Acta Militaria Mediaevalia XIV
Kraków – Sanok – Wrocław 2018, s. 249-266

Medieval arms and armor at the Art Institute of Chicago

The Art institute of Chicago retains one of the more important collections of European arms and armor in America. It contains about a thousand pieces including mail and plate armor, edged weapons, polearms, crossbows, firearms, model cannons, and horse equipment, dating from the 12th through the 19th century.

After a decade of remaining largely in storage, in March 2017 the museum opened its new arms and armor galleries, part of an 8.000 square foot (about 743 square meter) wing devoted to contextualizing the art of medieval and Renaissance Europe. This installation moves from sacred to secular art, unifying textiles, metalwork, ceramics, glass, paintings, and sculpture among other works from the period and culminates with a display of about 400 pieces of arms and armor (Fig. 1). In celebration of the inaugural year of these new galleries, this article outlines the history of this unique collection and presents some of the highlights of medieval arms and armor in the new display.

History of the collection

Nearly the entirety of the collection of arms and armor was assembled by one man, George F. Harding Jr., during America's golden age of collecting from the 1920s to his death in 1939. Harding was a real estate magnate as well as a major politician in Chicago.[1]

Fig. 1. View of the New Buonanno Family Gallery of Arms & Armor. Art Institute of Chicago. *Photo by The Art Institute of Chicago*.

Ryc. 1. Widok na nową Galerię Uzbrojenia Rodziny Buonanno. Art Institute of Chicago. *Fot. The Art Institute of Chicago*.

[1] For a brief history on George F. Harding (1868-1939) and his collecting see: Karcheski (1995, 8-15).

Fig. 2. Interior of Harding's Castle, formerly 4853 Lake Park Avenue. Chicago, ca. 1940s. *Photo from the Archives of the Art Institute of Chicago*.

Ryc. 2. Wnętrze Zamku Hardinga, dawniej Lake Park Avenue 4853. Chicago, l. 40. XX w. *Fot. Archiwa Art Institute of Chicago*.

Romanced by notions of chivalry at an early age, he created a castle for himself beside his otherwise ordinary mansion. Inside, every corner was crammed with European sculpture, furniture, paintings, and above all arms and armor (Fig. 2). Harding prided himself in quality as well as quantity and successfully amassed a comprehensive collection despite strong competition from major American collectors such as media mogul, William Randolph Hearst.[2]

The sources of the collection were diverse. Harding purchased from several European dealers, such as Kahlert & Son of Berlin and Samuel Whawell and Hal Furmage of London. He was also active purchasing at auction, especially the sales of Henry Griffith Keasbey's collection held at the American Art Association from 1924 to 1926. Occasionally he purchased directly from ancestral armories, including Grafenegg Castle in Austria and the armory of the Marques de Dos Aguas in Valencia, Spain. One other channel was through Dr. Bashford Dean, curator at the Metropolitan Museum of Art and doyen of arms and armor scholarship in America, purchasing some pieces from Dean's estate in 1929.

After Harding's death in 1939, he left the collection and his house as a museum, which remained open until its demolition in 1963. Lingering for years on partial display in a local library, Harding's collection was permanently transferred to the Art Institute of Chicago by court settlement in 1982. Within months of its transfer a comprehensive display was mounted, though limited to about twenty percent of Harding's collection it captured visitors attentions for decades.

The new arms and armor galleries

With the new Medieval and Renaissance galleries, the breadth and importance of the Harding collection can once again be seen in full splendor. The finest pieces now benefit from new casework, non-reflective glass, newly sculpted manikins, subtle mounting, and LED lighting to create an all-enveloping atmosphere. The goal of this display is to enrich the collection with narrative and context, building a sympathetic

2 On William Randolph Hearst as an arms and armor collector see: Pyhrr (2014, 76-105, Harding discussed on 91).

Fig. 3. Italian Armor for the Joust, about 1560. George F. Harding Collection, Inv. No. 1982.2405. *Photo by The Art Institute of Chicago*.

Ryc. 3. Włoska zbroja turniejowa, ok. 1560. Kolekcja George'a F. Hardinga, nr inw. 1982.2405. *Fot. The Art Institute of Chicago*.

environment with hints of period architecture, color, and atmosphere.

