

PHYSICAL EFFECTS

Rain, wind, fire, snow, smoke, car crashes and explosions are all physical effects, also called practical, mechanical or special effects. Mechanical creatures known as animatronics, prosthetic makeup like false limbs or noses, and stunts, such as actors smashing through a window or jumping from a burning building, are also considered physical effects. Although physical effects are created live in front of the camera using actual objects, they are a variety of movie magic. For instance, what looks like snow on screen might be a combination of torn paper, foam, painted glass, and falling ash. The building destroyed by a bomb could be a 20-inch miniature. A talking lion turns out to be a mechanical puppet. The star who appears to run into a burning building is actually a stunt performer. And the bullet holes from a gun battle were made by tiny explosions, not by real bullets.



This oversized animatronic hand was used for close-ups in **MIGHTY JOE YOUNG (1998)**. Photo courtesy of Rick Baker.



Wind machines such as this one on the set of a 1940s western have been used since the silent film era. On-set physical effects are now usually supplemented with CGI effects to create even stronger visuals. Photo from the Margaret Herrick Library Collection.

Watch the movie your teacher has chosen. While you watch, try to identify the different physical effects in the scenes. Some, like explosions, will be obvious. Others, like weather, may not be.

What physical effects did you see?

PHYSICAL EFFECTS TERMS

Animatronics: Three-dimensional figures or parts powered by pumps, motors, hydraulics, computers or other electronic or mechanical means.

Prosthetics: Any three-dimensional item that is attached to an actor to change his or her appearance.

Which of those effects were obvious?

Which of those effects were not obvious?

Why would a director choose to use physical effects instead of the real weather, for example?

What other situations might prompt a director to use physical effects?

Although many physical effects can be duplicated in the computer, why do you think a director would choose to use physical effects instead of digital effects?
