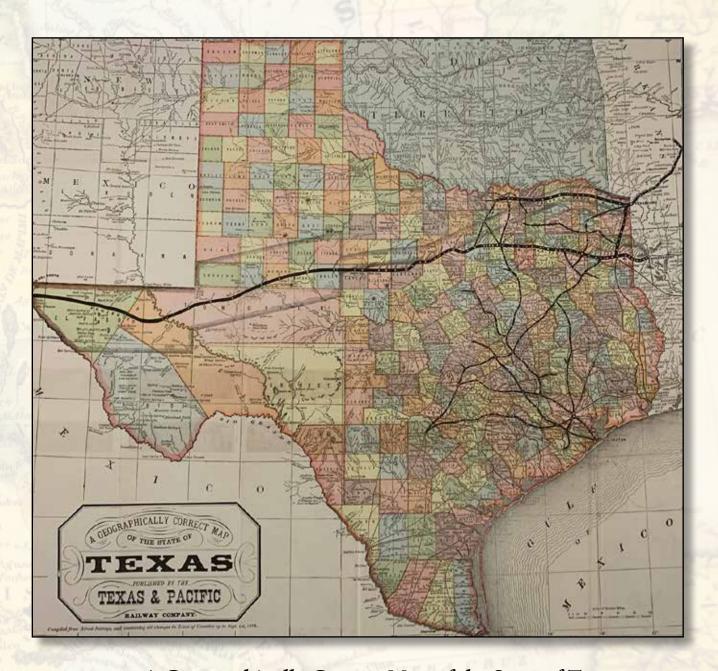


A NEWSLETTER OF THE TEXAS MAP SOCIETY

Issue 36 · Fall 2023



A Geographically Correct Map of the State of Texas

Published by the Texas & Pacific Railway Company Woodward, Tiernan & Hale, 1878, St. Louis

FROM THE PRESIDENT

Texas Map Society Members. 2023 has been an exciting year of starts and stops. Our Spring meeting in Houston was a great success! We had 40 attendees visit Rice University for presentations from some of the preeminent scholars of Texas and cartographic history. We also attended tours of Minute Maid Park (Go Astros!), the Antiquarium, and the map collection of Frank and Carol Holcomb. It was a pleasant experience, and you will be able to learn more about it in this edition of *The Neatline*.

Unfortunately, our Fall Meeting, scheduled initially for Austin in October (and then November), had to be postponed indefinitely due to a series of unfortunate events. I am working with Dr. Mylynka Kilgore Cardona, Vice President of the Texas Map Society, to plan the Spring in Austin meeting. We plan to tour several of the significant institutional map collections in the city. I would like to request one or two members join us in planning the Spring Meeting.

On a brighter note, our organization has agreed to support a fellowship/award for upcoming cartographic scholars. Dr. Cardona has agreed to lead that committee, which will be joined by myself, Lydia Towns, and Jeff Dunn.

I would also like to make a call to action for members. Brenda McClurkin and I are serving on the Nominations Committee. If you are interested in serving on the board of directors of the organization or you are interested in serving as an officer, please reach out to me at james.harkins@glo.texas.gov. We need three board members to take office in 2024, and we need to fill one open position for 2023-2025. We also need a second vice president, and to officially name a new treasurer. Before the end of the year, we will hold an online vote to fill open positions.

Sincerely,

-James Harkins, President, Texas Map Society

FROM THE EDITOR

I am very thankful for those TMS members who supply material for each edition of this newsletter. In fact, there are several first-time contributions to this fall 2023 edition, and I very much appreciate them.

But I hope I can prevail on more of you to share some of your own knowledge of maps and cartography for future issues. Reviews of TMS meetings, or even a short article for the My Favorite Map feature would be much appreciated. Also, any photos you may take at our meetings are fair game. Even cellphone photos are completely adequate. I have used a number of mine in the past, as well as those from other members.

Always remember that all of the archived editions of *The Neatline*, and much more information on the Texas Map Society can always be found at our website at: www.TexasMapSociety.org

-David Finfrock, Editor of The Neatline

The Neatline is published semi-annually by the Texas Map Society c/o Special Collections

The University of Texas at Arlington Library • Box 19497 702 Planetarium Place

Arlington, TX 76019-0497 http://www.TexasMapSociety.org

For more information contact

David Finfrock - Editor, Texas Map Society Email: editorTMS@aol.com

Texas Map Society members and others who helped produce this issue are: David Finfrock, Ed Grusnis, James Harkins, Elizabeth Page, Aaron Pratt, Lila Rakoczy, Martin VanBrauman, Chet Van Duzer, Patrick Walsh, and our graphic designer Carol Lehman.

A **Neatline** is the outermost drawn line surrounding a map. It defines the height and width of the map and usually constrains the cartographic images.



The 2023 Texas Map Society Spring Meeting Houston – May 19-20, 2023

By James Harkins and Ed Grusnis

The Texas Map Society gathered in Houston on May 19-20 to visit public, private, and commercial map collections, as well as to hear from five speakers about an assortment of map-related topics.

On Friday, May 19 attendees toured several institutions, starting with a bus shuttle that picked us up at The Antiquarium. This tour includes stops at Minute Maid Park, home of the Houston Astros and formerly Union Station, as well as the Julia Ideson Building, part of the Houston Public Library System and home to one of the premier institutional map collections in Houston.

After touring the Ideson Building, our group enjoyed a reception hosted by The Antiquarium, Texas' largest rare map and Texana dealership. The reception was sponsored by Joe Ahmad, an avid map collector and the founding partner of AZA Law.

About 25 guests arrived to enjoy catering by Masraf's and beer and wine provided by AZA Law. Joe Ahmad shared his perspective as a serious emerging



All photos courtesy of Ed Grusnis were taken at Friday's TMS reception at the Antiquarium.



collector of maps. His collection is broad, and includes some of the most rare Holy Land maps, large format maps of India, rare World War II maps, and a stunning 1755 Mitchell *Map of the British and French Possessions in North America...* currently on display at The Antiquarium. Ed Grusnis, the owner of The Antiquarium discussed the importance of using only archival material and credible frame galleries for preservation of maps and other important material. Guests then spent time admiring and shopping the extensive collection of more than 20,000 items on offer at the gallery.

On Saturday, May 20, thanks to the amazing work of Amanda Focke, Head of Special Collections at the Woodson Research Center in the Fondren Library at Rice University, we were treated to lectures from five distinguished scholars, followed by a tour of the special collections of the Fondren Library. Speakers included Ron Tyler, Russell Martin, Director of the DeGolyer Library at Southern Methodist University, independent scholars Jeff Dunn and Gary Pinkerton, and Norie Guthrie, Archivist & Special Collections Librarian at the Fondren Library.

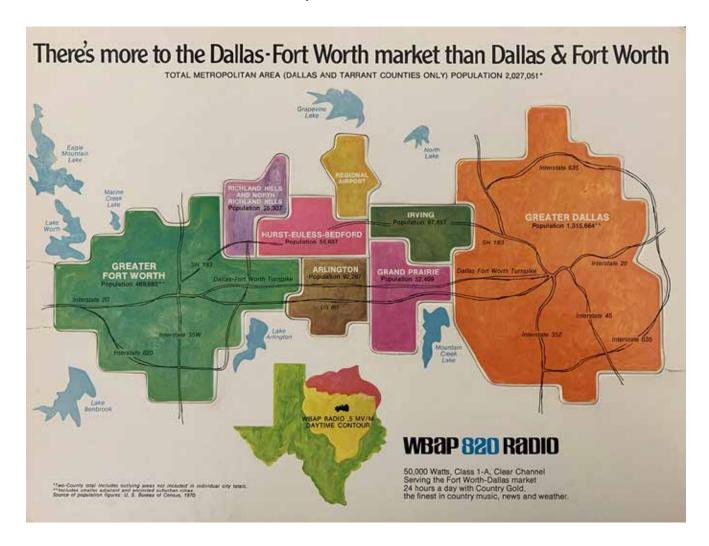
Following tours of the Fondren Library, the general meeting ended, and those who registered in advance had a special opportunity offered by Frank and Carol Holcomb. Frank's office was the first of two stops to see his map collection consisting of over 100 maps of Texas and the United States. Frank and Carol then welcomed visitors to their home for a behind-the-scenes tour of the rest of their collection.



MY FAVORITE MAP

WBAP Promotional Maps

By David Finfrock



While certainly not the most valuable or most ancient of my map collections, these hold a special place of significance for me. They combine my love of maps, my home in Dallas-Fort Worth for almost 50 years, and a connection to my career as a broadcast meteorologist.

My Favorite Map continued

While I began my career on television at NBC5 with my first broadcast in early January 1976, I actually had my premiere on WBAP-820 radio the previous week, in late December of 1975. That very first radio weather forecast was on the Don Harris show before the sun came up.