At the heart of the gallery stand two newly mounted horsemen on an elliptical platform. These figures draw the visitor in and around the installation while also bringing the armor to life. They embody the two main themes of the display, war and the sport of the tournament. The first represents a man-at-arms caught in the heat of battle with sword raised on a rearing horse (Fig. 1). The second, a nobleman in jousting armor bedecked in full splendor (Fig. 3).

Surrounding these figures in nine-foot (2.74 meter) cases around the gallery are over 300 pieces of arms and armor from the 10th to the 18th century. On the walls above there are panoplies or trophies of arms with edged weapons, polearms, lances, and armor that relate in both period and theme to the material displayed in the cases below. These panoplies pay homage to the tradition of arms and armor displays during the gothic revival of the 19th century as well as to its former display history in Harding's castle.

Beyond the armor court, a more intimate gallery displays the Art Institute's collection of luxury arms: model cannons, rifles, crossbows, hunting equipment, and an array of rapiers and smallswords. With walnut cabinets and a barrel-vaulted ceiling, the atmosphere is meant to evoke a princely 17th-century Baroque gun cabinet. The new galleries are intended to be immersive with the hopes of attracting the interest of all from the casual visitor to the seasoned connoisseur.

Highlights of Medieval arms and armor on display

The Art Institute's collection, like those in many other institutions, is strongest in early modern (16th- and 17th-century) European arms and armor, thought there are several noteworthy objects of earlier date. Helping to bridge this substantial gap of medieval arms, the museum has sixteen Viking-era and medieval objects on long-term loan. Most of these loans are edged weapons, but also include two mace heads, a horse bit, pair of spurs, a four-plate helmet, mail shirt, and a spearhead all from the collection of Laird Landmann (Fig. 4).

One of the finest objects from this group of loans is a silver overlaid hilt, possibly Eastern Baltic in origin from the 10th to early 11th century (Fig. 5).[3] It comprises of four hollow iron fittings: a pommel, upper guard, barrel grip, and cross guard. The silver wire overlay is laid down over a cross hatched surface and cut into with niello inlay creating a bold contrasting interlace pattern ornamented with strips of flattened

[3] Relative to Peterson's type T hilt (see Peirce 2002, 18, similar in form to the hilt illustrated on page 108).

Fig. 4. Display case of 10th to 15th century arms and armor in the Buonanno Family Gallery of Arms & Armor. Art Institute of Chicago. *Photo by The Art Institute of Chicago*.

Ryc. 4. Przykładowe uzbrojenie z X-XV w. w Galerii Uzbrojenia Rodziny Buonanno. Art Institute of Chicago. *Fot. The Art Institute of Chicago*.

twisted wire. The horizontal lozenge pattern on the upper and lower guards terminates in adorsed stylized dragonheads. Considering its form and date this may be classed as a simplified variation on the Ringerike style with its twisted tendrils and volutes. The preservation is remarkable, with only some areas of blistering from corrosion that has dislodged the silver overlay.

Other pieces on loan from roughly the same period include a sword with the name INGELRII inlaid into the blade with silver and copper wire damascening over the hilt, and another sword with the name +VLFBERH+T in twisted iron inlaid into the blade. The Ulfberht sword has been examined and found to possibly be the result of a crucible process not altogether melted in a furnace, an interesting if not complex metallurgy.[4] Both the Ulfberht and Ingelrii swords are part of well-known large groups of similarly signed blades thought to be the product of leading 9th- through 10th-century workshops in Northern Europe. In the case of Ulfberht, this workshop may have been active in the Rhineland as the name implies Frankish origins (see: Williams 2012, 116-188, particularly 117). In these names are perhaps the beginnings of recognizable quality trademarks on blades, a practice that carries throughout the centuries.

A late 14th- or early 15th-century sword from the Harding collection demonstrates the continuance of this marking tradition, in this case a brass inlay of a stylized running wolf centered on both sides of the blade at the fort (close to the hilt) (Fig. 6). This well known mark may represent either of the two German blade-smiting centers of Passau or Solingen. Overall, the sword is extremely well preserved, likely surviving above ground as a tomb ex-voto or in some other

[4] Samples of this sword were examined and published in Williams (2012, 134).

Fig. 5. Silver overlaid hilt, 10th-11th century, possibly Eastern Baltic. Collection of Laird Landmann. *Photo by The Art Institute of Chicago*.

