

More than Metal:
Knightly Swords as an Identity

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More than any other weapon in history, the sword is perhaps the most iconic and timeless representation of not just the warrior but also the power that warrior possesses. From the earliest stories in the Bible, where God sealed the gates of paradise with a flaming sword, to the modern military where officers are issued a ceremonial sword as part of their formal dress uniform, the sword has remained a constant icon of status and power. Although the sword has always been more than a merely functional weapon, no other period solidified the sword's cultural significance as did the Age of Chivalry in medieval Europe. Between 1000 and 1500 C.E., a new kind of knight emerged, one who was not just a skilled, mounted warrior, but a titled and landed nobleman, a warrior whose social status was ideally linked to the ability to enact violence and protect those who served their liege lord. As the title of knight became synonymous with wealth and power, corresponding needs emerged for symbolic social differentiation. While land and title were of utmost importance, a social marker was needed to distinguish knights from others, and even amongst themselves, something that was visible to anyone who came upon them, an object that undeniably established power and prestige; something like the sword.¹

Historians have tended to look at the sword through a specific lens. Scholars have either looked at the sword as a functional weapon, an object or artifact of a bygone era, or as they are often couched today in many museums, as works of art. However, a holistic approach to the sword, looking at it as not just a weapon but rather a work of art, crafted laboriously over months, skillfully decorated and personalized by its maker and patron, gives a better perspective into what made the sword a weapon, that despite vast technological advances, remained a

1. Ewart Oakeshott, *The Sword in the Age of Chivalry*, 2nd ed. (Woodbridge: Boydell, 1994), 12-4, & Constance Brittain Bouchard, *Strong of Body, Brave and Noble: Chivalry and Society in Medieval France* (Ithaca: Cornell UP, 1998), 80.

companion to so many. When the sword is taken from the lens of a mere functional weapon, it reveals how sword ownership became a means of identity, and not just a weapon.

The swords of this period in medieval Europe borrowed from earlier styles and methods of fabrication, but there were many ways in which they were distinct. While symbolic in many ways, their primary function was first and foremost a weapon. Most swords were forged similarly in accordance with the latest technological advances—which were quite slow, remaining unchanged for periods of over one hundred years. Ewart Oakeshott, renowned by many as the preeminent authority on medieval arms and armor, contends that the swords of this period can be classified into two types; Group I, which are swords from circa 1050 to 1350 C.E., and Group II, which are swords from approximately 1350 to 1550 C.E., with the biggest changes being in design based on what type of combatants were being fought. The swords of Group I tended to come to a pointed tip to pierce the chain mail armor of the period. However, when plate armor became the predominant form of protection, Group II emerged with wider blades meant to crush and break the armor of opponents. Oakeshott contends that while these groupings serve as a general guideline for classifying knightly swords, there was much ambiguity based on region and material available.²

The swords of this era, or knightly swords, although differing in design and material had several common characteristics. They weighed an average of two to three pounds and were perfectly balanced for fighting, “with the same care and skill in the making as a [modern] tennis racket or a fishing-rod.” Most knightly swords approximately had a thirty-inch blade with two cutting edges, a six to seven-inch handle—or *hilt*—and tapered from approximately two inches to an inch and a half at the tip. Most had a fuller, or a groove that ran the length of the blade up

2. Oakeshott, *The Sword in the Age of Chivalry*, 17-8.

the center which reduced the weight of the weapon without compromising its structural integrity. The design of these swords was modeled after those of the Vikings and Celts, although these predecessors were made from relatively poor material, often iron instead of steel, and were of considerably lesser quality.³

It is surprising that given the military advancements being made elsewhere during the Age of Chivalry that the sword changed comparatively little. In fact, most changes were in the materials and methods of construction rather than the design. According to Ewart Oakeshott's text *The Knight in Battle*, "Take any medieval period, and you will find that all the battles fought during that time differed. Weapons and armor might occasionally stay the same, but the tactical style of each fight would not be. So when spanning the four centuries of the Age of Chivalry, we are bound to find great variation in tactical fighting methods – and in armaments too."⁴ Former Master of the Royal Armouries in the Tower of London A.V.B. Norman says that the sword remained the, "main knightly weapon," well into the thirteenth century despite the rapid changes elsewhere on the field of battle.⁵ According to Norman, other than the changes in design to combat the changes in armor, the sword remained a relatively standard weapon until the proliferation of firearms in the first half of the sixteenth century.⁶

What about the sword made it a constant knightly standby, even as more effective and efficient weapons such as the longbow came into fruition amid these rapid and constant changes in arms and armor from 1000 to 1500 C.E.? It is because the sword was more than a weapon to

3. Ibid., 12.

4. Ewart Oakeshott, *The Knight in Battle*, 2nd ed. (Chester Springs: Dufour Editions, 1998), 7.

5. A.V.B. Norman and Don Pottinger, *English Weapons & Warfare 449 — 1660* (Englewood Cliffs: Prentice-Hall, Inc, 1979), 67.

6. Ibid., 150.

the knights of the Age of Chivalry. It was more than a piece of sharpened steel. The sword was a companion, a symbol of power and status. In many cases, well-crafted swords outlived their owners and became family heirlooms coveted by the next generation of knights.⁷ So while Oakeshott categorizes swords into groups based on design, it is equally important to look at each sword as an individual object in relation to its warrior.

