CHAPTER IV

Manner and Cause of Death

Forensic anthropologists normally deal with bodies devoid of flesh. The evidentiary universe available to them is circumscribed. Nevertheless some deaths, such as stabbings or shootings, leave evidence of the nature of that death on the bones. Forensic investigators have found it necessary to distinguish between cause and manner of death (see Adelson 1974, for a clear discussion of these important concepts). Briefly, *manner* of death describes whether death was due to homicide, suicide, accident, misadventure, or natural causes. Death due to disease is natural while being mauled to death by a bear is accidental. The *cause* of death is the trauma, disease or event which commences the physiological processes culminating in death. Landing at the foot of the stairs can be the cause of death. The fact of being tripped, rather than tripping, is the manner of death.

We can illustrate the use of these terms by reference to the somewhat decomposed body of an adult male found at the side of a road. The torso appeared to have been chewed by a bear. The head was shattered and upon cleaning and reconstruction showed the presence of loose lead shot plus lead fragments embedded into the lower left facial bones. It seemed likely that the shooting preceded the bear activity. Consequently the cause of death was judged to be a shotgun blast. An informant readily admitted to shooting his friend, claiming that as he was driving down the road in his pick-up with his friend in the passenger seat, they spotted some game on the right hand side of the road. The driver grabbed his gun, leapt out of the left side of the truck and, leaning over the box behind the cab of the truck, aimed his shotgun over the

box. The passenger got out and started to walk forwards towards the back of the truck receiving the shotgun charge, accidently according to the driver, in the head. Reconstructing the event indicates the victim would, if walking as claimed (forwards), have been shot in the right side of the head. The embedded lead shot shows that the victim was shot in the left side of the face. The evidence indicates that the manner of death might have been homicide rather than an accident. The accused evidently thought so too, for when presented with the contradiction in his story, he pleaded guilty to a more serious charge.

Pathologists rarely need to obtain a clear picture of what trauma to bone looks like. Examination of the soft tissues is usually sufficient to indicate the cause of death. Certain causes of death, however, will tend more frequently to confront the forensic anthropologist, for example, cremations and drownings. In the latter case, it may be possible to determine when the body was deposited on the shore by reference to annual flood records (Wilson 1980).

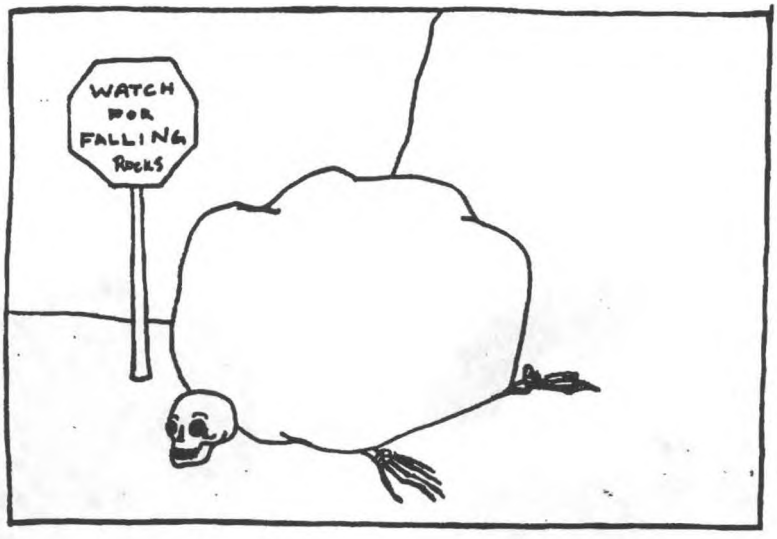
Murderers often attempt to hide or destroy their victim's body. Some suicides retreat to secluded spots. Outdoor deaths due to accident or exposure are not uncommon. In all these cases the bodies are not likely to be discovered until skeletonization has occurred, in which event the forensic anthropologist should become involved in the identification process.

One case will suffice to illustrate the quality of detail regarding cause and manner of death which may be available to the forensic anthropologist.