Ryc. 5. Zdobiona srebrem rękojeść miecza, X-XI w., prawdopodobnie wschodnia część basenu Morza Bałtyckiego. Kolekcja Lairda Landmanna. *Fot. The Art Institute of Chicago*.

Fig. 6. Thrusting sword, late 14th or early 15th century, Western European, blade either Passau or Solingen, Germany. Art Institute of Chicago, George F. Harding Collection, Inv. No. 1982.3373. *Photo by The Art Institute of Chicago*.

Ryc. 6. Miecz, koniec XIV lub początek XV w., Europa Zachodnia, głownia z ośrodka w Passawie lub Solingen, Niemcy. Art Institute of Chicago, kolekcja George'a F. Hardinga, nr inw. 1982.3373. *Fot. The Art Institute of Chicago*.

unusual circumstance.[5] The large wheel-shaped pommel on this sword counterbalances a heavy rigid diamond cross-section blade clearly intended for trusting at heavily armed opponents. The cross guard has a rounded bar cross-section that terminate in downwardly pointed curls, designed to arrest the sliding edge of an adversaries' sword.

The form, defined by a thick tapered blade, long grip, and heavy wheel-shaped pommel, is part of a distinct group of swords dating from the end of the 14th to the first half of the 15th century. The closest example is in the Royal Armories, Leeds and said to have been found in Lake Constance, Switzerland.[6] Others of the group are preserved in the collection of the Society of Antiquaries, London, the Musee de l' Armee, Paris, and in a private collection all heavily corroded and in excavated condition (Laking 1920, 140-142[7]).

The Harding sword appears to be one of the best preserved of the type, even retaining an old wood grip. This intact grip is made of one piece of oak and was reamed to fit the tang of the blade and secured by the pommel peened down over it. Evidence of this process can be seen at the end of the grip below the pommel where the grain and fibers of the wood had been compressed under tension and then slightly split out over centuries of shrinkage. At the base of the oak grip there is also a stain line in the form of a chevron that suggests a lost iron fitting or ferrule. Such an iron or metal ferrule would have protected the wood in that area from wear, and indeed this stained area is slightly raised from the worn grip.

Equally as rare, though in a more compromised condition is a visored bacinet from the Harding collection (Fig. 7). Dating from the turn of the 15th century, this helmet was composed in the 1920s from two disparate fragments of a bascinet bowl and visor restored under the direction of Bashford Dean for his

5 The sword is first published and illustrated in the collection of E. H. Max Dreger before 1926 (Dreger 1926, 146, Pl. 25, No. 54).
6 The first to point out this type of heavy thrusting sword and hilt form is Sir Guy Francis Laking (1920, 140-142).
7 Also through correspondence with Ian Eaves.

Fig. 7. Composite visored bascinet, ca. 1390-1400, Western European, Art Institute of Chicago, George F. Harding Collection, Inv. No. 1982.2467. *Photo by The Art Institute of Chicago*.

Ryc. 7. Kompozycja łebki z zasłoną, około 1390-1400, Europa Zachodnia. Art Institute of Chicago, kolekcja George'a F. Hardinga, nr inw. 1982.2467. *Fot. The Art Institute of Chicago*.

Fig. 8. Photograph of the bascinet bowl when in the collection of Henry Griffith Keasbey, pre restoration, ca. 1920. *Photo from the Archives of The Metropolitan Museum of Art, Arms and Armor Department*.

Ryc. 8. Fotografia łebki z kolekcji Henry'ego Griffitha Keasbey, przed konserwacją, około 1920. *Fot. Archiwum Metropolitan Museum of Art, Arms and Armor Department*.

own collection at the workshop set up near his home at Riverdale, the Bronx. The visor retains a small fragment of its original engraved latten (brass) boarder at the bend of the right visor near the pivot. The rest of the brass border is restored. Large patched repairs were also made over the lower left side of the snout. In a typed note in the Metropolitan Museum, where this helmet was once on loan in 1927, Dean relates that he bought this visor from the Parisian dealer Louis Bachereau as part of the hoard from the fortress of the Knights of St. John on the Island of Rhodes.[8] If true, it survives as one of the few late 14th and early 15th-century fragments from that find.[9] The Ottoman Turks captured the fortress in 1522, with this large hoard of a few hundred fragments of old plate armor left behind only to be discovered in the mid-19th century and dispersed into the antiques market.[10]

