

quistadors as cutting better than the Spanish swords and being so cleverly constructed that the blades could be neither pulled out nor broken.⁶⁷

There are no known surviving examples of the *macuahuitl*.⁶⁸ However, there are numerous illustrations in various sixteenth-century drawings, and, as with the lance, one example did survive in the Real Armería in Madrid until it was destroyed in 1884. A print remains, but it is also mislabeled (see fig. 10).⁶⁹ As with the thrusting spear, the stone blades of the *macuahuitl* in the print are closely set, forming a virtually continuous cutting edge. Other drawings indicate that they were sometimes discontinuous, forming a gapped, possibly serrated, edge.⁷⁰ I can find no depictions of the typical Aztec *macuahuitl* predating the postclassic. In several early postclassic carvings at Chichen Itza, however, single warriors are holding clubs with two separated blades protruding from each side,⁷¹ these may have been early variants of the *macuahuitl*. Another example comes from a mural from the eighth-century Maya site of Bonampak, in which one warrior is wielding a club with blades on one side and a single point or blade on the other.⁷²

Clubs of various types were also used in Mesoamerican warfare.⁷³ Some were made of wood alone, but others (*huitzauhqui*) had stone blades.⁷⁴ Another type of club was the *cuauhololli* (see fig. 33), a simple wooden club with a spherical ball at the end.⁷⁵ The *cuauhololli* is a crusher and is thus effective in the downward blow but notably less so on the upward. Moreover, its lateral blows are probably less effective in absolute terms and impractical in combat. Yet another type of club was the *macuahuitzoctli*, which had a knob of wood protruding from each of its four sides and a pointed tip,⁷⁶ which Seler⁷⁷ likens to the medieval "morning star" club. These relatively unspecialized clubs were fairly widespread.⁷⁸

DEFENSIVE WEAPONS

Aztec defensive weapons included shields, helmets, and various types of body armor. Aztec military shields (*yaochimalli*) were of a variety of designs and materials, with many being made of hide or plaited palm leaves⁷⁹ (see Figs. 4, 5, 7, 13, 15, 31–33). One conquistador described shields, called *otlachimalli*, made of strong woven cane with heavy double cotton backing.⁸⁰ An early account describes

shields of split bamboo woven together with maguey fiber, reinforced with bamboo as thick as a man's arm, and then covered with feathers. Other shields called *cuauhchimalli*, were made of wood.⁸¹ Some shields were made with a feather facing over which was laid beaten copper.⁸² One type of shield was constructed so that it rolled up when it was not needed in fighting and was unrolled to cover the body from head to toe.⁸³ Shields were covered with painted hide, feathers, and gold and silver foil ornamentation.⁸⁴ The feather ornamentation varied by color, type, and design, according to the owner's status, merit, and so forth.⁸⁵ The Aztecs used round shields,⁸⁶ although square or rectangular examples are found throughout the classic and early postclassic in the Maya area, Gulf coast, and at Cacaxtlan (present-day Cacaxtla, Tlaxcala).⁸⁷

As part of the royal fifth, Cortés sent the king a shield of wood and leather with brass bells on the rim and a gold boss with the figure of Huitzilopochtli on it. The handle had carvings of four heads—a puma, a jaguar, an eagle, and a vulture.⁸⁸ As the Anonymous Conqueror cautioned of the Aztec shields sent to Spain, many were of the type used in dances and ceremonies (*mahuizzoh chimalli*) and not the sturdy war shields (see fig. 12).⁸⁹ One shield examined by Peter Martyr d'Anghera in Spain was made of stout reeds covered with gold, and the back was lined with a jaguar skin. The lower part of the shield was decorated with a feather fringe that hung down more than a *palma* (0.209 meters or 8.2 inches).⁹⁰ The hanging border of feathers was a common feature, and, though appearing fragile, it afforded additional protection to the user's legs.⁹¹ Such feather fringes could easily stop a spent projectile and deflect others, and the feature predates the Aztecs, being depicted in murals at the classic site of Cacaxtlan, at Teotihuacan,⁹² and among the classic Maya.⁹³ They were probably intended primarily for protection against projectiles and not against clubs or swords.⁹⁴

