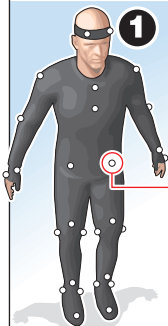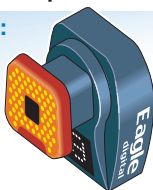# Puppetry brings computer animation to life

The Jim Henson Company – creator of the Muppets – has developed a digital performance system that takes computer graphics (CG) animation to a new level, speeding up a traditionally lengthy process while producing more naturalistic performances than ever before

❶ MOTION CAPTURE: Actors perform characters' *body movements* on studio soundstage
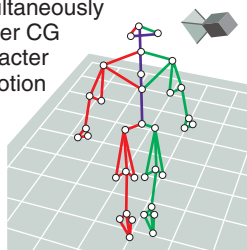
Computer maps movement on to *3D skeleton* to simultaneously render CG character in motion

Reflective markers attached to major joints

Eight infra-red cameras detect reflective markers to record body movement

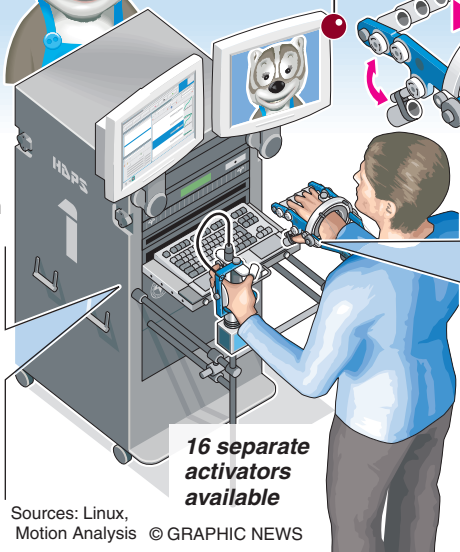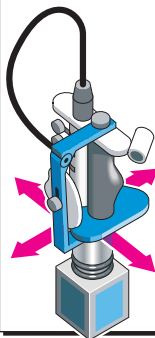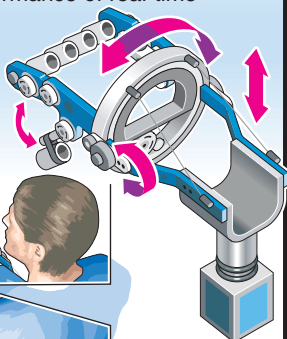**❷ MECHANICAL CONTROL:** *Henson Digital Performance Studio* – self-contained mobile workstation – allows puppeteers to control performance of real-time CG character

Two handed controls for head and neck movement and facial expression

Puppeteer can create on-screen character's expressions on the fly without need for prior script or programming

16 separate activators available

Sources: Linux, Motion Analysis © GRAPHIC NEWS