

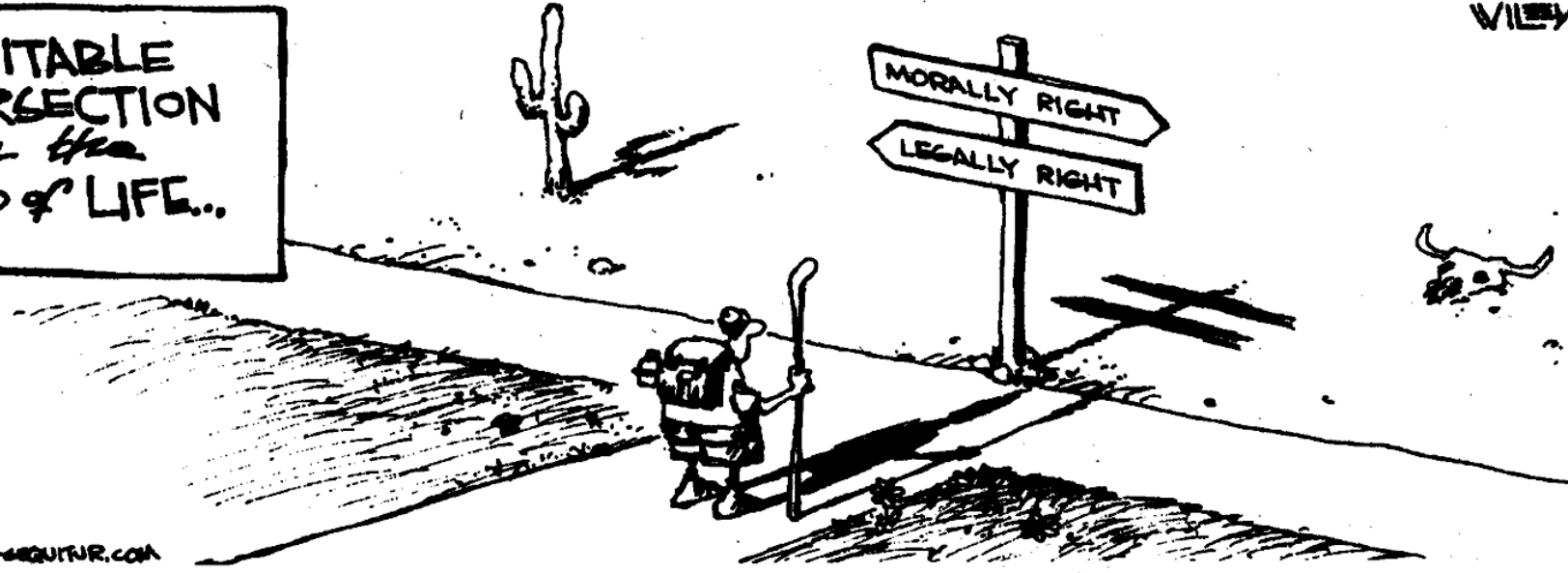
2006 CIEC San Antonio, TX

CED/ETD Session 424:
Engineering Ethics: Micro and Macro Cases
for Developing Ethical Awareness

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INEVITABLE
INTERSECTION
on the
ROAD OF LIFE...

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BACKGROUND

- 2 CIVIL ENGINEERING COURSES
 - CIV U300 – INTRODUCTION TO ENGINEERING COOPERATIVE EDUCATION, 1 SH
 - CIV U500 – PROFESSIONAL ISSUES IN ENGINEERING, 1SH

McCUEN'S MODEL

- PREPROFESSIONAL LEVEL
 - INDIVIDUAL ORIENTATION
 - MARKETPLACE ORIENTATION

McCUEN'S MODEL

- FUNDAMENTAL PROFESSIONAL LEVEL
 - FIRM ORIENTATION
 - PROFESSIONAL ORIENTATION
- PRINCIPLED PROFESSIONAL LEVEL
 - LEGALISTIC ORIENTATION
 - UNIVERSAL ORIENTATION

