

The photographer

The camera can record details of crime scenes with an accuracy no detective's notepad can match. It can preserve evidence as fragile and ephemeral as footprints in melting snow. If a jury cannot visit a crime scene, photographs can vividly recreate it for them. No wonder photographers are key members of every investigating team.

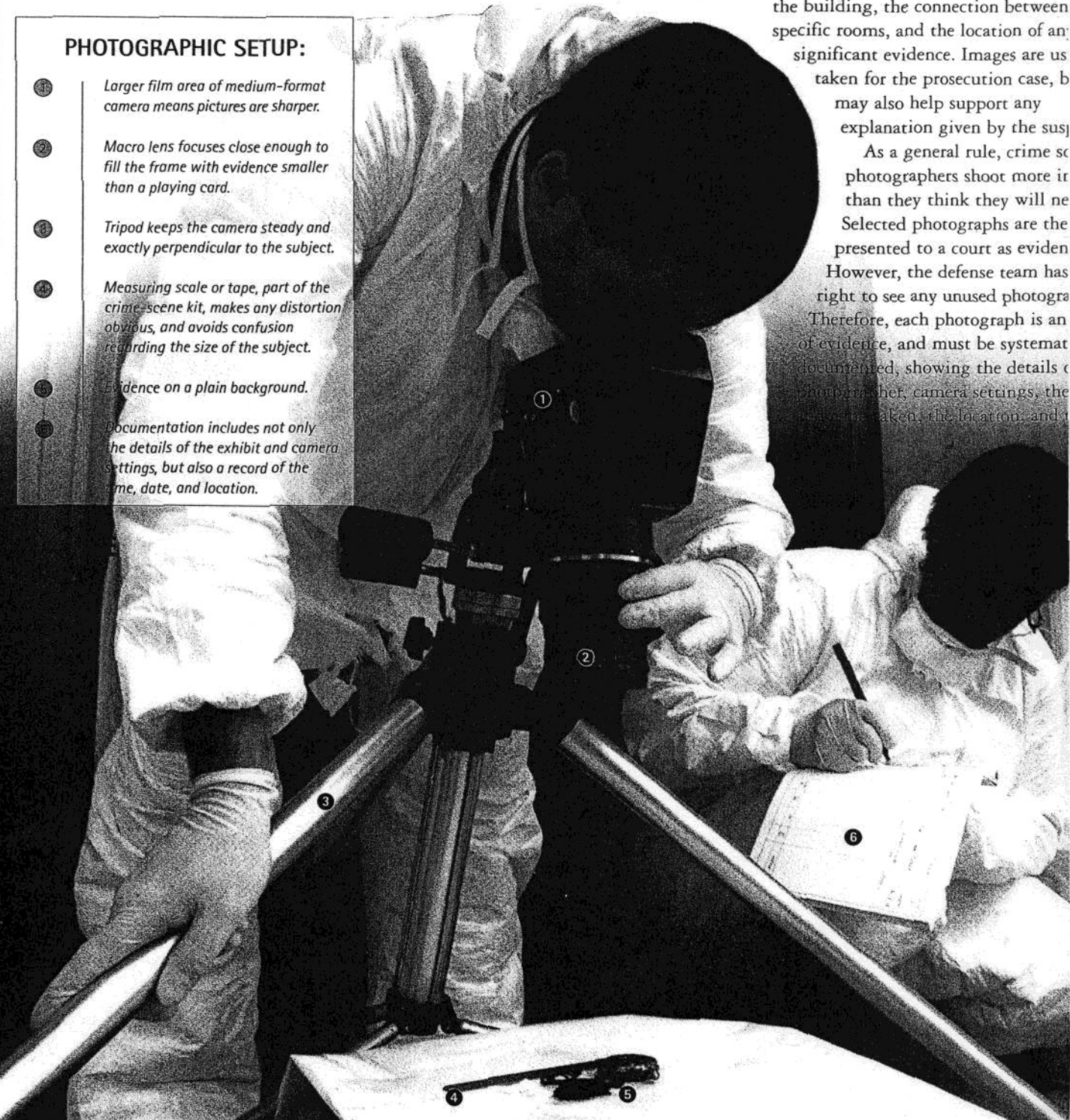
After the crime scene manager has completed an initial assessment, crime scene photographers are often the first to operate. Their priority is to "document key elements of an undisturbed crime scene in relation to the surroundings, since such evidence may be moved to forensic laboratory for further analysis. The photographer then makes a broad and more comprehensive record. Photographs might include: the entry and exit routes, exterior and interior shots of the building, the connection between specific rooms, and the location of any significant evidence. Images are usually taken for the prosecution case, but

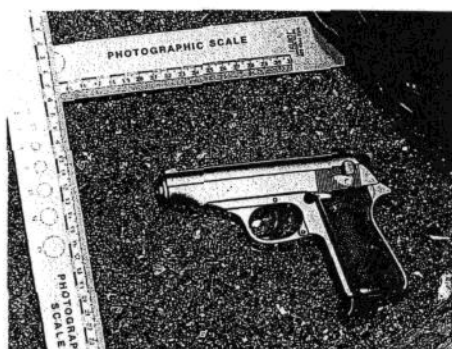
may also help support any explanation given by the suspect.

