Bring the Glory of a Dynasty to Your Students

Habsburg Splendor gathers almost one hundred objects representing nearly five hundred years of Habsburg family collecting. In your classroom, this unprecedented grouping of objects will prove to be invaluable as you consider the objects’ owners, their makers, their subjects, and the powerful dynasty that amassed them. With this resource, our goal is to equip and inspire you to introduce these objects to your students and achieve a wide range of curricular aims.

The Kunsthistorisches Museum, established in Vienna by Emperor Franz Joseph I (1830–1916), has assembled this traveling exhibition, with some of these objects leaving Austria for the very first time. The oldest objects in this exhibition date from the first and second centuries, connecting the Roman Empire of the second millennium to that of the first. In addition to sculpture and painting, the exhibition includes military effects, such as uniforms, weapons, and suits of armor, along with clothing, jewelry, tablewares, religious objects, and even a carriage and sleigh.

Unknown Austrian Artist, *The Princes’ Carriage*, ca. 1750–1755, wood, bronze, glass, iron, velvet, silk, and gold, Kunsthistorisches Museum, Vienna, Austria
The Habsburg rulers represented in the exhibition begin with Frederick III (1415–1493) and span five centuries to Crown Prince Otto (1912–2011). Several groupings of objects highlight specific figures such as Emperor Charles V (1500–1558), Emperor Leopold I (1640–1705), and Queen Maria Theresa (1717–1780). Crucial to this exhibition is Rudolph II (1552–1612), who was a chief patron of the arts and one of the greatest Habsburg collectors in history. As exhibition curator Franz Pichorner notes, “Emperor Rudolph II’s art collection was one of the largest of his time, and he expended enormous sums on enlarging it. With perseverance, dedication, and the help of numerous envoys, he pursued individual works of art until he succeeded in adding them to his collection.” In addition to collecting, Rudolph commissioned original works of art and divided his collection into three sub-collections that were shown only to privileged guests at his Prague residence.

You and your students now have the rare opportunity to be such privileged guests. You can see the armor of emperors and gowns of empresses, the swords of kings, and the carriage of a prince. Paintings, sculpture, and tapestries unparalleled await you. To see and study such objects will bring the past to the present and bridge the royal with the everyday. While the entirety of Habsburg Splendor presents myriad artists, rulers, and centuries, each object carries personal, individual significance, inviting student inquiry in an intimate and up-close way that no book or map could ever equal.

In this resource, we highlight objects from Habsburg Splendor that carry great historical and artistic significance, and yet we hope educators will see their even wider educational scope. These fantastic objects can teach your students about science, reading and writing, and speaking and listening. The collection even addresses mathematics and technology. Many of the images and objects in the exhibition are accessible to the youngest of learners and can also be enlightening to our most advanced students. Please accept our invitation to bring Habsburg Splendor into your classroom to enrich and extend your students’ experience.
Special Imagery You’ll Find in the Exhibition:
Look closely and you’ll find that several symbols recur throughout Habsburg Splendor. One is the double-headed eagle (see below left). The eagle signified the Roman emperor beginning in antiquity and by the sixteenth century was still recognized as the Holy Roman Emperor’s symbol. Now with two heads—one to represent the emperor’s authority through election and the other for that ordained by God through the church—the eagle often appeared in black on a yellow or gold field holding a shield or crest that bears flags or symbols of the territories governed by the emperor at that time. Once the empire dissolved, the Habsburgs retained the double-headed eagle in their family crest.

Also look for the collar of the Order of the Golden Fleece (see below right) throughout the exhibition: a wide golden chain with a golden lamb pendant. Established in the fifteenth century in Burgundy and brought to the Habsburgs with Mary of Burgundy’s marriage to Maximilian I, the knightly Order of the Golden Fleece had the emperor at its head and allowed only fifty members of noble birth and Catholic christening, hand-selected by the emperor himself. These Knights of the Order were charged with protecting Christendom in chivalrous loyalty to the emperor. While many of its rites remain secret, the order’s fleece is likely a reference both to Jason of the Argonauts from antiquity as well as Gideon’s fleece from the Book of Judges. Upon the dissolution of the Empire, the Order eventually split into Spanish and Austrian branches, which continue today.
Maximilian I

Under Maximilian I’s reign, the Austrian Empire grew exponentially. Through inheritance, his own marriage to Mary of Burgundy, and the marriages of his children and grandchildren, Maximilian I saw the Habsburg footprint extend to Tyrol, Burgundy, Bohemia, Hungary, Spain, and beyond. Some of the earliest works in the Kunsthistorisches collection date from Maximilian I’s collection.

This portrait of Maximilian I is one of several versions that remain of an older original painted by German artist Bernhard Strigel. It bears many hallmarks of Renaissance portraiture: the figure in profile, the parapet in the fore, the tapestry in the background, and the open space. This space could represent an open view as through a window or might have been left open to be filled later with an inscription about the sitter, a practice common at the time. Strigel also painted Maximilian with his family.

Many details included in the painting point to Maximilian’s royalty. Note the scepter, sword, and crown. This particular crown is that of a king, not an emperor, as Maximilian I did not assume that title until 1508. Also note the chain around his neck, which indicates the Order of the Golden Fleece. While Maximilian was leader of this knightly and chivalrous order, the golden suit of armor in this portrait is more likely for tournaments than for battle, as his love of the joust led to his title “the last knight.” Note the lance rest on the right side of his breastplate.
Like those of his Habsburg successors, many of Maximilian I’s commissions and acquisitions were strategic portrayals of his monarchy. If his shining armor and festive tournaments were one method of glorifying Maximilian’s reign, artwork was another. Carved by sculptor Hans Daucher, this limestone relief portrays the emperor as St. George, the dragon slayer. Maximilian was fond of St. George, and many other works depict him in the same way—armor-clad astride a horse above a slain dragon—symbolically illustrating good defeating evil.