The feather workers of Tenochtitlan made shields,⁹⁵ and as part of their tribute the Aztecs received shields covered with fine, many-colored feather work and gold, depicting weapons, gods, kings, and scenes of great deeds in the past.⁹⁶ These were made of fire-hardened sticks so strong and heavy that, reportedly, not even a sword could damage them. According to the conquistadors, a crossbow could shoot through them but not a bow.⁹⁷

The two feather shields in the Württembergisches Landesmuseum in Stuttgart are 0.71 and 0.75 meters (28 and 30 inches) in



Fig. 12. Aztec feathered shield. This is an ornamental shield (*mahuizzoh chimalli*), not a functional war shield (*yaochimalli*). (Courtesy of the Museum für Völkerkunde, Vienna)

diameter, respectively, and have 3-millimeter (0.12-inch) foundations of wood strips bound together by fine interwoven cords. Four round sticks, 12 millimeters (0.47 inches) in diameter, cross the shields horizontally, and to these sticks and the leather patch on each shield are attached two leather handles. The outer surfaces of the shields are

covered with thick parchment, covered with feathers glued to the surface.⁹⁸

Quilted cotton armor (*ichcahuipilli*) was a common element of battle attire in Mesoamerica⁹⁹ (see figs. 31–33). It was constructed of unspun cotton tightly stitched between two layers of cloth and sewn to a leather border. The belief that the cotton was soaked in coarse salt to strengthen it¹⁰⁰ derives from de Landa;¹⁰¹ but this account is unsubstantiated elsewhere, and Gates¹⁰² thinks this is a misinterpretation of *taab*, "to tie," for *tab*, "salt," and that the cotton was tied or quilted, not salted.

The *ichcahuipilli* was so thick (one and a half to two fingers) that neither an arrow nor an *atlatl* dart could penetrate it.¹⁰³ It was made in several styles: a type of jacket that tied at the back, a sleeveless jacket that tied in the front, a sleeveless pullover that hugged the body and reached to the top of the thigh, and a sleeveless pullover that flared and reached the mid thigh.¹⁰⁴ As with their other weaponry, the Aztecs received some cotton armor in tribute.

The war suit (*tlahuiztli* suit) encased not only the torso but the arms and legs as well in long sleeves and leggings (see figs. 4, 5, 7, 15, 31, and 32). These suits were not padded but were worn over the cotton armor.¹⁰⁵ They existed in many different types; twelve are recorded as having been received as tribute.¹⁰⁶ Despite appearing like animal skins, the suits of noble warriors were made of feathers sewn to a backing fabric.¹⁰⁷ Only meritocratic nobles wore *tlahuiztli* suits of animal skins.¹⁰⁸ Both types of *tlahuiztli* suit afforded some protection from projectiles, especially the body if the wearer was also protected by the *ichcahuipilli*, but the limbs were also protected, though to a lesser extent. The feathered garments were finer and of higher status. The slick surface of the feathers may have offered greater protection than would skins, especially against glancing blows, and depending on the backing, these suits were probably lighter and cooler.

In addition to the jacketlike top, leggings were worn.¹⁰⁹ They offered the same protection provided to the upper limbs, since there was no cotton armor below the torso proper. But the legs were not major targets with the weapons in use, and the arms were most endangered by the force of blows rather than by the cutting power of the weapons used. *Tlahuiztli* suits apparently predated the Aztecs; a jaguar suit worn by a warrior is depicted at classic El Tajín.¹¹⁰

Over their cotton armor some warriors—apparently the war leaders—wore feather tunics (*ehuatl*) (see fig. 13).¹¹¹ Not as common as



Fig. 13. Nezahualcoyotl, king of Tetzcoco, dressed in war attire: a feather tunic and kilt (*ehuatl*) usually worn over padded cotton armor (*ichcahuipilli*), greaves (*cozehuatl*), armbands (*matemecatli*), wristlets (*matzopetztl*), sandals (*cactli*), a helmet, and a gold lip plug. He is armed with a feather-fringed shield (*yaochimalli*) and a sword (*macuahuitl*) and carries a small upright drum (*huehuetl*) on his back to signal the attack. (Codex Ixtlilxochitl 106r; courtesy of the Bibliothèque Nationale, Paris)

the tlahuiztli suit, the ehuatl was used primarily in the areas to the east of Tenochtitlan, stretching from Tetzaco to Tlaxcallan.¹¹² The tunic was fashioned of cloth over which feathers were set in rows. It had a hanging border of feathers,¹¹³ and it resisted lances, arrows, and even swords.¹¹⁴ Because it lacked sleeves and leggings, however, the ehuatl appears functionally inferior to the tlahuiztli suits,¹¹⁵ and its continued use may have been due to its divine associations, as many gods bearing arms are depicted thus clad. Examples are shown in murals at Teotihuacan¹¹⁶ and in carvings at early postclassic Chichen Itza.¹¹⁷

