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## Jacopo de Barbari's *Veduta di Venezia* (1500) into the Digital Theory and Practice

*Keywords:* de Barbari, Venice, 1500, digital, history

*Summary:* The map of Venice, which is dated 1500 and attributed to Jacopo de Barbari. As demonstrated by Corrado Balistreri Trincanato and Davide Zanverdiani, Jacopo de Barbari. *Il racconto di una città* (2000) and Corrado Balistreri Trincanato, *Venezia città mirabile. Guida alla veduta prospettica di Jacopo de Barbari* (2009), this map is a masterpiece of Renaissance city mapping that provides a unique and detailed understanding of the intricate urban fabric of Venice during that time.

This paper discusses the results of a digital history project that applied information visualization and knowledge aggregation methodologies to gain new insights into this map at a glimpse. Firstly, the authors reviewed and learned from major digital projects that previously focused on de Barbari's map. Then, they utilized the Engineering Historical Memory (EHM) content management system, search and visualization algorithms to improve the user experience of this map with philological accuracy and historical scholarship as companions. The research team has been working on parsing, decoding, and merging the visual urban information presented in de Barbari's 1500 map and the scholarly publications by Balistreri-Trincanato and Zanverdiani.

Afterwards, the authors translated the established and validated information into a machine-readable document that helps to uncover the nuances of Venice's urban landscape, architectural landmarks, and socio-cultural milieu as represented by de Barbari through the EHM search and visualization algorithms. Ultimately, by synthesizing scholarly insights within the map's visual narratives, this study sheds light on its significance as both a cartographic monument and a cultural artifact produced by and in Renaissance Venice. The research project is supported by the University of Venice Ca' Foscari (in-kind, 2024), the Foundation Musei Civici di Venezia (in-kind, 2024), and the Ministry of Education, Singapore, under its Academic Research Fund Tier 1 (PI, Andrea Nanetti, 2023-2026, RT20/22).

### Introduction

Inquisitiveness: The quality of being inclined to ask questions; intellectual curiosity or a desire for knowledge. Curiosity leads to discovery and allows us to see the world around us with new eyes.

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The digitization of Jacopo de Barbari's map, "View of Venice, MD", was born from this need for discovery. In Venice, time seems to have stood still. The alleys and canals traversed by the Doges and Gondoliers remain nearly unchanged. 724 years after the creation of Jacopo de Barbari's bird's-eye view map, many of the buildings he depicted still stand, enduring the passage of centuries. The objective was to create something unprecedented: an interactive map that represents and provides information about all the elements depicted in Jacopo de Barbari's woodcuts. This project arose from the need to explore and better understand the Renaissance city, using modern technology to breathe new life into a masterpiece from the past.

#### *The Author*

Luigi Servolini in the preface of his book "*Jacopo De' Barbari*"<sup>8</sup> wrote:

"A mysterious figure in Venetian art and, so to speak, its plenipotentiary minister in the centers of northern art. The human and artistic persona of Jacopo de' Barbari remains enigmatic. It is not to be excluded that, sooner or later, new facts may come to light to clarify his biography and that more works may be found to add to the limited number of pieces known to us: around fifteen paintings and thirty engravings. But for now, much of his life is shrouded in mystery."<sup>9</sup>

Additional studies have been added to Servolini's work, as reported in the specific bibliography, but the author's hopeful wish that the mystery surrounding the life and works of De' Barbari for 500 years might be unveiled has not yet been fulfilled. The authors of the Venetian exhibitions: "*A volo d'uccello. Jacopo de' Barbari e le rappresentazioni di città nell'Europa del Rinascimento*"<sup>10</sup> e "*Il Rinascimento a Venezia e la pittura del Nord ai tempi di Bellini, Dürer, Tiziano*"<sup>11</sup> Despite having substantial financial resources and skilled scholars, they have not found materials that broaden our understanding of this artist. The restoration of the six pearwood blocks of the bird's-eye view of Venice now allows for a thorough reading of the engravings on the wood through a magnifying glass.

The article: "Indagini sulle matrici lignee della veduta di Venezia e prospettive per la conservazione"<sup>12</sup>, written by Stefano Berti, Anna Gambetta, Simona Lazzeri the restoration, conducted by the Institute for Wood Research in Florence, provides valuable information on the "restored health" of the blocks, yet it leaves our previous knowledge of De' Barbari unchanged. This artist, born in Venice in the mid-15th century, was considered a "foreigner" both in Venice and at the German courts where he was referred to as such "walch"<sup>13</sup>, even starting with the etymology of his surname, De' Barbari has always posed significant challenges for scholars. The ethnic nickname "Barbaro" can refer both to various Germanic individuals and groups who settled in Italy during the Early Middle Ages and to non-Christians. Additionally, in the case of our subject, it may

<sup>8</sup> L. Servolini, *Jacopo de' Barbari*, University of Michigan, 1944.