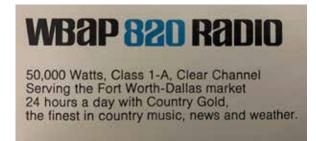
These maps even predate my time at WBAP and NBC5. They are promotional items emphasizing the geographical coverage area of the radio station dating from the early 1970s. This first map is a dissected map, or puzzle map, probably given out as a gift by salespeople when visiting clients. While there certainly may be others extant, I am only familiar with this one copy that I acquired when my mentor Harold Taft died in 1991.

In the lower left is a notation that population figures on the map came from the U.S. Census Bureau data of 1970. It is not Interstate 30, but the Dallas-Fort Worth Turnpike that connects the two urban areas on this map. And Interstate 20 through Arlington doesn't show up at all, as it wasn't completed until 1977.

This larger view shows the map partially dissected. I removed the jigsaw pieces of Dallas, Fort Worth and Arlington to show the map background.

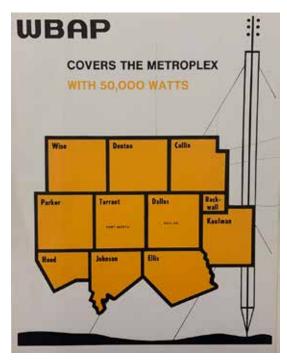


This detail (I suppose one could exaggerate and call it the map's cartouche) describes WBAP's Clear Channel broadcasting power.



A second separate map again emphasizes the 50,000 watt power of WBAP, along with its primary coverage area.

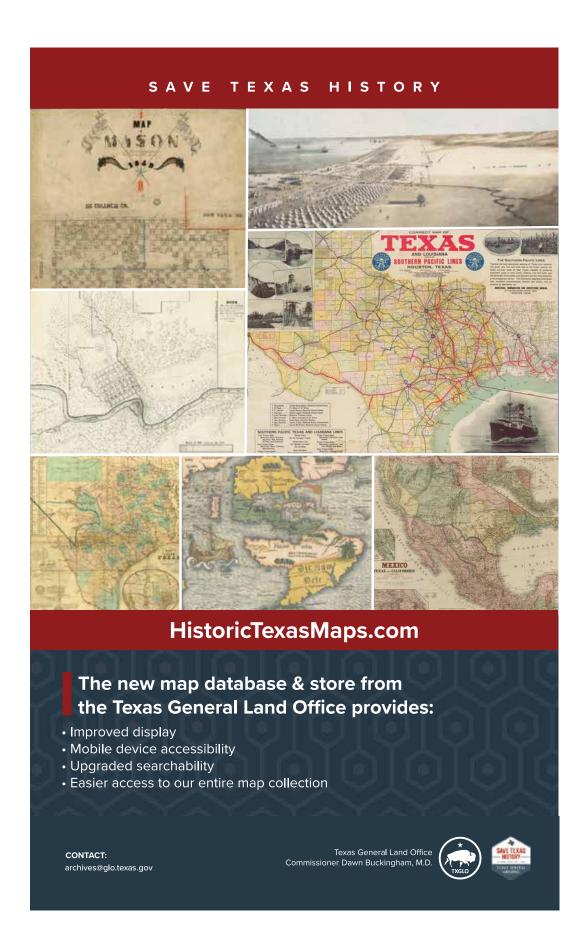
Because of the clear channel status of the station, and its powerful signal, WBAP programming could be heard at much greater



distances at night. Bill Mack's Midnight Cowboy Trucking Show was listened to by long distance truckers all across the country. I once heard part of his broadcast, featuring Harold Taft's trucking weather forecast while I was camping at the Grand Canyon in northwest Arizona. And after Harold's death, I took over the overnight weather forecasts on WBAP, until the radio and television stations separated completely around the turn of the century.

You can read more on the history of WBAP from the Texas State Historical Association at:

https://www.tshaonline.org/handbook/entries/wbap

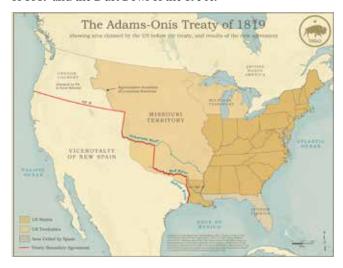


GIS Maps and Education Outreach at the Texas General Land Office

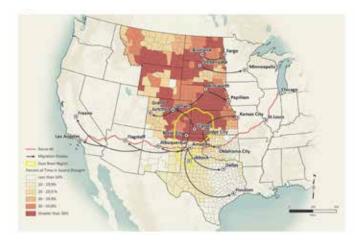
By Dr. Lila Rakoczy Education and Outreach Specialist, Texas General Land Office

It has often been argued that cartography exists at the intersection of art, science, and technology. In the last several decades, there is perhaps no better example of this than maps created using Geographic Information Systems (GIS). Computer technologies have revolutionized mapmaking by democratizing the process of map production itself. Numerous software applications, educational courses, and other resources allow more users than ever before the chance to create maps that are beautiful, accurate, and at their best, educational.

As one of the premier public archives for historical maps, the Texas General Land Office (GLO) has long been a valuable educational resource. Since 2000, over 41,000 maps have been digitized and made available in the Texas GLO Map Database and Store. More recently, the GLO began a GIS map production initiative through an already established and thriving student internship program within the GLO's Geospatial Technology Services Division. Although initially made for the GLO's Texas Hidden History StoryMaps program, outreach and education staff soon recognized the potential of GIS maps as a classroom resource. Several of these maps focus on Texas history and U.S. history topics emphasized in the Texas Essential Knowledge and Skills (TEKS) school standards. Two current examples are the Adams-Onís Treaty of 1819 and the Dust Bowl of the 1930s.



Owen Myers and Julia Bordelon, *The Adams-Onis Treaty of 1819*, 2022, Map #96978, General Map Collection, Archives and Records Program, Texas General Land Office, Austin, TX.



April O'Donnell and Patrick Walsh, *The Dust Bowl: Severe Drought During the Depression*, 1930-1939, Map #97095, General Map Collection, Archives and Records Program, Texas General Land Office, Austin, TX.

HistoricTexasMaps.com, the GLO's map database and store was created with user engagement in mind. GIS educational maps are searchable by title, place, subject, and map number, or by selecting the "Geographic Information System" option. For added convenience, teachers have the option of either downloading a thumbnail jpeg of their selected map for a PowerPoint presentation or zooming in and navigating the map at a high resolution during a lecture or interactive class discussion.



Current screenshot of GIS educational maps in the new Texas GLO Map Database and Store.

GIS Maps and Education continued

GIS maps have several advantages over historical maps, especially with younger learners. Because they are custom made, extraneous or confusing details can be left out or simplified to facilitate easier analysis. Hard to see details can be emphasized with color or inserted symbols or labels. And relevant information can be added in the form of images, tables, graphs, and inset maps.

One striking example of this in the GLO collection is an interpretation of an important Civil War-era map titled *Map* showing the distribution of the slave population of the southern states of the United States. Compiled from the census of 1860 (GLO Map #95749). The GLO's updated version (of the same name) (GLO Map #96677) uses the same data source as the 1861 map, but with two important modifications: the prominent use of blue instead of the more muted and patterned shades of black, and a reduction in legend categories from nine to four. These simple changes direct the eye to the most important geographical patterns, such as where chattel slavery was most – and least – concentrated, providing teachers with a valuable tool for classroom discussions.



E. Hergesheimer, Map showing the distribution of the slave population of the Southern States of the United States [...], Washington, D.C.: Henry S. Graham, 1861, Map #95749, Library of Congress, Archives and Records Program, Texas General Land Office, Austin, TX.



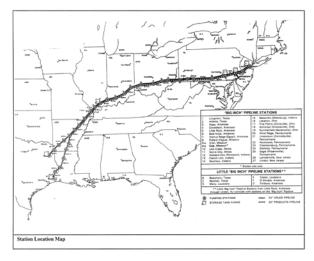
Blake Barber and Lila Rakoczy, Map Showing the Distribution of the Slave Population of the Southern States of the United States [...], 2022, Map #96677, General Map Collection, Archives and Records Program, Texas General Land Office, Austin, TX.

Another good example of this is the GLO's *Big Inch and Little Big Inch Pipelines*, *1942 – 1943* (GLO Map #97089). Based on a crudely sketched original from an obscure government document, the new GIS map highlights an important energy development during World War II in a more dynamic way. As well as color, a

historical image of one of the pipelines being laid was included, as well as U-boat icons to visually represent the wartime threat faced by the U.S.



Blake Barber, Lila Rakoczy, and James Harkins, *Big Inch and Little Big Inch Pipelines*, 1942-1943, 2022, Map #97089, General Map Collection, Archives and Records Program, Texas General Land Office, Austin, TX.



