

The Byteman's Burden

Computer Ethics

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Computer Ethics

- Us and them
- Why all the fuss about it?
- What is covered by it?
- Who needs it?
- How is it taught?
- How is it learnt?
- Applying it
- What we really really want

Us and them & them

- For computer professionals there are 2 THEMs
 - THEM1
 - Unscrupulous people who might take advantage of us (even perhaps because of our own scruples)
 - THEM2
 - Holier-than-thou people who will delight in questioning our ethics when things go wrong
- Computer Ethics needs to address both

Why all the fuss?

- Early science fiction - **Fears**
- Privacy of data - **Hacking**
- Uncensored broadcasts - **Usenet, BBS**
- System sabotage - **Worms, Viruses**
- Intellectual property rights - **Copyright**
- Electronic theft - **Fraud**
- Offensive graphics - **Backgrounds**

What is covered by Computer Ethics?

- All of the above!
- Also
 - Public interest
 - Confidentiality
 - Sound design
 - Thorough testing
 - Fair trading
- MI - Moral Intelligence

Who is supposed to need instruction?

- Who says anybody does?
 - **THEY do!**
- Everybody who uses computers
- But especially
 - **IT professionals**
 - **Computing students**
 - **Young people**
- Mud sticks - The byteman's burden

How not to teach MI?

- Sermons
 - Amen to that!
- Deterrents
 - Economic penalties (fines, compensation)
 - Her Majesty's Pleasure
- The ancients
 - Moral philosophy

How MI is actually acquired

- By example
 - Good and bad examples
- Through feedback
 - Both positively and negatively
- Often very early in life
 - Can teenagers or adults acquire it at all?
- So there's no point in giving university students lectures on it

Applying MI in a new world

- Acquiring the basics
 - Learning the accepted norms of behaviour
- Extrapolating values
 - What current values imply for new situations
- Recognising grey areas
 - Forseeing problems before they arise
- Inventing new rules
 - Creating new norms for new occasions

What we really really want

- Respect for our WITES (THEM1)
 - Welfare
 - Ingenuity
 - Trust
 - Effort
 - Sensitivities
- Respect for our Judgement (THEM2)

So maybe we can provide guidance?

- Passing on the accepted norms
- Case studies
 - Trespasses against us
 - Deliverance from evil
 - Situations that might confront us
 - Hypothetical decision making
- Ethical systems
 - Justification

Bibliography

Computer Ethics: Cautionary Tales and Ethical Dilemmas

Tom Forester & Perry Morrison, MIT Press, 1994

Ethical Decision Making and Information Technology

Ernest Kallman & John Grillo, McGraw-Hill, 1993

The Moral Intelligence of Children

Robert Coles, Bloomsbury, 1997