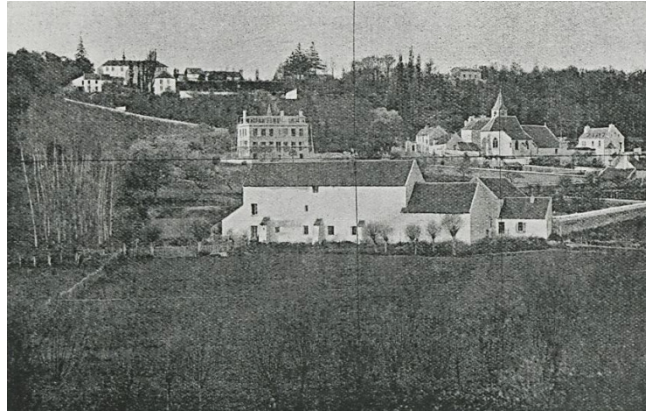
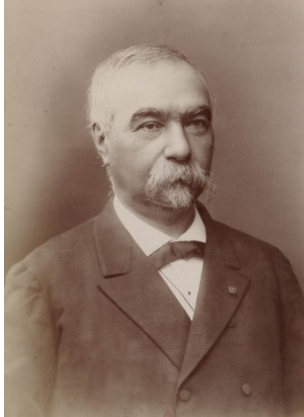


**satellite**

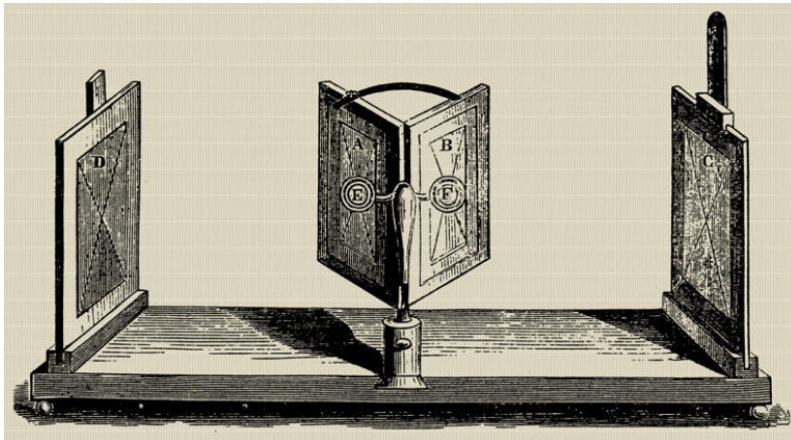


**laser**

# The first photogrammetric feasibility demonstration (Buc, 1861)



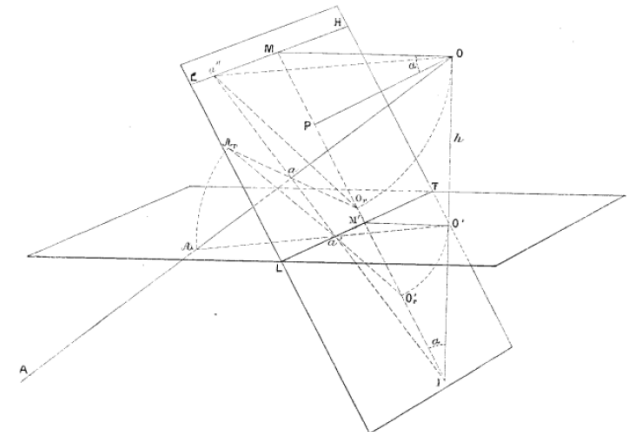
# The experiences Laussedat did not make (yet he could)



stereoscopy



aerial photography



...no algebraic solutions



Laussedat in 1902



Meydenbauer



Porro



Thiele



Deville



Pulfrich



Dolezal

The seed of an international photogrammetric community



## Keynote Address

### The International Society for Photogrammetry and Remote Sensing—75 Years Old, or 75 Years Young

GOTTFRIED KONECNY, *University of Hannover, F.R. Germany*



**L**ADIES AND GENTLEMEN, I am grateful for the distinction of having been asked to prepare the keynote speech for the 1985 Annual Meeting of the American Society of Photogrammetry and the American Congress on Surveying and Mapping.

As a photogrammetrist, I am naturally concerned about matters dear to me and therefore I have chosen as the title of my talk "The International Society for Photogrammetry and Remote Sensing—75 years old, or 75 years young." I have done this for two reasons. Last year I became successor to Fred Doyle, who ably represented the American Society of Photogrammetry as President of ISPRS for four years from 1980 to 1984. Secondly, our organization celebrates this year its 75th Anniversary. We photogrammetrists are officially in our third generation. Reason enough to look back on our accomplishments and to ask ourselves the question, whether we still have a future.

As photogrammetrists and people who are concerned about remote sensing, we cannot work in isolation. We are deeply interrelated with the other surveying and mapping fields, with which, as the long standing tradition of the Annual Meeting shows, we already form an unofficial union of surveying and mapping disciplines. It is in this context, that photogrammetry and remote sensing are also of concern to surveyors, geodesists and cartographers.

We know that surveyors were already in existence, when the Babylonians and Assyrians were delimiting their irrigated fertile lands in the valleys of the Euphrates and the Tigris, which were their very existence. This tradition was continued in the Nile Valley. The Egyptians needed accurate surveys to build the pyramids in an attempt to make their kings immortal gods. Surveys needed mathematical thought, and this is why by pure observation Eratosthenes of Alexandria succeeded from observations of the sun, that the Earth must be like a

sphere, and he determined its average radius within 1% of accuracy. He thus became the first geodesist.

Mathematical thought and survey practices spread from Mesopotamia and the Nile to the areas of Greek and Roman culture. Roman land surveys were a highly developed technique. Its practice was interrupted by the fall of the Roman Empire because of invasion from the North and the introduction of Christianity with its upcoming mysticism. Therefore the oriental cultures then became responsible for the further development of our disciplines. In the Arab world, astronomy and navigation became highly developed. Cartography, as a description of the earth's features on its surface, flourished in China, long before this was the case in Europe.

The European Renaissance period brought about a change in the occident. The preoccupation with the observation of the laws of nature permitted Galileo, Copernicus and Newton to lay down the foundations of physics, on which geodesy and cartography are now based, and as a result of which the New World was found, explored and settled. Positional Astronomy was the main observation technique used by the Spanish, the Portuguese, the Dutch and the British the world over in exploratory cartography. But soon more exact models for the figure of the earth were developed, and the new observation technique introduced by Snellius called triangulation began to be used alongside with positional astronomy.

It was the French Academy of Sciences, which initially defined the meter as a natural unit of length, namely the 10 millionth's part of the quadrant of the Earth's ellipsoid. In doing so, it generated the first world wide geodetic research project. After it failed, the meter was redefined by other physical measures. But French academic thought in the survey discipline henceforth persisted in Conti-

THE INTERNATIONAL SOCIETY  
FOR PHOTOGAMMETRY  
AND REMOTE SENSING

100 Years of  
the Society



information from imagery

by Gottfried Konecny

4<sup>th</sup> July 2010

Vienna / Austria

**THANK YOU**  
**HAPPY BIRTHDAY**