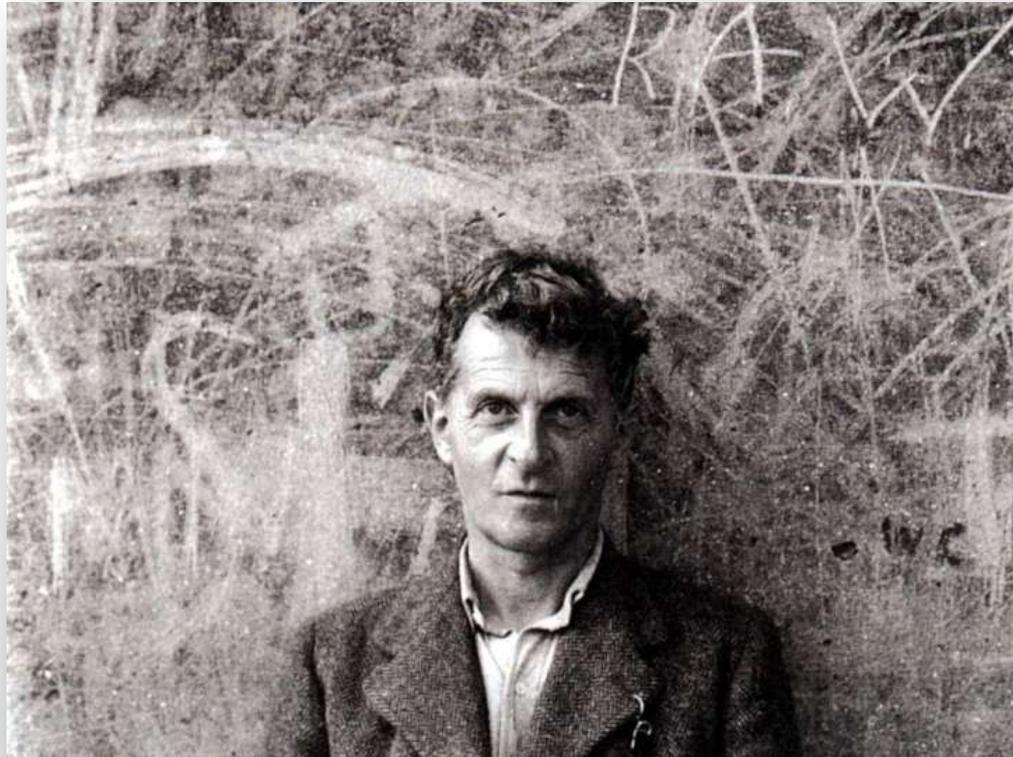


Richard Harper *Microsoft Research Cambridge, England*

# Information, communication



Yesterday, some reference to this geezer: most confined to the idea that concepts are to be understood in terms of their use

But he also remarked, more importantly, on the ***stretching*** of concepts beyond their meaningful application

# *One form of stretching: the role of a concept*

**Information** - how can one use the concept sensibly?

Isn't it like the concept **truth**? –it's one that is to be defined in relation to particular instances

It makes no sense to define it in the general – doing so suggests that one doesn't know what the concept means – one cannot define truth in the general, for example, one knows it's a resource for investigating the truth of something in the particular

Yesterday there were some very good examples of exploring what information is in **particular instances** : of how particular content of various kinds gets 'worked' - as in the case of electrical engineers

## ***A second form of stretching: reductionism***

Can one reduce content types to an elemental form?

Yes, but when it is ***appropriate*** to do so – when it affords traction

Take ***Shannon's*** topic: ***reductionism worked for him!***

But don't think that one can easily go back to redefine the thing  
***reduced***

Human communication **can be reduced** to 'information' for engineering, but can information be used ***to explain*** human communication?

### ***What happens when you try?***

# Human communication



# The case of Shared Editors

Never went anywhere. Why?

# Then the Media Space

(More is better – but what more?)



