

Georeferencing Roberti Grosseteste Epistolae

Amelia Carolina Sparavigna

▶ To cite this version:

Amelia Carolina Sparavigna. Georeferencing Roberti Grosseteste Epistolae. Philica, 2016. hal-02264392

HAL Id: hal-02264392 https://hal.science/hal-02264392

Submitted on 6 Aug 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Georeferencing Roberti Grosseteste Epistolae

Amelia Carolina Sparavigna (Department of Applied Science and Technology, Politecnico di Torino)

Published in histo.philica.com

Abstract

Georeferencing Roberti Grosseteste Epistolae

Amelia Carolina Sparavigna

Department of Applied Science and Technology, Politecnico di Torino, Torino, Italy **Abstract**: In this paper, we are proposing a georeferencing of "Roberti Grosseteste Epistolae", that is, of the Letters written by Robert Grosseteste, one of the most prominent thinkers of the Thirteenth Century, Bishop of Lincoln from 1235 AD till his death, on 9 October 1253. The georeferencing is evidencing the network of the thinker, in particular, his links with other episcopal seats in England. The map we obtain on Google Earth shows the large influence of Grosseteste on his geographic area and political environment.

Keyword: Georeferencing of culture knowledge, Smartphone, Google Earth, GIS.

Georeferencing is the association of something with a location in a map. Then, it is naturally used for any structure that can be related to a geographical area, such as points of interest, monuments, roads, and so on [1]. Usually, the action of georeferencing is made by means of a geographic information system (GIS), designed to capture, store and analyse spatial or geographical data [2]. Therefore, any object can have a reference on a map, that is, a "georeference", like in the scholar articles we find the references for formulas, theories, data and experiments to previous published works. As proposed in [3,4], we can, for instance, georeference the life of scholars, and use GIS for education and for cultural knowledge, and also for teaching sciences too [5-8]. For what concerns the use of GIS in education programs, the effectiveness of it had been addresses and tested in [9]. Reference [9] is dated 2003, and the use of smartphones was not so popular in that year as it is today. Then, we can imagine that a georeferencing of cultural contents can be more appealing now, if it is implemented on a smartphone.

Today, we have a GIS tool that can be used on smartphones and this is the Google Earth. As shown in [4], Google Earth is offering the possibility of virtual tours on historic contents; in the given reference, we have used the life of Isaac Newton, but, of course, the approach can be applied to any other cultural case. In Google Earth, the data can be saved in the KML (Keyhole Markup Language) format, which is the notation of XML language.

Besides linking data to some locations, we can try to investigate the possibility of discover some features concerning the life of scholars and their relevance on coeval society from the geolocation of data on maps. Here, we propose an example. Let us georeference the "Roberti Grosseteste Epistolae", that is, the Letters written by Robert Grosseteste, one of the most prominent thinkers of the Thirteenth Century, Bishop of Lincoln from 1235 AD till his death, on 9 October 1253 (the reader can find information on Grosseteste at [10]). His scientific work was very important for the Oxonian school [11-13], and of some of his treatises we have discussed in several papers (among them [14-18]).

The Letters of Grosseteste had been collected in a volume [19]. Let us use of Ref.19 the Contents of the Letters, from page xcviiii to page cxxxi. The list is giving the person to which the letter is addressed, and also the address; for instance, Letter CXVI is written to Walter Gray, Archbishop of York. Using the places we find in the abovementioned Contents, and marking them on Google Earth, we have Figure 1. We can compare this map to that shown in the Figure 2, which is giving England under William the Conqueror [20] (this map is "older" than the one necessary for a proper comparison, but very interesting because it is showing main roads too). Georeferencing and comparison to an historical map is evidencing the large network of the thinker, in particular, his links with other episcopal seats in England. It is clear that the influence of Grosseteste on his geographic area and political environment was large, covering England almost completely. The scholarly contributions of Grosseteste were profound and far-reaching several philosophic and scientific schools, but, as told in [21], remarkably Grosseteste "did not allow them to prevent him from taking his pastoral duties seriously". This is clearly evidenced by the georeferencing of his letters.

References

[1] Hill, L.L. (2006). Georeferencing. The MIT Press. ISBN 978-0262083546.

