Quick Notes for Miniatures, Animation, and Physical Effects
DSFX Fall 2006

Miniatures:

Shuftan process: mirrors used to place items together, such as a miniature house and live-action actor.

Considerations with miniature: Scale!

- Depth-of-Field
- Speed (SQRT (D/d) * 24 fps, for instance SQRT (30/3) x 24 = 76 fps
  (More accurate movement, explosions, etc.)

Use of “foreground miniatures” such as in Aliens.

Rotation around the nodal point of a lens.

Motion Control used to exactly repeat camera moves for plates and elements.

Animation:

- Rotoscopying.
- Multi-plane camera.
- Slit-scan process.
- Miniature rear projection.
- Ray Harryhausen -- Dynamotion (photograph actors, rear project, animate).
- Motion Blur -- mult exposure per frame, gel smeared, or moving model while shooting.
- Phil Tippett -- Go Motion (Tauntauns, etc.)

Matte Painting: (combined in ways already discussed with other mattes, glass shots, multiple exposure with mattes, rear projection, etc.)

Sorry, no time for:

Other Physical effects: rainbars, tip tanks, cloud tanks, smoke, etc., stunts
Sound: effects, lipsync, ADR, etc.