The Knightly Sword

Some of the obscurity about the meaning of the sword is because it really was such a common weapon. “It was not only used by those of gentle birth but was carried by anyone who could afford one or had picked one up after a battle.”⁸ What should be considered with this statement is that while any warrior may have possessed a sword, they were not all the same quality, and that quality said much about the individual wielding the weapon. Knightly swords, commissioned by highborn warriors or passed on as a family heirloom, were of exceptional quality and elegance. These swords were often forged from rare, damascened crucible steel, gilded and etched with artistic beauty, adorned with rare jewels and other precious materials, and any person seeing that kind of weapon girded around the waist of a knight, or drawn in battle, would have no question that the person was of noble birth.⁹

Although full name Norman in book title, states that swords were often found after battles, they were rarely these precious weapons. The finely crafted knightly sword would either be reclaimed by the knights’ companions or would be captured as a prize by the opposing knights. The swords that were left on the field, or purchased by common soldiers, were of far

7. Oakeshott, *The Sword*, 15.

8. Norman, *English Weapons*, 67.

9. Ibid.

lesser quality. The steel of these other swords what would have been left on the battlefield were likely of decent or poor quality and rather than precious stones and metals adorning the guard and hilt, they would be made of iron, leather, and wood. The designs also differed from the double-edged broadsword preferred by knights. Common soldiers, mostly archers and spearmen, often carried what was known as the backsword. These swords had a single sharpened edge and a flat, blunt back edge, and was wedge shaped alleviating the need for sophisticated forging methods and tempering required for the knightly sword.¹⁰ These were often the kinds of swords produced by a lord for the poor infantryman who could not afford his own armaments and was clearly of a lesser status than the knightly sword.

The ascribed status of the sword would have never been possible without the rise of the knight to a noble status, and with that their ability to commission the forging of knightly weapons, win them in combat, or receive them as endowments. It was only after the emergence of chivalry that the sword took on new meaning. Aside from the physical attributes that conveyed wealth, such the incorporation of jewel and precious metals, the sword began to take on figurative meaning for those that possessed them. During the knighting ceremony, new vassals would be dubbed on each shoulder with a sword, then have their own sword girded around their waist.¹¹ In noble marriage, the sword could represent the bridegroom in his absence.¹² And in the eyes of the crusading knight, the sword represented Christian justice.¹³ The

10. Mike Loades, *Swords and Swordsmen* (South Yorkshire: Pen & Sword, 2012), 164.

11. Norman, *English Weapons*, 38.

12. Richard Francis Burton, *The Book of the Sword: A History of Daggers, Sabers, and Scimitars from Ancient Times to the Modern Day*, (New York: Skyhorse Publishing, 2014) xii.

13. Loades, *Swords*, 123.

sword came to represent so much more than simply social status. During the Age of Chivalry, it became an undeniable symbol of power, authority, and piety.

In medieval Europe, between 1000 and 1500 C.E., the sword emerged from its “pagan roots,” and became the ultimate symbol of chivalry and sanctity. Mike Loades eloquently says of the knightly sword that, “[it] came of age and was elevated to be the most iconic weapon of the epoch; it became the weapon of everyman and yet remained the ultimate symbol of authority and status.” This ability to be wielded by any person, and to either take on the status of that person, or ascribe a new status upon them, makes the sword a truly remarkable icon during the Age of Chivalry. No other weapon during this period could possess an identity that was both of its owner and at the same time of itself, able to stand on its own merits and values.¹⁴

It could be argued that the knightly sword would have never existed without the rise of the knight from his humble beginnings. According to Norman and Pottinger, in the early eleventh century, approximately the first century after the Battle of Hastings, the function of the knight shifted significantly. Previously, large numbers of knights were retainers, servants to their lords, whose purpose was as cavalymen. It was not until fighting settled down that the lords no longer had a need to keep a large cavalry in their service, and the lords provided many of the knights with estates in lieu of payment. This shifted the responsibility from purely military to feudal, as the knight presided over their estate while remaining in the service of their lords and kings.¹⁵

Although this transition to a landed noble marked a new era of authority for the knight, the roots of military authority went much further back. Timothy Reuter, a professor of medieval

14. Loades, *Swords*, 123.

15. Norman, *English Weapons*, 35.

history at the University of Southampton, wrote of the ambiguity between the political and the militant in the Carolingian era preceding the Age of Chivalry. “Warfare was perhaps the most dominant concern of the political elites of the eighth, ninth, and tenth centuries... [as Carolingian society was] largely organized *by* war. The political community, when it came together, was often called ‘the army’ even when it was not functioning as one.”¹⁶ As a society organized around war, the lords’ retainers exercised certain levels of authority that were implied by their service in war and accepted by those who did not fight. However, prior to the shift to chivalry in the eleventh century, they were still mostly just retainers with no hereditary rights to land or title.