Some warriors (mostly higher nobles) also wore other body armor. Among these were armbands (*matemecatli*) and greaves (*cotzehuatli*) of wood, bark, or very thin gold; both were covered with leather and feathers. There were also wristlets (*matzopetzli*)¹¹⁸ (see fig. 13). These pieces were worn with the ehuatl but were of little protective value.

Some helmets made of wood and bone were highly decorated with feathers,¹¹⁹ while others were made of the heads of wild animals—wolves, jaguars, and pumas—over a frame of wood or over quilted cotton, with the wearer gazing out from the animal's opened jaw.¹²⁰

Some warriors wore a wide breechcloth (*maxtlatl*) that covered their thighs.¹²¹ Over this was often worn a hip-cloth.¹²² Sandals (*cac-tli*) were also worn by some of the warriors.¹²³

NONMARTIAL WEAPONS

Several other weapons served little or no martial functions in post-classic central Mexico—blowguns, axes, and knives.

The blowgun (*tlacalhuazcuahuitl*) was used primarily for hunting birds and was not a military weapon.¹²⁴ It was a hollow tube¹²⁵ through which molded clay pellets were propelled by blowing.¹²⁶ Pellets ranging from 8.5 to 34 millimeters (averaging 14.7 millimeters, or 0.3–1.3 inch, averaging 0.6 inch) were found at the classic site of Teotihuacan, indicating a blowgun of 1.5 to 1.7 meters (5–5.5 feet) in length.¹²⁷

The ax (*tlateconi*) is frequently depicted in codices in martial contexts,¹²⁸ but it is not mentioned in the chronicle accounts.¹²⁹

However, these small tactical units of five or six soldiers, led by an experienced warrior, may not have been as permanent as those of the *calpolli* or served as building blocks of the larger units.

The units into which the army was divided for marching were probably quite large—some multiple of the *xiquipilli*—and differed substantially from combat units, which could be quite small. This meant that multiple combat units probably marched together and were subordinated to the army's more comprehensive command structure, led by the *tlacochcalcatl* and the *tlacateccatl*.⁶⁵

As was common throughout central Mexico,⁶⁶ each unit was designated by a standard (*cuachpantli*), the banner carried on marches and into battle (see figs. 2–4, 7, and 33). The *Codex Mendoza*⁶⁷ lists four types of standard used by the Aztec army: (1) *tlahuizmatlacopilli*, or "reticulated crown device" (2) *itzpapalotl*, or "obsidian butterfly" (3) *xolotl*, or "double" and (4) *cuachichiquilli*, or "crest." These may have represented the four great quarters into which Te-

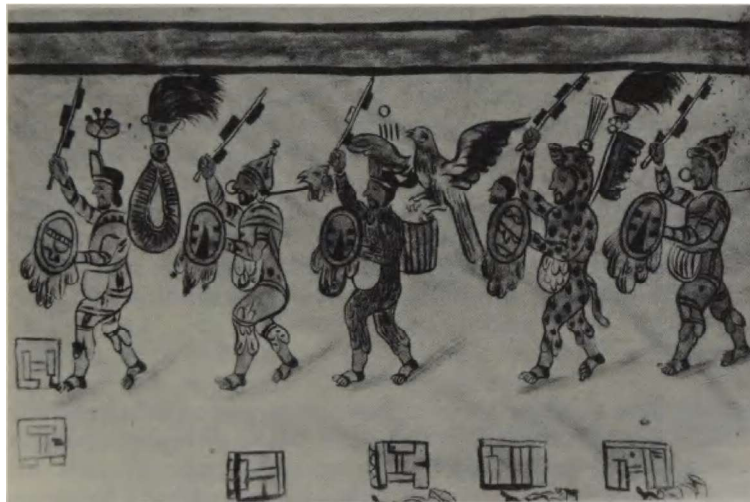


Fig. 4. Warriors of various grades in the Tenochtitlan ward of Popotlan. (Detail from the Mapa de Popotla; courtesy of the Museo Nacional de Antropología, Mexico)