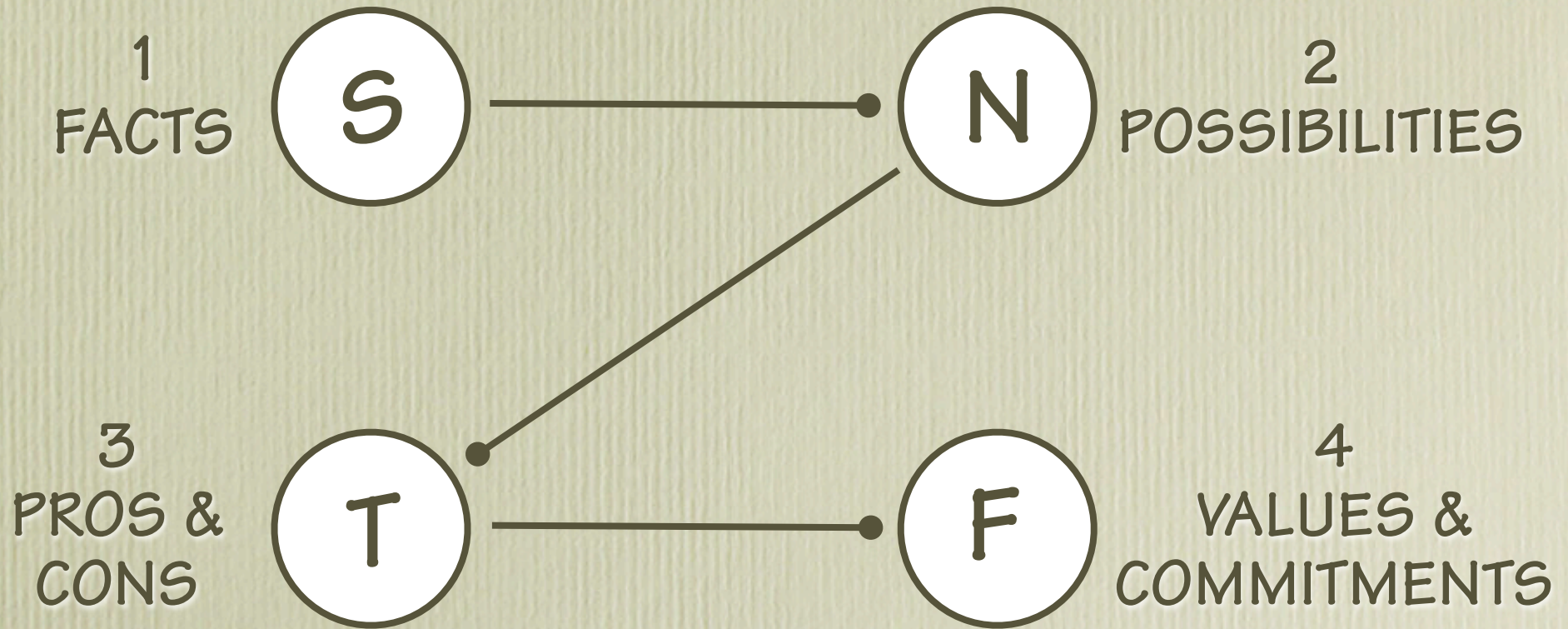
COMMON ETHICS CODE PROVISIONS

- Ultimate responsibility to the public welfare;
- Obligation to be objective and truthful in all communications and reports;
- Duty to maintain confidentiality of client information;
- Prohibition against practicing outside the engineer's area of competence;
- Strict requirements regarding use of the professional seal;
- Mandate to avoid conflicts of interest;

COMMON ETHICS CODE PROVISIONS

- Prohibition against unfair competition;
- Prohibition against injuring the professional reputation of others;
- Prohibition against misrepresenting qualifications;
- Obligation to cooperate with the licensing agency in investigations of violations, or an obligation to affirmatively report any suspected violations.

ZIG-ZAG PROCESS FOR DECISION MAKING



CONSCIENCES DIFFERING –

DOING WHAT'S RIGHT
OR SEEKING THE GOOD

*Sensing (S) and Intuitive (N) are concerned
with the WHAT of our moral existence.*

*They help us answer the question:
What should I do?*

CONSCIENCE OF PRINCIPLE (S)

- *Present oriented – “do the right thing” – argues that we are duty bound not to lie, cheat or steal*
- *Consider the act alone – it is the thing I will do right or wrong, regardless of the consequences*
- *Basis in Deontology – study of moral obligation based on principle – Kant & Ross*

CONSCIENCE OF POTENTIAL (N)

- *Future oriented – “seeking the good” for the future*
- *Focus on evaluating the hypothetical future consequences of the act – what will happen if I do ...*
- *Basis in Teleology – the study of action toward a final end – aligns best with Mill & Brant*

THINK: MARGE & HOMER

Thinking (T) and Feeling (F) are concerned
with the HOW of moral decision-making.

They answer the question:
How should I decide?

KOHLBERG – ETHIC OF JUSTICE (THINKING)

- Maintains that justice is the goal of all moral decision-making
- Maintains that moral reasoning is largely dependent on logical reasoning ability
- Reasoning is detached from the context of the situation

GILLIGAN – ETHIC OF CARE (FEELING)

- Moral reasoning is context oriented – attachment
- Moral decisions based more on feelings and relationships

THINK: BART & LISA

GUIDELINES FOR DERIVING SOLUTIONS TO ETHICAL DILEMMAS IN PROFESSIONAL PRACTICE

- S Determine the facts in the situation – obtain all of the unbiased facts possible.
- Examine your motives.
 - Determine the type of wrongdoing involved – understand the issues.
 - Verify and document your information.
 - Be accurate in your observations and claims – frame your allegations in an appropriate way.