And even as the status of knighthood shifted during the eleventh century and beyond, and more complex systems of land ownership and feudal service emerged, those outside of European society still considered Western Europeans as barbarians consumed by bloodlust rather than an emerging class of nobles. John Gillingham, Emeritus Professor of Medieval History at the London School of Economics and Political Science, summarizes these perceptions through the writings of thirteenth century historian Ibn-al-Athir:

In the eyes of the Muslims and Greeks eleventh-century Western Europeans (whom the Muslims called Franks...) were loud-mouthed and crude barbarians whose only skill lay in fighting and in the manufacture of arms. During the later eleventh and twelfth centuries these barbarians enjoyed a period of unusually sustained military success and expansion... Underlying the rise of the empire of the ‘Franks’ were demographic growth and economic expansion... they [the Franks] chose to spend more on war... Even more than before, Western aristocratic society became an aggressive society where knights and their

16. Timothy Reuter, “Carolingian and Ottonian Warfare,” in *Medieval Warfare: A History*, ed. Maurice Keen (New York: Oxford UP, 1999), 13.

followers, archers and crossbowmen, pushed back the frontiers of their dominions...¹⁷

While al-Athir draws the expansion of the Western Europeans in a negative light, as barbarians who sought only war, much of their success was because of their undeniable, “industrial and technological advantage... their capacity to produce arms and armour superior both in quantity and quality.”¹⁸

The ability of these societies for produce more and better weapons was only a small part of what led to the military success of the Western Europeans. A large part of the success had to do with the emergence of knights as nobles, not just their role on the battlefield. In wars of expansion, armies could not simply defeat the enemy. They needed to maintain a presence in the region, a stronghold. This was accomplished through the capturing of castles. As castles were captured and troops garrisoned there to hold the lands, knights often became the castellans. In addition to becoming a stronghold in newly conquered territories, these castles also became a forward base where further military excursions could be launched from. Without the newly emerged class of titled knights to hold these castles, it could be argued that the Western European societies would not have enjoyed such success, and in turn the knights would not have had the opportunities to enrich themselves and expand their authority from an estate in their homeland to noble status.¹⁹

In the eleventh and early twelfth centuries, knights were excellent warriors and loyal to their lords, but they were also extremely “cruel, hard, and uncultured.” It was not until they had

17. John Gillingham, “An Age of Expansion c. 1020-1204,” in *Medieval Warfare: A History*, ed. Maurice Keen (New York: Oxford UP, 1999), 59.

18. *Ibid.*, 60.

19. Gillingham, “An Age of Expansion,” 74-81.

lands bestowed upon them, forged a brotherhood in battle, and were influenced by the Church that they began to grow from. “coarse warriors into the bright sword of knighthood.”²⁰ In the early eleventh century, before chivalry became the set of principles that guided knighthood, knights began to form military orders, fraternities, some of which swore vows like monastic vows of poverty, chastity, and obedience. However, with the emergence of land given to knights and titles becoming hereditary, these ideals fell out of fashion and developed into what became the guiding principles of chivalry. Those who remained true to the monastic vows, such as the fraternal Knights Templar, became known as warrior monks, and while still recognized as knights in the military sense, did not possess the land and titles of their secular counterparts.

With the increased influence of Christianity, the brotherhood formed in military orders, ideas of nobility learned from fighting in foreign lands, and the bestowal of land upon them, knights emerged as a class separate from other men-at-arms. Knights were able to participate in local government in more meaningful ways, and their increased wealth led to a more cultured life in peacetime. For the first time, “Knighthood and chivalry became associated with gentle birth.”²¹

“By the late twelfth century [the sword] had become the ultimate symbol of the knight...”²² It was not by coincidence that the sword and the knight became iconic companions during the Age of Chivalry. With knighthood now a hereditary title, training began around the age of seven, where horsemanship and sword fighting were the primary focus. When years of training were completed, the young man would be welcomed into the brotherhood of knighthood

20. Norman, *English Weapons*, 36 & Bouchard, *Strong of Body, Brave and Noble*, 83.

21. Norman, *English Weapons*, 38.

22. Loades, *Swords*, 123.

in a grand ceremony. The night prior would be spent in vigil, and a ceremonial bath would follow in the morning. New robes were then given, and spurs attached to the foot. Finally, the sword was girded around the new knight's waist. Either with his own sword, or with a ceremonial sword, the young man was then struck lightly on the side of neck, face, or shoulder, and ceremonial words were uttered such as, 'May this be the last blow you receive unanswered', or 'Be thou a good knight'.²³ From then on, the knight was rarely seen without his sword as it had become a marker of his new title and social status.

The Sacred Sword

During this same period, the knight's sword became a sacred object, often consecrated prior to the knighting ceremony. New knights were told everything that had been given to them during the ceremony not only served a practical purpose in war, but also symbolized the ideals of knighthood. "His dagger represented his trust in God; his spur, swiftness and diligence... Most important of all was his double-edged sword; one edge represented chivalry and the other justice."²⁴

The sanctity of the sword proliferated during the crusades when the knight's cause was explicitly a holy cause, and in many ways also a selfish cause. When Pope Urban II called for the crusades, he made the decree that, "Whoever for devotion alone, not to gain honour or money, goes to Jerusalem to liberate the Church of God can substitute this journey for all penance." Now, not only was killing in the name of the church a knightly duty, it also guaranteed that all sins committed by the knight were forgiven and paid for, assuring them a place in heaven.²⁵

23. Ibid., 129-31 & Norman, *English Weapons*, 38.

24. Loades, *Swords*, 131.

25. Loades, *Swords*, 118.

With this change of purpose also came changes in the proportions of the sword. While the changes during the eleventh century were often practical and functional to make the weapons more effective in combat, the longer hilt and extended guard that emerged during the crusades made the sword look more like a cross, perhaps one of the most important symbols in Christian ideology. The similarities between the sword and the cross were not seen as a mere coincidence ~~by many~~. It was divine providence that the very weapon carried to “liberate the Church of God,” as Pope Urban declared, was the symbol of Christ.²⁶

In the thirteenth century, Ramon Lull, a knight who became a hermit after a spiritual epiphany, wrote the *Book of Knighthood and Chivalry*, which explained much of the symbolism in knighthood. Of the sword, Lull wrote:

Onto a knight is given a sword, which is made in the semblance of the cross to signify our lord God vanquished in the cross the death of human lineage, to which he was judged for the sins of our first father Adam. Likewise a knight owes to vanquish and destroy the enemies of the cross by the sword, for chivalry is to maintain Justice. And therefore is the sword made to cut on both sides to maintain chivalry and Justice.

