

actual combat. When the situation does finally deteriorate into physical contact, the naked ape-unarmed -behaves in a way that contrasts interestingly with that seen in other primates. For them the teeth are the most important weapons, but for us it is the hands. Where they grab and bite, we grab and squeeze, or strike out with clenched fists. Only in infants or very young children does biting play a significant role in unarmed combat. They, of course, have not yet been able to develop their arm and hand muscles sufficiently to make a great impact with them.

We can witness adult un-armed combat today in a number of highly stylised versions, such as wrestling, judo and boxing, but in its original, unmodified form it is now rare. The moment that serious combat begins, artificial weapons of one sort or another are brought into play. In their crudest form, these are thrown or used as extensions of the fist for delivering heavy blows. Under special circumstances chimpanzees have been able to extend their attacks this far. In conditions of semi-captivity they have been observed to pick up a branch and slam it down hard on to the body of a stuffed leopard, or to tear up clods of earth and hurl them across a water ditch at passers-by. But there is little evidence that they use these methods to any extent in the wild state, and none at all that they use them on one another during disputes between rivals. Nevertheless, they give us a glimpse of the way we probably began, with artificial weapons being developed primarily as a means of defence against other species and for the killing of prey. Their use in intraspecific fighting was almost certainly a secondary trend, but once the weapons were there, they became available for dealing with any emergency, regardless of the context.

The simplest form of artificial weapon is a hard, solid, but unmodified, natural object of wood or stone. By simple improvements in the shapes of these objects, the crude actions of throwing and hitting became augmented with the addition of spearing, slashing, cutting and stabbing movements.

The next great behavioural trend in attacking methods was the extension of the distance between the 152