GUIDELINES FOR DERIVING SOLUTIONS TO ETHICAL DILEMMAS IN PROFESSIONAL PRACTICE

- S Seek appropriate additional assistance/input – including advice of peers and supervisors – avoid isolation.
- S Define relevant stakeholders – those with a vested interest in the outcome.
- S Assess the motivations of the stakeholders.
 - Important to understand what influences individual stakeholders to act the way they do in a specific situation including hidden agendas.

GUIDELINES FOR DERIVING SOLUTIONS TO ETHICAL DILEMMAS IN PROFESSIONAL PRACTICE

- N *Formulate alternative solutions – brainstorm.*
- T *Logically evaluate alternatives – look for “win-win” solutions.*
- F *Evaluate consequences of decisions on all stakeholders.*

GUIDELINES FOR DERIVING SOLUTIONS TO ETHICAL DILEMMAS IN PROFESSIONAL PRACTICE

Select the best course of action.

- Determine to whom it should be reported. Understand formal and informal (unwritten) rules for making appeals within the organization. Is there company policy that covers this area?

Determine if whistle blowing is warranted.

- Determine whether the whistle blowing should be internal or external. Except for extremely rare emergencies, always try working first through normal organizational channels.
- Determine whether the whistle blowing should be open or anonymous.
- Decide whether current or alumni whistle-blowing is required.
- Be prompt in expressing objections. Waiting too long may create the appearance of plotting for your own advantage and seeking to embarrass a supervisor.

GUIDELINES FOR DERIVING SOLUTIONS TO ETHICAL DILEMMAS IN PROFESSIONAL PRACTICE

Determine the timeframe to implement your course of action.

Implement the *selected* solution – take action as warranted.

- Keep formal records documenting relevant events and actions.
- Stick to the facts – focus on the disclosure – proceed in a tactful, low-key manner.
- Anticipate and document retaliation.

GUIDELINES FOR DERIVING SOLUTIONS TO ETHICAL DILEMMAS IN PROFESSIONAL PRACTICE

Communicate your decisions and/or actions.

- *As much as possible, keep supervisors informed of your actions, both through informal discussion and formal memorandums.*

Evaluate your decision

- *Ask yourself – “If I had to do make this decision again, would I make the same decision?”*

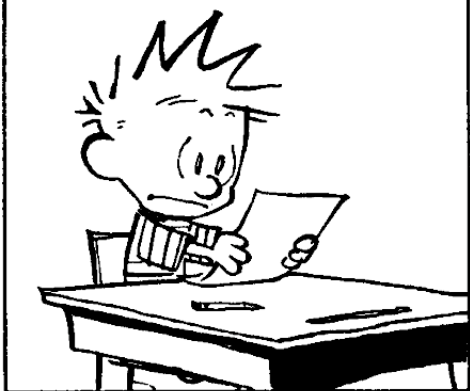
CIV U500 CASE STUDIES

- ASSIGNED READINGS
 - *The Man Who Bought Route 128*
 - *I Gave Up Ethics – To Eat*
 - *The Bart Case*
 - *Engineering Ethics*

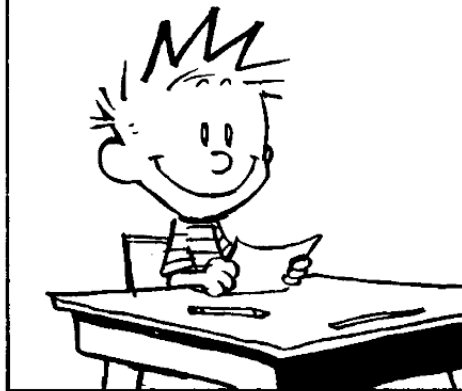
CIV U500 CASE STUDIES

- IN-CLASS CASE STUDIES
- ETHICS CASES IN PROFESSIONAL PRACTICE
– *Santa in the Summer*
- MEMO ASSIGNMENTS – *Wayward Client*

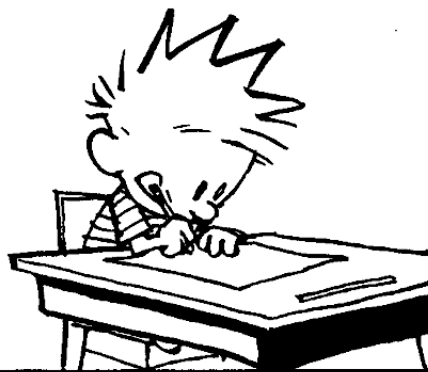
1. Explain Newton's First Law of Motion in your own words.



!



Yakka Foob Mog. Grug
Pubbawup zink wattooM
Gazork. Chumble Spuzz.



I LOVE
LOOPHOLES.