This passage, although reiterated by many historians as the symbolic value of the sword, takes on a different meaning when written from the perspective of a thirteenth century knight. Lull explicitly stated that the sword was made in the semblance of the cross and that the purpose of the two sides were to represent justice and chivalry yet says so in a manner that suggests this was unique to the knightly sword, when in fact swords were made in this fashion for centuries. Swords, such as the Ulfbeht sword—which will be discussed later—were made long before the Age of Chivalry and were constructed as double-edged weapons in a cross-like shape for

26. Michael Burger, *The Shaping of Western Civilization*, vol. 1 (North York: University of Toronto Press, 2014), 187.

practical, functional reasons. The two edges let the sword be used swinging in multiple directions, the long hilt was for balance, and the pommel at the end was to keep the sword from slipping from the warrior's grasp. The guard was to stop another blade from sliding into the warrior's hands. Although these attributes were accentuated as the symbolism of the sword as a Christian icon flourished, they were not exclusive to Christianity. Many of these attributes, such as the elongated guard, were born out of function to protect the hands as bulkier plate armor became commonplace. It wasn't until the marriage of piety with knightly status did the sword take on this new meaning, one of many ascribed to it by its noble owner. The sword had always resembled a Christian cross, but now there was a Godly reason as to why it was shaped as such.²⁷

While Christianity added new levels of symbolic value to the swords, it also changed how knightly swords were inscribed. Inscriptions prior to crusades were largely markings of the smiths who crafted them or omens of good fortune. Now with the sword being seen by knights as a sacred tool of divine justice wielded by the holiest of men, inscriptions and engravings on the blade began to reflect these sentiments. Surviving swords from the crusades show inscriptions such as *Homo Dei*, Latin for 'Man of God'. Another bears the phrase *In Nomine Domini*, 'In the Name of God'. Other common inscriptions of the era were *Sancta Maria* 'Holy Mary', *Sanctus Petrus* 'Saint Peter', and *Benedictus Deus* 'Blessed God'. As the crusades continued, so did the link between the knight, his sword, and piety. Support from the Christian church itself led the knight into battle with a "clean conscience," to carry out God's work and were justified by words

27. Ramon Lull, *Book of Knighthood and Chivalry & the Anonymous Ordene de Chevalerie*, trans. William Caxton (Union City: Chivalry Bookshelf, 2001), 64. & Loades, *Swords*, 113. & Oakeshott, *The Sword in the Age of Chivalry*, 17-8.

such as those found in, “twelfth-century crusader doctrine [which stated], ‘a knight should render no reason to the infidel than 6 inches of sword into his accursed bowels’.”²⁸

The Noble Sword

With the expansion of chivalry through military conquests, both secular and religious, the “Elite social status of knights became a given and a valorizing and inclusive ideology, expanding and extending earlier developments, fused with an older military function.” Citation The sword’s identity had grown with the knight to be a symbol of nobility, wealth, prowess, and piety, so it is not surprising that even in death, the sword was an important part of identity and accompanied the knight on his final quest, in one form or another.²⁹

Even before the Age of Chivalry, great warriors such as the seventh century Anglian king buried at Sutton Hoo in Suffolk, were interred with valuables, including swords and shields decorated with precious metals and jewels, objects that displayed enormous power and wealth.³⁰ Throughout the Age of Chivalry similar practices emerged, but as these precious weapons became heirlooms and part of estates, they were often not buried with the deceased. Additionally, the threat of these valuable swords being unearthed for the financial gain of others was present. Instead, effigies depicting stylized knights, armed and armored, became the primary means of conveying one’s social status as a knight after death. University of London Professor Emeritus Nigel Saul, who has written extensively about funerary effigies, asserts these depictions of the armed knights were not merely self-serving and that they, “constitute significant displays of family power... [and were] highly important to a family’s reputation and self-image.”³¹

28. Loades, *Swords*, 119-23 & Bouchard, *Strong of Body, Brave and Noble*, 81-5.

29. Richard W. Kaeuper, *Medieval Chivalry* (Cambridge: Cambridge UP, 2016), 85.

30. Norman, *English Weapons*, 15.

Examples of these idealized effigies, such as the Tomb Effigy of Jacquelin de Ferrière on display at the Medieval Art Gallery of the Metropolitan Museum of Art, depict the knights not as they were when they passed, but at the prime of their life, usually around the age of thirty-three, an age symbolic in Christendom as the age Jesus was crucified.³² In this particular effigy, Sir Jacquelin de Ferrière lays in state with full chainmail, shield and sword. While the age and attire depicted were largely stylized based on the popular trend of the period—this specific piece dating between 1275 and 1300 C.E.—the sword is altogether unique. Although sheathed, the guard, hilt, and pommel can be seen clearly. Most swords of this period had a pommel that was oval-shaped, and the guards were long. On the effigy, Ferrière is depicted with a trilobate, or scallop-shaped pommel and short, straight guards. The only other unique characteristic of the effigy is the heraldry on the shield, marking both items as valuable to not just Jacquelin de Ferrière in life, but as part of his legacy as well.³³

The Smith and the Sword

During the Age of Chivalry, the knightly sword, albeit not always the primary weapon in battle, grew into an identity and social status that were as revered as the knightly title itself. However, these knights would have never been able to display such an object of power and status if it were not for the craftsmen who forged these weapons. Not celebrated or revered as the knights of the Age of Chivalry, the smiths who worked the steel were nothing short of mystics who possessed the knowledge to turn lumps of iron ore and charcoal into magnificent works of

31. Nigel Saul, *Death, Art, and Memory in Medieval England: The Cobham Family and Their Monuments, 1300—1500* (New York: Oxford UP, 2001), 229-30.

