



# Engineering Privacy Property Jon Crowcroft Feb 4 2020

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#### **Private Property**

- Private, Keep Out.
- Imagine you rented your shoes
- Every now and then, they say
  - "You're wearing the soles out walking like that"
    - "Time to get re-soled."
  - "You're not walking enough steps"
    - "You're doctor may need to know"
  - "That walks a bit gay"
    - "Why not Try this LGBT dating site?"

## **Privacy Properties**

- Not especially new, despite claims
  - What's behind the Arras, mum?
  - Or indeed, whispers in ancient Rome
  - Or dramatic irony in ancient Greek drama
- The idea of a persona
  - We present differently to different people
  - Because we're not all the same

#### **Privacy Proprietaries**

- Principle of least astonishment
  - Property is about ownership
  - But data is more subtle...
  - Not just of things, but of personal space
  - Online (cyber) space should be no different

## Human Data Interaction (HDI)

- Legibility
  - Aka transparency: who knows what?
- Agency
  - Aka power: who has rights for what?
- Negotiability
  - How do we change
    - permissions,
    - ownership,
    - Even rules?

#### Data isn't property

- Obvious:
  - I give you a copy, I still have mine
  - Copy costs nearly zero
- Less obvious:
  - I change execute rights to program
  - I change other use rights?
- Isn't even just IP

## Engineering

- Default should afford equal power
  - to data subject, source, originators
- Agency
  - can I share or delete data?
- Negotiability
  - can I charge, refuse, revoke access
- Legibility
  - Do I know and understand all this?

#### Where is data?

- May matter
  - gdpr/cloud/jurisdiction/redress
  - Power/symmetry/coercion
- Retain data, or use trusted 3<sup>rd</sup> party
  - Or enclave/escrow -
  - someone we pay who isn't even curious?

## Summary

- Just because we virtualise something…
   ...doesn't make it ok to treat it different
- Data is payment too
  - She who has my data, owes me.
- Think about your shoes
  As you walk out of here