"Station Location Map" on page 36 of Historic American Engineering Record's report War Emergency Pipeline, Pittman Road, Longview, Gregg County, TX.

The heart and soul of the GLO map collection will always be its historical maps, the oldest of which date to the sixteenth century. But the GLO's growing collection of GIS maps are a fantastic addition with much to offer educators and map enthusiasts alike. They bring out the best in older maps, and help educators communicate sometimes complex topics. And through the GLO's internship program, they enable young Texans to develop resume-enhancing skills and create resources for the public good that are beautiful, accurate, and educational. It is yet the latest way the GLO continues to preserve our history and serve the schoolchildren of Texas.

Endnotes

Historic American Engineering Record, Creator, Charles P. Cathers, Oscar Wolfe, Inc War Emergency Pipelines, and Owner Texas Eastern Transmission Corporation. War Emergency Pipeline, Pittman Road, Longview, Gregg County, TX. Gregg County Longview Texas, 1968. Documentation Compiled After. See also: Jerrell Dean Palmer and John G. Johnson, "Big Inch and Little Big Inch," Handbook of Texas Online,

https://www.tshaonline.org/handbook/entries/big-inch-and-little-big-inch-



Map Showing the Distribution of the Slave Population of the Southern States of the United States

2022 Size: 8.5 x 11.0 inches 96677



New Mexico and Adjacent Lands 2022

Size: 8.5 x 11.0 inches 96977



The Adams-Onis Treaty of 1819

2022

Size: 8.5 x 11.0 inches 96978



Republic of Texas and State of Louisiana Boundary

2022

Size: 8.5 x 11.0 inches 96979



The Buffalo Bayou, Brazos and Colorado Railroad (BBB&C)

2022 Size: 8.5 × 11.0 inches 97088



Big Inch and Little Big Inch Pipelines

2022 Size: 8.5 x 11.0 inches 97089



Battle of Cerro Gordo

2022 Size: 8.5 x 11.0 inches 97090



American Civil War Political Loyalties

2022 Size: 8.5 x 11.0 inches 97091



Texas Population Distribution in Cities, per the U.S. Census of 1910

2022 Size: 11.0 x 8.5 inches

97092



Yellow Fever Deaths in the United States

2022 Size: 8.5 x 11.0 inches 97093



Yellow Fever Deaths in Texas and Louisiana

2022 Size: 8.5 x 11.0 inches 97094



The Dust Bowl: Severe Drought During the Depression

2022

Size: 8.5 x 11.0 inches 97095



General Range of Indigenous Tribes and Language Families in Texas

2022 Size: 8.5 x 11.0 inches 97100



Disputed Territory Between Mexico and the United States

2023 Size: 11.0 x 8.5 inches 97129



Northern Mexico Campaign of the U.S. - Mexico War

2023

Size: 8.5 x 11.0 inches 97152

Cartographic Cartouches

Chet Van Duzer

Board Member, The Lazarus Project at the University of Rochester https://rochester.academia.edu/ChetVanDuzer

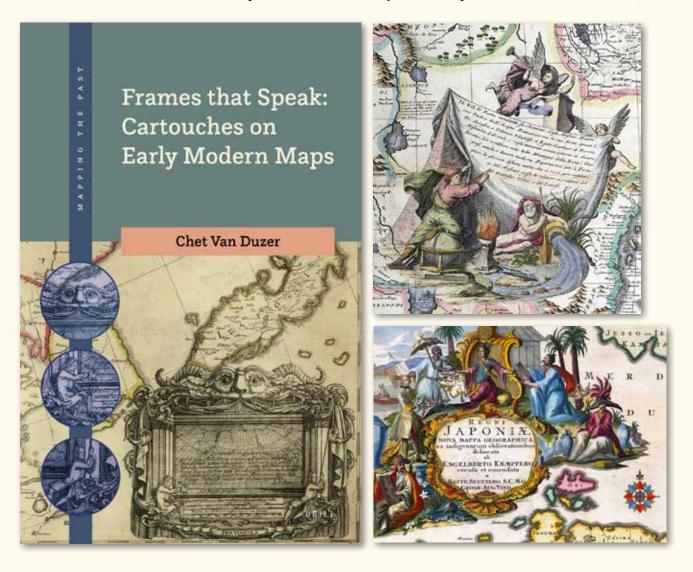
I wanted to give you some news that might be of interest to members of the Texas Map Society: a book of mine about cartographic cartouches has just been published by Brill, and thanks to a couple of grants, it's in Open Access, so one can download the whole thing for free. Here are the details and the link:

This lavishly illustrated book is the first systematic exploration of cartographic cartouches, the decorated frames that surround the title, or other text or imagery, on historic maps. It addresses the history of their development, the sources cartographers used in creating them, and the political, economic, historical, and philosophical messages their symbols convey. Cartouches are the most visually appealing parts of maps, and also spaces where the cartographer uses decoration to express his or her interests—so they are key to interpreting maps. The book discusses thirty-three cartouches in detail, which range from 1569 to 1821, and were chosen for the richness of their imagery. The book will open your eyes to a new way of looking at maps.

Thanks to the generosity of the Kislak Family Foundation and CITCO, the book is available in Open Access (free download) at this address:

https://brill.com/display/title/61494

Van Duzer, Chet, Frames that Speak: Cartouches on Early Modern Maps (Leiden and Boston: Brill, 2023)



The Changing Style of the Merian Jerusalem Map Variants During and After the Golden Age of Augsburg

By Martin M. van Brauman

Maps prior to the nineteenth century were expressing an artist's visual impressions and artistic perspective based upon the knowledge at that time of the subject area. In addition, maps were drawn in the style and culture of the times of the mapmaker. The local events of wars, religious conflicts and the knowledge of history influenced the maps produced. The place of the engraving and the printing of a map affected the overall presentation. The maps by Steidner, Haffner, Leopold and Seutter reflect the changing styles during and after the Golden Age of Augsburg by their printing of the Jerusalem map produced earlier by Matthäus Merian. Augsburg was a major European publishing center in the seventeenth and eighteenth centuries and there was a common link by families and printing houses among the engravers and printers to create what this article calls the "Augsburg School." As outlined in this article, there were many historical, cultural and social influences on the styles in the Jerusalem cityscape map from the printing of these maps between 1680 and 1740 in Augsburg.

The beginning point of analysis is the history of Augsburg, the place of map production. Augsburg was founded in 15 B.C. by the stepchildren of the Roman emperor Augustus and was named after the Roman emperor, *Augusta Vindelicorum*. It was a Free Imperial City from 1276 to 1803 under the Holy Roman Empire. Augsburg was an important center of the German Renaissance. During the fifteenth and sixteenth centuries, Augsburg was home to the Welser and Fugger merchant families, who were among the world's wealthiest and most powerful families for an entire century in the banking and metal businesses. The textile trade especially contributed to the rise of Augsburg. Augsburg's wealth brought artists seeking patrons. Emperor Maximilian I held *Reichstag* in Augsburg and so created a political capital.

Beginning in the sixteenth century, religious conflict plagued the city, as it became a mixed Protestant-Catholic city with a Protestant majority. The city played a leading role in the Reformation and was the site of the 1530 Augsburg Confession, which resulted in the 1555 Peace of Augsburg by providing equal rights to both religions. Beginning in the sixteenth century, the city's printing industry became the largest printer of German language books in the Holy Roman Empire.

The Golden Age of Augsburg occurred during the sixteenth and seventeenth centuries, when bankers of the imperial state financed the Holy Roman Emperor and the city was the center for art, publishing and industry. With the collaboration of printmaking with others forms of art, artisanship resulted in Augsburg prints being important in spreading the Rococo style beyond France, and the rococo style became known as the "Augsburg style" throughout the Holy Roman Empire. Following the elegant style of the Baroque, rococo style of art and design centered on the carefree aristocratic life and on lighthearted romance, revolving around nature. Floral designs, shells and swirling patterns signifying flowing water were common themes. The word rococo is a

combination of the French word *rocaille* for shell and the Italian word *Barocco* for Baroque style.

In the seventeenth and eighteenth centuries, Augsburg became a major trading center and, by attracting silversmiths and goldsmiths, became a major artisan center. The works of silversmiths, engravers, printers and the development of scientific equipment made Augsburg known all over Europe. Augsburg was a major center of European printmaking until the late eighteenth century. With the change in taste and style occurring during the second half of the eighteenth century, the Augsburg printing industry declined in importance. With the decline of Baroque and rococo styles, the neoclassical style emerged during the eighteenth century, the Age of Enlightenment.