32. Rachel Dressler, *The Chivalric Rhetoric of Three English Knights' Effigies* (New York: Routledge, 2017), 14-7.

33. Helmut Nickel, "A Crusader's Sword: Concerning the Effigy of Jean d'Alluye," *Metropolitan Museum Journal* 26 (1991): 123 & Oakeshott, *The Sword*, 14.

art. The process to create each sword, although the same, produced a product that was ~~entirely~~ unique.

Imagine living in a time when crossing a sea to a neighboring land was equated to traveling between worlds, where one could expect to face perilous sea monsters and angry gods. During this period, imagine walking into a dark room, probably conical in shape with a spiraling entrance to keep the light of day out. An open furnace burns at over 1000° Fahrenheit, pouring cinder, smoke, and soot into the air and out through a hole in the roof, as an apprentice forces air through the bellows into an inferno of coals. Over an anvil a man, black from soot and sweat, beats a piece of glowing ore that he has taken from the ground and mixed with just the right amount of carbon to create the strong, yet flexible steel needed to forge the blade and tang of the sword for his patron. As he skillfully moves the steel between the anvil and the furnace with his tongs, he draws out and folds the metal over and over with his hammer, the same way a baker kneads the dough to make bread, creating the many layers that will give the final product its strength. Slowly, the sword begins to take shape under the practiced swings of the smith's hammer. While this process to him is simply a secret of his trade learned from his father or master, to everyone else forging appears to be some form of alchemy; a magical process where this man took iron from the ground, and with fire and strength turned it into a sword that would be coveted by nobles far and wide.³⁴

Although modern science has taken some of the awe out of the swordsmiths' trade, the technique is still nothing short of spectacular, and even more so during the Age of Chivalry. Not much is said about the swordsmiths of the past, and when they are mentioned, it is usually in a mythical sense. The Romans told stories about Vulcan, the god of metalworking, crafting

34. Duncan Wright, "Tasting Misery Among Snakes: The Situation of Smiths in Anglo-Saxon Settlements," *PIA Papers from the Institute of Archaeology* 20 (2010): 131-36.

weapons over his anvil. In Norse mythology, Weland crafted weapons and armor for heroes that contained magical powers, such as the hauberk worn by Beowulf.³⁵ Weland emerges time and again throughout medieval Europe, with his image depicted on caskets discovered in Northumbria. Even during the Age of Chivalry, Weland appears in literature. In the *Song of Roland*, an epic poem believed to have been composed in the early eleventh century about the Battle of Roncevaux Pass during the reign of Charlemagne, Weland forges the mighty sword Durendal, which was given to Charlemagne by an angel of God, and then passed to his most beloved vassal Roland.³⁶

The mystery surrounding the forging of steel swords was most likely from a combination of smiths protecting trade secrets and a distinct line between nobility and those who toiled, but the feats accomplished by swordsmiths was nothing short of magical, and the names of several renowned swordsmiths are still extremely well known. The names of these smiths were not written in books, but in the very steel itself. Perhaps one of the most renowned names prior to and at the beginning of the Age of Chivalry, was the Ulfbehrt sword.³⁷

It's still uncertain whether Ulfbehrt was the name of an actual smith or the name of a trade shop, but because the swords inscribed with the signature inlay were manufactured from approximately 700 to 900 C.E., it was likely a shop name that was believed to have been located in the Solingen region of modern-day western Germany. Metallurgical tests conducted on surviving Ulfbehrt swords have shown that these swords were crafted of *wootz* steel, or crucible steel, and were of the highest quality steel known at the time.³⁸ Perhaps one of the greatest

35. Daniel Donoghue, ed., *Beowulf: A Verse Translation*, trans. Seamus Heaney (New York: W.W. Norton & Co, 2002), 14.

36. *The Song of Roland*, trans. Glyn Burgess (London: Penguin, 1990), 65.

37. Loades, *Swords*, 113-4.

testaments to the quality and value of the Ulfbehrt sword were the amount of forgeries produced during the eighth and tenth centuries and well into the Age of Chivalry. While contemporary science can easily identify forgeries through testing the quality of the steel, during the Age of Chivalry, when Ulfbehrt swords were no longer in production, but still highly coveted, people needed to rely on inscriptions. Careful analysis has revealed that true Ulfbehrt swords were inscribed in a specific way, +ULFBEHR+T, on one side, while the other usually was inlaid with saltires or swastikas.³⁹

The Ulfbehrt swords, along with other quality swords of this period, relied heavily on *wootz*. The process for creating the *wootz* ingots was such a laborious and skillful process requiring precise conditions and measurements of material that they were often imported to places of arms manufacture from India, Persia, and Central Asia rather than being made at the site of the forge. The process required blooms of iron to be heated to approximately 1350° Celsius, “in a covered crucible to “purify” them with medicinal herbs.”⁴⁰ These ‘medicinal herbs’ were in actuality plant matter with high carbon content, and over the period of one to two days where the crucible was heated and the iron melted, it absorbed enough carbon to become steel when cooled. Later, sometime in the tenth or eleventh century, as described by Iranian scholar Abū al-Biruni, ingots could be made more easily by combining low carbon wrought iron with high carbon cast iron in the crucible.⁴¹

38. Alan Williams, *The Sword and the Crucible: A History of the Metallurgy of European Swords up to the 16th Century* (Boston: Brill, 2012), 25.

