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# 1 Accountability

> Accountability is a state of being compelled or called to account for ones action

## 1.1 Importance of accountability

We have improved standards of reliability for computer systems but **neglected accountability** for the impact of computing, specifically for the harms and risk of fault and malfunctioning systems.
Accountability is needed

- Even if things go drastically wrong for the users at least they are **assured of answerability**
- For developing a sense of responsibility, **as a virtue**
- For **motivating better practices** and reliable and trustworthy systems

In terms of **social welfare**, a culture of accountability

- Motivates actions to **prevent or minimize** harms and risks
- Provides a **starting point** for assigning punishment and compensation for victims of harm through failure.

# 2 Accountability vs Liability vs Responsability

## 2.1 Accountability

> Accountability applies to all those involved in a specific action.

Accountability is assessed from the **nature of action** and the **relationship of the agent** to the **actions outcome**. In many instances, accountability is mediated through conditions of **blameworthiness** by considering **casual and fault** conditions.

## 2.2 Liability

> Liability is focussed on a person **who is to blame** and needs to **compensate victims** for damages suffered after the event.

Liability is rooted in the suffering of victims. The starting point for assessing liability is the victim's condition

### 2.2.1 Strict liability

Strict liability applies when a defendant places another person in danger, even in the absence of negligence

## 2.3 Responsibility

A person or a group of people is **morally responsible** when their **voluntary actions** have morally significant outcomes that would make it appropriate to blame or praise them. In order to appropriately *ascribe* moral responsability, three conditions should be followed.

- There should be a **casual connection** between the person and the outcome of actions
- Subject has to **have knowledge** of and be able to **consider the possible consequences** of it's actions
- The subject has to be able to **freely choose to act** in a certain way.

## 2.4 Computer practices and moral responsibility

Two pervasive misconceptions about responsibility

- Computing is an ethically neutral practice
- Responsibility is only about determining blame when something goes wrong

#### 2.4.1 Possitive responsibility

Positive responsibility emphasizes the virtue of **having (or being obliged to have) regard** for the consequences that actions have on others. Strive to minimize **foreseeable undesirable** events. Computer practitioners have a moral responsibility to avoid harm and to deliver a properly working product, regardless of whether they will be held accountable if things turn out differently.

# 3 Lack of accountability

Factors that influence adoption of accountability. (H. Nissenbaum: Four barriers)

- **Many hands**: Computing systems are built by big teams, they are complex and multi-layered making it difficult to assign responsability.
- **Bugs**: The view that bugs are inevitable implies that, they cannot be helped, and it would be unreasonable to keep programmers responsible
- **Computer as Scapegoat**: People point at the complexity of the computer to argue, that it was computers fault
- **Ownership without liability**: Commercial companies protect computing innovation and take advantage of exclusive use, without responsibility to protect from harm.

# 4 Ethics and computing agents

- **Implicit ethical agent**: A computer that has the ethics of its developers **inscribed in their design**. Adhere to the norms and values of the contexts in which they are developed or will be used
- **Explicit ethical agent**: A computer that can ***do ethics***, i.e., on the basis of an ethical model, determines what would be the right thing to do, given certain inputs. For example, implementation of Kantian or utilitarian ethics rules
- **Ful ethical agent**: Entities that can make ethical judgments and can justify them, much like humans beings can There are no computer technologies today that can be called fully ethical.

# 5 Moral responsibility for the computing artefacts

We aim to provide a normative guide for people who design, develop, deploy, evaluate or use computing artefacts

- **Computing artefact** for any artefact that includes an executing computer program.
- **Moral responsibility for computing artefacts** indicates that people are answerable for their behaviour when they produce or use computing artefacts
- **Moral responsibility** includes an obligation to adhere to **reasonable standards of behaviour**, and to respect others who could be affected by the behaviour.
- Each computing artefact should be considered within the context of a **sociotechnical systems** comprising people, artefacts, physical surroundings, customs, relationships, assumptions, procedures and protocols.

## 5.1 Rules

#### 5.1.1 Rule 1

The people who design, develop, or deploy a computing artefact are **morally responsible** for that artefact, and foreseeable effects of that artefact.

#### 5.1.2 Rule 2

The shared responsibility of computing artefacts is not a zero-sum game. The **responsibility is not reduced** because more people become involved.

#### 5.1.3 Rule 3

People who knowingly use a computing artefact are morally responsible for that use

#### 5.1.4 Rule 4

People who knowingly design, develop, deploy, or use a computing artefact can do so responsibly only when **they make a reasonable effort** to take into account the *sociotechnical* systems in which the artefact is embedded

#### 5.1.5 Rule 5

People who design, develop, deploy, promote, or evaluate a computing artefact should not **explicitly or implicitly deceive users** about the artefact or its foreseeable effects, or about the sociotechnical systems in which the artefact is embedded

# Reference section

**sociotechnical**
: Sociotechnical systems (STS) is an approach to complex organizational work design that recognizes the **interaction between people and technology in workplaces**.

**ascribe**
: regard something as being due to (a cause)