This article discusses four maps produced during and after the Golden Age of Augsburg that represent variants of the famous Merian map of Jerusalem (*Figure 1*). Matthäus Merian the Elder was born on September 22, 1593 in Basel and died June 19, 1650 in Bad Schwalbach. Merian was one of the most important copperplate engravers and publishers of the seventeenth century and famous for his cityscapes of diagonal bird's-eye perspectives.³

The Merian map, *IERUSALEM*, was printed in Frankfurt am Main with the first edition in 1638 and was copied by the Augsburg engravers Johan Philipp Steidner (*Figure 2*), Johann Christoph Haffner (*Figure 3*), Johann Christian Leopold (*Figure 4*) and Georg Matthäus Seutter (*Figure 5*) during the beginning and ending of Augsburg's Golden Age.



MATTHÄUS MERIAN (the Elder, 1593-1650), *IERUSALEM*, Frankfurt am Main, **1638 edition**. Published in *Neuwe Archontologia Cosmica* . . . Copperplate engraving. ⁴ [*Figure 1*].

The Merian map was one of the earliest realistic maps of Jerusalem and served as a prototype for many other Jerusalem maps until the eighteenth century. With the 24-point key in German at the bottom, the German legend was repeated exactly

in the Steidner map and the same religious sites were copied in subsequent maps by Haffner, Leopold and Seutter.

The Merian map was printed in Frankfurt am Main in 1638 with a title piece in the architectural design of a stonemason, reflecting more of the sixteenth century style of the Late Renaissance (1520-1600) of sophistication and complexity. During the early seventeenth century, there were conflicts between the craftsmen of the guilds and the ruling city council. There was social unrest with the Swedish garrison, occupying the city during the Thirty Year's War that ended with the Peace of Westphalia in 1648. Thereafter, Frankfurt became an Imperial Free City and prosperity returned. With the conflicts, the Baroque style did not spread across Europe and southern Germany from Italy, Spain and France until the Late Baroque Period beginning in 1675.



JOHANN PHILIPP STEIDNER (1652-1732), *IERUSALEM*, Augsburg, **1680 or earlier**. Unknown Copperplate engraving. [*Figure* 2].

The Steidner Jerusalem map was probably the first link between the Merian map and the Augsburg engravers prior to 1680. Johan Philipp Steidner was born in Augsburg in 1652 and died in Augsburg in 1732. His father, Daniel Steidner, was a famous copperplate artist and etcher in Augsburg. Sometime after 1680, Johann changed his name to Johann Philipp Steudner and his father changed his last name to Steudner, based upon various dated and signed prints. Johann Philip Steidner/Steudner was the grandfather of Johann Christoph Leopold. Steudner's daughter Eleonora married Joseph Friedrich Leopold in 1698, also a known engraver and publisher in Augsburg. Their son, Johann Christian Leopold, carried on the family business as a more successful engraver and publisher in Augsburg.

This Steidner Jerusalem map is not recorded in any reference book and is totally unknown. The map would represent a link between the Merian map and the Haffner map of Jerusalem produced in the workshop of Jeremias Wolff. The presumed etcher was his father Daniel Steidner as indicated by the initials DSf (Daniel Steidner, etcher) on the right bottom of the map. This map etching from the Steidner workshop predates the workshop of

Jeremias Wolff (born 1663- died 1724) in Augsburg, whose later workshop became the most important map publisher in Germany.

The map has the Jerusalem Cross under the flowing banner of *IERUSALEM* and the Jerusalem Cross with flowing ribbons and intricate ornamentation of the crest in the early Baroque style in Germany. The Baroque style reached central Europe during the Late Baroque Period of 1675 to 1750.

The Legend in German is the identical Legend from the Merian map.⁵ Like the Merian map, it carries the mistake of the two orientations by placing the Mount of Olives (Der Ölberg) northwest (left top corner of the map) of the city instead of south. In addition, the Church of the Holy Selpucher, the Golden Gate, the unusual wall design and most of the other features represent a very close copy of the Merian map. Similar to the Merian map, this map has the Catholic crosses on the dome and bell tower of the Church of the Holy Seplucher. There is a Muslim crescent on the Dome of the Rock building (Tempel Salomonis). This map copied the unusual stairs stepping up on the eastern city wall to the left of the Golden Gate as in the Merian map. The partially destroyed top of the Golden Gate is slightly different from the Merian map. Like the Merian map, a pilgrim on a horse and a turbaned Turkish solider walking ahead with a spear are crossing the bridge across the valley. Unlike the Merian map, there are not the two people walking before the bridge. Unlike the Merian map, this map has two pilgrims sitting among the ruins of ornate Roman columns in the bottom left on a hillside overlooking the road through the Kidron Valley into the city.



JOHANN CHRISTOPH HAFFNER, (1668-1754), HIEROSOLYMA. IERUSALEM. JOH. CHRISTOPH HAFFNER SEEL ERB. EXC. A[ugusta] V [indelicorum (i.e. Augsburg), 1720], very rare 1720 edition. Copperplate engraving. [Figure 3].6

Johann Christoph Haffner was a German engraver and publisher and was born in Ulm in 1668 and died in Augsburg on May 31, 1754. He worked at Augsburg with the very famous map publisher Jeremias Wolff (1663-1724). The best etchers in Germany worked at the shop of Jeremias Wolff and among them were Mattheaus Seutter and Johann Balthaser Probst, his son-in-law. Probst was famous for his Jerusalem 1740 view with a similar banner as Haffner's banner. Wolff was born in Augsburg on October 1, 1663 and died there on May 28, 1724. Wolff with his

copper engraving shop became the largest art publisher in the first half of the eighteenth century and sold copper engravings and the printed sheets.

Johann Haffner worked and produced his etching of Jerusalem at the prestigious Augsburg shop of Jeremias Wolff. The Haffner map was based upon the Merian map, but has unique features visible at the bridge scene and the group of people at the bottom. The only other known recorded copy seems to be in the Laor collection at the University Library Jerusalem. The map paper has a large vertical flowery watermark.

The map has a flowing ribbon title of *HIEROSOLYMA*. *IERUSALEM*, similar to the Steidner banner but with the word *HIEROSOLYMA* added. *HIEROSOLYMA* is the transliteration from the Hebrew, combining *hieron* meaning Temple and *Salem* meaning the first name of the city, which is a reference to the priestly king of Salem Melchizedek, who built a temple to God and went to bless Abraham.⁸ The crest of the Jerusalem Cross in the upper right corner has a decorative Baroque style, as the title banner in the later Baroque style.

The map is signed on the bottom right as *Joh. Christoph Haffner Seel Erb. exc A.V.*, in which *A.V.* represents *Augusta Vindelicorum*, the Roman name of Augsburg in 15 B.C. The map is a large panoramic etching, depicting "contemporary" Jerusalem as viewed from the Mount of Olives. The Dome of the Rock has the correct octagon base, but with a six-sided dome instead of the rounded dome.

The map has an elaborate legend in Latin and German. The German legend differs slightly in the words used in naming the sites as in the Merian and Haffner map legends, but the legend has the same listed sites. The Merian map placed incorrectly the Mount of Olives in the upper left corner of the map (*1. Des* Ölberg). The Haffner map placed the Mount of Olives also in the top left corner (*1. Mons olivarum*).

Sitting on the Mount of Olives overlooking the Kidron Valley are two pilgrims with hats and robes by a nearby Turkish solider, carrying a spear and curved Turkish bow. The three-arched bridge over the Kidron River (21. Rivus Kidron) has a pilgrim with hat and robe on a horse crossing the bridge behind a turbaned Turkish guard with a spear. The top section of the Golden Gate (10. Porta aurea) is in ruins without the tower added similar to the Merian map. Suleiman the Magnificent rebuilt the walls and added a guard tower over the Golden Gate from 1536 to 1538. Crosses are shown on the domes of the Church of the Holy Sepulcher (12 Templum S. Sepulcri) and the nearby bell tower. The Dome of the Rock is labeled under Christian tradition as the Temple of Solomon (9 Templum Salomonis).



JOHANN CHRISTIAN LEOPOLD, (1699- August 3, 1755), *HIEROSOLYMA/JERUSALEM*, scarce First edition of 1731 with the serial **Nr. 61** at the left bottom, copperplate engraving, original antique hand-coloring. ¹⁰ [*Figure 4*].

Johann Christian Leopold was the son of the engraver and publisher Joseph Friedrich Leopold. Johann Philip Steidner (1652-1732) was the grandfather of Johann Christoph Leopold. Steidner's daughter Eleonora married Joseph Friedrich Leopold in 1698 and their son, Johann Christian Leopold became an engraver and publisher in Augsburg like his father Joseph Friedrich. Between 1710 and 1750, the Leopold family published many graphics and cityscapes and with the death of his father, Johann Leopold took over the publishing house. Johann Leopold became one of the most important engravers in the first half of the eighteenth century for secular works by various composers and as an important art and music publisher. Johann Leopold worked with Rococo painter and engraver Gottfried Bernhard Göz (1708-1774) and with Johann Jacob Lotter (1683-1738), Augsburg music publisher.

