

# PROCEEDINGS



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# STUDENT INTEREST IN UNDERSTANDING EUROPEAN HISTORY THROUGH THE MUSEUM VIRTUAL TOUR 360

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*Studying history globally in a geographical framework is a bit more difficult than exploring it in terms of time. Difficulties that arise due to the vast landscape in local, regional and global constellation on earth where humans leave traces of their past. Such conditions, contrary to human curiosity, especially students when studying the historical narrative of human civilization in the dimensions of space and time. This article, seeks to present alternative thoughts while addressing difficulties or problems in students in studying European History that is geographically far from Indonesia. Through a touch of sophisticated digital technology in the form of the Virtual Tour 360 Museum, students are invited to wander to enliven their curiosity on the relics of Europeans. This article discusses important findings, including: (1) students' interest in studying European History is mounting, as lecturers guide students to visit the website <http://www.youvisit.com/tour/louvre-museum> and other museums that store relevant resources at European History material; (2) an interactive dialogue process takes place in the classroom, thereby arousing critical reasoning and enlivening the imagination of students by looking directly at artifacts, documents, sculptures and museum contents. Thus, studying European History through the Museum Virtual Tour 360 website is a breakthrough that needs to be made by history lecturers in the era of technological progress and digitalization.*

**Keywords**—Reasoning imagination, Historical Education, European History, Digital Museum, Virtual Tour

## I. PRELIMINARY

Since the last 10 years the problem of historical education is still trapped in the question of the meaning of the values contained behind the narrative (Yilmaz, 2008, p. 45; Conway, 2015; Burstein, 2019). Even such problems, according to Hasan (2013) do not shift in the expected direction even though approaches and learning methods are increasingly varied in the development of our education world. Historical education, especially in Indonesia, is trapped in an alarming problem (Harits, 2016). So, looking at yourself becomes a demand for philosophical thinking for various philosophical, pedagogical, didactic, and methodical practices carried out by historical education and history educators (Bandarsyah, 2019, p. 66).

Education and history educators need a knife set of analysis and a new paradigm developed from what is owned and carried out so far in order to be able to answer the demands of the continued role of science and science in society and nationality (Bandarsyah, 2019, p. 66). This is in line with the opinion of Kartodirdjo (1992, p. 14) that history is a construct compiled by the author as a story. Historical construction is a thought process so that the past can be understood. Learning history should not only be a vehicle for developing intellectual abilities and pride in the past (Hasan, 1999, p. 9), but rather events in the past must be used as good teachers to improve lives in the present and the future.

## II. DISCUSSION

Virtual Tour or also called panoramic tour is a simulation of a place that really exists, usually consisting of a collection of 360 degree panoramic photos, a collection of images connected by hyperlinks, or videos, can also use other multimedia elements such as effects sound, music, narration and writing. Unlike

the actual tour, Virtual Tour is usually accessed through a desktop computer. The term virtual tour is often used to describe various kinds of video and media based photography. The word "panorama" indicates an uninterrupted view, because the panorama can be in the form of a set of elongated photos or the results of a video shoot whose camera is rotating/shifting (Yuliana and Lisdianto, 2017).

Through the Virtual Tour 360 Museum, learning history in students in the Historical Education Study Program FKIP UHAMKA becomes more alive. Because, students can fulfill their curiosity and feel the sensation of visiting directly to Europe just by moving the mouse. The following piece of image is the result of screen shots from Museums Louvre that we have visited.

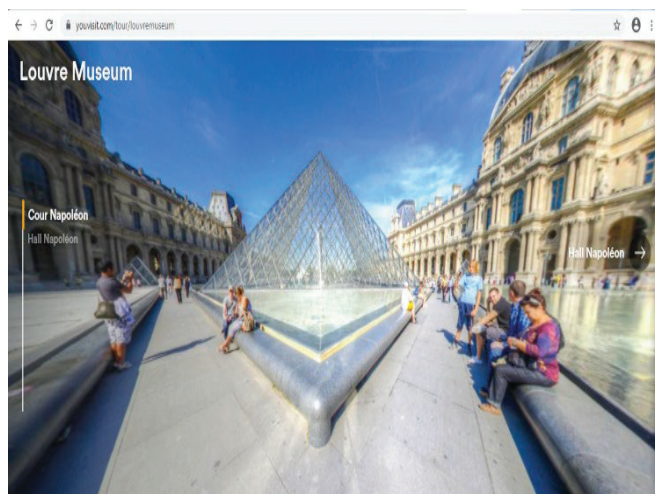
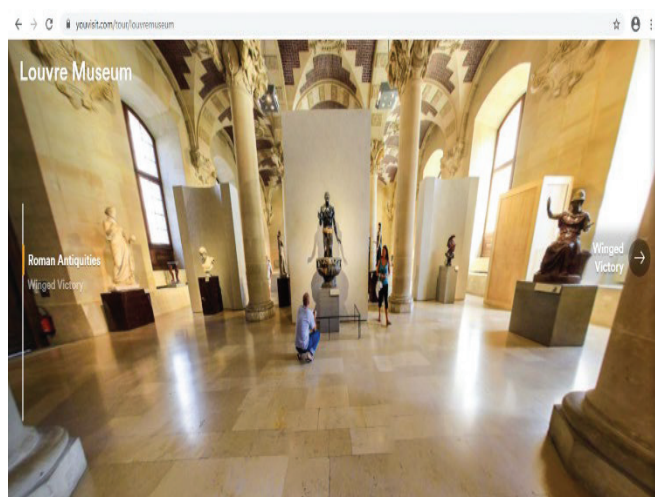


Figure 1.1 The atmosphere in front of the Louvre Museum icon



Based on the picture piece, the students in studying European history became very enthusiastic. Visiting France to see traces of its history is a dream that is difficult to achieve. However, technological sophistication has now penetrated the limits of human incapacity that had never been imagined before.