Fig. 20 diagrams the manner of skull breakage in a suicide mouth shot using a 20 gauge Cooey shotgun carrying slug shells. The lower jaw (and neck, not illustrated) were unbroken while there were two main damaged areas on the cranium: mid-face and top of the skull. The crucial evidence is not the complete cracks but the incomplete cracks, both shown as dotted lines in the figure. Observe their symmetry and that seven of eight incomplete cracks commence inferiorly in the mid-facial region, propagate upwards and peter out (observations by J. McKendry). These cracks indicate that the initial impact by the slug was the mid-face, not the top of the skull.

A final example of how cause of death can be recorded on the bones is afforded by cases of child battering (Kerley 1978). Happily, we have not encountered one of these but the forensic anthropologist should be able to recognize the characteristic

pattern of trauma recorded on the skeleton of the battered child. In one study (Akbarnia et al. 1974) of 231 battered children in Philadelphia only 34 percent showed fractures, the most common sites of which were ribs, long bones, and crania. Of critical importance to the forensic anthropologist confronted with a skeleton containing broken bones (which could be due to one of a number of causes) would be the recognition of healed and partially healed premortem fractures in such sites and incidence as to arouse suspicion of battering (Kempe et al. 1962).



"Context is an important clue to cause of death."

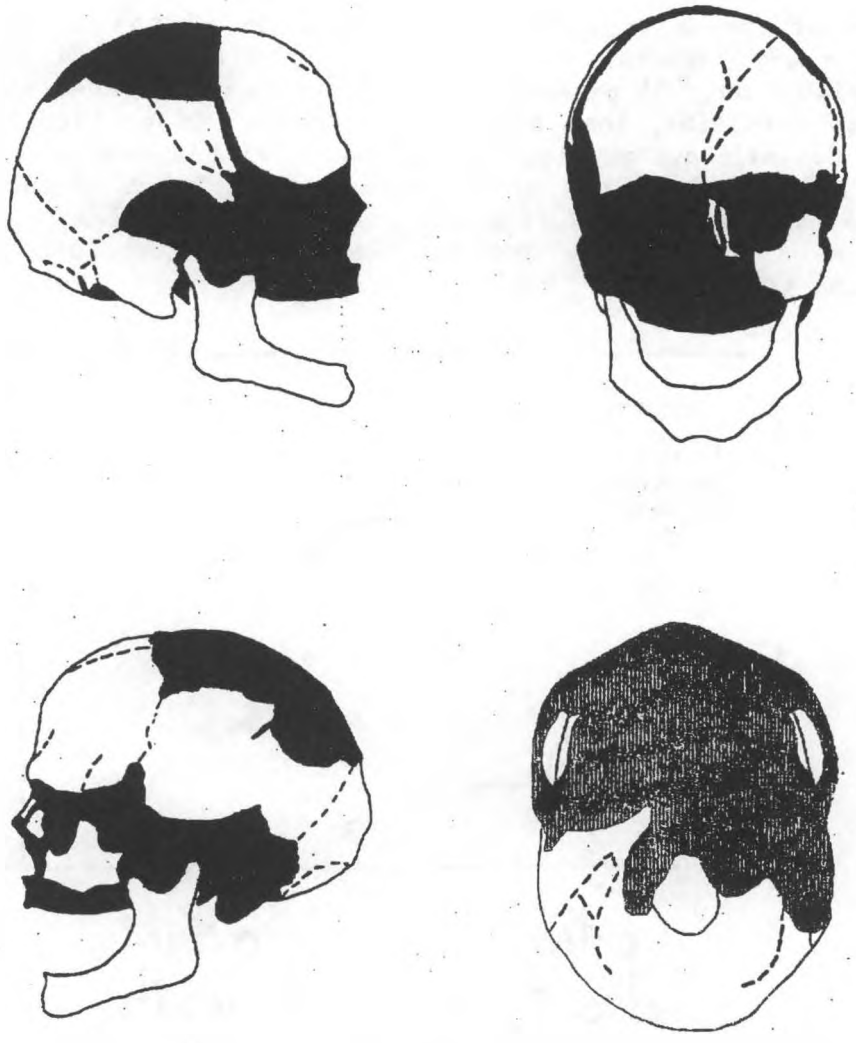


Figure 20. Firearms trauma to skull (20 gauge Cooey shotgun slug shell fired into roof of the mouth); blackened areas were not recovered, dotted lines signify complete and incomplete cracks.