Discover...

DEFENSIVE WEAPONS

The technological and tactical evolution of warfare can be broken down into two basic, equal forces: ways to kill people and ways to keep people from being killed. The latter is what we term ‘defence’. Of course, the use of any object to protect oneself from injury can be termed, ‘self-defence’, be it a saucepan or a chair to hide behind. However, defence was most commonly and effectively practised through objects designed for purpose, namely, **shields and armour**. This specificity means shields and armour are rare examples of weapons of war that have not been developed from agricultural or hunting tools. It is important to remember that shields and armour *are* weapons, since a weapon is defined as any implement used in combat.

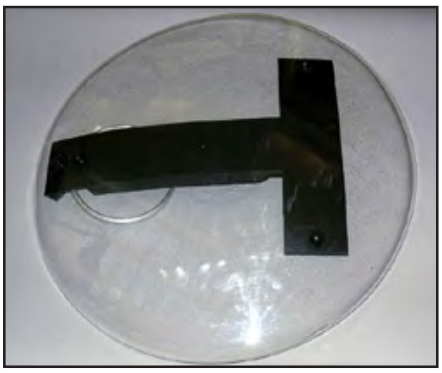
Usage

Shields and armour were used alone or together depending on a variety of factors. For the peoples of the East African plains or the Western Australian deserts, shields were the bedrock of their defensive systems, extensive armour being impractical in the intense heat. Even in temperate climes, full armour could be heavy and restricting to move in, a fatal flaw if a quick reaction to a sword or incoming projectile was needed. Shields could also be discarded easily in an emergency, or if the attack slackened. On the other hand, encompassing armour offered more protection from all sides. It also freed up the use of the shield-bearing arm to use another weapon or to aid balance, which was especially useful for horse-mounted warriors.

Shields and armour were used in combination in many cultures. However, the rapid advancement of firearms from the 15th century, and the mounting cost of equipping large armies, gradually rendered shields and then armour obsolete. However, this decline did not happen everywhere at once. The Persian-inspired model of mail shirt, domed helmet and round, incised metal shield was used in the Caucasus area of Russia until two hundred years ago. Right up until the early 20th century there have been examples of the peoples of Africa, Oceania and the Americas attempting to resist gun-using Europeans with traditional armour and shields, usually with fatal results.

Mail shirt, helmet and shield, Georgia, the Caucasus, Russia; 1911.29.1, .2 and .4

In the late 20th century there was a renaissance in body defence. Science caught up with ballistics to develop resistant (though not always 'bullet proof') equipment.



Thames Valley Police riot shield, Oxfordshire; 1993.21.2

Riot police today are issued with protective vests and polycarbonate shields in order to tackle potentially violent situations. It is interesting that as well as new materials such as reinforced metals, fibre-glass, ceramics and plastics, modern armours also use specialised nylon-based textiles. Armours have, in a sense, come full circle and are not totally different from the leather and fibre versions used thousands of years ago.

Shields

True shields have some form of grip. This is usually a hand-grip set into the back or a larger strap that can be hooked through the arm or looped over the shoulder. Shields have been used on every continent since early times, producing a rich variety of shapes, weights and styles. Materials used to make shields include metal, wood, wickerwork, plastic, leather, hide, skins and plant fibres, as well as decorative additions such as metallic fittings, paint, lacquer, shell, hair, jewels and fabric.

There are *three* principal types of shield:

- the circular shield, usually convex in front, with a boss in the centre; such as those found in Ethiopia, or the famous Indian *dhal*, with four bosses
- the rectangular or elongated oval shield, either flat or curved outward, common in Australia and Melanesia
- the kite or triangular shield tapering to a lower point, which was the prevailing form in medieval Europe

Basketry shield, Solomon Islands, Melanesia; 1895.22.196

Armour

The rich and varied types of armour are all stylistic interpretations of a specific type of clothing. They are also works of engineering, representing different solutions to the problem of bodily protection within technological restraints. As with shields, there was no single 'ideal' design, nor was metal universally employed. Craftsmen often had to use whatever natural materials were available and possessed a varying array of metalworking technologies. But differences in design could sometimes be conscious decisions, since defensive measures were often dictated by the type of weapons and tactics used by the opposition.

Whatever type of armour was used, it underwent rigorous, real-life refining and testing to make sure it did what it was meant to, namely, save the wearer's life.

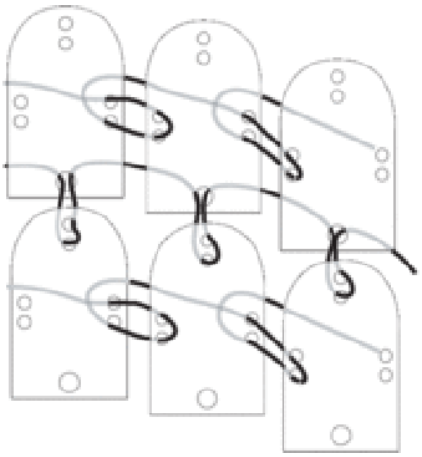
Some armours were thick and protected large parts of the body, although they were so heavy that the wearer could not run very far or fast. An example of this is brigandine armour, which consisted of large plates riveted to the underside of a thick garment.