39. *Ibid.*, 117-50 & Loades, *Swords*, 115.

40. Williams, *The Sword and the Crucible*, 25.

41. *Ibid.*, 26 & P.T. Craddock and Janet Lang, eds., *Mining and Metal Production through the Ages* (London: British Museum Press, 2003), 231–57.

Once the ingot was delivered to various forges, they were carefully worked at relatively low temperatures of approximately 1000° Fahrenheit into a sword. The process was very specific and varied little for centuries. It began with the smith heating the ingot in the furnace to an orange glow. Then, he would *drift*—make a hole by driving a pin through the ingot with a hammer—through the center of the ingot, the place where the most impurities in the steel settled as the ingot cooled in the crucible. The smith would then return the ingot to the fire, heating it to an orange glow once again, this time to cut through one side of the o-shaped ingot using a hammer and chisel. The steel was again fired and returned to the anvil where the smith would *draw* the ingot—lengthen and flatten it with a hammer. Again, the steel would be fired, then cut partially with the chisel about halfway and folded onto itself, then hammered until the two halves became one again. This process repeated until the smith was satisfied that he had removed enough *slag*—impurities remaining from the crucible process. The ingot was then fired once more and cut into steel *billets*—just enough steel necessary to forge a full-length sword.⁴²

At this point, the smith would take one billet and begin to heat, draw, and fold the steel repeatedly creating sometimes over a hundred layers, which provided the delicate balance of strength and flexibility required in battle. Next, the smith would fire and draw the steel into its final rough shape of blade and tang complete with beveled edges. This process of forging would take several months to produce a quality steel blade and tang.⁴³

After the roughly forged steel was cooled, any inlays would be cut into the steel. With earlier swords, like the Ulfbehrt, any inlays besides from those denoting the manufacturer or small other small symbols were rare. However, during the Age of Chivalry, as a demand for unique

42. Williams, *The Sword and The Crucible*, 218-25.

43. *Ibid.*, 263.

and elegant swords grew, so did the intricacy of the artwork that adorned the blades. Once all the engraving was done, and inlays set, the steel was hardened. To harden the steel, the smith would bring the blade to an orange glow for the final time, focusing the heat specifically on the edges. Using a skilled eye to judge the temperature by the color of the glowing steel, the blade would be brought to approximately 1000° Fahrenheit then immediately quenched in water or oil, preferably oil if it were available. This would harden the outer edges of the blade while allowing the center to remain flexible.⁴⁴

After quenching the blade, the sword was then ground to its final shape. First, a *fuller*—a groove running the length of the blade to remove weight without compromising the structural integrity—was ground, then the edges were shaped and then sharpened. When this was done properly, no amount of sharpening could ever remove the edge of the sword. Next, the guard, handle and pommel were fitted to the sword. Most guards were made of iron, handles of wood and leather, and the pommels were of usually of iron as well. Finally, any precious metals that were to be inlaid were set into place and the sword was dipped into a weak acid bath to accentuate and reveal these inlays on the blade. The result was a humble weapon of incomparable quality.⁴⁵

At the beginning of the Age of Chivalry, when swords such as the Ulfbeht were rare and highly coveted, they could cost as much as a small castle.⁴⁶ Although these swords were so valuable, as stated previously little is known about those who crafted them. This is possibly because materials were more valuable than labor in this period. As the early high quality swords

44. Ibid., 265

45. Williams, *The Sword and the Crucible*, 92.

46. Guy Halsall. *Warfare and Society in the Barbarian West, 450-900* (New York: Routledge, 2003), 164.

became scarce over time, and the number of knights increased during the Age of Chivalry—as well as in their wealth—new types of swords were sought. After the Norman conquest in 1066 C.E., the predominant weapon became the Ingelrii sword, named after the inscription in the blade. While the style and shape, as well as the method of manufacture, was comparable to the methods used to make the Ulfbehrt swords, drastic changes were made to the decorative and symbolic aspects of the sword. Perhaps the biggest change was the disappearance of the pagan inscriptions such as the swastika and saltires, which were replaced by, “Latin inscriptions invoking the power of the Christian God.”⁴⁷ The method of inlay also shifted from an iron inlay, which needed to be forge welded into the blade, to inlays of precious metals such as gold and silver.⁴⁸

Another shift was in the steel used to forge these blades. While still a form of *wootz*, a specific kind of crucible steel emerged from Damascus that was coveted for its purity, strength, flexibility, and beauty and became known as *Damascened steel*. This steel was made in the same manner, by mixing high carbon iron and pure iron in a crucible, but also adding certain types of leaves and sticks to produce what is called cementite, a specific compound formed of iron and carbon. After being forged, a damascened blade was then dipped in a weak acid, like that used to reveal etchings and inlays, and the entire blade took on an appearance of “water silk.”⁴⁹ In doing so, a sword of not just exceptional strength derived from the many layers of steel, but also exquisite beauty, was forged.