The detail and power of the image are remarkable for the sculpture’s relatively small size—not even a foot high. Maximilian’s posture, his facial expression, the horse’s confident trot are not lost in the medium. Note Maximilian’s prominent lower lip, also somewhat evident in the portrait above. This is in part due to a lower jaw malformation common among the Habsburg generations and caused Maximilian to have speech problems as a young child. This speech difficulty greatly concerned Maximilian’s father and led him to fear that his son might not be able to lead, that he might be seen as feeble-minded. History has proven those fears to be unfounded, as Maximilian I’s uniting power ushered in almost six centuries of Habsburg rule over Europe.

Introduce Maximilian I across the curriculum via these artworks. Use the ideas below as a jumping-off point for teaching and learning in your classroom:

**English/Language Arts or French:**
- Read a chanson de geste to introduce the genre. How do Maximilian’s objects illustrate it? How do they contrast? Titles to consider: La Chanson de Roland or Aïquin. What do Maximilian and Charlemagne have in common? How do they differ?
English/Language Arts or German:
• Use these works alongside the reading of a courtly epic. **Tristan and Isolde (von Strassburg)** would have been well known in Maximilian’s day and thrived in German culture through **Wagner**. These works provide solid context for **Le Morte d’Arthur** or **Gerusalemme liberata**. Consider comparing and contrasting elements from one or more of these poems.

Visual Arts:
• Let Hans Daucher’s work launch your exploration of relief sculpture. Read this work first, using a technique such as **Think/Puzzle/Explore**. Next, investigate what makes relief unique. What challenges does it pose for the artist? Your discussion can lead to brainstorming methods and materials for creating one. Might an artist carve a relief into wood or stone? Or build one from modeling clay or papier mâché? In your classroom, consider hand building your sculpture in clay first and then creating a mold from which you can cast it in plaster, as in [this lesson plan](#).

![Lorenz Helmschmid](German, ca. 1445–1516), *Composed Armor for Emperor Maximilian I*, 1492, iron, brass, and leather, Kunsthistorisches Museum, Vienna, Austria

**The Knightly Tournament**
Knightly tournaments date as far back as the eleventh century, when mock battles served as combat practice. By 1500, these exhibitions of prowess accompanied royal occasions such as coronations and weddings. Festivities often followed a theme and included four sporting events. First was the tournament proper, a crowded, chaotic fight in which teams of knights fought to knock opponents from their horses and destroy the crests of their helmets. Next were two types of jousts. The Rennen, or joust of war, was fought with pointed lances, and the Stechen, or joust of peace, was conducted with blunt lances. The fourth contest was foot combat with varied weapons. While courtlier than tournaments of the past, fifteenth- and sixteenth-century tournaments remained dangerous, and serious injury was common. By the sixteenth century, elaborate banquets, theatrical performances, and hunts accompanied the tournament, which spanned several days or even weeks.
Maximilian I was one of the greatest patrons and proponents of the tournament. On display in this exhibition is his Königs-Garnitur (king’s complete set of armor and accessories). While many of the seventy-two exchangeable pieces in the set have been lost over time, all pieces of this assembly in *Habsburg Splendor* (with the exception of the breastplate) are original. Note the brass trim and lines along the edges of the pieces and lack of engraving or ornamentation on the plates themselves. This sleekness shows the up-to-date nature of the suit. That this armor would be of the latest fashion is not surprising as it was made by Lorenz Helmschmid, one of the greatest masters of armor-making. The Helmschmid family produced armor for the Habsburgs for several generations, including this jousting armor for Maximilian I’s son Philip I (Charles V’s father) when he was just a boy.

Compare it to Archduke Sigmund’s armor, produced by another notable armorer, Kaspar Rieder. Both are jousting armors. The small shields at chest level protected
against the opponent’s lance, which could range from nine to sixteen feet in length. The lance is braced against a lance rest on the front of the breastplate and balanced on a locking hook on the knight’s back plate. The cone-shaped shield around the lance, which protects the knight’s right arm, is called a vamplate. The helmet’s shape is specific to the joust, as well. The neckpiece protrudes farther than the headpiece, slanting smoothly and leading the opponent’s lance to glance upward without entering the helmet. This clever design impeded the knight’s range of vision, however. He would tilt his head downward just at the precise moment of aiming and then immediately upward to protect himself.

All three suits of armor are made of iron, brass, and leather and, while heavy, would have permitted their wearers to walk and move surprisingly freely.

These suits of armor can introduce the tournament to your students in a variety of ways across the curriculum. Use the ideas below to spark dialogue in your classroom:

Social Studies:
• Via Socratic Seminar, consider the idea of a knightly tournament. The discussion’s initial question: What purposes did a tournament serve? And the culminating question: Which “tournaments” do we have now to serve those same purposes? For preparation, students could read “They Call It Royal for Good Reason,” by Stefan Krause, in the Habsburg Splendor exhibition catalogue (available in the High Museum Shop).

• Create a timeline of armor. Beginning with Maximilian I, work backward and forward through time, researching how armor has evolved. Allow students to work digitally or on paper/posterboard to illustrate various changes in military protective gear. Note how changes in armor coincide with changes in weapons technology.

Physical Science or Chemistry:
• Study these suits of armor closely alongside the 2012 article “A Technical Note on the Armor and Equipment for Jousting,” published in the Spanish journal Gladius. In this article, scientists have published their findings on the metallurgy of many suits of armor from the period, including examples of the Helmschmids’ work and this specific suit by Rieder. Microscopic analysis of the material’s thicknesses, carbon content, and other factors reveal even more about the suits of armor and their makers as scientists.
English/Language Arts:
• Encourage students to investigate the etymology of the word *armor* and identify other words that share the same root. Ask questions such as: How do these words share meanings with *armor* and with each other? Which meanings are literal and which are figurative? How does knowing the etymology help you better understand these words and their meanings?