[2] Foote, K.E., & Lynch, M. (1996). Geographic information systems as an integrating technology: context, concepts, and definitions. Austin, University of Texas.

[3] Sparavigna, A.C., & Marazzato, R. (2012). Georeferenced lives. arXiv preprint arXiv:1203.0500.

[4] Sparavigna, A.C., & Marazzato, R. (2012). A tour about Isaac Newton's life. arXiv preprint arXiv:1203.4966.

[5] Ryder, B.A. (2007). Journey to the Ends of the Earth. Phys. Educ. 42, 2007, 435-7,

DOI: 10.1088/0031-9120/42/5/f04

[6] Logiurato, F., & Danese, B. (2010). Physics of Waves with Google Earth. AIP Conf. Proc. 1263, 208- 211, DOI: 10.1063/1.3479871

[7] Logiurato, F. (2012). Teaching Waves with Google Earth. arXiv preprint arXiv:1201.0001.

[8] Aguiar, C.E., & Souza, A.R. (2009). Google Earth Physics. Phys. Educ. 44, 2009, 624-626. DOI: 10.1088/0031-9120/44/6/009

[9] Kerski, J.J. (2003). The Implementation and Effectiveness of Geographic Information Systems Technology and Methods in Secondary Education. Journal of Geography, 102(3), 128-137. DOI: 10.1080/00221340308978534

[10] Vv. Aa. (2016). Robert Grosseteste, Wikipedia.

[11] Thomson, S.H., & Crombie, A.C. (1954). Robert Grosseteste and the Origins of Experimental Science 1100–1700. Speculum, 29(03), 545-548. DOI: 10.2307/2846799

[12] Rosenthal, J.T., & Catto, J.I. (1985). The Growth of Early Oxford. History of Education Quarterly, 25(3), 383. DOI: 10.2307/368275

[13] Pegge, S. (1793). The life of Robert Grosseteste, the celebrated Bishop of Lincoln. Printed by and for John Nichols, printer to the Society of Antiquaries.

[14] Sparavigna, A.C. Translation and discussion of the De Iride, a treatise on optics by Robert Grosseteste, arXiv, 2012, History and Philosophy of Physics. arXiv preprint arXiv:1211.5961.

[15] Sparavigna, A.C. (2013). On the Rainbow, a Robert Grosseteste's Treatise on Optics. International Journal of Sciences, 2(9), 108-113. DOI: 10.18483/ijsci.296

[16] Sparavigna, A.C. (2013). The Generation of Sounds According to Robert Grosseteste. International Journal of Sciences, 2(10), 1-5. DOI: 10.18483/ijsci.311

[17] Sparavigna, A.C. (2012). Robert Grosseteste's colours. arXiv preprint arXiv:1212.6336.

[18] Sparavigna, A.C. (2013). Robert Grosseteste and his Treatise on Lines, Angles and Figures of the Propagation of Light. International Journal of Sciences, 2(9), 101-107. DOI: 10.18483/ijsci.295

[19] Roberti Grosseteste Episcopi Quondam Lincolniensis Epistolae, edited by Luard, H.R.,

published in 1861, London. Available at https://archive.org/details/robertigrossetes00gros

[20] Emerson Kent.com, World History for the Relaxed Historian, retrieved on 25 January 2016, from http://www.emersonkent.com/maps_by_year_from_0501.htm

[21] Cunningham, J.J. Editor (2012). Robert Grosseteste: His Thought and Its Impact, PIMS. ISBN-10: 088844821X, ISBN-13: 978-0888448217



Figure 1: Using the addresses of Grosseteste's Letters that we find in [19], and marking them on Google Earth, we have the map given in the Figure. Note that Grosseteste's political network was covering England almost completely.



Figure 2: A part of a historical map of the Dominions of William the Conqueror about 1087. The map is "older" than the one necessary for a proper comparison, but very interesting because it is showing main roads too. Credits: University of Texas at Austin. Historical Atlas by William Shepherd (1923-26).

Information about this Article

Published on Monday 25th January, 2016 at 15:42:20.

The full citation for this Article is:

Sparavigna, A. (2016). Georeferencing Roberti Grosseteste Epistolae. *PHILICA.COM Article number 563*.