The Leopold Jerusalem map was based on a drawing by Friedrich Bernhard Werner (1690-1776), who was famous for panoramic city views. Werner also worked in the workshop of Wolff. Werner was a German printmaker and draftsman. Werner drew views for the publishing houses of a Martin Engelbrecht (1684-1756), Johann Christian Leopold (1699-1755) and Jeremias Wolff (1663-1724). From 1729, he specialized in panoramic views of towns and he traveled around Europe drawing nearly 100 views for the Augsburg publishers known as the "Wolff heirs," which included members of the Probst family and their brother-in-law's father, Johann Georg Hertel. Werner's drawings were published by a variety of Augsburg firms.¹¹

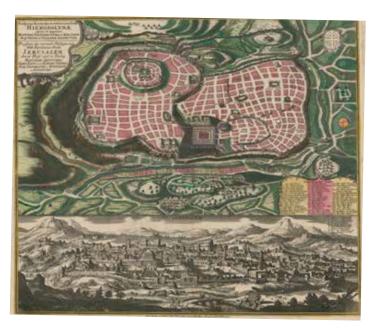
This Leopold Jerusalem map was published first only in separate sheets in 1731. A later map was published in an atlas in 1741. As mentioned earlier, Johann Leopold worked with Rococo painter and engraver Gottfried Bernhard Göz. This map reflects the rococo style, which became known as the "Augsburg"

style" especially during the first half of the eighteenth century. The map is placed within a picture frame and the entire map is in the rococo style. The map with a rococo flair depicts a caravan of religious pilgrims, Ottoman soldiers, merchants and other types of visitors walking and riding on horses and donkeys. They are approaching the city on the road crossing Kidron's three-arched bridge to St. Stephen's Gate. Similar to the Merian map, people are depicted in the Temple Mount area. However, in this map the people are portrayed in a "carefree aristocratic lifestyle" and a landscape of a flowing river and green vegetation.

The map has the Haffner flowing title banner of HIEROSOLYMA JERUSALEM, but with more flair that is graceful. The Jerusalem Cross is located in the bottom center of the map, similar to Haffner's crest but in the more ornate Rococo style. Two winged cherubs (Cherubim) are holding up banners with the legend in German for the map. The cherubim was a heavenly creature in Genesis and in Ezekiel, such as in Ezekiel's vision. The cherub with a flowing roble on the left holds up a banner with a legend for sites 1 through 12. The cherub on the right holds up a banner with a legend for sites 13 through 24. The legends follow the Merian, Steidner and Haffner legends with slight changes in the German words used for the same sites.¹³ The bottom of the map presents text in both Latin and German, which must have been importance to tell the reader about the once great Christian Holy city of Jerusalem and now to emphasize its sad possession by the Turks and under the Damascus province and rule.¹⁴ For a map to have the extent of such commentary on a map, itself, instead of the text, is infrequent and makes a religious statement. The text describes the history of Jerusalem in the Promised Land from the time of the Jewish kings to its sanctification by Christ the Redeemer and then to the destruction by the Romans and to conclude with its Turkish domination.15

The English translation is as follows:

One city in the Promised Land in Asia, not far from the place, where in former times the famous city Jerusalem stood, from which's magnificence the spiritual as well as the secular history cannot tell enough, and which was sanctified by Christ the Redeemer of the world, by his personal presence. The new (city) one is very small after its complete destruction, while the former was 4. German leagues large, and the residence of the Jewish kings, but after the conquest of the Romans, the present one was rebuilt by Aelioc Adriano, but then not inhabited by a single Jew when in order to disgust them, a swine made of marble was set above the gate, but it was inhabited by Christians, who had their own bishop, called Patriarch. In the year 615 she was captured by Cosroe, the Persian King and in 636 Haumar, a Saracene Prince took her into his possession, and although in Anno 1097 the Saracenes were expelled by the Christians and Gottfried of Bouvillon was crowned to be King there Anno 1099, in 1224 she fell totally into Turkish hands and is still owned by them, while inhabited by Turks, Arabs, Jews and Christians. One shows there the Tomb of Christ, as the Franciscans own it and it is intensely visited by pilgrims. She (Jerusalem) belongs to the Bassa of Damascus, and even a Sangiac and Cadi live there.



GEORG MATTHÄUS SEUTTER, (1678-1757), Prospectus Sancta olim et celeberrimae Urbis HIEROSOLYMAE opera et impensis Matthaei Seutteri S. Caes. Et Reg. Cath. Maj. Geogr. Et Chalcogr. August. Vind. Prospekt der vormals Heiligen und Welt Berühmten Stadt IERUSALEM durch Fleiss und in Verlag Matthaei Seutters, Ihro Kays. Und Königl. Cathol. Maj. Geograpghi u. Kupfer St. in Augspurg. Grosser Atlas, Augsburg, 1740. Rare Cum Gratia et Privil. S.R.I. Vicariatus, in partibg Rheni, Svevice, et Juris Franconici (Imperial privilege granted by German Emperor Charles VI in 1732)(located at bottom of map). Copperplate etching with original antique hand coloring. Rare early edition. [Figure 5].

Georg Matthäus Seutter was born in Augsburg, the son of a goldsmith. He was apprenticed as a map engraver to Johann Baptist Homann, the renowned atlas maker at Nuremberg. Returning to Augsburg after his apprenticeship, he began to gain distinction for his maps of the German states. Eventually, he replaced his mentor, Homann, as the official geographer to the Kaiser of the Holy Roman Empire. In 1727, he was granted the title of Imperial Geographer. Seutter relied on the maps of his Dutch and French predecessors. His most famous work was the *Atlas Novus Sive Tabulae Geographicae*, published in two volumes around 1730. His maps of the Holy Land are enriched with ornate eighteenth century neoclassical scenes drawn from the Bible. The widespread popularity of Seutter's atlases made his decorative delineation the standard for mid-eighteenth century conception of the Holy Land.

During the second half of the eighteenth century, the Augsburg style and taste had changed from the Baroque and Rococo styles to a neoclassical style in Europe. The neoclassical style was a grand style with emphasis on antiquity and nobility. The Seutter map of Jerusalem is bordered in a picture frame and the title cartouche reflects a motif from classical art. The neoclassical

style found inspiration from ancient Greece and Rome and from Renaissance art.

Seutter printed on one sheet in two sections the imaginary historical map of Jerusalem in the upper part after the Spanish scholar Villalpando, according to Biblical sources and the writings of Josephus Flavius. The map shows Jerusalem surrounded by a wall that follows an uneven course and the city within it appears to be divided by a network of streets following an ordered plan. Only a few important buildings are drawn and identified by captions. The upper map has a 47-point key in German, *Erklaerung der Zahlen*. Upper right is the most important *Berg Golagtha* for the pilgrim and to the left the equally important *Des Grab Christi* – Nr. 45. This upper imaginary map represents a chronological Biblical representation of Jerusalem from the time of Melchizedek to the crucifixion of Jesus at Golgotha and the Holy Sepulcher.

An inner wall divides the city into two main sections, which are subdivided. The right section and northern part of the city includes *Mt*. *Acra* and *The City of Shalem of Melchizedek* with a lower section enclosed by another circular wall, *Bezeta*. To the right is another quarter called *The New City*. The left section or southern part is called *Mount Zion* and in its center is a hill encircled by a wall defining the *City of David* with the king's palace in the middle. The Temple Mount is indicated by the purple square in the bottom center, *Der Vorhof Israelis* - Nr. 21, with the Holy of Holies in its center, *Das Heilige* - Nr. 22. The Temple Mount depiction was based upon the interpretation of the Temple in Ezekiel's vision, emphasizing the division of the Temple court into nine smaller square-shaped courts.¹⁷

The Lower part shows a realistic panorama of Merian's *IERUSALEM* map as seen from the East towards the Temple Mount with an 8-point key in German. The presentation of such pairs of maps indicates that they were not viewed as contradicting or opposing one another, but that their typology and purpose were intended to be complementary. The upper map underscores how things in the Christian Old Testament prefigure Christian belief. As the Christian pilgrim walked the streets and visited the holy sites, the pilgrim had in his mind the spiritual map, the sacred center of his faith.