• Employ an artful thinking routine such as Step Inside for a close reading of one or more of the suits of armor. Allow that close reading to introduce “The Knight’s Tale” and possibly a compare/contrast discussion with its antithesis, “The Miller’s Tale.” If the Knight empathizes with Palamon and Arcite, and he wears such armor, what might the miller wear? How are Nicholas and Absalom different from the knight’s characters? What do these stories teach us about chivalry? Have students work in groups to respond to these questions.
Charles V

Grandson of Maximilian I, Charles V ruled the Holy Roman Empire from 1519 to his resignation in 1556. By this time, the empire was so vast that it was said that the sun never set over it. Even surpassing that of his grandfather, the empire under Charles V included the majority of the existing territories plus Naples, Sicily, Sardinia, and territories in the Americas as well as a unified Spain. His mother was Joanna of Castile, the daughter of Ferdinand of Aragon and Isabella of Castile. While Charles V’s ancestors on his father’s side were Austrian Habsburgs, his mother’s parents were the rulers of Spain, Ferdinand and Isabella, who financed Columbus’s voyage to America. Charles’s parents’ marriage and his birth strategically brought all of Spain under Habsburg rule. A pivotal figure in Western history, Charles ruled over Spanish colonization of the New World as well as the Catholic response to the Protestant Reformation and the Empire’s halting the Ottoman advance into Europe.

Coin designer and sculptor Leone Leoni created this bronze bust in the mid-sixteenth century, depicting Charles at the height of his power. The breastplate reproduces exactly the one Charles wore during the Battle of Mühlberg in 1547. This was a very important victory for Charles as the Catholic emperor during the Protestant Reformation because it secured the German territories as Catholic and allied to Rome under his authority, at least for a time. Also note the collar of the Order of the Golden Fleece that hangs around his neck and the sash across his chest indicating him to be a military commander.

Now examine the fantastic pediment that supports the bust. An eagle, along with the figures of Mars and Bellona, lifts Charles V into position. The bust’s foundation imitates those of ancient emperors and conveys a bold message about Charles V’s power and authority.
Charles V—raised near Brussels, a major European tapestry center—greatly appreciated the art of tapestry. Woven of wool, silk, and metal-wrapped threads, this tapestry was one of a series of four that Charles most likely commissioned. Curators have identified the weaver’s mark of Willem de Pannemaker, one of the most popular weavers. Among the tangled leaves and vines (or verdure, as this background style is known) are two double-headed eagles, the Habsburg emblem. Each eagle bears a coat of arms with flags representing the empire’s territories. The top left quarter of the shield (or escutcheon) contains the flag of Castile and Leon; the top right depicts that of Aragon and Sicily. The bottom left represents Austria and Old Burgundy and the bottom right New Burgundy and Brabant. In the center lies a smaller, inset shield (an inescutcheon) depicting Flanders and Tyrol. Atop sits a pomegranate (called the apple of Grenada), a common symbol for the Spanish city of Granada.

Allow the bust of Charles V and the tapestry to introduce Charles V to your students in a variety of ways across the curriculum. Use the ideas below as a jumping-off point for discussion in your classroom:

• Integrate this bust into your study of Roman mythology. What can your students learn about the figures Mars and Bellona? Why might Charles V have wanted their support? Make similar connections with other people in the news today: Who might Apollo uphold? Or Venus? Students can explain their pairings and demonstrate mastery with expository paragraphs, short speeches, or multimedia presentations.
Social Studies:
• Use Coat of Arms to drive serious map work. So many territories are indicated on the escutcheon that students might easily use it as a guide to demarcate Charles V’s empire on a map. They will need to consult several sources to determine the location of such areas as Tyrol and Brabant. Compare to more recent political maps or maps marking cultural, linguistic, or religious affiliations. How do the boundaries of the empire compare to modern-day boundaries? Boundaries of the nineteenth and twentieth centuries? How do we see the Habsburgs’ influence perpetuate or diminish over the centuries?

Visual Arts:
• Let the Coat of Arms tapestry spark discussion of decorative art. This tapestry was part of a set that, while lavish and grand, served a function. Large-scale tapestries such as this could be hung in open, drafty areas of a palace to keep it warm while simultaneously declaring the emperor’s wealth, power, and fine taste. Brainstorm parallel objects today. What are some functional items that people use for a purpose but that also show or proclaim something about them? Possible examples include officially licensed sports merchandise, presidential china, NASCAR uniforms, or even graphic t-shirts.

Biology/Botany:
• Weavers of this time period paid great attention to accuracy in their imagery. The Coat of Arms tapestry’s rich background provides ample opportunity for leaf and plant identification. How many different species can your students find? Have them analyze the group: Would such plants grow together in the same place? Why or why not? Students can sketch verdure patterns representing different ecosystems or orders. What would a verdure of rainforest plants look like? Desert plants? See if your students can make a verdure pattern interweaving only plants native to Georgia.
Fire

Earth, wind, water, and fire—the universe’s most basic elements. Painted by Giuseppe Arcimboldo, Fire is one of four portraits in a cycle depicting Emperor Maximilian II in elemental terms. (Maximilian II is Maximilian I’s great grandson, Charles V’s nephew, and Rudolph II’s father.) As in Fire, each of the paintings assembles various objects associated with the element to compose the head. Look closely: how many different fire-related items can you find? Also note the collar and double-headed eagle hanging below; these undeniably indicate this to be a portrait of Maximilian, for whom this cycle was painted. The Kunsthistorisches also holds the companion painting Water. A private collector holds Earth. Air has been lost.

While Fire and Arcimboldo’s other composite heads stand out quite distinctly from other works of their time, we can find in them aspects of Mannerism, which explored the natural world in a stylized, sophisticated way. Sandwiched between the Renaissance and Baroque periods, we see this painting as well as other Mannerist works connecting the natural and the spiritual, the literal and the symbolic.
Allow this work to introduce Maximilian II and his portraitist Arcimboldo to your students in a variety of ways across the curriculum. Use the below ideas as a jumping-off point for teaching and learning in your classroom:

**Visual Arts:**
- Compare *Fire* to [Vik Muniz’s composite self-portrait](https://www.vikmuniz.org). What do they have in common? What delineates them? Choose a subject and medium to make a composite portrait. How will you combine the smaller objects into one figure? How will they represent your subject? **Hear from Muniz about his creative process.** Follow up with a visit to the upcoming exhibition of Muniz’s work that will be at the High Museum of Art in spring 2016.