<sup>9</sup> "Uomo mistero dell'arte veneziana e, per così dire, suo ministro plenipotenziario nei centri dell'arte nordica. Ancora misteriosa è la figura umana e artistica di Jacopo de' Barbari. Nè da escludere che possano venire, presto o tardi, alla luce nuovi fatti a precisare la sua biografia e che si trovino altre opere da aggiungere a l'esiguo numero delle carte a noi note: una quindicina di dipinti e trenta incisioni. ma per ora c'è molta ombra di mistero intorno a lui". *Ibidem*.

<sup>10</sup> S. Biadene, C.Tonini, *A volo d'uccello. Jacopo de' Barbari e le rappresentazioni di città nell'Europa del Rinascimento*. Venezia, 1999.

<sup>11</sup> B. L. Aikema, B.Brown, *Il Rinascimento a Venezia e la pittura del Nord ai tempi di Bellini, Dürer, Tiziano*, Bompiani, 1999.

<sup>12</sup> Refer to the Investigations on the wooden matrices of the view of Venezia and prospects for conservation, in *A volo d'Uccello, Jacopo de' Barbari e le rappresentazioni di città nell'Europa del Rinascimento*. Venezia, 1999.

<sup>13</sup> Vlach in Middle High German.

indicate belonging to the patrician lineage of the Barbaro family, as suggested by the presence of the prepositional article "de", which could indicate a possible status as a member of a noble Venetian family, as Servolini also believes.

This connection with the merchant Antonio Kolb<sup>14</sup>, his frequent travels to German cities, and his salary as an artist at the court of Frederick of Saxony have led some scholars to believe that he may have been a descendant of a family originally from Germany.<sup>15</sup> The fact that in the presumed self-portrait, which appears in the bird's-eye view map, the artist is depicted with curls of hair very similar to those worn by the most traditionalist Jewish groups has led some to speculate that he might have belonged to a Christianized Jewish-German family who sought protection under the Barbaro family.<sup>16</sup>

The enduring mystery surrounding his true origins makes the story of this painter and engraver even more fascinating. However, what matters is not so much his biographical identification, but rather his artistic identity, clearly evident from the exceptional quality of such an extraordinary work as this first major portrait of the city of Venice.

### *The Map*

Jacopo de Barbari's map from 1500 is not merely a cartographic work but a cultural monument that intricately depicts Venice. Created during a period of great artistic and intellectual flourishing, this map offers a unique view of the city's urban structure, architecture, and social life during the Renaissance. Its value lies not only in its geographical accuracy but also in the richness of visual and textual information it provides, making it an extraordinary example of how art and science can integrate to document and celebrate a city.

Jacopo de' Barbari's bird's-eye view of Venice, created using the woodcut technique, intricately describes the city in the year 1500. There exist several states of this print, which notably differ in detail such as the depiction of the campanile and the indicated date.<sup>17</sup>

Due to its complexity, it is believed that the bird's-eye view was the result of collaborative work involving various individuals with specific scientific skills: from surveying and drawing, to carving the woodcut matrix, and finally printing, all coordinated by Anton Kolb. The view was created over a period of three years, completed before 1500, as indicated within the map itself. Over the

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<sup>14</sup> He conceived the idea of creating a large view of Venice, the largest ever created before with the xylographic technique and chose Jacopo de' Barbari who he met during his stay in Venice in the Fontego dei Tedeschi. It is precisely thanks to the letters written by Albrecht Dürer that we know of Kolb's great consideration for de' Barbari. Esteem reciprocated by the artist of the view who pays homage to him by portraying him young and old as the personification of two winds, Mistral and Scirocco.

<https://www.movio.beniculturali.it/bnm/ridottiprocuratorisanmarco/it/126/il-committente-il-mercante-tedesco-anton-kolb>

<sup>15</sup> J. A. Levenson, *Jacopo de Barbari and Northern Art of The Early Sixteenth Century*, Università di New York, 1978.

<sup>16</sup> S. Ferrari, *Jacopo de' Barbari : un protagonista del Rinascimento tra Venezia e Dürer*, Milano, 1969.