The Seutter map followed very closely the Merian map with the similar title of *Iersusalem* and represented a return of the Merian style map. Since the neoclassical style had an emphasis on antiquity, perhaps it made sense to retain the old style of the original Merian map of the Late Renaissance period. The only difference in the maps were with the legends. Instead of the 24-point legend of the Merian map, the Seutter map has only an 8-point legend, but the names of the other sites were placed over the particular sites. The Seutter legend contained the similar eight site names. ¹⁸

Conclusion

The fact that the maps by Steidner, Haffner, Leopold and Seutter preserved the same errors, such as the one bridge over the Kidron valley and the incorrect orientations, clearly shows that the maps were copies of the earlier Merian map. However, the maps illustrate the influence of style and culture during the times of the mapmaker. The Merian map was printed in Frankfurt am Main in 1638 with a title piece in the architectural design of a stonemason, reflecting more of the sixteenth century style of the Late Renaissance. The conflicts in Frankfurt probably delayed the new styles from France and Italy. The Steidner map was influenced by the early Baroque style in Germany. The Baroque style reached Germany in the beginning of the Late Baroque Period in Europe. The Haffner map has the decorative later Baroque style. The Leopold map was in the Rococo style.

The Seutter map had the imaginary Biblical map double the size of the Merian contemporary map, as if to emphasize the importance of the Biblical conception of Jerusalem over the present day Jerusalem. The Seutter map inserted a simple copy of the Merian map, but presented an early eighteenth century style of an ornate and classical title cartouche on a very illuminated and imaginary Biblical map. The Biblical Jerusalem presentation and cartouche exhibit the graceful designs modelled on the furniture maker patterns of the neoclassical style as opposed to the Baroque and Rococo style. The Seutter depiction of the simple Merian map may be the result of the influence of the neoclassical period to reflect back to an earlier period.

These five maps illustrate the point that maps reflect the style and culture of the times of the mapmaker. The local events of wars, religious conflicts and the knowledge of past time periods can affect directly the design of maps beyond the geography of the subject area.

Endnotes

- Augsburg was annexed in 1806 to the Kingdom of Bavaria upon the dissolutionment of the Holy Roman Empire.
- 2 Augsburg was the birthplace of Hans Holbein the Elder (1460-1524) and the Younger (1497-1543). Hans Holbein the Elder was a painter, who represented the Late Gothic School. Hans Holbein the Younger was a painter and printmaker in the Northern Renaissance Style.
- ³ Merian studied drawing and copper engraving from the engraver Friedrich Meyer in Zurich. In 1623, he took over the publishing house of his father-in-law Johann Theodor de Bry in Frankfurt. Merian took charge and completed the editions of *Grand Voyages* and *Petit Voyages*, which de Bry started in 1590. Together with Martin Zeiller, he produced the popular series of *Topographia* in 21 volumes. The work was continued by his sons Matthäus the Younger and Caspar.
- ⁴ See Rehav *Rubin, Image and Reality, Jerusalem in Maps and Views*, Jerusalem: The Hebrew University Magnes Press, 1st ed. 1999, pgs. 68-69, Fig. 31-32; Eran Laor, *Maps of the Holy Land, Cartobibliography of Printed Maps*, 1475-1900, New York: Alan R. Liss, Inc., 1st ed, 1986, p. 1082.
- ⁵ The German legend at the bottom is as follows: 1. Der Ölberg (Mount of Olives), 2. Brunnen Siloe (Spring or Pool of Siloan); 3. Absalons Begrebriis (Absaloms tomb), 4. Berg Sizon (Mount Zion), 5. Caiphe Behausung (Caiphe's House), 6. Tempel S. Simeonis (Church of St. Simeon), 7. Hannas Behausung ("God is gracious" house of the Virgin Mary), 8. Davids Pallast (David's palace), 9. Tempel Salomonis (Temple of Solomon), 10. Gulden Port (Golden Gate), 11. Der Bilger Spital, 12. Tempel Jes H. Grabs (Temple of the Grave of Jesus), 13. Verfallner Pallast (royal palace), 14. Unserfrauen Capell (our bell tower), 15. S. Anne Behausung (house of St. Anna, mother of the Virgin Mary), 16. Herodis Behausung (Herod's dwelling), 17. Pilati Behausung (Pilate's dwelling), 18. S. Stephanus Thor (Stephen's Gate), 19. Ortda Stephanus gesteiniget Worden (marker of St. Stephen's Gate), 20. Stras nach Bethlehem (Road to Bethlehem), 21. Der Bach Cedron (Kidron stream), 22 Valle Josafat (Valley of Jehoshaphat), 32 (numbers reversed) Helisei Begrebriis (holy grave of Elisa), 42 (numbers reversed) Der Bilgern Begrebriust (pilgrim graves).
- ⁶ See Laor 1030; Rubin 67, 71 (Fig. 34), 75.
- ⁷ See Rubin, p. 59.
- 8 Genesis 14:18.
- ⁹ The Haffner Latin legend has the following listing: 1. Mons olivarum; 2. Fons Silohe; 3. Sepulcrum Absalomi; 4. Castellum Sion; 5. Domus Caiphae; 6. S. Simon; 7. Domicilium Hannae; 8. Domus Davidis; 9. Templum Salomonis; 10. Porta aurea; 11. Nosodochium peregrin; 12. Templum S. Sepulcri; 13. Palatium ruinosuin; 14. Sacellum Dominae nostrae; 15. Domus S. Annae; 16. Herodis domus; 17. Palatium Pilati; 18. Porta S. Stephani; 19. Locus ubi Stephan lapidatus est; 20. Via ad Bethlehemion; 21. Rivus Kidron; 22. Vallis Iosaphat; 23. Sepulcrum Elisa; 24. Sepulcrum pereginorum. The German legend has the following listing: 1. Ochlberg; 2. Brunn Siloe; 3. Absoloms Grab; 4. Burg Sion; 5. Caiphae Haus; 6. S. Simon; 7. Hannae Haus; 8. Davids Haus; 9. Tempel Salomonis; 10. Gulden Pfort; 11. Pilger Spittal; 12. Heilig Grab Tempel; 13. Verfallner Pallast; 14. Unser Frauen Capell; 15. S. Annae Haus; 16. Herodis Haus; 17. Pilati Pallast; 18. S. Stephans Thor; 19. Der Orthwo Stephans gesteiniget worden; 20. Weg nach Bethlehem; 21. Bach Kidron; 22. Thal Josaphat; 23. Elisae Grab; 24. Pilger Grab.
- ¹⁰ See Laor 1066 describes the later 1741 edition and gives the wrong date of 1730, which Rubin copied.

- ¹¹ After Jeremias Wolff's death his firm was continued as "Wolff's Heirs" (Haeres Jer. Wolffi) by his son-in-law Johann Balthasar Probst (1689-1750). After Probst's death in 1750, his descendants divided the business and published under their own imprints: Johann Friedrich Probst (1721-1781), Georg Balthasar Probst (1732-1801) and Johann Michael Probst. Another part of the Wolff-Probst firm was acquired by the Augsburg publisher Johann Georg Hertel (1700-1775), whose son Georg Leopold Hertel had married a sister of the Probsts.
- 12 The 1741 edition as illustrated in Rubin, page 73 has the wrong date and has the digit 12 at the right bottom margin.
- ¹³ Legend sites: 1. Ölberg, 2. Brun Siloe, 3. Absal. Grab, 4. Burg Sion, 5. Caiphae Haus, 6. S. Simoni, 7. Hanae Haus, 8. Davids Haus, 9. Temp. Salomi, 10. Gülden Psort, 11. Pilger Spital, 12. H. Grab Tempel. The cherub on the right holds up the banner with the following legend: 13. Versallner Pal, 14. U.F. Capelle, 15. S. Annae Haus, 16. Herodis Haus, 17. Pilate Palast., 18. S. Stephane Thor. Und., 19. Der Ort damanilume steirugte, 20. Wegnach Bethli, 21. Bach Kidron, 22. Thal Iosaphat, 23. Elisae Grab, 24. Eilger Grab.
- ¹⁴ The German text is as follows: Eine Stadt im gelobten Lande in Asien, nicht weit von dem Ort, wo vormahls die berühmte Stadt Jerusale gestanden, von welcher Herrlichkeit, so wohl die geistlich – als weltlichen Historien nicht genug zusagen wissen, und die Christus der Welt Heiland durch seine persönliche Gegenwart, selbsten geheiliget hat. Die neue ist aber nach ihrer gäntzlichen Zerstörung sehr klein, indem die Vorige 4. Teutsche Meilen Gr., und der jüdische Könige Residetz gewesen ist, die jezige aber nach der Eroberung so durch die Römer geschehe von Aelioc Adriano wider aufgebauet, aber damahls mit keinen einige Juden besezt / als denen zum Abscheu ein Schwein von Marmor über das Thor gesezt wurde:/ sondern von Christen, die ihren eigenen Bischoff, nachhero Patriarchen daselbst hatten. Sie wurde 615, von Cosroe dem König in Persien eingenomen, und 636. brachte sie Haumar ein Saracenischer Fürst in seine Bottmässigkeit; und obwohl Ao . 1097 die Saracenē von den Christen wider herausgetrieben, und Gotfrid von Bouvillon darinen A o . 1099. zum Könige gekrönt worden, kam Sie doch 1224 gäntzlich in Türckische Hände, u, wird von ihnen noch jezo besessen, dermahlen aber, von Türken, Arabern, Juden, und Christen bewohnt. Man zeigt daselbst das Grab Christi, so die Francisca ner ine haben, und von den Pilgrims starak besuchet wird. Sie gehört unter den Bassa zu Damasco, und wohnet daselbstem Sangiac und Cachi.
- 15 The text describes the rebuilding of Jerusalem by Aelioc Adriano, the Roman Emperor from 117 to 138. The revolt of the Jews of 132, which was led by Bar Kochba and Eleazar, motivated Adriano to build on the ruins of Jerusalem the Roman colony of Aelia Capitolina. The emperor himself went in person to the Roman province to control the uprising, which could not be stopped until 135 after nearly 200,000 Jews died and many others were sold as slaves. King Khushru or Cosroe I was a Persian king from 531 to 579 and fought for territory against the Byzantine Emperor Justinian. In May 614, the Persian army reached the walls of Jerusalem. Later, the Caliph Omar, the House of Umayya, captured Jerusalem. The text describes Gottfried of Bouvillon or Godfrey of Bouillon, who was a French nobleman and one of the leaders of the First Crusade. He played a leading role in siege of Jerusalem in 1099 and was the first ruler of the Kingdom of Jerusalem from 1099 to 1100.
- ¹⁶ See Ariel Tishby, Holy Land in Maps, Jerusalem: The Israel Museum, 1st ed. 2001, p. 38; Rubin 55, 61, Fig. 27; Laor 1131.
- 17 Ezekiel 40-43.
- ¹⁸ 1. Caiphe behausung, 2. Tempel S. Simeonis, 3. Hannas behausung, 4. Davids Pallast, 5. S.Anna behausung, 6. Herodis behausung, 7. Pilati behausung, 8. Ort da Stephanus ge. steinigt worden.