- Investigate the terms *portrait* and *still life* in relation to Arcimboldo. What do these art forms have in common? How do they differ? What happens when they overlap? Try combining other types of composition, such as landscape and figure painting, or still life and seascape.

**Social Studies:**
- If Maximilian represents sixteenth-century Europe, who would represent Classical Rome? The Golden Age of India? Byzantine Russia? Seventeenth-century China? Which objects would compose their portraits?

- Compare Maximilian and the fire-making technology available in the 1500s to a leader from another time. How would a fire portrait differ if it were composed for Alexander the Great? Napoleon? Lincoln? Hirohito? Khrushchev? How do their firepower technologies differ? How do these differences affect their respective cultures? Their military actions?

**Language Arts:**
- In the sixteenth century, many believed that the four elements accompanied the four humors of the body and contributed to a person’s temperament. References to the humors abound in Shakespeare’s works. An investigation of *Fire* and other images in the cycle will enhance your Shakespearean study. Consider Brutus’s address to Cassius in Act IV of *Julius Caesar*: “Go show your slaves how choleric you are…. Must I stand and crouch / Under your testy humour?” Rosalind addresses Jaques in Act IV of *As You Like It*: “They say you are a melancholy fellow.” Less direct references to hot and cold or wet and dry, considered in the elemental context, will illuminate your students’ understanding of a Shakespearean text in its time.

- Stylistically, the [metaphysical poets](https://en.wikipedia.org/wiki/English_metaphysical_poets) share much in common with Mannerist artists. Both examine and exaggerate the natural, merging and stretching it into the supernatural. If John Donne’s “The Flea” or “The Sun Rising” were a composite painting in Arcimboldo’s style, what might it look like?
Curiosity
Madeleine Gonzalez is likely to be as interesting to your students as she was to the European royalty of the sixteenth century. Along with others depicting her family members, this portrait comes to us from the Chamber of Art and Curiosities at Ambras Castle, the palace in Innsbruck built by Ferdinand II, now part of the Kunsthistorisches Museum. In their day, Madeleine and her family attracted much attention as “hairy people,” who had the genetic condition congenital hypertrichosis universalis, also known as Ambras syndrome or werewolf syndrome. Her father, Pedro, and some of her siblings also had the condition, whereas her mother and other siblings did not. Madeleine’s regal dress and jewelry indicate her beloved status among the European courts, while the cave from which she emerges suggests a more primitive view of the condition.

The unknown artist likely did not paint Madeleine in person but from depictions of her face only, as her hands have been rendered inaccurately. They were covered in hair as well. Her family originated from the Canary Islands, whose terrain is depicted in the cavernous background. Madeleine wed in 1593, and her husband is believed to have been Giovan Maria Avinato, master of the ducal dogs. While the “hairy people” were found to be fascinating among the wealthy and learned, it is most likely that Madeleine’s marriage was arranged, as she and people like her weren’t often considered equals but more as curiosities or even animal-like. An exhibition curator has noted that her arranged marriage to a dog handler is a “curious coincidence.”
Allow this painting to introduce Madeleine to your students in a variety of ways across the curriculum. Use the below ideas as a jumping-off point for teaching and learning in your classroom:

**Visual Arts:**
- Distinctive Self-Portraits: While very few of us have werewolf syndrome, all of us have something about us that sets us apart. With a looking routine such as Claim/Support/Question, guide a close reading of Madeleine’s portrait and transition into open discussion of self-awareness and self-image. Encourage students to identify one aspect of themselves that they feel sets them apart from others. Via photography or mixed-media collage, encourage students to create self-portraits that highlight this aspect, literally or figuratively.

**Biology:**
- Let Madeleine’s family introduce genetics to your students. We now know that congenital hypertrichosis universalis is a genetic condition. Much less was understood about genetics in the 1500s, yet part of the curiosity that Madeleine and her family held was a growing interest in how traits are inherited. As a case in point, one of the Gonzalez family portraits in Ambras Castle is of Madeleine’s mother, who did not have the condition. Also interesting to note is the Habsburgs’ own genetic issue at the time. Not yet known in the 1500s but soon to be discovered was another, more widespread, genetic condition affecting the Habsburgs as well as other European royal families.

**English/Language Arts:**
- A common theme for literary study is the “outsider.” Madeleine’s portrait and story serve as a beautiful introduction to such a unit. For older students, pair her portrait with a clip from or trailer for the 1932 film Freaks. Also cogent to discussion is the true story of Joseph Merrick as told for the stage and screen. Younger students might more readily connect with the films Mask or Man Without a Face. Literary titles that explore the outsider theme include Freaks Like Us, “The Metamorphosis,” The Scarlet Letter, The Bluest Eye, and The Merchant of Venice. Such a unit could culminate in performances, multimedia presentations, or personal narratives on the theme citing various artworks and texts.
Drawing Perspective

Invented and created by mathematician, astronomer, and clockmaker Jost Bürgi, this device aids its user in creating exact perspectival representations of far-away objects and spaces. Note the bar atop the instrument that forms the diameter of the semi-circle. An artist or astronomer could place his eye at one end of this bar and focus on an object at the other end. Then with that eye, he traces along the outline of the object, while the stylus below simultaneously marks the movement on a plotting board, creating an accurate depiction in realistic, three-dimensional perspective. Composed of copper alloy and partially plated in gold, this device entered Emperor Rudolph II’s Kunstkammer inventory as “Jobst Bürgis perspective device mounted on a small wooden chest,” under the heading “astronomical and geometric instruments” (Runtscheiner et al., 128). While we no longer have the original wooden chest, this—the mechanical portion of the device—has survived over 400 years. The science behind it lives on as well, as the device works similarly to a theodolite, the tool used by surveyors even now.