Brigandine armour, China, early 19th century; 1884.31.27

Buffalo-hide cuirass, Sema Naga people, Assam, India; 1923.85.545

Conversely, it could be argued that the greater mobility and sensory awareness provided by lighter and more flexible armour was worth the increased vulnerability. Bark belts and carved wooden shields were all the defence employed by the warriors of the Papuan Gulf. Similarly, this buffalo-hide cuirass from India was unrestricting; it covered the soft belly and vital organs but offered no protection to the chest, shoulders or neck.

One construction that has prevailed in various designs is a 'glancing surface' to deflect blows. Scale armour may have taken its inspiration from the protective skins of fish and reptiles. Small flat pieces of leather, iron, metal or horn were attached to an undergarment in vertically overlapping layers over which a blade would 'skim'. This was developed into lamellar armour, consisting of tightly laced horizontal rows of plates, making it less likely for a single piece to be detached. This design was widely used by warriors in Byzantium, the Eurasian Steppe and the Far East.



An example of how lamellar armour is laced together. *Image: wikipedia*

A widely used deflective armour was mail, often called 'chain-mail', consisting of linked metal rings forming a rippling surface of miniature convex arcs. Weighing approximately 10kg, a mail shirt was not as heavy as full-plate armour, which offered greater protection against piercing. Yet plate armour too had its weaknesses – it could buckle or communicate the full force of a blow to the body, causing internal injuries. Other armours were designed to absorb impact. For example, padded fibres received and dissipated a blow, even though such 'soft' creations would not stand up to a high-velocity arrow or bullet. In Kiribati, Micronesia, entire suits were made of woven coconut-fibre to form a very tough matting.

Detail of coconut-fibre armour, Kiribati, Micronesia; 1941.2.74.

More than Just Defence

The term ‘defensive weapon’ is something of a misnomer. Many weapons were multi-purpose and defence and attack often blurred in warfare. For example, some shields had pouches on the back in which to conceal daggers or pistols. Others were long and thin for bludgeoning or for parrying the blows of a club or sword. Some had sharp projections that could be used aggressively. This Philippine shield has three prongs on the upper edge to trip up an opponent. The two prongs on the lower edge would then be used to pin his neck to the ground so that his head could be cut off.

Pronged wooden shield, Igorot or Kalinga people, Philippines, South East Asia; 1929.71.2

The Importance of Decoration

It is important to gain a psychological advantage in warfare. Armour and shields had fairly large surface areas that could be embellished with messages, symbols and decorations to encourage and inspire the wearer or intimidate his opponents. Bornean warriors would often adorn their shields with the hair of slain enemies. Some Indian shields were painted with hunting scenes to emphasise the role of the enemy as the doomed prey. In western New Guinea, a man went into battle to avenge the death of a relative, his sheild would bear threatening, masculine motifs and depictions of the dead relative, thus making his enemies feel that they were fighting two men at once.

‘Demon’ helmet, Iran (Persia); 1966.1.1359

Helmets could increase the wearer’s self-confidence, reinforcing a sense of allegiance through the use of recognisable forms, from the Roman *galea* to Germanic morions to First World War ‘tin-pots’. They could make the warrior more frightening (especially those with plumes, horns and visors, etc), or even imbue him with magical powers. This Persian helmet bears the face of a demon or *div*. In mythology, the great Persian hero, Rostam, defeats the king of the *divs* and thereafter wore a helmet with an image of his victim’s face. The wearer of this helmet would have been considered to possess the heroic qualities of Rostam.

The symbolic and presentational aspect of shields, armour and helmets is illustrated by the way many were still used as ceremonial or ritual items long after they had no practical use on the battlefield.

References, Sources and Further Reading

Egerton, Wilbraham Egerton [Lord Egerton of Tatton], *Indian and Oriental Armour*, London: Arms & Armour Press (1968; originally published 1896).

Ferdowsi, *Shamnameh: The Book of Kings*, Tehran: University of Tehran (1997).

Holmes, Richard (ed.), *Weapon: A Visual History of Arms and Armour*, London: Dorling Kindersley (2006).

Koch, Gerd, *The Material Culture of Kiribati* (transl. Guy Slatter), Berlin: Museum für Völkerkunde (1965).

Robinson, H. Russell, *Oriental Armour* (Arms and Armour series), London: Jenkins (1967).

Shakespear, J., *The Lushei Kuki Clans*, London: Macmillan (1912).

Spring, Chris, *African Arms and Armour*, London: British Museum Press (1993).

Tregear, Mary, *Chinese Art*, London: Thames & Hudson (1997).

Waite, Deborah, 'Shell-Inlaid Shields of the Solomon Islands', in Sidney Moko Mead and Bernie Kernot (eds), *Art and Artists of Oceania*, Wellington: Dunsmore Press (1993), pp. 114–61.

The objects featured in this Introductory guide can be found at the following locations:

Upper Gallery	**Case U3A**	**police riot shield** **basketry shield** **Philippine pronged shield** **Indian *Dhal***
Upper Gallery	**Case U4A**	**Kiribati coconut-fibre armour** **buffalo-hide cuirass**
Upper Gallery	**Case U5A**	**Caucasian mail, helmet and shield** **Chinese brigandine armour** **Persian 'demon' helmet**

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