

HULA HOOP or CONTRACEPTIVE PILL:

Misunderstanding the nature of the social impact of technology

There are two possible views of the nature of technological change. The first assumes that the technology is the main driver of change in society. This view, which is widely held, can be termed technological determinism.

The alternative view is that society actually determines the forms taken by technologies and their diffusion. This is a minority position and seems to many to be counter-intuitive.

The consequences of these different approaches are profound. The technological determinist often see developments are revolutionary e.g. the information revolution or the digital revolution.

Those who hold that technology is primarily socially shaped (SST) tend to see situations in more evolutionary terms.

SST (which can be traced back to analistes school of French historians) addresses a central problem of technicism viz.: why does innovation occur so independently of science e.g. the application of steam power.

The same can be claimed of current innovations. Technicism suggests that these are of different order - discovered in a more structured fashion than in the past, introduced more quickly, diffused faster and with more profound effects. Yet each of these received claims can be disputed. It is after all 70 years since the first digital device. In order to sustain it revolutionary stance technicism needs histories written by amnesiacs.

It also needs to confuse hula hoops with contraceptive pills (as it were). So, while often hyperbolically claiming each and every advance is revolutionary, it fails to see what socially shaped technologies are really important in an evolutionary sense.

SST sees the introduction and diffusion of technologies as a matter of what Braudel calls 'brakes' and 'accelerators'. I see the accelerator as a supervening social force or necessity causing the science (which often is quite old) finally to be applied as a technology. But then, in order not to disrupt the social sphere, the capacity of the new technology so do is contained - in fact it is constrained so that the radical potential which technicians see, is actually suppressed.

Consider DAT

Consider NAPSTER

Consider the 50 year long removal of nitrate based film

Consider the 'baby' computer (ie the PC)

Consider the net (and consider China and the net)

To understand technological change it is crucial to understand the social context in which such change occurs.