Rudolph, quite likely the most significant of Habsburg collectors, “went to great lengths to bring to his court not only outstanding artists but also scientists and scholars from around Europe” (Runtscheiner et al., 128). Sometimes called the “Swiss Archimedes,” Bürgi is one of two men who simultaneously invented the algorithm.

At the time this device was made, Bürgi was not yet employed by Rudolph II. He worked for the Landgraf of Hesse-Kassel as his watchmaker and later as astronomer and official mathematician in his observatory. An accomplished astronomer and scientist himself, the Landgraf invested a great amount of money in the observatory and its staff, enabling them to research, learn, and invent. It was during this time at Kassel that Bürgi built the first clock to have a minute hand and also measure seconds. He also built an astronomical clock following his Copernican understanding of celestial movement. Bürgi traveled to Prague more than once and met with Tycho Brahe (Rudolph’s imperial mathematician) and Johannes Kepler, his assistant. Upon Brahe’s death and Kepler’s promotion, Bürgi moved to Prague to serve the emperor. By that point, he had already constructed a mechanical globe for Rudolph as well as this device.

Allow this work to introduce technology of the time to your students in a variety of ways across the curriculum. Use the below ideas as a jumping-off point for teaching and learning in your classroom:

**Advanced Algebra:**
- Conduct a discovery lesson. Without any introduction, present your students with Bürgi’s logarithm table. Allow students to work in small groups and investigate the table’s meaning. A looking strategy such as See/Think/Wonder or Parts/Purposes/Complexities might be helpful. If students get stuck, ask prompting questions such as Which patterns do you see? Or What might the colors mean? Or What kinds of relationships can you find? Follow up the investigation with a mini lesson on logarithm and then an investigation of this device. Where is the logarithm in it?

**Visual Arts:**
- Allow your students to investigate this device from a designer’s standpoint. Prompt them to analyze its appearance. Looking: Ten Times Two will be useful as well as Parts/Purposes/Complexities. Guide discussion toward a delineation between the functional and the ornamental aspects of the device. Compare to an invention of today; look at a cell phone or a toothbrush or a car. Which aspects of its design are functional, and which are ornamental? What stylistic design choices do your students find personally appealing? Or distasteful? The lesson could culminate in journal sketches of new designs—new objects that appeal to your students’ own individual styles—and sculptures of them.
- Note where this perspective drawing device appears in the history of perspective in art. Compare medieval, Early Renaissance, and High Renaissance examples of perspective. Allow your students to explore how science, philosophy, and art are moving in parallel as we enter the seventeenth century.
Social Studies and/or Physical Science:

• This device and Bürgi’s other inventions were built in the midst of Rome’s Counter-Reformation efforts. Place this groundbreaking science in its political and religious context. Tycho Brahe had his own Tychonic theory of planetary movement. Kepler’s laws of planetary motion clearly place the sun at the center of the solar system. Bürgi had held the Copernican heliocentric view since his time in the Kassel observatory. Notable is Rudolph II’s investment in these three Protestant scientists and mathematicians who paid little heed to the dictates of Rome and the Catholic Church. Via Socratic Seminar, allow your students to explore such open-ended questions as: What would the implications for science have been if Rudolph II had been more like his cousin Ferdinand II? Did Brahe’s age affect his science? What were Martin Luther’s contributions to astronomy? Did the Holy Roman Empire help or hinder scientific advancement around 1600?

A Coronation

In this biblical painting by Caravaggio, we see Christ before crucifixion as the crown of thorns is crushed upon his head. None of the figures’ faces is fully visible, yet a stark diagonal shaft of light illuminates Christ’s neck and shoulder, drawing the viewer’s eye toward the composition’s central figure. While we see vigor and exertion in the background figures’ arms, the armored figure in the fore left, possibly the officer presiding over the scene, has a more ambiguous presence. His posture indicates neither enthusiasm nor intensity; he sits in the shadow somewhat bent, leaning on the ledge, his back to the viewer. Christ’s head is bowed, his torso bent in resignation. The red cloak stands apart from the painting’s warm earth and skin tones, as do the droplets of blood on his forehead.

One of the best preserved works by the Baroque master Caravaggio, The Crowning with Thorns entered the Habsburg collection in 1809, nearly two hundred years after its completion. Close scientific examination shows scratches and markings deep within the painting, indicative of Caravaggio’s method of sketching directly into the wet under-layer of paint on the canvas in lieu of creating detailed paper sketches (Runtscheiner et al., 152).
Allow this work to introduce Caravaggio to your students in a variety of ways across the curriculum. Use the below ideas as a jumping-off point for teaching and learning in your classroom.

**Visual Arts:**
- Allow this painting to introduce the term “Baroque.” Tell your students that this painting was a prime example of a new style and then use a looking strategy such as Think/Puzzle/Explore to investigate the painting and discover characteristics of the style. Allow additional Baroque examples such as *Christ Embracing St. Bernard* or *St. Simon* to help your students build their definitions.

- Investigate *chiaroscuro* and *tenebrism*. After a close reading of this painting and its stark illumination, encourage your students to explore light and shadow in a dramatic way. Bring reading lamps into the art room to illuminate still-life compositions. Go into your school’s theater and experiment with spotlights. Encourage multiple sketches of the same subject lit by different sources. This light study could culminate in works in charcoal, pastel, or acrylic.

- Caravaggio depicts six different hands in this painting. Four are clenched; one supports a leaning weight, while the last is loosening its grip. Study them closely and let class discussion follow: What kinds of meaning might they carry, literally and figuratively? Which are instruments of creation? Of destruction? Encourage students to study these hands along with their own in various poses. Ultimately, students will depict their own hands in a drawing lesson. Try blind contour drawing, rough sketches, or formal contour drawings in charcoal or pen and ink. If your literal/figurative discussion was particularly rich, consider allowing the concepts that arose to inspire fantastic “handscapes.”