Fig. 5. Priests en route to war bearing images of the gods on their backs, followed by various grades of warriors and various grades of warriors in battle. (Med. Palat. 219, c. 284; courtesy of the Biblioteca Medicea Laurenziana, Florence)



Fig. 7. *Cuahchicqueh* land from canoes; Spaniards attacked from both sides; Aztec warriors throw a captured Spanish cannon into the water at Tetamazolco, a deep-water spot near the hill of Tepeztzinco. (Med. Palat. 220, c. 465; courtesy of the Biblioteca Medicea Laurenziana, Florence)





Fig. 31. Spaniards fighting the Aztecs during the siege of Tenochtitlan. Note the Indians' arms and armor, both the rectangular and the lancelet *macuahuitl*, the Spaniards' cannon, and the use of canoes. (Diego Muñoz Camargo, *Descripción de la ciudad y provincia de Tlaxcala*, 275r; 242 Hunter Collection, University of Glasgow Library)

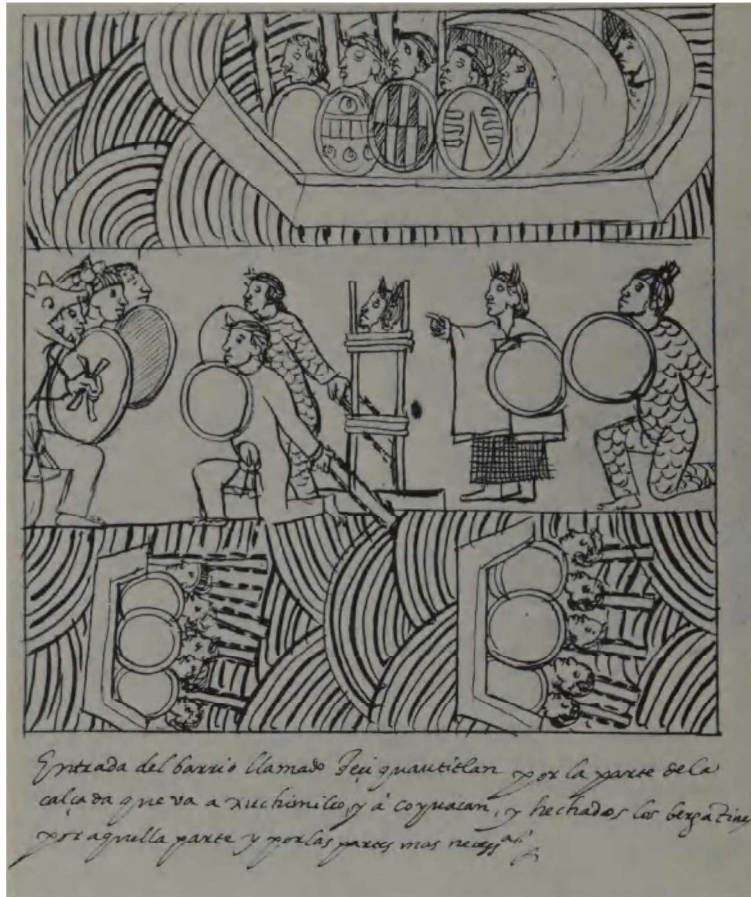


Fig. 32. Tlaxcaltec entry into the Tenochtitlan ward of Tetzcicauhtitlan during the Spanish siege of the city. Note the defenders' arms and armor and their use of canoes. A head is placed on what appears to be a rudimentary skull rack (tzompantli). (Diego Muñoz Camargo, *Descripción de la ciudad y provincia de Tlaxcala*, 274r; 242 Hunter Collection, University of Glasgow Library)



Fig. 33. Spanish attack, aided by Tlaxcaltec allies, on Ayotochcuitlatlan (Cui-
 catlan). Note the cotton armor (*ichcahuipilli*) of the attackers, their insignia,
 shields, and swords (*macuahuitl*); and the *cuauhololli* (clubs), bows and arrows,
 shields, and quivers of the defenders. (Diego Muñoz Camargo, *Descripción de la*
ciudad y provincia de Tlaxcala, 277r; 242 Hunter Collection, University of
 Glasgow Library)