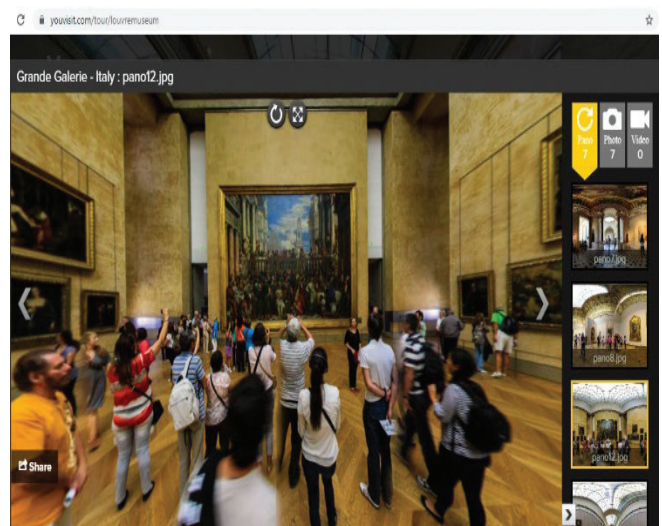
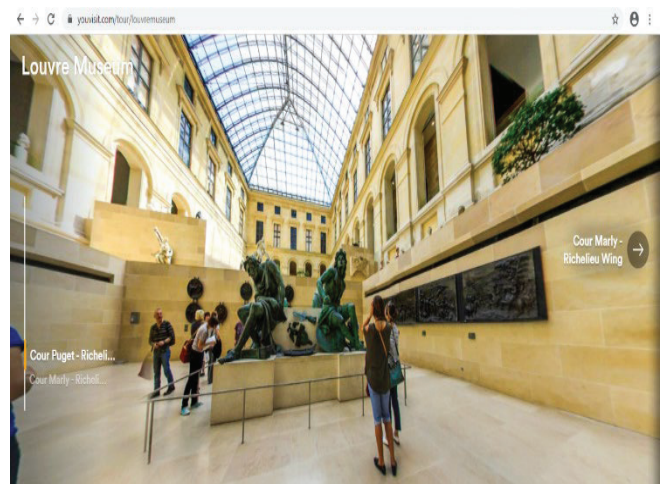


Figure 1.2 Collection of the Grande Galerie room, Italy in the Louvre Museum



Breakthroughs like this that will transcend the age. History will be more alive, on the other hand is able to bring up historical awareness which is the highest peak in exploring the past as future binoculars for the generation of a country.

### III. CONCLUSION

With historical education based on progress and adaptation to technological sophistication in the form of the Virtual Tour 360 Museum, we are introduced to things that have not been experienced and seen before, so we need lecturers or instructors who can help students see the past that we have never experienced as an outer skin from important issues that still exist today. Because the results of history learning make students with strong personalities, understand something in order to determine their attitudes. The importance of understanding of history for daily life makes students have the tools to uncover the secret veil of European society's influence on the world, especially Indonesia.

## REFERENCE

- [1] Bandarsyah, Desvian, Fondasi Filosofis Pendidikan Sejarah di Era Post Truth, *HISTORIA: Jurnal Pendidik dan Peneliti Sejarah*, 3 (1), 2019, DOI: 10.17509/historia.v3i1.21042.
- [2] Conway, Michael, The Problem With History Classes, <https://www.theatlantic.com/education/archive/2015/03/the-problem-with-history-classes/387823/> 2015.
- [3] Harits, Imron Wakhid, Indonesia Education Today: Dating Back Its History of Islam and Imparting European Education System, *Asian Social Science*, Vol. 12, No. 5, 2016, doi:10.5539/ass.v12n5p179
- [4] Yilmaz, Kaya, 2008, A Vision of History Teaching and Learning: Thoughts on History Education in Secondary Schools, *the High School Journal*, Volume 92, Number 2 DOI: 10.1353/hsj.0.0017.
- [5] Burstein, Rachel, The Problem With How We Teach History, <https://www.edsurge.com/news/2019-11-04-the-problem-with-how-we-teach-history>, Nov 4, 2019.
- [6] Hasan, Said Hamid, History Education in Curriculum 2013: A New Approach to Teaching History, *HISTORIA: International Journal of History Education*, Vol. XIV, No. 2, 2013.
- [7] Hasan, Said Hamid, Pendidikan Sejarah untuk Membangun Manusia Baru Indonesia, *Mimbar Pendidikan*, Nomor 2, Tahun XVIII, 1999.
- [8] Yuliana, Ade dan Lisdianto, Eko, Aplikasi Virtual Tour sebagai MediaPromosi Objek Wisata di Stone Garden Kab. Bandung Barat, *KOPERTIP: Jurnal Ilmiah Manajemen Informatika dan Komputer*, Vol. 01, No. 01, Februari 2017, ISSN: 2549-211X.



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