

The Little Ice Age and how it was captured in the visual arts

Keča, Lovorka; Gabrić, Petar

Conference presentation / Izlaganje na skupu

<https://doi.org/10.17605/osf.io/kxy63>

Permanent link / Trajna poveznica: <https://um.nsk.hr/um:nbn:hr:131:548323>

Rights / Prava: [Attribution 4.0 International](#)/[Imenovanje 4.0 međunarodna](#)

Download date / Datum preuzimanja: **2024-07-24**



Sveučilište u Zagrebu
Filozofski fakultet
University of Zagreb
Faculty of Humanities
and Social Sciences

Repository / Repozitorij:

[ODRAZ - open repository of the University of Zagreb
Faculty of Humanities and Social Sciences](#)



THE LITTLE ICE AGE AND HOW IT WAS CAPTURED IN VISUAL ARTS

Lovorka Keča, Department of History of Art

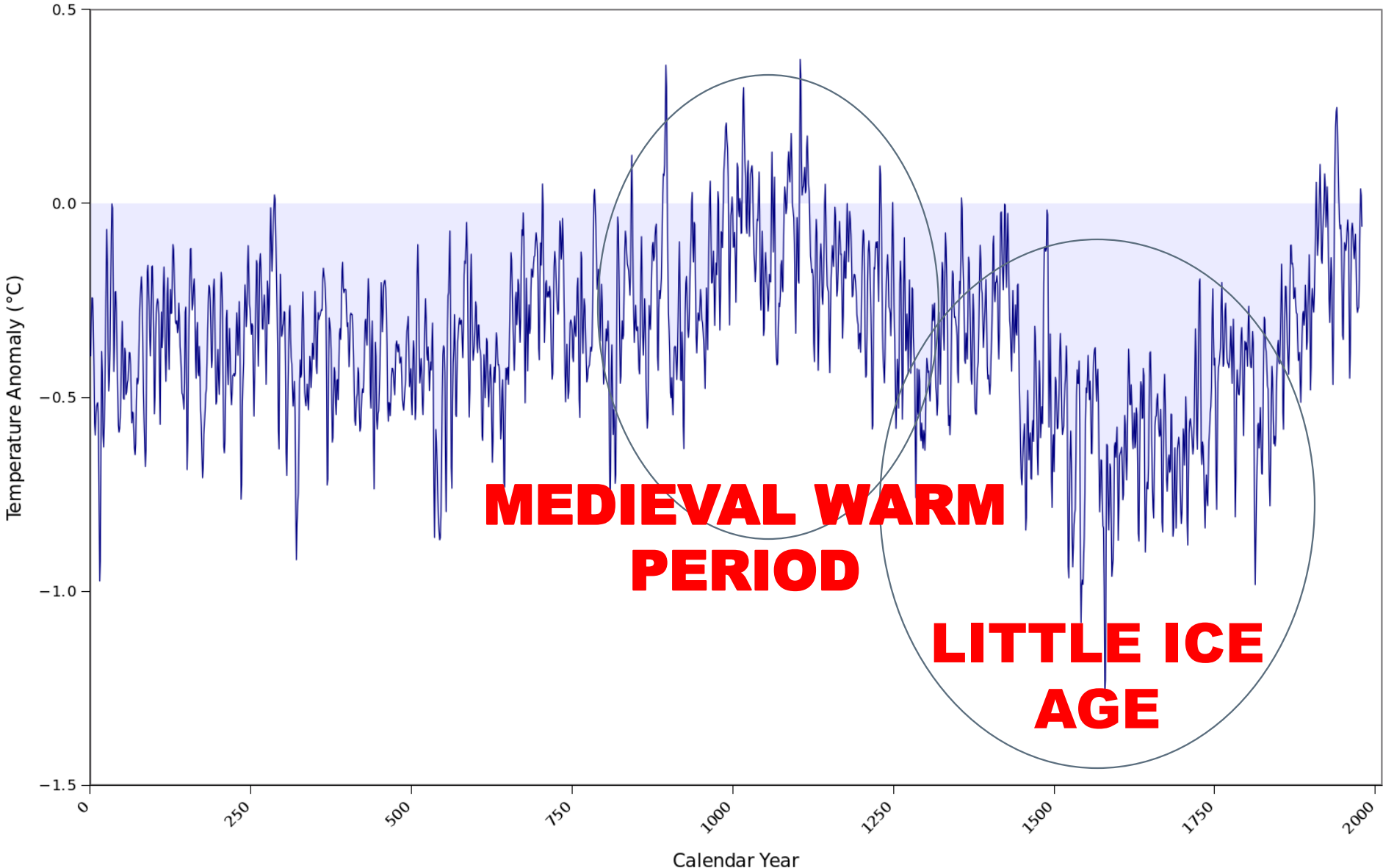
Petar Gabrić, Department of Archaeology

Faculty of Humanities and Social Sciences, University of Zagreb

Zagreb, 2015

2,000 Years of Temperature Change

Moberg, 2005

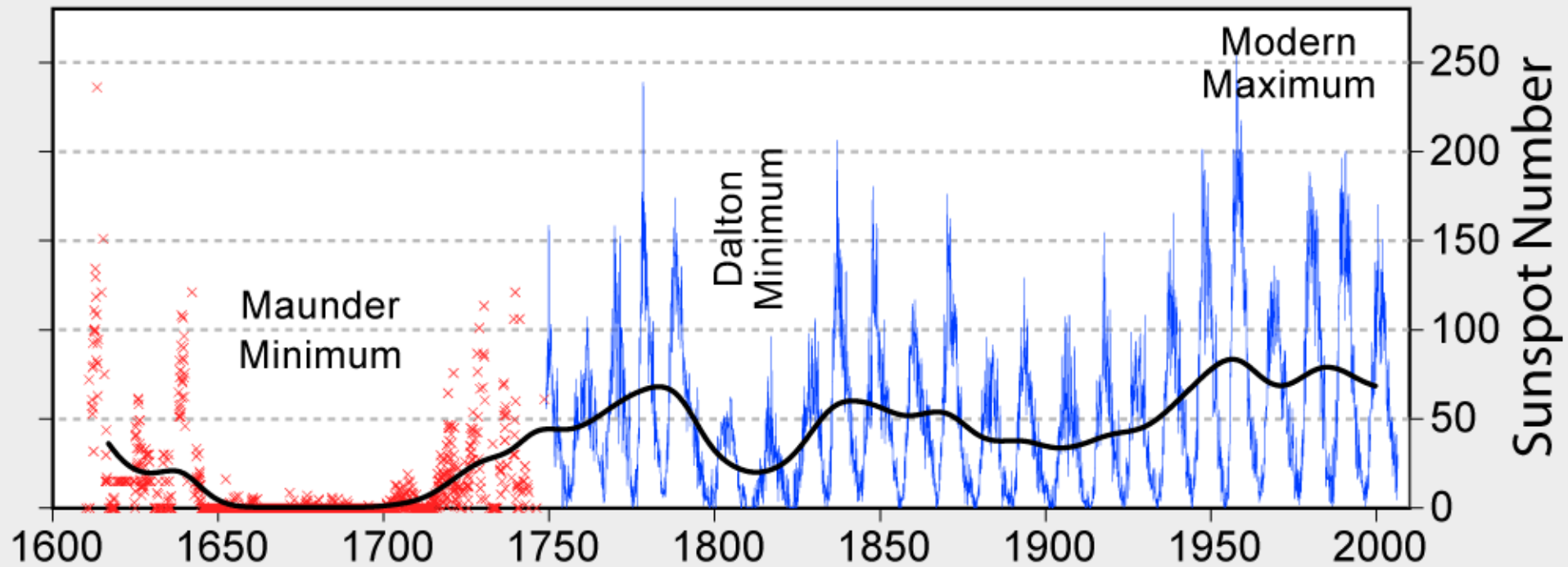


LITTLE ICE AGE

- a change in 0,8°C
- Europe, Alaska, New Zealand, East Asia, Patagonia
- possible causes: volcanic eruptions, changes in thermohaline circulation, reduced number of sunspots