47. Loades, *Swords*, 119.

48. Williams, *The Sword and the Crucible*, 223-6.

49. *Ibid.*, 36.

As knights and smiths sought to differentiate themselves and their weapons from others, new methods were discovered, aside from the previously mentioned inlays of precious metals, to create weapons that were not only superior in battle, but elegant and noble in their presentation. One method, which was only achieved by the most skilled swordsmiths in the fifteenth century, was the art of blueing the steel. This method, believed to have been mastered as a technique rather than an unintentional outcome of the heat cycling process, would require the heating of the steel slowly to around 250° Celsius under extremely clean conditions, without tempering the steel. This would cause the steel to oxidize leaving a uniform blue hue to the entire sword. Because of the extreme care and skill needed to not affect the hardness of the weapons edge, this technique was largely used on armor, however some smiths, especially in southern Germany, were able to produce this effect on weapons making them highly valuable and distinct.⁵⁰

With the evolutions in methods of manufacture and craftsmanship, the sword evolved through the Age of Chivalry from a weapon to a symbol of status and power, in many ways, transforming in appearance and intricacy and meaning as well. More decorative, with religious aspects? Any family insignia?

The Literary Sword

Aside from physical changes, the sword's role grew in chivalric tales as well during this period. Richard Kauper says that "Little space and effort are required, for throughout this entire period, chronicles and biographies fulsomely report knights active in raid, war, and tournament, and imaginative literature is animated by lance strokes and sword blows breathlessly admired..."⁵¹

50. Ibid., 224.

51. Kauper, *Medieval Chivalry*, 86-7.

Tales, such as the previously mentioned *Song of Roland*, treat the vassal's sword with as much reverence and honor as they do the knights of Charlemagne. Sir Roland is described as the most beloved vassal, beautiful, brave, strong, and honorable. Durendal, the sword brought to earth by an angel of God, is described similarly. Durendal's steel is unbreakable, even as Roland attempted to destroy it in a final desperate act before his death to prevent his weapon falling into enemy hands. The beauty and elegance of Durendal are portrayed through the descriptions of its richly adorned pommel and hilt. The strength and power of the sword are shown in its ability to strike down many armored enemies with a single swing. What is also notable is that throughout the battle Roland's actions in battle are described, but so are Durendal's as a character, not just as Roland's sword. In the chanson, Archbishop Turpin proclaims, "Even this attack of the heathen we will repulse, and the best blows given shall be by Durendal."⁵²

The physical attributes are not the only significant evolution of the sword as a character. In the *Song of Roland*, Durendal also represents the marriage of chivalry and piety. Aside from being presented by a heavenly being, Durendal is mentioned in the *Matter of France*, a collection of medieval literature also known as the Carolingian cycle, as having a golden hilt blessed by Saint Peter's tooth, Saint Basil's blood, Saint Denis's hair, and a piece of cloth worn by the Virgin Mary.⁵³

While the *Song of Roland* represents the sword in literature during the rise of the Age of Chivalry, Sir Thomas Malory's *Le Morte D'Arthur* chronicles the life of King Arthur and the sword Excalibur, as well as his vassals, and bookends the era. Written by an imprisoned knight,

52. *The Song of Roland*, translated by Glyn Burgess (London: Penguin, 1990), 43.

53. Albrecht Classen, *Handbook of Medieval Culture* (Boston: De Gruyter, 2015), 161.

Le Morte D'Arthur not only presents the sword as a character through Excalibur, but it also provides what in many ways became an origin story for the birth of a nation with the legitimate heir to the throne drawing Excalibur from the anvil. The sword became the literal source of power and authority for an entire nation and secured a means of passage of this authority. In addition to showing the transference of power, Excalibur was used within the story to represent fallibility but not to the point where it could not be rebuilt, much in the same way a knight who had strayed from the values instilled by chivalry could return.⁵⁴

Although Durendal and Excalibur are just two examples of swords as literary characters, and they appeared in various forms of literature throughout the Age of Chivalry, it is what they represented that is important. They represented chivalric values, piety, power, nobility, and authority. The swords of these stories reinforced the ideals of the Age of Chivalry and continue to do so in many ways today with new iterations and interpretations portrayed in various forms of media.⁵⁵

The Eternal Sword

In her recent work, *Living by the Sword*, Kristen B. Neuschel concludes, “Swords did not mean just one thing, ever, but they were always good for thinking with, good for representing the timelessness of warrior identity and the security of one warrior’s stature, good for appealing to some imagines past for purposes of any present.”⁵⁶ The sword has withstood the test of time, consistently finding its place in the hands of warriors and nobles perhaps more than any other

54. Thomas Malory, *Le Morte Darthur, Or, The Hoole Book of Kyng Arthur and of His Noble Knyghtes of the Rounde Table: Authoritative Text, Sources and Backgrounds, Criticism*, Stephen H. A. Shepherd, ed. (New York: Norton, 2004), 614, 1268, & 1920-2047.

55. Lorraine K. Stock, “Reinventing an Iconic Arthurian Moment: The Sword in the Stone in Films and Television,” *Arthuriana* 25, no. 4 (2015): 67-9.