The bowl however, was aquiered by Dean from the collection of Henry Griffith Keasbey in 1925, and is stated to have been found in France where it was serving as a water bucket for a well.[11] Thankfully there are photographs of the bowl before its heavy restoration, showing that it retains about five of its original pierced studs ("vervelles") for the attachment of a mail hood or aventail (Fig. 8). It was also clearly a visored bascinet as the pivot holes remained on the sides. Though few would carry out such extreme restoration today, it is a good marriage of parts and well represents the complete form. Recognizing its rarity, Harding purchased this composite helmet from Dean's estate in 1929.

A mid-15th century bouched shield painted with the civic arms of the city of Daggendorf, Bavaria, is another curiosity from the Harding collection (Fig. 9).

[8] The note also states that the restorer, Leonhard Heinrich, working for both The Metropolitan Museum and Dean, was responsible for the repairs and joining the visor and bowl in 1927. Information from Metropolitan Museum of Art, Arms and Armor Departmental files. This author is indebted to Stuart W. Pyhrr, Distinguished Research Curator, Metropolitan Museum of Art, for this information.

[9] Most of the fragments from the Rhodes hoard date from the second half of the 15th and beginning of the 16th century, there is one breastplate in the collection of the Metropolitan Museum that is contemporary with this visor, 29.150.87, dating to about 1400. This breastplate was also passed through the dealer Louis Bacherau and eventually to Bashford Dean (Karcheski, Richardson 2000, 53).

[10] On the history of the Rhodes hoard see: Karcheski and Richardson (2000, vi-xv).

[11] First published in Laking (1920, 248, illustrated on 247). Also illustrated with its provenance discussed in: *European*...(1925, lot 146, Pl. XVI).

Fig. 9. Bouched shield with the Civic Arms of the Bavarian City of Daggendorf, ca. 1450-1460, South Germany, Bavaria. Art Institute of Chicago, George F. Harding Collection, Inv. No. 1982.2456. *Photo by The Art Institute of Chicago*.

Ryc. 9. Tarcza turniejowa z herbem miasta Daggendorf w Bawarii, około 1450-1460, południowe Niemcy, Bawaria. Art Institute of Chicago, kolekcja George'a F. Hardinga, nr inw. 1982.2456. *Fot. The Art Institute of Chicago*.

Fig. 10. Three swords associated with the Battle of Castillon, before 1453, Western European, possibly English or French. Collection of Laird Landmann. *Photo by The Art Institute of Chicago*.

Ryc. 10. Trzy miecze wiązane z bitwą pod Castillon, przed 1453, Europa Zachodnia, prawdopodobnie Anglia lub Francja. Kolekcja Lairda Landmanna. *Fot. The Art Institute of Chicago*.

Made of wood with layers of animal skin glue, canvas, leather (possibly pigskin), gesso, and casein paint, its distinct rounded rectangular shape and concave profile is designed to divert an opponent's lance away from the lower body and head. The cutout at the right side, known as the bouche or mouth, acts as a rest when the cavalryman coached and lowered his lance into position for attack. There are at least a dozen other shields of this type with the arms of Daggendorf that survive, including one in the Philadelphia Museum of Art.[12] These were all likely part of a mass of shields made for a contingent of heavy or medium cavalry to defend the city of Daggendorf, a sort of civic mounted guard from about 1450 to 60. Recently, this shield has been carefully conserved, consolidating the outer layers of paint, leather, and canvas. Examination and x-rays indicate there are no earlier painted layers. Four iron staples remain on the back, formerly used for fixing the leather guige or straps for securing the shield.

Contemporary with this shield, though from a French context is a group of three swords on loan from the Landmann collection (Fig. 10). These include one long sword and two arming swords from the so-called Castillon group, named for the last battle of the Hundred Years War fought in 1453. This group was part of a cache of over eighty swords discovered in the 1970s in the river Dordogne near Bordeaux. These included two types of arming sword, one with rigid blades and fishtail pommels for trusting against armored adversaries, and the other wider tapered blade with wheel-shaped pommels for slashing against lightly armored adversaries.[13] Both types are represented here. Within the group only a few long swords were discovered, including this example with a robust fishtail pommel and slightly curved knob-ended cross guard. Another long sword from the group is on loan from the Landmann collection to the Metropolitan Museum. Though the two arming swords were heavily cleaned to

[12] Philadelphia Museum of Art, Kienbusch collection accession number 1977-167-735. Others include six in the Hermitage Museum, Saint Petersburg, and others in the Germanisches Nationalmuseum, Nuremberg, the Bayerisches Nationalmuseum, Munich, and the Deutsches Historischs Museum, Berlin (von Kienbusch 1963, catalogue #273,135).
[13] On this group of swords thought to be from the battle of Castillon (see: Oakeshott 1993, 7-16).