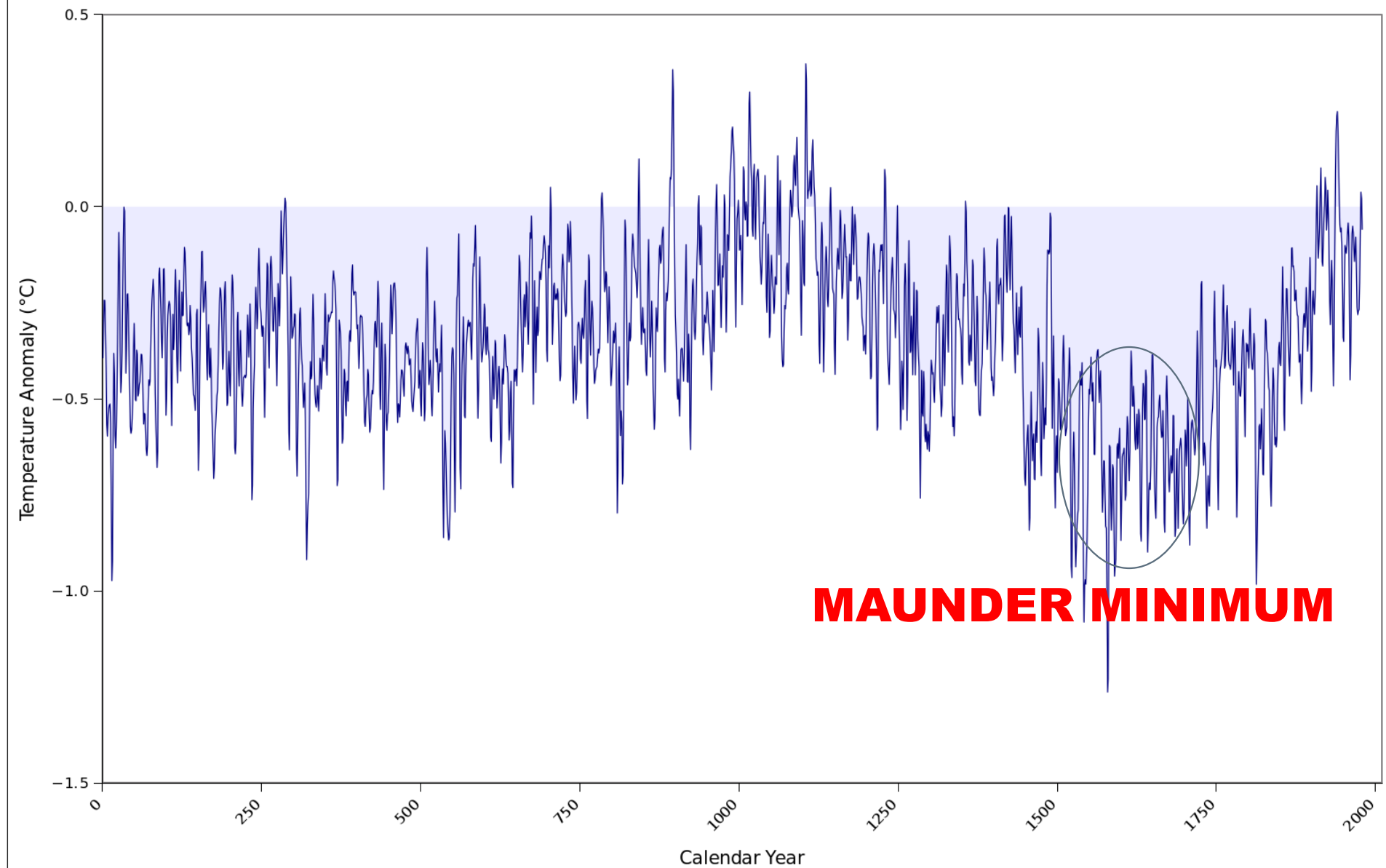
MAUNDER MINIMUM

400 Years of Sunspot Observations



2,000 Years of Temperature Change

Moberg, 2005



- Pieter Bruegel the Elder, *The Corn Harvest* (detail), 1565



- Hendrick Avercamp, *Winter Landscape with a Windmill*, 1610-1620



THE LITTLE ICE AGE (LIA) AND VISUAL ARTS

- Are the paintings and the real weather correlated?
- Do the paintings genuinely show how the weather was when they were painted?
- The Dutch Golden Age (17th century)
- the Dutch landscape paintings of the 17th Century

