AAG Workshop
October 29, 2009

Using Armor as subs

Armor in our permanent collection

G241 Greek Gallery

- Corinthian Helmet (2001.80.1) "A typical set of Greek armor from this period also included a bronze breastplate and metal shin guards called greaves"
- Black –Figured Hydria (61.59) "Athena dressed for war"
- Black-Figure Neck Amphora (57.1)

Facts about Greek armor:

- Starting in the seventh century BCE, a new kind of soldier became the backbone of most Greek armies: the heavily armed Hoplite (from the word for shield). Hoplites were really heavily armed – the helmet, breastplate, greaves (shin guards), sword, and shield weighed between 50 and 70 pounds. These weapons were made of expensive metal, but still cost less than a horse and its equipment, not to mention a chariot.
- After a battle, the victorious side would construct a monument made of arms and other objects they had taken from their defeated enemy. They called it a trophaion, from a word meaning "defeat". " trophy"

Oil Paintings

- Erminia and the Shepherds (62.12) G330
- The Death of Germanicus (58.28) G313
- The Gamblers G312
- The Denial of St. Peter G313

G330

- Armor (German, c 1520) 23.54 -with lance rest, armor sometimes called "men's jewelry"
- Half Armor (Northern Italy, c 1570-1580) 2001.111a-j "Originally developed to decorate armor, etching was later adapted for printmaking."
- Visored Sallet (German, c 1470-1485) "Generally shallow in form and covering only the upper half of the face, visored sallets were usually complemented by a separate bevor, a defense covering the chin and throat that was strapped around the back of the neck."
- Pointed Morion or Cabasset – Parade armor decorated with reliefs showing men in armor.

G340 (all on loan from the Metropolitan Museum of Art in NYC)

- Mail Shirt (German, 15th century) "Weight – 20 pounds"
- Helmet – Forged from a single piece of steel, with a Norman "T" face opening, reinforced with applied steel bands and curved neck protection on back
- Close Helmet with "grotesque" mask visor. This type of helmet was used in tournaments. Note hinged visor with mustache.

G341

- Pair of Gauntlets – made for Philip II of Spain in the 16th century. "articulated construction of riveted plates with etched designs

General info on Armor

Web sites: metmuseum.org

Books in the Docent Library:

- The Art of Chivalry (MMA Publication)
- The Ancient Greek World by Roberts & Barrett
- The Ancient Roman World
- The Romans by Marks & Tingay

History (chivalry and war protection)

Prehistoric
Shields
Greek & Roman
Medieval
Renaissance

Types (purpose of each)

Field or battle armor
Parade or ceremonial armor
Armor for Sporting events – Tournaments on horseback or on foot

Questions for tour participants

- What Shapes do you see?
- Who wears armor today? And why do they wear it?
    - Soldiers
    - Police
    - Fire Fighters
    - Bomb Squads
    - Construction Workers
    - Sports teams
- What do we call armor today?
- How is it made today?
- When do you wear armor?
- How do you decorate your armor? Team colors, logos
- What does armor protect?
- What does armor reveal or tell us about:
    - The society or world in which it was created and worn?
    - Its wearer?
    - Its creator?
- Epaulettes with steel plates were worn by cavalry regiments in the 19th century to protect the shoulders from saber strikes.

Fun Facts about Armor

COST of ARMOR

It is true that, unless looted from a battlefield or won in a tournament, the acquisition of armor would have been a costly affair. However, as there are certainly differences in the quality of armor, there also would have been differences in price. Armor of low to medium quality, affordable to burghers, mercenaries, and lower nobility, could be bought, ready-made, at markets, trading fairs, and in urban shops. On the other hand, there were also the high-end, made-to-measure products of the imperial or royal court workshops, and of famous German and Italian armorers. Armor made by some of these celebrated masters represented the highest art of the armorer's craft and could cost as much as a king's ransom.

It is clear, however, that the value of armor ranged from low-quality or outdated second-hand items quite affordable to citizens and mercenaries, to **the cost of an entire armory of an English knight, the contents of which were valued in 1374 at over £16. This was equivalent to about five to eight years of rent for a London merchant's house, or over three years' worth of wages for a skilled laborer, a single helmet (a bascinet, probably with aventail) being worth the purchase price of a cow.**

At the upper end of the scale, we find examples such as a large garniture (a basic suit of armor that, through the addition of further pieces and plates, could be adapted for various purposes both on the battlefield and in different types of tournament) commissioned **in 1546 by a German king** (later emperor) for his son. For this commission, the court armorer Jörg Seusenhofer of Innsbruck received on completion a year later the enormous sum of **more than 1,200 gold coins, equivalent to twelve times the annual salary of a senior court official**.

WEIGHT

An entire suit of **field armor (that is, armor for battle) usually weighs between 45 and 55 lbs.** (20 to 25 kg), with the **helmet weighing between 4 and 8 lbs. (2 to 4 kg)—less than the full equipment of a fireman with oxygen gear,** or what most modern soldiers have carried into battle since the nineteenth century. **Moreover, while most modern equipment is chiefly suspended from the shoulders or waist, the weight of a well-fitted armor is distributed all over the body**. It was not until the seventeenth century that the weight of field armor was greatly increased in order to render it bulletproof against ever more accurate firearms. At the same time, however, full armor became increasingly rare and only vital parts of the body, such as the head, torso, and hands, remained protected by metal plate.