Fig. 11. Jousting helm (”Stechhelm”), Christian Spor (active 1464-1485), ca. 1483-1485, Mühlau, Innsbruck, Austria, Art Institute of Chicago, George F. Harding Collection, Inv. No. 1982.2445. *Photo by The Art Institute of Chicago*.

Ryc. 11. Hełm turniejowy (tzw. „żabi pysk”), Christian Spor (wzmiankowany pomiędzy 1464-1485), około 1483-1485, Mühlau, Innsbruck, Austria. Art Institute of Chicago, kolekcja George'a F. Hardinga, nr inw. 1982.2445. *Fot. The Art Institute of Chicago*.

produce a bright steel surface, the long sword retained its russet patina from the riverbed and is in fine condition.

Of interest is the forged construction of the blade on the arming sword with fishtail pommel. The tang appears to have been forge-welded onto the blade as a scarf joint at the fort of the blade. This is noticeable as a fold line that wraps around the end of the blade and extends up to form the tang. A unique feature, perhaps it uses softer steel to act as shock absorption at this critical juncture. Alternatively, it may be a clever way of fitting a broken sword blade with a new tang.[14] Further research and metallurgical tests might prove interesting results.

For the tournament grounds rather than battlefield, the Harding collection retains a jousting helm (“Stechhelm”), produced by the armorer Christian Spor of Mühlau near Innsbruck dating from 1483-85 (Fig. 11). This rare helm is marred with deep gouges made by the force of impact from heavy lances capped by steel coronels. At least one other “Stechhelm” with Spor's mark – a shield with the star-shaped rowel of a spur (“Sporn”) – is in the Kunsthistorisches Museum, Vienna, formerly from Ambras Castle, Innsbruck (see: Thomas, Gamber 1954, 5, 55-56). These helms and perhaps another unmarked example also from Harding in the Art Institute's collection were perhaps made for the festivities of Archduke Sigismund of Tyrol while Spor was producing armor for his court.[15] Harding purchased this and his other “Stechhelm” directly from Grafenegg Castle in Austria. Though currently in storage, the collection contains a peytral or horse's chest defense also marked by Spor.[16]

Recognizing the significant gap in the Harding collection for gothic armor, the Art Institute recently acquired a South German or Austrian cuirass also from about 1480 (Fig. 12). This cuirass, though in heavily pitted condition, forms a sleek expression of the armorer's art.[17] It emerged in the Viennese market with the dealer Leopold Satori around 1910-20; and then passed into the hands of the London dealer Cyril Andrade, together with the remains of another gothic armor today in the Metropolitan Museum of Art.[18] The Metropolitan's armor is slightly more complete with a breastplate, backplate, pair of tassets, bevor, and visored sallet. This armor and perhaps the Art Institute's cuirass by association were said to have come from a tomb in a Southern Austrian church. Although difficult to prove, such a circumstance may account for both armors' relative condition and rare survival.[19]

Though the Metropolitan's still retains a russet patina, the Art Institute's cuirass underwent a more severe cleaning that has ground down and buffed the heavily corroded plates to a burnished finish.[20] Recently, this high luster has been carefully mitigated to a mild satin polish that is more sympathetic to its age. The cuirass was first restored before 1922 with an added neck plate at the V-shaped opening at the top of the backplate, patched repairs along the front fauld lames (overlapping segments of the skirt), and also along the back culet (skirt) with the topmost lame (segment) replaced (*Catalogue*... 1922, 39, illustrated 135, 137).[21] These spliced and riveted repairs are carried out in modern rolled steel and are detectable upon close inspection.