Oliver Cromwell's own Atlas novus (1648-1655)

By Aaron T. Pratt and Carl and Lily Pforzheimer
Curator of Early Books and Manuscripts, Harry Ransom Center, The University of Texas at Austin

The Harry Ransom Center at The University of Texas at Austin is home to a complete copy of Willem and Joan Blaeu's *Atlas novus*, published between 1648 and 1655. Its six volumes remain in their 17th-century velvet bindings, and the maps throughout are expertly hand-colored and gilt. The fifth in the set is particularly notable for being the first atlas dedicated to Scotland. It includes 49 maps of the country and six of Ireland.

By the time the volume was published in 1654, work toward the Scottish portion had been underway for more than 70 years. The first maps were created near the end of the 16th century by Timothy Pont (ca. 1584–ca. 1614). In 1626, Willem Janszoon Blaeu (1571–1638) reached out to Sir John Scot (1585–1670) in an effort to secure Pont's work for a multi-volume atlas he was working on.

After almost two decades of fits and starts, Scot went to Amsterdam in 1645 to ensure progress on the atlas. By that time, he was working with Willem's son, Joan Blaeu (1596–1673). Once the project finally neared completion, Scot helped Blaeu secure a 14-year license from Oliver Cromwell (1599–1658), who had become Lord Protector in 1653. Other privileges were obtained from the States General of the Netherlands and the Holy Roman Empire. Together, they ensured that no would-be competitors could compromise sales.

In 1655, after all parts of the *Atlas novus* had been published, Blaeu sent a set to Scot. In an inscription he added to that set's first volume, Blaeu mentions that he sent another set of six volumes to Cromwell. The Center's copy of the Scotland volume includes an engraved dedication leaf that features Cromwell's arms. It is the only copy of the atlas the special leaf appears in, almost certainly indicating that the set it belongs with is the one Blaeu gave to Cromwell.







Joan Blaeu, ed., *Theatrum orbis terrarum*, sive Atlas novus, Vol. 5 (Amsterdam: Joan Blaeu, 1654). Harry Ransom Center Book Collection, -f- G 1015 B5 1648 Vol. 5.

The Iron Horse Reaches Texas – Charting the Railroad's Arrival via Interactive StoryMap

By Patrick Walsh Research and Outreach Specialist, Texas General Land Office Archives and Records

Texans have long turned to the Texas General Land Office (GLO) for maps and other tools used to display and organize information about the state's rich history. Since 2014, one such GLO initiative is Texas Hidden History (THH), a collaborative project between the GLO's Archives and Records program and its Geospatial Technology Services team. In 2020 the initiative was expanded to use Esri GIS software to produce narrative StoryMaps on Texas history topics that align with GLO collections strengths.

One of the greatest technological advancements in nineteenthcentury Texas was the arrival of the railroad in 1853. The completion of the state's first working stretch of railroad, twenty miles of track connecting Harrisburg to Stafford's Point, signaled the beginning of an era of massive development.

The Iron Horse Reaches Texas: The Buffalo Bayou, Brazos and Colorado Railroad combines historical maps, documents, and imagery with modern GIS technology to tell the story of Texas' first railroad and its transformative effect on the state's infrastructure, economy, and population. This article serves as a companion piece to the StoryMap. Its narrative follows the history of rail development in Texas and its connection to the GLO, while images and captions offer a preview of the innovative GIS features found in the StoryMap. Click the link to view the StoryMap, which includes full high-resolution images and expanded coverage of Texas' first railroad.

Early Visions of Texas Railroads

From the beginning of the Republic era, Texas' leaders expressed interest in creating a railroad network; but they faced repeated setbacks, and their early efforts proved fruitless. The Texas Congress chartered the Texas Railroad, Navigation, and Banking Company in 1836; however, it failed the following year amid the Panic of 1837. That same year, New Orleans cartographer H. Groves included the first unnamed proposed railroad projects near Houston and in northern Texas on his *Map of the Republic of Texas....* Four more unsuccessful charters followed in 1838, 1839, and 1840, each suffering from the familiar refrain of financial hardships and abandoned objectives. Republic-era railroad efforts ultimately resulted in complete failure, and the venture remained dormant into the statehood era.





An 1837 map of the Republic of Texas shows proposed rail lines near Houston and in northern Texas. H. Groves, *Map of the Republic of Texas shewing [sic] its division into Counties and Latest Improvements too*, 1837, Map #476, Map Collection, Archives and Records Program, Texas General Land Office, Austin, TX.

Sydney Sherman and the Buffalo Bayou, Brazos & Colorado (BBB&C)

Sidney Sherman, a hero of the Texas Revolution who led the left flank of the Texian army at the Battle of San Jacinto and is credited with the "Remember the Alamo!" battle cry, spearheaded the railroad's arrival in Texas. As Texas' politics and economy stabilized post-annexation, Sherman planned to begin construction of his railroad at Harrisburg, a thriving natural port city located on the banks of Buffalo Bayou. His vision was to link the port with the fertile cotton plantations watered by the Colorado and Brazos rivers. Sherman hoped his railroad would supplant limited overland options in the region and create a lucrative business in transporting cotton and other goods.

In March 1847, Sherman purchased all the available town lots in Harrisburg from the Harrisburg Town Company. Armed with this investment as a tangible foundation for new company stock, he successfully secured financing from investors in Boston. On February 11, 1850, the Texas Legislature issued a charter to the Buffalo Bayou, Brazos and Colorado Rail-way Company granting

it "the right of locating, constructing, owning and maintaining a Rail-way, commencing at any suitable point on Buffalo Bayou, between Lynchburg and Houston, in the county of Harris, and thence running by such course, and to such point at or near the Brazos River, between the towns of Richmond and Washington exclusive."

Work began on the Buffalo Bayou, Brazos and Colorado Railroad (BBB&C) in the spring of 1851 when John A. Williams, an engineer from Boston, began a survey on the banks of Buffalo Bayou in Harrisburg. In late 1852, the first locomotive engine, named the "General Sherman," arrived in Texas having been purchased second-hand in Boston for \$3,250. At this point, work laying track was in full swing. By August 1853, workers completed twenty miles of track from Harrisburg to Stafford's Point, a small settlement established around a vast plantation owned by William Stafford. Texas now boasted its first working stretch of railroad (and only the second such track west of the Mississippi). An 1854 map of Harrisburg reflects this progress, with the BBB&C tracks cutting across the town's grid.



[left] An 1854 map of Harrisburg shows the BBB&C track projecting southeast from the depot on the Brazos River. Kirby William, *Harrisburg, Texas*, L.H. Bradford and Company, 1854, Map #3044, TGLO. [right] The StoryMap includes an interactive slider featuring an 1893 map of Harris County that shows the BBB&C (now the GH&SA) departing Harrisburg and entering Fort Bend County. F.G. Blau, *Map of Harris County*, August Gast Bank Note and Litho. Company, 1893, Map #3633, TGLO.