The notion that the development of plate armor (completed by about 1420–30) greatly impaired a wearer's mobility is also untrue. A harness of plate armor was made up of individual elements for each limb. Each element in turn consisted of lames (strips of metal) and plates, linked by movable rivets and leather straps, and thus allowing practically all of the body's movements without any impairment due to rigidity of material. The widely held view that a man in armor could hardly move, and, once he had fallen to the ground, was unable to rise again, is also without foundation. On the contrary, historical sources tell us of the famous French knight Jean de Maingre (ca. 1366–1421), known as **Maréchal Boucicault, who, in full armor, was able to climb up the underside of a ladder using only his hands.** Furthermore, there are several illustrations from the Middle Ages and the Renaissance depicting men-at-arms, squires, or knights, all in full armor, mounting horses without help or instruments such as ladders or cranes. Modern experiments with genuine fifteenth- and sixteenth-century armor as well as with accurate copies have shown that even an untrained man in a properly fitted armor can mount and dismount a horse, sit or lie on the ground, get up again, run, and generally move his limbs freely and without discomfort.

There are a **few exceptional instances when armor was extremely heavy or did indeed render its wearer almost "locked" in a certain position, such as armor for certain types of tournaments. Tournament armor** was made for very specific occasions and would have been worn only for limited periods of time. The man-at-arms would have mounted his steed with the aid of his squire or a small step, and the last pieces of his armor could then be donned after securely sitting in the saddle.

Who made armor and how long did it take?

The time it took to make armor depended on several factors, namely, who ordered the work, from whom the work was commissioned (i.e., how many people were involved in the production, and how busy the workshop was with other commissions), and finally, what quality of armor was asked for. Two famous examples may serve to illustrate this point. In 1473, Martin Rondelle, probably an Italian armorer working in Bruges, who called himself "armorer of My Lord the Bastard of Burgundy," wrote to his English client, Sir John Paston. The armorer informs Sir John that he can make the requested suit of armor as soon as the English knight tells him what pieces he requires, in which fashion, and when the armor must be completed (unfortunately, no time frame is given). In court workshops, the production of garnitures for a princely client appears to have required more time**. It apparently took the court armorer Jörg**

Seusenhofer (and a small number of assistants) about one year to complete a horse armor and a large garniture commissioned in November 1546 by King (later Emperor) Ferdinand I (1503–1564) for himself and his son, and delivered in November 1547. We do not know whether Seusenhofer and his workshop were also working on other commissions during that time.

Medieval armor

At the height of the Middle Ages, Saint **Anselm (ca. 1033–1109) listed the equipment of a knight: his war horse (which by the thirteenth century was protected by mail and fabric), bridle, saddle, spurs, hauberk (a long-sleeved mail shirt, sometimes with a hood, or *coif*), helmet, shield, lance, and sword**. Toward the end of the twelfth century, a new flat-topped type of helmet with side plates, which hid the face of a knight, became popular. To distinguish friend from foe, the knight's triangular shield was painted with identifying symbols. **By 1200, mail for the legs, called chausses, was commonly worn by mounted warriors. Later, boiled leather or steel pieces protected the knees (kneecops), while small squares of the same hard materials covered the vulnerable shoulder joints (ailettes).**

By the fourteenth century, the improved crossbow **was able to pierce shields and mail armor.** To counter this, knights first wore a poncho-like coat with small rectangular plates riveted to it, while articulated plate armor was developed for the legs, arms, and hands. The small, square, convex shield of the time (the targe) was eventually relegated to use in tournaments, since improved body armor made it unnecessary. A new form of helmet joined the all-encompassing great helm and the wide-brimmed chapel-de-fer (war hat). This was the more streamlined, close-fitting bascinet, with a curtain of mail (camail) from chin to shoulders, which frequently had a movable visor. **By the late 1300s, solid breastplates first appeared to protect the chest as part of the short, tight-fitting coat of plates called a brigandine, while smaller plates covered the abdomen, hips, and back.**

Within a few years, by about 1420, full head-to-toe plate armor was in use, completing the image of the knight in shining armor.

Renaissance Armor

In medieval and Renaissance Europe, not all armor was made of metal plate. **Mail armor, a mesh of interlinking metal rings sometimes erroneously referred to as "chain mail," probably originated over 3,000 years ago. It remained the dominant form of body armor from long before the Migration period (ca. 400–600) until well into the fourteenth century.** In western Europe, the development of plate armor for the body began in the thirteenth century and progressed throughout the fourteenth century. **Aside from steel, plate armor was also made of leather, some of which was hardened by boiling in wax or oil** (*cuir bouilli*). In addition to mail and plate armor, some European knights and men-at-arms wore **armor made of fabric**, many-layered and heavily quilted body armor known as a *gambeson* (worn under mail and early plate armor), or a *jupon* (worn alone or over a mail shirt). During the fifteenth century, plate armor became the dominant form of protection, and by about 1500 had all but displaced mail and fabric armor or relegated them to secondary functions such as protecting the joints and easily exposed areas of the body. Nevertheless, in all times a complete armor invariably consisted of a mixture of different materials.

Most plate armor is not as heavy as is commonly believed. A fully armored knight was expected to be able to mount and dismount unaided.

Different materials afforded different protective qualities and were thus employed in various ways. **Mail armor, for instance, protects well against any cutting movements, including that of a stray lance or arrow**. But when worn as the main source of protection, mail necessitates an underlayer of quilted fabric, which would not only make it more comfortable but also cushion and protect against the impact of a strike. **Armor made of fabric to some extent could offer both these qualities, but the combination of plate armor and mail or fabric offered the best protection.** Not only was a **weapon's point or cutting edge deflected by its "glancing surface," on impact it would also absorb some of the blow's energy.** No armor, however, could guarantee complete invulnerability.