**In Visual Arts and/or Physical Science:**
- Turn your classroom into a *camera obscura*. How does it work? Why does it work? Can you manipulate the image with lenses or mirrors? How? Form hypotheses and test them out. Some have theorized that Caravaggio’s work was so realistic because he used one. Try it. Mount a paper or canvas on the wall and sketch your camera obscura projects. Reflect on the process in sketchbooks or journals.

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In Social Studies:

• Introduce the term “anachronism.” Task students with finding the historical anachronism in this painting and then let them explore the “why.” Why might Caravaggio and other Baroque masters have incorporated such inaccurate clothing and armor so freely? Notice that the figure on the left is wearing seventeenth-century clothes and armor. The feathered hat and billowy blouse are not representative of the time period. Does it matter? Why or why not? Small group work or class discussion might culminate in journal writing, entries on a timeline, or a digital image/collage that creates other anachronisms.

• The Habsburgs were quite familiar with crowns. Can your students imagine what this painting might have meant to Emperor Franz II when it was acquired for the imperial gallery in 1809? Or from students’ own perspectives, how many figurative or symbolic comparisons can they make between details in this painting and the status of the Habsburgs at that time? Valuable research resources are available at habsburger.net and in the Habsburg Splendor catalogue essay “The Habsburgs: Empire and Art,” by Monica Kurzel-Runtscheiner. The catalogue is available for purchase in the High Museum Shop.
Imperial Sleigh

This sleigh of an emperor—or emperor-to-be—is intricately carved, covered in gold, and upholstered in velvet. On February 7, 1765, Roman King Joseph II, heir to the imperial throne, drove this sleigh in an elaborate public ride to celebrate his wedding to Maria Josepha of Bavaria. A favorite event of his mother’s, Empress Maria Theresa, such parades (or carousels) were grand and ceremonial and followed a strict code of conduct as to who rode how and where, according to royalty and rank. In warmer months, carriages were the vehicles of such processions, while sleighs carried the rulers and their entourages over the snow in winter. Harkening back to antiquity and the triumphal processions following military victories, these eighteenth-century parades were often held for courtly, ceremonial celebrations such as coronations and weddings. The rides often lasted many hours and displayed the grandeur of the Habsburgs for the crowds who gathered to watch them pass.

Attributed to sculptor Balthasar Moll, this particular sleigh displays the “magnificent culmination” of Baroque racing sleighs made exclusively for the Vienna Habsburg court (Runtscheiner et al., 220). The ornate, curvy shells, scrolls, and vines (called rocailles) are hand carved from wood and covered in gold. They completely consume and disguise the skids and supports for the shell-shaped passenger’s seat, giving the appearance that

the box is floating above the sleigh’s frame. At the rear, the velvet-covered platform is for the driver. Look closely and you can see the driver’s foot resting on the skid below it. Moll’s best-known works include nearly twenty highly intricate and detailed sarcophagi (the vehicles that have carried many Habsburgs into the afterlife), including those of Maria Theresa and Franz Stephan and Karl IV in the Imperial Crypt, the Habsburgs’ burial site in Vienna since 1617.

Along with the sleigh, an elaborate harness was made for Joseph II’s wedding ride. Over time, the harness’s original red velvet became brittle, and around 1814 the embroidery, gold braiding, and bells were removed and reworked into the new green harness we see here. In fact, there was enough ornamentation on the original to cover two harnesses, which adorned the horses that pulled the imperial sleighs for the great sleigh ride that marked the Congress of Vienna in 1815, a significant event during Franz II’s reign.

The harness and sleigh can spark a variety of lessons across the curriculum. Use the below ideas as a jumping-off point for teaching and learning in your classroom:

**Physical Science:**

- Sleigh bells ring—are you listening? The sleigh bell is a practical invention that passersby of the oncoming sleigh as it glides silently over the snow. The bells on this harness are golden and quite large, yet they ring in the same way as today’s jingle bells that you can find in a craft store. Conduct an experiment to determine how loud this harness might have been. Find bells that are approximately one inch in diameter (similar in size to these). Prompt students to measure a single bell’s volume with a sound level meter and then the volume of multiple bells. (If your school does not have sound meters, several smartphone apps that measure sound are available.) Think STEAM. Set students free in their small groups to design tests and formulas to determine how loud in decibels this harness of 350 bells would have been. Groups can present and compare their findings, refining their methodologies and applying all of their twenty-first-century thinking skills. If you have a large enough indoor space or access to the school’s track, encourage students to calculate the Doppler effect on the harness. If the horse pulls the sleigh at a healthy trot, around 10 mph, how close would it be before you could hear it? How far away could it go and still be audible?
Visual Arts:
• Consider the sleigh in its time and design an equivalent for today. If Maria Theresa enjoyed the ornate Baroque design, what would you like? Task students with designing their own contemporary transportation. Will it be showy and attract attention like the sleigh? Or will it be strictly utilitarian? What will power it? Will it be large or small? How many people will it carry? Journal entries and sketches can grow into prototypes. Encourage written artists’ statements to explain design choices.

In Social Studies:
• A close reading of the harness and sleigh can prompt rich discussion of the importance of pomp and parade in history. What other examples can your students think of? Compare and contrast the imperial sleigh rides with royal wedding processions, papal processions, military displays, victory parades, and even championship parades. What purposes do these processions serve? What do they accomplish? Why do leaders and groups stage them? To launch discussion, students should read “The Throne on Wheels,” by Monica Kurzel-Runtscheiner, in the Habsburg Splendor catalogue, available for purchase in the High Museum Shop.

