Penarth Computer Club   Poetic Licence On Screen   8th April 2013

One of the interesting things about computing is the fun you can have picking up on the bits of poetic licence employed by the filmmakers. You can also work out when the film was made by the computers that are being shown on the big screen.

It can take quite a time for the film industry to catch up – sometimes deliberately long. It started with the Strowger** switch in the old telephone exchanges. The scene where a telephone engineer is frantically following the clicking mechanical vertical and rotational movements of electrical contacts as each number is dialed to trace the criminal's telephone call.

The scene persisted for dramatic effect long after the switches were reduced to static components and the drama was otherwise invisible.

For the same reason for some time the work of computers was portrayed on the big screen by an operator loading large reels of tape onto spindles and the tape winding from reel to reel on the face of an enormous cabinet (the computer).

When the computers were reduced to small dull boxes the drama had to be transferred to the computer screen. To retain impact it was necessary to make the text large and flashing to say "WARNING" in bright colour. Meanwhile computer screens in the background of the picture were shown with text scrolling up the screen with no-one manning the computer.

Then there is the scene where the computer is cracking a password character by character and the tense wait for the final character to drop into place in the nick of time. Spurious drama; cracking doesn't work that way. You cannot crack a password character by character; you have to test the complete word each time. Cracker software can generate millions of combinations and check them at extreme speed, of course.

What makes the work easier is using a weak password. (The most common password is "password" as some people don't bother to set their own.) More about that important subject another time.

It calls to mind one bit of realism in a film. In "*Clear and Present Danger*" Harrison Ford's character asks a computer whiz to hack into a baddies computer. As our hero is leaving the room with a colleague the cracker is heard muttering " *his birthday backwards … wife's birthday backwards …   I'M IN*!". Hero and colleague exchange startled glances: "I'm going to change my password!" "So am I" is the reply.

** The Strowger switch. Named after an undertaker, A B Stowger, of Kansas City. The manual switchboard operator was putting all his undertaking business calls through to a competitor. His solution was not to make a fuss, but eliminate the operator by automating the exchange. He developed his switch from emerging technology. With others he formed the 'Stowger Automatic Telephone Exchange' in 1891.