With these losses, scattered areas of delamination of the steel surface, and heavy internal blistering, it is clear this armor befell centuries of neglect. Nevertheless, surviving details like the pierced edges, graceful fluting, and remains of engraved roping all indicate a harness of the finest workmanship. One

[14] From discussion with blade smith Richard Furrer, Fall 2016.
[15] Art Institute of Chicago, George F. Harding Collection, 1982.2224. Illustrated in Karcheski (1995, 40).
[16] Art Institute of Chicago, Harding Collection accession number 1982.3100. Illustrated in Karcheski (1995, 26).
[17] This cuirass was exhibited at the Victoria and Albert Museum, 19th April-5th May, 1963 (see: *Art*... 1963, Cat. No. 7, Ills. 10).
[18] Metropolitan Museum of Art, 26.92.2c-g.
[19] This provenance for one of these armors is given in: *Catalogue*... (1922, 39, illustrated 135, 137).
[20] The Metropolitan's armor has also been heavily repaired, though it was decided to retain the russet color and match the patina on the repairs rather than grind and polish the original plates.
[21] According to Ian Eaves, former Keeper at the Royal Armories, Tower of London, the armor was again restored or repaired in the 1950s by Theodor Egli at the Royal Armories at the Tower of London.

Fig. 12. Cuirass, ca. 1480, South German or Austrian. Art Institute of Chicago, Chester D. Tripp Estate Fund, Inv. No. 2013.480. *Photo by The Art Institute of Chicago*.

Ryc. 12. Kirys, około 1480, południowe Niemcy lub Austria. Art Institute of Chicago, dar Fundacji Chestera D. Trippa, nr inw. 2013.480. *Fot. The Art Institute of Chicago*.

noteworthy feature is that the arm openings on the breastplate are asymmetrical. The right opening is broader than the left to allow for freer movement with the weapon arm. To display the elegant S-shape silhouette of the cuirass and the beauty of the backplate, the piece is mounted in a single case that can be viewed in the round. A period mail standard or collar from the Harding collection has also been added to the mounting to lend further context and animate the cuirass as it sits on its form.[22]

Having lain fallow for so many decades, the Harding collection at the Art Institute is rife with surprises and curiosities that beg to be explored by a new generation of museum visitors, enthusiasts, students, and arms and armor scholars. There are many more fine objects presented in the new galleries that merit study. Forthcoming initiatives include an accessible, heavily illustrated publication cataloguing the best pieces of the arms and armor collection, as well as deeper provenance research, expanded content, and photography for the Art Institute's collection online. It is hoped that this overview, however brief, reveals an important collection worth rediscovering.

Jonathan Tavares PhD.
Associate Curator of Arms and Armor
Art Institute of Chicago

Bibliography

Art...
1963 *The Art of the Armourer An Exhibition of Amour, Swords and Firearms Catalogue*, London.
Catalogue...
1922 *Catalogue of An Exhibition of Arms and Armour held by Mr. Cyril Andrade at Dalmeny Gallery 8 Duke Street, St. James's*, *During Oct. and Nov. 1922*, London.
Dreger E. H. M.
1926 *Waffensammlung Dreger*, Berlin.
European...
1925 *European Arms and Armor VI-XVIII Century Important Collection of Henry Griffith Keasbey, Part II*, New York.

[22] Mail standard, Art Institute of Chicago, George F. Harding Collection 1982.3027.

Karcheski W. Jr.
1995 *Arms and Armor in the Art Institute of Chicago*, New York.
Karcheski W. Jr., Richardson T.
2000 *The Medieval Armour From Rhodes*, Leeds.
Laking G. F.
1920 *A Record of European Armour and Arms Through Seven Centuries*, vol. 1, London.
Oakeshott R. E.
1993 *The Swords of Castillon*, The Tenth Park lane Arms Fair (February 1993), pp. 7-16.
Peirce I.
2002 *Swords of the Viking Age*, Woodbridge.
Pyhrr S. W.
2014 '*I would prefer Gothic' William Randolph Hearst as an Armor Collector*, London Park Lane Arms Fair (Spring 2014), pp. 76-105.
Thomas B., Gamber O.
1954 *Die Innsbrucker Plattnerkunst*, Innsbruck.
von Kienbusch O. K.
1963 *The Kretzschmar von Kienbusch Collection of Armor and Arms*, New Jersey.
Williams A.
2012 *The Sword and the Crucible: A History of the Metallurgy of European Swords up to the 16th Century*, Boston.