56. Kristen B. Neuschel, *Living by the Sword: Weapons and Material Culture in France and Britain, 600-1600* (New York: Cornell University, 2020), 162.

weapon, becoming a historical object and in many cases its own historical character. This is not only because it was a practical and useful weapon, but because it became a part of medieval society, especially among the nobility. While much focus is paid to the physical attributes of the sword, they were so much more. The knightly sword of medieval Europe represented months of labor by skilled craftsmen who, by servitude or by trade, brought these simple objects of steel and gave them value, monetary and socially. This was where pieces of forged metal were taken from a utilitarian object and artfully crafted into coveted legends that took their place in literature, that bestowed title and accolades on nobility, and were symbolic of Christendom, which the European knights saw as their duty to protect. In chivalric tales, the swords have come to be known as their knights now are, by name and legend of their deeds. The same sword represented years of training by knights and nobles while the various etchings, pattern welds, and encrusted jewels portrayed the knight's wealth and prestige. In ceremonies, the sword bestowed power in the form of title upon knights, charging them as protectors of their realms. The knightly sword, while often viewed as a weapon, could better serve as a look at a medieval society, often framed around religion and great men that would have never been able to achieve their place without the skilled craftsmen who created the swords and those who wielded their creations.

Works Cited

- Ayton, Andrew. "Arms, Armour, and Horses." In *Medieval Warfare: A History*, edited by Maurice Keen, 186-208. New York: Oxford UP, 1999.
- Bouchard, Constance Brittain. *Strong of Body, Brave and Noble: Chivalry and Society in Medieval France*. Ithaca: Cornell UP, 1998.
- Burger, Michael. *The Shaping of Western Civilization*. Vol. 1. North York: University of Toronto Press, 2014.
- Burton, Richard Francis. *The Book of the Sword: A History of Daggers, Sabers, and Scimitars from Ancient Times to the Modern Day*. New York: Skyhorse Publishing, 2014.
- Classen, Albrecht. *Handbook of Medieval Culture*. Boston: De Gruyter, 2015.
- Craddock, P.T. and Janet Lang, eds. *Mining and Metal Production through the Ages*. London: British Museum Press, 2003.
- DeVries, Kelly and Robert Douglas Smith, *Medieval Military Technology*. 2nd ed. Toronto: U of Toronto P, 2012.
- Donoghue, Daniel ed. *Beowulf: A Verse Translation*. Translated by Seamus Heaney. New York: W.W. Norton & Co, 2002.
- Dressler, Rachel. *The Chivalric Rhetoric of Three English Knights' Effigies*. New York: Routledge, 2017.
- Gillingham, John. "An Age of Expansion c. 1020-1204." In *Medieval Warfare: A History*, edited by Maurice Keen, 59-88. New York: Oxford UP, 1999.
- Halsall, Guy. *Warfare and Society in the Barbarian West, 450-900*. New York: Routledge, 2003.
- Housley, Norman. "European Warfare c. 1200-1320." In *Medieval Warfare: A History*, edited by Maurice Keen, 113-135. New York: Oxford UP, 1999.
- Kaeuper, Richard W. *Medieval Chivalry*. Cambridge: Cambridge UP, 2016.
- Keen, Maurice Hugh. *Medieval Warfare: A History*. New York: Oxford UP, 1999.
- Langlands, Alexander. *Craft: An Inquiry Into the Origins and True Meaning of Traditional Crafts*. New York: W.W. Norton, 2018.
- Loades, Mike. *Swords and Swordsmen*. South Yorkshire: Pen & Sword, 2012.

- Malory, Thomas. *Le Morte Darthur, Or, The Hoole Book of Kyng Arthur and of His Noble Knyghtes of the Rounde Table: Authoritative Text, Sources and Backgrounds, Criticism*. Edited by Stephen H.A. Shepard. New York: Norton, 2004.
- Neuschel, Kristen B. *Living by the Sword: Weapons and Material Culture in France and Britain, 600-1600*. New York: Cornell University, 2020.
- Nickel, Helmut. "A Crusader's Sword: Concerning the Effigy of Jean d'Alluye." *Metropolitan Museum Journal* 26 (1991): 123-8.
- Norman, A.V.B. and Don Pottinger. *English Weapons & Warfare 449 — 1660*. Englewood Cliffs: Prentice-Hall, Inc, 1979.
- Oakeshott, Ewart. *The Knight in Battle*. 2nd ed. Chester Springs: Dufour Editions, 1998.
- *The Sword in the Age of Chivalry*. 2nd ed. Woodbridge: Boydell, 1994.
- Reuter, Timothy. "Carolingian and Ottonian Warfare" In *Medieval Warfare: A History*, edited by Maurice Keen, 13-35. New York: Oxford UP, 1999.
- Saul, Nigel. *Death, Art, and Memory in Medieval England: The Cobham Family and Their Monuments, 1300 – 1500*. New York: Oxford UP, 2001.
- The Song of Roland*. Translated by Glyn Burgess. London: Penguin, 1990.
- Stock, Lorraine K. "Reinventing an Iconic Arthurian Moment: The Sword in the Stone in Films and Television." *Arthuriana* 25, no. 4 (2015): 66-83.
<http://www.jstor.org/stable/44697440>.
- Williams, Alan. *The Sword and the Crucible: A History of the Metallurgy of European Swords up to the 16th Century*. Boston: Brill, 2012.
- Wright, Duncan. "Tasting Misery Among Snakes: The Situation of Smiths in Anglo-Saxon Settlements." *PIA Papers from the Institute of Archaeology* 20 (2010): 131-36.
doi:10.5334/pia.346.
- Yücel, Ünsal. *Islamic Swords and Swordsmiths*. Istanbul: IRCICA, 2001.