<sup>17</sup> There are three states of print of the work. The first two can be dated to 1500 and 1514, it is not possible to precisely reconstruct the third dating, it is however considered to be from the 16th century. The second state reported the different representation of the bell tower of San Marco after the inauguration of the new spire in 1513, in fact in these examples the tower appears with a lower bell tower, spire and surmounted by the angel. There are two variants of this second state: the first left a white area in place of the date, the second replaced it with a hatch similar to that of the surrounding waters. Terisio Pignatti, *La pianta di Venezia di Jacopo de' Barbari*, in *Bollettino dei musei civici veneziani*, IX, Venezia, 1964, pp. 9-49.

following decade, modifications were made to update and maintain its relevance in the market, supported by the few preserved documents.<sup>18</sup>

To obtain the view, six engraved wood blocks were used, which, when printed, produced a map nearly three meters wide by one and a half meters high. These pearwood blocks, now joined with butterfly joints, are preserved at the Museo Civico Correr. Considered a masterpiece of woodcut art from the outset, the view was even attributed to Dürer. The city is meticulously delineated and described, including through place names, faithfully reproduced to the extent that the map is regarded as a historical source. Islands, land plots, gardens, fields and small squares, streets, canals, bridges, buildings, docks, shops (including those on the water), hospitals, churches and bell towers, convents, chapels, boatyards, and monuments are all depicted truthfully. Numerous urban elements that have since disappeared or been completely altered, such as the wooden Rialto Bridge and St. Mark's Square, are featured. Buildings are rendered with rich detail: towers, battlements, chimneys, loggias, altane (roof terraces), huts, walls, palisades, wells, cisterns, drains, and arcades. People engaged in various activities -working, boating, fishing- bring the city to life. Figurative details related to navigation, such as ships, boats, and barges (transport vessels), are also included.<sup>19</sup>

In addition to the cityscape and lagoon, the view also describes the mainland with the towers of Marghera and Mestre, as well as the beginning of the foothill area, particularly northward towards Serravalle, a passage for merchants from Northern Europe. It is a bird's-eye perspective: the viewpoint is situated south of the island of San Giorgio. It is likely that a surveying instrument similar to the geometric square, known to have been perfected by the mathematician and astronomer Georg Aunpekh von Peuerbach and popularized in Italy by his student Johannes Müller, known as Regiomontano, was used.<sup>20</sup>

### The Work

From curiosity arises the creation of a tool for study and research, as well as an organized platform to satisfy others' curiosity, building upon the solidly established project led by Professor Andrea Nanetti<sup>21</sup>: Engineering Historical Map<sup>22</sup> (EHM). Since 2011, EHM has been an ongoing research endeavor that welcomes international and multidisciplinary collaborations to design and test interactive applications for the virtual (re)organization and dissemination of historical knowledge in the digital age. The goal is to overcome linguistic barriers and cultural obstacles in historical research through a transcultural reinterpretation of primary sources and secondary literature

<sup>18</sup> Juergen Schulz, *The printed plans and panoramic views of Venice (1486-1797)*, in *Saggi e Memorie di storia dell'arte*, vol. 7, 1970,

<sup>19</sup> Corrado Balistreri Trincanato, Emiliano Balistreri, Anna Maria Ghion, Dario Zanverdiani, *Venezia, città mirabile: Guida alla veduta prospettica di Jacopo de' Barbari*, Cierre Verona, 2008

<sup>20</sup> Vanna Bagarolo e Vladimiro Valerio, *Jacopo de' Barbari - Una nuova ipotesi indiziaria sulla genesi prospettica della veduta Venetie MD*, in Vladimiro Valerio (a cura di), *Cartografi Veneti. Mappe, uomini e istituzioni per l'immagine e il governo del territorio*, Treviso, Editoriale Programma, 2006,

<sup>21</sup> Andrea Nanetti has an impressive international education background, having studied in Italy at the University of Bologna, Paris-Sorbonne in France, the University of Cologne in Germany, the National Hellenic Research Foundation in Greece, and Brown University in the United States. His education has been multidisciplinary since high school, incorporating mathematical, physical, computational sciences, entrepreneurship, and humanities such as history, ancient and modern literature, languages, philosophy, philology, palaeography, archival, and library studies. Despite his formal education in historical sciences, he has built a career that combines heritage studies with computational technologies and digital media in various academic and non-academic settings across Europe, the United States, Australia, The Gulf Region, China, India, and Singapore. This diverse experience has contributed to his interprofessional profile, evidenced by his broad range of publications and service locations.