• This sleigh rode at two significant events in European history. Research Joseph II’s wedding as well as the Congress of Vienna. How have these two events (and possibly this sleigh) shaped history? If this sleigh could talk, what could it teach us?
Maria Theresa

In Andreas Møller’s portrait, we see a young Maria Theresa, daughter of Emperor Charles VI, the only woman in the line of Habsburg succession. In the portrait, her hair is pulled back, revealing her pierced ears, while a few curls cascade to her iridescent blue gown adorned with golden embroidery and pearls. She holds her skirt in her left hand and a flower in her right, behind which the archducal hat rests upon a velvet cushion.

As Maria Theresa had no brothers, her father issued in 1713 the Pragmatic Sanction, which declared that daughters could carry on the dynasty if there were no male heirs. Before Charles VI’s death, most of Europe seemed to accept his decree, and Maria Theresa was next in the line for the throne.

Upon her father’s death, resistance to Maria Theresa’s succession arose, and what has become known as the War of Austrian Succession ensued. By 1745 her succession was secure, yet Maria Theresa was never crowned empress. Her husband became Emperor Franz Stephan, yet most consider Maria Theresa to have been the true head of the empire. During her four-decade reign, she mothered sixteen children (one of whom was Marie Antoinette) and brought about vast economic, educational, military, political, and labor reforms that strengthened both the populace and her power, making her one of the most extraordinary European rulers of the eighteenth century.

Maria Theresa stood fast, never ceding power to her husband or son. She was an absolute monarch. More than many of her male predecessors, she effected great change across her lands, promoting commerce; reorganizing the military; and instituting financial, bureaucratic, and educational reform.
Schönbrunn Palace remains a substantial reminder of Maria Theresa’s reign. Depicted here in Bernardo Bellotto’s painting, the palace became the Habsburgs’ summer residence following her complete refurbishment of it in the mid-1700s. Schönbrunn served as the site of important state events and carousels, and Maria Theresa opened the surrounding gardens to the public. Maria Theresa commissioned thirteen paintings of the palace, but this is the only one that depicts a historic event: the empress receiving news of victory over Frederick II of Prussia at the Battle of Kunersdorf in 1759. Look closely and you can find her in the painting, on the balcony in the pavilion to the rear left as Count Joseph Kinsky crosses the courtyard to bring the news. Schönbrunn remained a Habsburg residence for over a century.

The portrait and palace can introduce Maria Theresa to your students. Lesson ideas below can spark teaching and learning across the curriculum.

Social Studies:
• Via Venn Diagram, compare and contrast Maria Theresa one of her contemporaries, Catherine the Great. What do these two powerful women have in common as leaders or personally? How do they differ? Students can demonstrate understanding through classroom discussion or short essays.
• Allow Maria Theresa to begin your study of women as political leaders throughout history. Plot them on a timeline from ancient times to the present. Are there any groupings by century or by continent? By race or faith? In their leadership styles, are there similarities in types of major decisions or issues of importance? Encourage your students to find commonalities among leaders or trends in their types of leadership. Synthesize the learning with a prediction: who, when, or where will the next female world leader be?

• Schönbrunn is a palace suitable for an empress (or emperors to come). It was and has remained a source of Austrian pride. Compare it to other nations’ leaders’ homes, such as the White House, Buckingham Palace, or the Élysée Palace. How does the shape or form of the building reflect its respective nation? Allow groups of students to present different residences to the class.

**Visual Arts:**
• Bernardo Bellotto has depicted the palace from the cour d’honneur (great courtyard) in detailed perspective. Study it to learn about foreshortening and one- and two-point perspective. Where has Bellotto foreshortened? Has he used one- or two-point perspective? Where? After studying the lines in the image, students will create their own cityscapes. Ask students to consider their vantage points when looking at the city. What would they be able to see?
Centerpiece for Sorbets
As a testament to the Habsburg family’s allegiance and the opulence of their reign stands the *Table Center Piece for Sorbet*. Its six curved arms display six cameos—two men and four women—most likely depicting the emperor and his wife, their three daughters, and Maria Theresa’s husband, Franz Stephan. We know from documentation in the Kunsthistorisches that this centerpiece for serving sorbet was owned by Maria Theresa’s mother, Elisabeth Christine of Braunschweig-Wolfenbüttel (Runtscheiner et al., 212). The cameos are carved into the shells of bonnet snails, while the six dishes and their ornate stand are rimmed in gold. Because it depicts both Charles VI and Franz Stephan, it must have been produced sometime between the latter’s marriage in 1736 and the former’s death in 1740.

Visual Arts:
• Investigate the cameo as an art form. These usually small, monochromatic reliefs are ancient in origin as we can see in other works in this exhibition, such as *Bust of Emperor Claudius* or *Bust of Emperor Numerianus*. Let the *Table Centerpiece for Sorbet* and these ancient objects inspire your students to work on a small scale. Sketches should precede drawings and/or carvings.
The pale-blue tunic with golden embroidery seen here was worn by Emperor Franz Joseph I. All officers of the Austro-Hungarian army had uniforms in two styles: the casual German style or this more ornamented Hungarian style. The tunic is heavily braided and embroidered in gold; the embroidery pattern indicates the emperor’s rank as Field Marshall of his army. Look closely at the left side of the chest; there you can see small, pale-blue loops for attaching medals and stars. A stiff, heavy fabric called buckram is sewn inside the jacket tails to keep it crisp and straight. The red piping and stripes on the trousers complement the red trim at the tunic’s cuffs and collar.