- Pieter Bruegel the Elder, *Winter Landscape with Skaters and a Bird Trap*, 1565



- Pieter Bruegel the Elder, *Massacre of the Innocents*, 1565 - 1567



- Pieter Bruegel the Elder, *The Census at Bethlehem*, 1566



- Pieter Bruegel the Elder, *The Adoration of the Magi in the Snow*, 1567

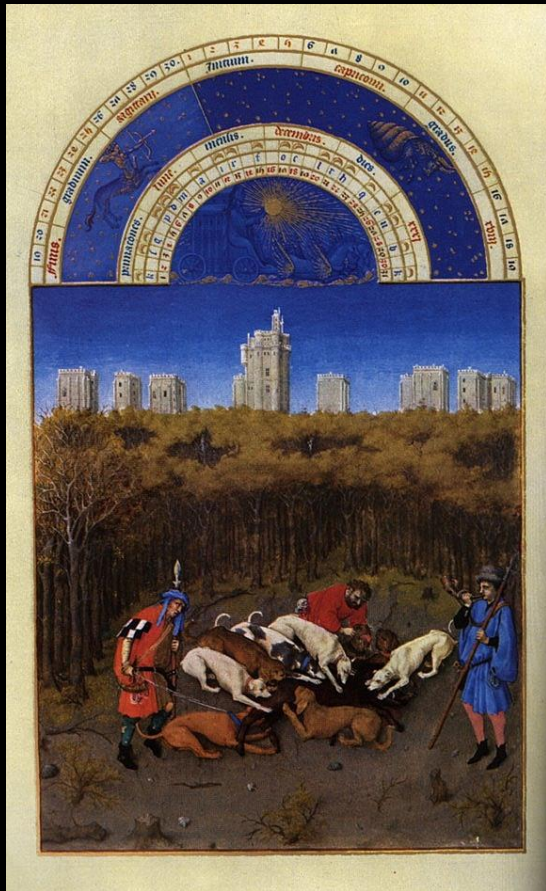


- Pieter Bruegel the Elder, *Hunters in the Snow*, 1565



- Brothers Limbourg, *Les Très Riches Heures du Duc de Berry*, 1412 - 1416

- *illumination of December*



- Hendrick Avercamp, *Numerous Figures on the Ice at Sunset* (date unknown)



- Adam van Breen: *Landscape with a frozen Canal, Skaters and an Ice Boat* (*Winter Entertainment*), 1611



- Adrian van de Venne: *The Winter, 1614*



- Isack van Ostade: *Icy landscape with sleigh and frozen boats*, 1645



- Jan van Goyen: *Ice Pleasure in front of a Tavern*, 1650



- Aert van der Neer: *Winter Landscape with Skaters*, 1655/60



- Jacob Isaackszon van Ruisdael: *Winterlandscape with a view of the River Amstel and Amsterdam, 1670/75*



- Jacob Isaackszon van Ruisdael, *A Village in Winter*, 1665



Ahmed M. et al. (2013): *Continental-scale temperature variability during the past two millennia*. Nature Geoscience 6: 339–346.

Bauer, Linda et George (March 1984): *The Winter Landscape with Skaters and Bird Trap by Pieter Bruegel the Elder*. In: *The Art Bulletin*, p. 145-150

Behringer W. (1999): *Climate Change and Witch-hunting: the Impact of the Little Ice Age on Mentalities*. Climatic Change 43: 335–351.

Budde, Michael (2001): *Eisvergnügen und andere Lebenswirklichkeiten – Bedeutungsebenen holländischer Winterlandschaften*. In: M. Budde, *Die "Kleine Eiszeit" Holländische Landschaftsmalerei im 17. Jahrhundert*. Berlin: Gemäldegalerie. p. 64-86

Buchanan, I. (August 1990): *The Collection of Nicolaes Jongelinc: II The 'Months' by Pieter Bruegel the Elder*. The Burlington Magazine. p. 541-550

Burroughs, W.J. (December 1981): *Winter Landscapes and Climatic Change*. In: *Weather*, p. 352-357

Camuffo, D. et Jones, P.M. (2002): *Improved Understanding of Past Climatic Variability from Early Daily European Instrumental Sources*. Dordrecht: Kluwer Academic Publishers.