<sup>22</sup> <https://engineeringhistoricalmemory.com/>

concerning the premodern history of the Afro-Eurasian continent, its peoples, and their interactions between 1100 and 1500.

We were able to take advantage of a well-organized and functional software for data input and online visualization. This project is based on some interesting epistemological and methodological assumptions, both in terms of historical and academic approaches. Historically, EHM is an interactive system that employs the "mapping and visualization" method, innovative as an epistemological process seeking a visual way to provide, present, and display historical data in the digital age, facilitating the discovery and organization of new relationships among objects, people, and historical events. The methodological assumption can be summarized by the formula: "narrative is not just a set of materials, but it is a quite specific method of organizing those materials."<sup>23</sup> In short, the solutions adopted facilitate the transition from top-down approaches (based on the application of theories) towards agent-based modeling and simulations. These approaches are grounded in the knowledge and study of primary sources (established through philological research), alongside a continuous flow of secondary sources (updating and discussing historical interpretations).

Once the theoretical and technical aspects of the project and its specific framework were clarified, the actual work began. This involves collecting, analyzing, and interpreting historical sources, entering data into the EHM system, and visualizing them through interactive maps. These maps enable exploration of historical dynamics from a fresh and accessible perspective.

#### *The preparation*

In the process of creating a digital map of Jacopo de Barbari's View of Venice, the first step involved reviewing the project and conducting a thorough search of all published materials available online about this masterpiece. The project review encompassed consulting various sources. Additionally, the project benefited from initiatives by Duke University and the NEH, which included a digital storytelling installation at the Correr Museum in Venice, alongside the original woodblocks and one of the twelve surviving prints of the first state. A curated volume titled "A Portrait of Venice: Jacopo de' Barbari's View"<sup>24</sup>, published by the Duke University Press, the volume features essays by over 20 scholars exploring various aspects of Renaissance Venice, using Jacopo de Barbari's print as a starting point. A comparative analysis of woodcuts and digital images has led to an academic study on the creation of the View of Venice.

An exhibition curated by Kristine Love Huffman<sup>25</sup> at Duke University allows for an in-depth analysis of de Barbari's map. Utilizing five touchscreens, visitors can zoom in with high definition to examine the details. The project focuses primarily on woodblocks and decorative designs rather than the map itself.<sup>26</sup>

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<sup>23</sup> Andrea Nanetti and Siew Ann Cheong, *Computational History: From Big Data to Big Simulations*, in Shu-Heng Chen (Ed.), *Big Data in Computational Social Science and Humanities*. Cham (Switzerland): Springer International Publishing AG, 2018, Ch. 18 (pp. 337-363). [LINK](#). Translated in Korean in 2019.

<sup>24</sup> Huffman, K. L., *A Portrait of a City: Jacopo de' Barbari's Venice*, Duke University Press, 2015

<sup>25</sup> Until 2022, Kristin Love Huffman was a Lecturing Fellow in the Department of Art, Art History & Visual Studies at Duke University. Her current research focuses on the uses, configurations, and, at times, deliberate re-ordering of architectural spaces and larger urban systems in early modern Venice. This is the central topic of her monograph: *Visual Rhetoric and Spatial Dynamics in Early Modern Venice*.

<sup>26</sup> Huffman, K. L. (2019). Jacopo de' Barbari's 'View of Venice' (1500): Image Vehicles Past and Present. *Mediterranea. International Journal on the Transfer of Knowledge*, 4, 165–214; <https://doi.org/10.21071/mijtk.v4i0.11530>

The Biblioteca Nazionale Marciana<sup>27</sup> contributed through a website that includes information about the map itself, along with introductory videos on YouTube<sup>28</sup> focusing on various aspects such as the details of the artwork's creation, different states of the print, the Venetian Arsenal, the life of Jacopo de Barbari, art in Venice, connections with Dürer, relations with Europe, the patronage of Anton Kolb, printing techniques, and bibliographic references.