As a general rule, crime scene photographers shoot more images than they think they will need. Selected photographs are then presented to a court as evidence. However, the defense team has a right to see any unused photographs. Therefore, each photograph is annotated, documented, showing the details of the photograph, camera settings, the date and time taken, the location, and the

PHOTOGRAPHIC SETUP:

- 1 Larger film area of medium-format camera means pictures are sharper.
- 2 Macro lens focuses close enough to fill the frame with evidence smaller than a playing card.
- 3 Tripod keeps the camera steady and exactly perpendicular to the subject.
- 4 Measuring scale or tape, part of the crime-scene kit, makes any distortion obvious, and avoids confusion regarding the size of the subject.
- 5 Evidence on a plain background.
- 6 Documentation includes not only the details of the exhibit and camera settings, but also a record of the time, date, and location.





◀ EVIDENCE AS IT WAS FOUND

Evidence, such as this gun, is first photographed in situ, both with scales and without—in case the scales hide details that later prove significant.

processing procedures, to prove continuity of the film from the photographer to the processing laboratory.

Equipment

Forensic photographers tend to use medium-format or 35mm cameras. These balance the conflicting demands of picture quality, economy, portability, and ease of use. The interchangeable lenses of single lens reflex (SLR) cameras make them especially adaptable, and their viewfinders show the subject exactly as film records it. For close-up pictures of evidence, a tripod-mounted camera provides the necessary quality and stability.

Digital cameras have many advantages for forensic photography: their pictures need no chemical processing, and can be instantly transferred to a computer database. Also, photographers can use the camera's display to verify immediately that the image was captured. However, the current ease of altering digital images prevents them from being used as

evidence, though a digital "watermark" system will eventually change this.

Investigators may also use video cameras to document crime scenes quickly and cheaply: panning around a room gives a jury a more realistic sense of place than showing them four still pictures taken from the corners. Crime-scene videos can also be used as briefing tools for police officers who have not visited the scene.

Technique

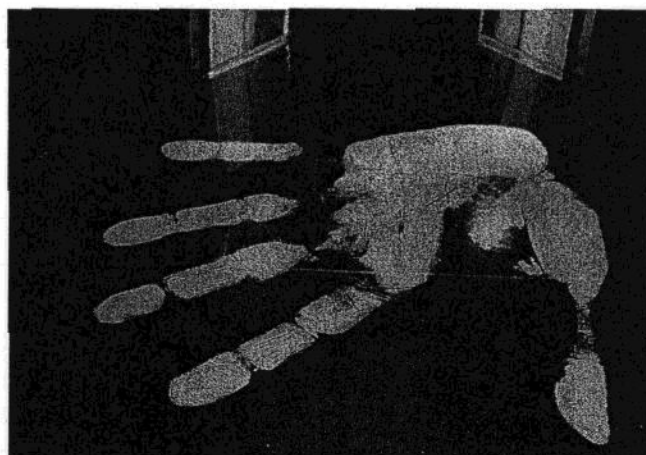
General crime-scene picture-taking employs techniques familiar to any amateur photographer, but close-ups of evidence need more exact requirements. These pictures form a factual record in which reproduction of size, shape, and color balance must be accurate. In these cases, pictures are normally taken with the camera square to the subject, with two scales at right angles to each other.

Special lighting

Conventional flash and floodlights are adequate for general crime-scene photography, but close-up evidence may

need careful lighting. For example, oblique-angled light brings out detail in textured surfaces, such as shoeprints in mud.

Forensic light sources have revolutionized the photography of special evidence. Equipped with colored filters and flexible light-guides, these lamps direct a brilliant, narrow beam at the subject. Changing the filter allows the detection of different evidence: ultraviolet makes stains and some fingerprints glow, violet makes gunshot residues and blood more visible, while blue and green light are used with enhanced fingerprints, and to show up fibers, urine, and semen.



ULTRAVIOLET ILLUMINATION ▲

Few fingerprints are naturally fluorescent in an ultraviolet beam, though contamination with oil or grease can make prints glow. More often, UV is used as a photographic light source after prints have been treated with DFO or superglue (see p. 19).

SYSTEMATIC PHOTOGRAPHY

Crime-scene photography, complete with thorough documentation, has to cover systematically both the general scene and specific details. Here, for example, the photographer started with a long shot of the crime scene (far right), and only later closed in on the spent cartridge cases (right). Important evidence gets photographed from several different aspects: pictures taken from ground level, or high above, show up clues that are not visible in images taken from normal eye level. Lighting helps capture extra detail, too: even in daylight, a flash puts extra light into shadows, so that parts of the crime scene are not hidden in shade.



DOCUMENTING A SHOOTING SCENE

After a shooting near Wiesbaden, Germany, photography was a priority because the scene of the crime was a street, which could not be kept closed.

