

Big data of the past comes true - The Time Machine Initiative

Thomas AIGNER, Time Machine Organisation (TMO), Austria

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Time Machine is a far-reaching initiative developing solutions for digitising European cultural heritage in archives, libraries and museums. Digitised information can be examined using text mining and shape recognition. One of Time Machine's aims is to create artificial intelligence based services, which allow citizens to explore digital cultural heritage and benefit from shared data in novel ways. The Time Machine network is formally constituted by the Time Machine Organisation, which is comprised of 600+ members: from libraries, archives, museums, universities, research institutions to private enterprises as well as individual members, the Time Machine Supporters.

To succeed, a series of fundamental breakthroughs are targeted in Artificial Intelligence, Robotics and ICT. Massive digitisation infrastructures and High-Performance Computing will be coupled with Machine Learning techniques to produce a multiscale simulation of more than 5000 years of history. Miles of archives and museum collections will be transformed into a digital information system. The so generated Big Data of the Past will enable us to deal with historical information in fundamentally new ways. It will have strong positive long-term effects on European cohesion, economy and society, with concrete contributions to promoting critical thinking at all levels of decision making, to strengthening the feeling of European identity, as well as to boosting scientific and technological competitiveness, entrepreneurship and employment in knowledge intensive and creative sectors across the European Union.