Empress Elisabeth was a fashion trendsetter. This velvet and silk dress, in the style of designer Charles Frederick Worth, accentuates what was called a “Viennese wasp waist,” designed to make the wearer’s waist appear thinner from the front than from the side. The dress’s off-the-shoulder neckline, pouf sleeves, and skirt with integrated train are all indicative of fashion of the time. Elisabeth owned other dresses made by Worth, and this example’s heavy, ruffled trim made of the dress fabric is typical of his style of the 1860s, suggesting that the dress might have been made by someone in his studio.
Affectionately called Sisi, Elisabeth was adored by her husband and admired by fashion-conscious women across Europe. Her father was quite eccentric, and Elisabeth’s upbringing was somewhat unconventional, which revealed itself in her own eccentricities. She exercised regularly and had a fitness room installed in the imperial palace in Vienna. She was a prolific poet, even in Greek. She was an accomplished par force hunting rider, a sport dominated by cross-country chase, which required great athleticism. She carefully watched her weight, practiced special beauty regimens, and spent hours having her long hair styled. Despite her beauty, fame, and fortune, her poetry reveals Empress Elisabeth to be quite discontented with her life in royal society. She was devastated by the mysterious suicide of her son, Crown Prince Rudolph, in 1889. Some report that she wore only black in her remaining days until her assassination in 1898. Consequently, Rudolph’s suicide made his cousin, Archduke Franz Ferdinand, heir to the throne, and it was his 1914 assassination that is widely believed to have sparked World War I.

Start with these garments to introduce the emperor and empress to your classroom and use the following lesson ideas to launch a variety of teaching and learning experiences across the curriculum.

Social Studies or English Language Arts:
• There are many comparisons to be made between Elisabeth and Princess Diana. Encourage your students to research both women, noting the parallels between them. Students can report their findings in speeches or in digital multimedia presentations.

• In Act I of Hamlet, Polonius warns his son Laertes of wearing elaborate clothes: “Costly thy habit as thy purse can buy, / But not express’d in fancy; rich, not gaudy; / For the apparel oft proclaims the man.” Franz Joseph’s wearing a military uniform shows a shift in imperial custom begun by his great grandfather, Joseph II, before the turn of the nineteenth century. Emperors previously wore elaborate silken and ruffled ensembles to announce social status. Despite its golden embroidery, Franz Joseph’s uniform indicates this shift, but what do these more austere clothes “proclaim about the man”? Encourage students to compare this shift in regalia to current-day examples such as Pope Francis or even Steve Jobs. Perhaps they might even report their comparisons in iambic pentameter!

In Visual Arts:
• Elisabeth’s gown can launch your exploration of fashion design. Closely read the dress using a strategy such as Looking: Ten Times Two and/or Parts/Purposes/Complexities. Next, prompt students to choose one aspect of this design and incorporate it into a new one of their own. Also note the upcoming exhibition Iris van Herpen: Transforming Fashion. Opening at the High Museum of Art in November 2015, this exhibition will provide your designers with even more inspiration.
The central figure in Gyula Éder’s elaborate painting is four-year-old Crown Prince Otto as he descends the imperial carriage to the coronation of his father, Karl I, as King of Hungary. Behind him is his mother, Zita. In a spectacular ceremony largely to win Hungarian confidence, the family rode in on the finest imperial carriage, which had been shipped to Budapest from Vienna, and little Otto and his mother wore regal attire in the Hungarian style.

Also in the exhibition are the coat, cap, and shoes Otto wore that day, which we see in the painting. Like his mother’s robe, Otto’s heavy gold brocade coat and cap are trimmed in ermine along with the white leather shoes, which also feature appliqué in gold lace. The cap originally had a clasp attaching a plume of white feathers, visible in the painting, which no longer remains. The diamond crown of Austrian empresses that we see Zita wearing has also been lost.
At the moment of the painting, a footman has just opened the carriage for the pair, and two members of Hungarian nobility, called magnates, stand to greet them. As was custom, Karl has ridden on horseback to the Matthias Church and is likely inside the carriage. On this day, he is only twenty-nine years old. As third in line for the crown (cousin Rudolph I committed suicide, father Karl Ludwig died, and Franz Ferdinand was assassinated), he has had no training to become a ruler. Having served on the front lines, he was loyal to his country and optimistic about his ability to unify the empire, but this very coronation proved counter to such purposes. While Karl’s regal ceremony pleased many Hungarians, its oath of respect to the Hungarian constitution further alienated many Germans and Slavs.

As World War I came to a close, food and coal rations, the ravages of war, and rumblings of independence had fractured the empire. By the end of 1918, Karl abdicated his power and was exiled ultimately to Madeira, where he died in 1922.

Otto lived out his days a king in name only but did wield influence in Europe and worked with Franklin Roosevelt during World War II. Much of the Habsburg riches became property of the Austrian state.

The painting and coronation attire can launch teaching and learning across the curriculum. Consider the lesson ideas below.

- Starting with Otto in his coronation attire at the center of the painting, use the Circle of Viewpoints to imagine what it must have felt like to be him in that moment. Encourage students to record thoughts in Otto’s voice. Next, imagine the scene from Zita’s or the footman’s or one of the magnate’s points of view. Even consider Karl as he is “off screen.” This exercise might culminate in an entry in students’ writer’s notebooks or scripts between the figures that students act out for their classmates.
• Explore these works as historical artifacts and learn the terms “primary” and “secondary source” from them. Construct your lesson using I used to think…. Now I think…, allowing students first to hypothesize which (the painting or the attire) is primary and which is secondary. Then watch this short video defining primary and secondary sources. Following the “I used to think…. Now I think …” format, encourage students to revisit their original ideas, revising if necessary. Answer students’ specific questions about the works; such questions will be a great sign that they’re really thinking it through. Some questions you might hear: Did Otto really wear this coat, or is this a copy of it? (This is not a copy. He really wore this one.) Who painted this painting? When did he paint it? Was he there? (Gyula Éder painted it in 1929. We don’t know if he was there.) Allow for conflicting answers if they are adequately supported. Students might also demonstrate their understanding in a moderated debate.

**Social Studies:**
• The Habsburg monarchy unraveled in a complex way. Let this painting present your students with “the beginning of the end.” Follow it with text resources that will more fully explore the fall of the Habsburgs, such as *The Habsburgs: Embodying Empire*, *The Habsburgs: History of a Dynasty*, or *A Mad Catastrophe: The Outbreak of World War I and the Collapse of the Habsburg Empire*. To close the lesson, return to the painting and look for metaphors that might represent the family’s downfall.