Cartwright F. F., Biddiss M. (2006): *Bolest i povijest*. Zagreb, Croatia: Naklada Ljevak.

Eddy J. A. (1976): *The Maunder Minimum*. Science: 1189–1202.

Fagan B. (2000): *The Little Ice Age: How Climate Made History 1300 – 1850*. New York, USA: Basic Books.

Fischler, S. (2015): *The Handy Hockey Answer Book*. USA: Visible Ink Press.

Fowler, Alastair (Fall 2014).: *Brueghel's „Hunters in the snow“*. In: *Notes in the History of Art*. p. 9-15

Gabrić P., Jelenić V. (2014): *Etika u arheologiji - od arheološkog iskopavanja do muzejskog izložka*. In: *Filozofija i znanost: zbornik radova s međunarodnog studentskog simpozija Udruženja studenata filozofije u Zagrebu, 15. i 16. svibnja 2014. godine*. Zagreb, Hrvatska: Udruženje studenata filozofije Filozofskog fakulteta u Zagrebu (USF), p. 179–193.

Hedinger, B. (2001): *Wirklichkeit und Erfindung in der Holländischen Landschaftsmalerei*. In: M. Budde, *Die "Kleine Eiszeit" Holländische Landschaftsmalerei im 17. Jahrhundert*. Berlin: Gemäldegalerie. p. 55-63

Houghton J. T. et al. (2001): *Climate Change 2001: The Scientific Basis*. Cambridge, United Kingdom: Cambridge University Press.

Janković I., Karavanić I. (2009): *Osvit čovječanstva: Početci našega biološkog i kulturnog razvoja*. Zagreb, Croatia: Školska knjiga.

Lucas D. (2003): *World Population Growth*. In: *An Introduction to Global Studies*. Hoboken, USA: Wiley. p. 1–15.

Matthes F. É. (1939): *Report of Committee on Glaciers*. *Transactions of the American Geophysical Union* 20: 518–523.

Metzger, Alexis et Tabeaud, Martine (February, 2012): *The Birth of Winter Landscape*. In: *Geopolitics, History, and International Relations*. p. 224-33

Möller et al. (2007): *Erratum to: Severnaya Zemlya, Arctic Russia: a nucleation area for Kara Sea ice sheets during the Middle to Late Quaternary [Quaternary Science Reviews 25(21–22) (2006) 2894–2936]*. Quaternary Science Reviews 27: 1149–1191.

Metzger, Alexis et Tabeaud, Martine: *The winter scenes in the painting of the Dutch Golden Age*. In: *Physio-Geo* [Online], Vol. 4 | 2010, online set: October 20, 2010, Accessed: November 2, 2015. URL: <http://physio-geo.revues.org/1312>

Negendank J. F. W., Brüchmann C., Kienel U. (2001): *Die „Kleine Eiszeit“ und ihre Abbildung im Klimaarchiv Binnensee*. In: *Die „Kleine Eiszeit“: Holländische Landschaftsmalerei im 17. Jahrhundert*. Berlin, Germany: Gemäldegalerie, Staatliche Museen zu Berlin. p. 55–63.

Ossing, F. (2001): *Der unvollständige Himmel – Zur Wolkenendarstellung der holländischen Meister des 17. Jahrhunderts*. In: M. Budde, *Die "Kleine Eiszeit" Holländische Landschaftsmalerei im 17. Jahrhundert*. Berlin: Gemäldegalerie. p. 41-55

Parker G. (2013): *Global Crisis: War, Climate Change & Catastrophe in the Seventeenth Century*. Padstow, United Kingdom: Yale University Press.

Perkins S. (2009): *Disaster goes global: The eruption in 1600 of a seemingly quiet volcano in Peru changed global climate and triggered famine as far away as Russia*. Science News: 16–21.

Raedisch L. (2013): *The Old Magic of Christmas: Yuletide Traditions for the Darkest Days of the Year*. Woodbury, USA: Llewellyn Publications.

Rampino M. R., Self S. (1984): *Sulphur-rich volcanic eruptions and stratospheric aerosols*. Nature: 677–679.

Young F. D. (1940): *Frost and the Prevention of Frost Damage*. Washington, D.C., USA: U.S. Department of Agriculture.