The Minneapolis Institute of Art<sup>29</sup> and the Cleveland Museum of Art<sup>30</sup> have both digitized Jacopo de' Barbari's bird's-eye view, offering the opportunity to download the image. We would like to thank the latter, which has made an image available in open access, downloadable in TIFF format at very high resolution. This resource was used for our project not only for the meticulousness of the work carried out but also because it preserves the originality of the artwork, keeping the six woodcuts separate, which, when combined, create various graphic anomalies.<sup>31</sup>

### *The source*

A critical aspect in digital humanities is the connection with texts and the historical accuracy of what is published online. The foundation of this research is based on the work of Corrado Balistreri-Trincanato and Dario Zanverdiani, first published in 2000 under the title: “*Jacopo de Barbari: Il racconto di una città*”<sup>32</sup> and in its re-edition in 2009, “*Venezia città mirabile: Guida alla veduta prospettica di Jacopo de Barbari*.”<sup>33</sup> The two authors, both architects and professors at the IUAV University of Venice, analyze Jacopo de Barbari's bird's-eye view in this work, extending their study beyond their academic interests. They examine and catalog features such as boats, canals, regattas, and many others, offering a comprehensive and detailed view of the map and the city of Venice in 1500. A pivotal example in this work is Chapter 19, focused on churches, where the authors first catalog all the churches divided by district, adding images and descriptions for easier identification.

Critical to their work is Alvisè Zorzi's “*Venezia scomparsa*”<sup>34</sup>, a significant contribution to the philological restoration of lost aspects and the proposition of a rigorous artistic culture. The intentions of the work, as glimpsed from a quick perusal of the volume, reveal a history of Venice from the fall of the Serenissima Republic to the 1960s. The title itself suggests an exploration of how Venice's ancient splendor and physical security reached their zenith as a Venetian metropolis, only to be lost due to mishandling or neglect by humans.

Numerous churches, convents, devotional schools, and palaces depicted in ancient canvases, prints, and photographs have since been destroyed or robbed of furnishings, objects, and artworks. For example, there is the vanished church of Madonna dell'Arsenale depicted by Luca Carlevaris, the church of S. Antonio di Castello painted by Vittore Carpaccio, and the Giustinian Morelli palace

<sup>27</sup> <https://www.movio.beniculturali.it/bnm/ridottiprocuratorisanmarco/it/141/la-veduta-di-jacopo-de-barbari>

<sup>28</sup> <https://www.youtube.com/@500giovanibibliotecanazion3>

<sup>29</sup> <https://collections.artsmia.org/art/111219/view-of-venice-jacopo-de-barbari>

<sup>30</sup> <https://www.clevelandart.org/art/1949.565>

<sup>31</sup> For more information: Balistreri-Trincanato, C., Zanverdiani, D., Ghion, A.M., Balistreri, E. (2009). *Venezia città mirabile. Guida alla veduta prospettica di Jacopo de Barbari*. Caselle di Sommacampagna: Cierre, pp. 39-43

<sup>32</sup> Balistreri-Trincanato, C., Zanverdiani, D. (2000). *Jacopo de Barbari. Il racconto di una città*. Venezia: Ed. Stamperia Cetid.

<sup>33</sup> Balistreri-Trincanato, C., Zanverdiani, D., Ghion, A.M., Balistreri, E. (2009). *Venezia città mirabile. Guida alla veduta prospettica di Jacopo de Barbari*. Caselle di Sommacampagna: Cierre

<sup>34</sup> Zorzi, A., *Venezia Scomparsa*, 2001, Mondadori, Venezia.

represented by Giuseppe Heinz the Younger. These examples illustrate the irreversible historical destructions, rigorously documented through elegant iconography.<sup>35</sup>

### *The digital map*

The EHM software employs the "mapping and visualization" method, allowing us to trace lines and polygons, pinpointing specific areas in the digital version of the map and providing coordinates essential for displaying data related to the area of interest. Next, we analyze and select the most relevant historical information associated with map objects such as palaces, churches, and bridges, drawing from Balistreri-Trincanato's book. We aimed to include a significant number of objects for each of the 27 identified types, considering their historical and urban significance, visibility, and accuracy in the original map. Illustrations found in Venetie MD, such as wind directions, inscriptions, names, mythological figures (Neptune and Mercury), boats, mountains, and people, were also considered. All these elements reflect historical, cultural, social, economic, and political aspects that are crucial to emphasize in support of the described educational and methodological intentions.