From Prospects to Policy: Public Lands to Fund Railroad Construction

As Sherman prepared to begin construction on the BBB&C, the Texas Legislature revived the issue of railroad construction in 1852 and 1853. Taking inspiration from a United States policy passed in 1850 that granted land to the Illinois Central Railroad for constructing its tracks, lawmakers passed "An Act to encourage construction of railroads in Texas by donations of lands" on January 30, 1854.

The Texas General Land Office (GLO) administered the program that authorized sixteen 640-acre sections of land per mile of rail laid, to be issued only after a company completed its first 25 miles. In return, the companies were obliged to pay for the survey of equal tracts of land to be reserved for the state to dispose of at its discretion. These alternating sections often formed checkerboard grids that are clearly visible on GLO county maps. To prohibit the railroad companies from amassing overly large land holdings, the terms of the program required the companies to sell their land within a specified period. The program's innovation came from the fact that it still required companies to raise their own initial capital to begin construction, but it backed their investment by ensuring them a long-term payoff once they sold their granted lands.

The GLO maintains in its Archives the land scrip certificates it issued to railroad companies, including the BBB&C (which eventually received over 887,000 acres), and historical county cadastral maps reflect the large blocks of railroad grants. In total, railroad companies received over 24 million acres for building Texas' earliest rail networks.





[left] Certificate #378 for the Buffalo Bayou, Brazos and Colorado Railroad Company, 3 March 1860, Houston S-000385, Texas Land Grant Records, Archives and Records Program, Texas General Land Office, Austin, TX. [right] An 1880 map of Throckmorton County displays a large block of land grants to the BBB&C. Sam P. Matthews, *Throckmorton County*, 1880, Map #4079, TGLO.

Construction Continues

Reaching Stafford's Point was a milestone, but there was still much more track to be laid. Contemporaneous county maps depict the BBB&C's progress. By December 1855, the railroad extended another twelve miles to the east bank of the Brazos River opposite the town of Richmond, where it crossed the river and continued west. The first river crossing employed inclined planes on each bank of the river connected by a ferry with tracks on it, with winches to pull the trains up the banks.



For the StoryMap, the Geospatial Technology Services team incorporated historical county maps into interactive, georeferenced sliders allowing users to compare mid-nineteenth century maps to modern satellite imagery. This slider shows where the BBB&C passes through Richmond in Fort Bend County. Charles W. Pressler, Fort Bend County, 1865, Map #3550, TGLO.

By the fall of 1859, the track reached Eagle Lake. BBB&C director DeWitt Clinton Harris and an investor named Gamaliel Good had purchased land near the lake prior to the railroad's arrival, intending to establish a town on the site that would serve as a station on the route. A year later, the railroad advanced to Alleyton, about eighty miles from Harrisburg opposite Columbus on the Colorado River. At this point, Alleyton represented the railroad's western terminus, with plans to build onward to Austin. The Civil War halted all construction, however, and builders completed only a few miles of grading from Alleyton to La Grange.



Another slider shows where the BBB&C reaches Alleyton in Colorado County and projects north; local residents later extended the line from Alleyton to Columbus on the opposite side of the Colorado River. Robert Reichel, *Map of Colorado County*, 1864, Map #3423, TGLO.

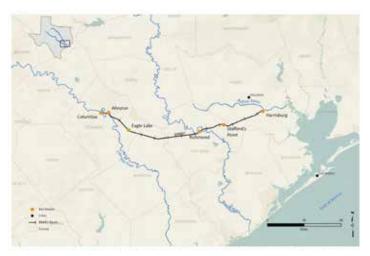
During this lull in construction, the citizens of Columbus seized the opportunity to build a stretch of railroad linking Alleyton with the banks of the Colorado River. They feared that if the railroad went from Alleyton to Austin, Columbus would suffer economically, and they hoped the new line would secure the town's economic future. By 1867, builders completed a bridge over the Colorado River, and Columbus usurped Alleyton as the railroad's western terminus.



[Detail] An 1857 map charts an unnamed railroad from Harrisburg to a point on the San Antonio River. *Cart du Chemin de Fer de Galveston, Houston et Henderson*, 1857, Map #89274, TGLO.

To complement the StoryMap and support the overall Texas Hidden History program, the GLO produced a simplified educational map that traces the BBB&C from Harrisburg to Columbus. Archives and Records staff collaborated with the Geospatial Technology Services team to create a map relaying information critical to the topic while avoiding clutter and other distractions. Here, the viewer can easily identify the railroad's route as it crossed three major waterways – Buffalo Bayou, the Brazos River, and the Colorado River – and subtly rendered county boundaries and names provide geographical context. The educational map is not intended

to replace historical maps, but rather to complement them and help make historical concepts easier to grasp for modern audiences, including students who are unfamiliar with historical cartography.



Kevin Greszler, Carlos Varela, Patrick Walsh, *The Buffalo Bayou, Brazos and Colorado Railroad (BBB&C) 1850-1868*, 2022, Map #97088, TGLO.

A Link in the Transcontinental Railroad

In 1868, the BBB&C's ownership group shook up the railroad industry's future in Texas when they sold their stake in the railroad. The new owners extended the line not to Austin, but rather to San Antonio, and it became known as the Galveston, Harrisburg & San Antonio Railroad. The GH&SA ultimately built onward to El Paso, where it connected with the Southern Pacific as that railroad progressed eastward. This made the original BBB&C line not only the first railroad in Texas, but also a key segment in the nation's transcontinental route from the Pacific Ocean to New Orleans.



[detail] An inset shows the transcontinental Sunset Route, including the original BBB&C. H.S. Crocker & Co., Map of the Southern Pacific Company and connections, 1890, Map #95759, Cobb Digital Map Collection, TGLO.

Railroads Expand Statewide

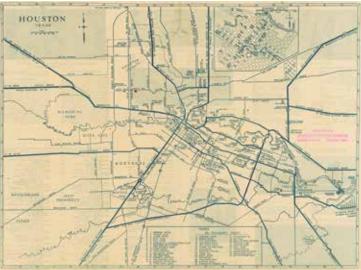
From its humble beginning with the Buffalo Bayou, Brazos and Colorado Railroad, Texas' rail network continued to grow. In the late nineteenth century, expanding railroads combined with the invention of barbed wire and restrictions on moving cattle to bring about the end of the state's cattle drive era. By 1911, Texas had more railroad mileage than any other U.S. state, a distinction it still holds today. This vast network became a crucial part of the state's booming oil and gas industry throughout the twentieth century. In the ensuing years, expansion continued into more isolated areas, including the Rio Grande Valley, South Plains, Panhandle, and West Texas. Over half a century after the establishment of land grant programs that facilitated the growth of Texas' early rail systems, the railroads finally extended into these historically sparsely populated regions where most of the over 24 million acres granted for their development were surveyed.

Houston annexed Harrisburg, the birthplace of Texas' railroads, in 1926. Riding the railroad's momentum, it reached a population

of 292K in 1930 to become the largest city in the state, a title it has never relinquished. Two years later, the total mileage of Texas' rail system reached its peak at 17,078 miles. The second half of the twentieth century marked a dramatic change in American transportation, however. The U.S. became increasingly more reliant on automobiles and the highway system, which capped the railroads' growth. Today, Texas' railroads continue to function as a viable transportation system for several industry and agricultural sectors within the state and nationwide, and their early influence helped facilitate Texas' continued economic growth.

The GLO's Archives and Records and Geospatial Technology Services teams collaborated to produce this interactive StoryMap. It utilizes a modern application and GIS software to present dozens of historical maps, documents, and images in an engaging format for those interested in history and cartography, and it serves as an educational tool for the classroom. True to the GLO's mission, it helps save Texas history for future generations.





[left] The original BBB&C remains a critical link in the Sunset Route in the early twentieth century. Southern Pacific Lines, *Correct Map of Texas*, [1904] #95768, Cobb Digital Map Collection. TGLO. [right] Houston annexed Harrisburg, the birthplace of Texas' railroads, in 1926. *Houston, Texas*, 1935, Map #79321, Texas State Library and Archives Collection, TGLO.



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Texas Map Society Mission

The mission of the organization is: "The Texas Map Society supports and promotes map collecting, cartography, and the study of cartographic history." According to the "Who We Are" section of the website, which is language that came from the previous web page: "The Texas Map Society was organized in November 1996 to foster the study, understanding, preservation, restoration, and collection of historical maps as well as the general history of cartography. Membership only requires an interest in maps of any nature or focus. Members participate in special events and programs. TMS is one of only a few such societies in the United States and the only one in Texas."

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Phone: 817.257.6604

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