The next step involves compiling the database and entering information into an Excel spreadsheet designed to serve as the source for information displayed on the website. The information to be researched includes: type, historical name and English translation, district location (Sestiere), description, bibliographic references, coordinates in EHM, and current coordinates using OpenStreetMap.<sup>36</sup> Wikipedia pages, as well as reference sources such as the *Musei civici di Venezia*<sup>37</sup>, the site *Conoscere Venezia*<sup>38</sup> and the *Archivio dei beni culturali italiani*<sup>39</sup>. The description required meticulous historical research from sources, both online and in print, including the work: "A volo d'uccello: Jacopo de' Barbari e le rappresentazioni di città nell'Europa del Rinascimento"<sup>40</sup> curated by Giandomenico Romanelli, the text of Guglielmo Zanelli, "Navi, squeri, traghetti da Jacopo de' Barbari"<sup>41</sup>, Raffaello Moradei, "Le montagne invisibili: il paesaggio montano di sfondo alla veduta "Venetie – MD" di Jacopo de Barbari"<sup>42</sup>, and Rizzo, "I ponti di Venezia"<sup>43</sup>. The coordinates in EHM required the accurate and unique identification of the object both on the historical map and in contemporary Venice.

### Conclusions

The digitization of Jacopo de Barbari's "View of Venice, MD" represents an ongoing journey of discovery and exploration. This project, which began with the profound goal of uncovering the hidden details of Renaissance Venice, has evolved into a complex and multifaceted endeavor. By utilizing modern technologies to breathe new life into this centuries-old masterpiece, we have

<sup>35</sup> ibidem

<sup>36</sup> <https://www.openstreetmap.org/#map>

<sup>37</sup> <https://www.visitmuve.it/>

<sup>38</sup> <https://www.conoscerevenezia.it/>

<sup>39</sup> <https://catalogo.beniculturali.it/>

<sup>40</sup> G. Romanelli, *A volo d'Uccello, Jacopo de' Barbari e le rappresentazioni di città nell'Europa del Rinascimento*. Venezia, 1999.

<sup>41</sup> G. Zanelli, *Navi, squeri, traghetti da Jacopo de' Barbari* Centro Internazionale della Grafica, 2011.

<sup>42</sup> Raffaello Moradei, *Le montagne invisibili: il paesaggio montano di sfondo alla veduta "Venetie - MD" di Jacopo de Barbari* (2011)

<sup>43</sup> Rizzo, T., *I ponti di Venezia* (Newton Compton, 1983)

created a dynamic, interactive map that serves as both a research tool and a platform for public engagement.

Future implementations could expand the scope of the project in several key areas. Firstly, the database can be continuously enriched with new historical information as more sources are discovered and existing data is re-evaluated. The foundational work of Corrado Balistreri-Trincanato and Dario Zanverdiani, as well as contributions from scholars like Alvisè Zorzi and Giandomenico Romanelli, provide a robust starting point for this ongoing research. Secondly, the interactive map can be enhanced with additional layers of data, such as 3D reconstructions, augmented reality experiences, and more detailed annotations that provide deeper insights into the social, economic, and cultural context of the depicted sites.

Moreover, the project has the potential to incorporate more advanced technologies, such as machine learning algorithms, to analyze patterns and relationships within the historical data. This could lead to new discoveries and interpretations that were previously unimaginable.

Collaborations with scholars, historians, and technologists from around the world will be crucial in pushing the boundaries of what this digital map can achieve. Notable contributions from initiatives like the Duke University project, and the work of Stefano Berti, Anna Gambetta, and Simona Lazzeri on the woodblock restoration, have already demonstrated the value of interdisciplinary collaboration. By fostering a collaborative environment, we can ensure that the project remains at the forefront of digital humanities research, continually adapting to incorporate the latest technological advancements and scholarly insights.

In conclusion, the digital reconstruction of Jacopo de Barbari's "View of Venice, MD" is not merely an endpoint but a gateway to ongoing exploration and discovery. The project's open-ended nature ensures that it will continue to evolve, offering endless possibilities for enhancement and innovation. As we delve deeper into the history and heritage of Venice, this digital map will serve as a vital tool for both scholars and the general public, bridging the past and the present in a uniquely engaging and informative way. The enduring mystery surrounding de Barbari's true origins, as highlighted by scholars like Luigi Servolini and others, only adds to the fascination and significance of this remarkable work.

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Engineering Historical Memory: <https://engineeringhistoricalmemory.com/>

Il committente, il mercante tedesco Anton Kolb:

<https://www.movio.beniculturali.it/bnm/ridottiprocuratorisanmarco/it/126/il-committente-il-mercante-tedesco-anton-kolb>

### **Credits for the Map**

Nanetti, A., Benenti, T., Vu, N. K. (Eds.) (2024 - ongoing). EHM – Jacopo de Barbari's View of Venice MD.