# Video tunnels

(Fitting glances to lookings)

# Ten years later....

C-Slate

Touching documents

(Fitting touches together)

# The body

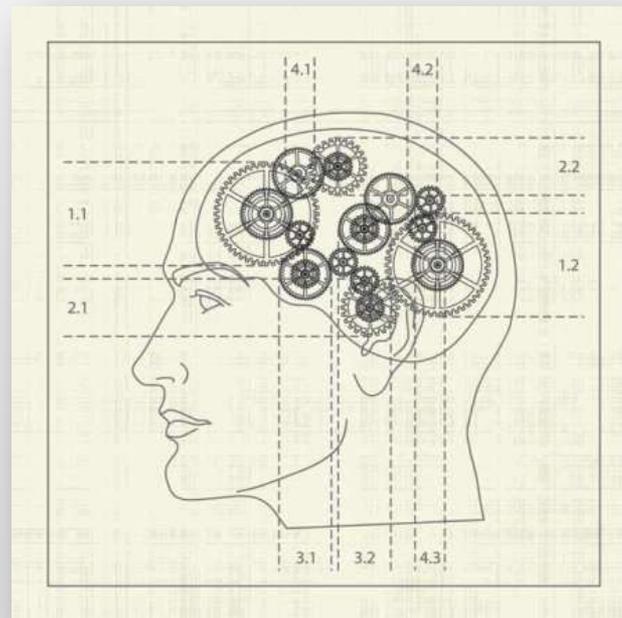
A mechanics of fitting

The fitting of bodies  
in space and time

Google Wave

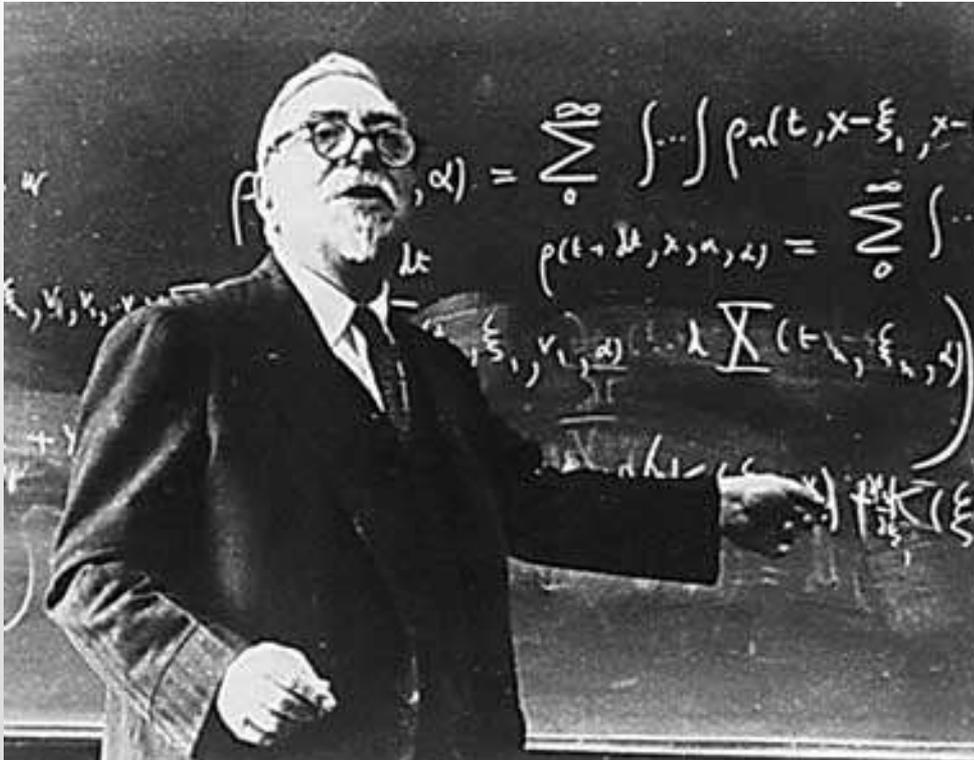
# Information and communication

Reductionism around information tends to adopt the machine metaphor



(Video)

# What are we?



Shannon  
& Weaver

Weiner

Pentland

What happens when you go from information processing as a reductive reconceptualism back to the act of communication being merely information?

Weiner

# Contrary examples: Glancing



# Scenarios of use



# Very little of this



**Lots of this**



# **Making reasons to communicate**

# Lots of design examples....



Social Touch  
Reassurance  
Connectedness and togetherness  
Expressing identity



**So, what is communication?  
Is it about exchange?  
(of something)**



# **This something?**

**An mental object – Locke**

**As merely information? (Shannon)**

**A language object – ‘thoughts as things’ (viz, Kantian-Quinean ‘thought’)**

**From an inner soul – the solution to solipsism?  
(Viz, Durham Peters)**

**As manifestation of primal cognitive need – a metaphorical act of (embodied) sexual touch?  
(viz..?)**

**These either derive from metaphors**

Or **reductionism** when the reductionism has been taken the wrong way (with Weiner)

Perhaps a better way of answering this question is to look and ask a different question

***Why*** do people communicate?

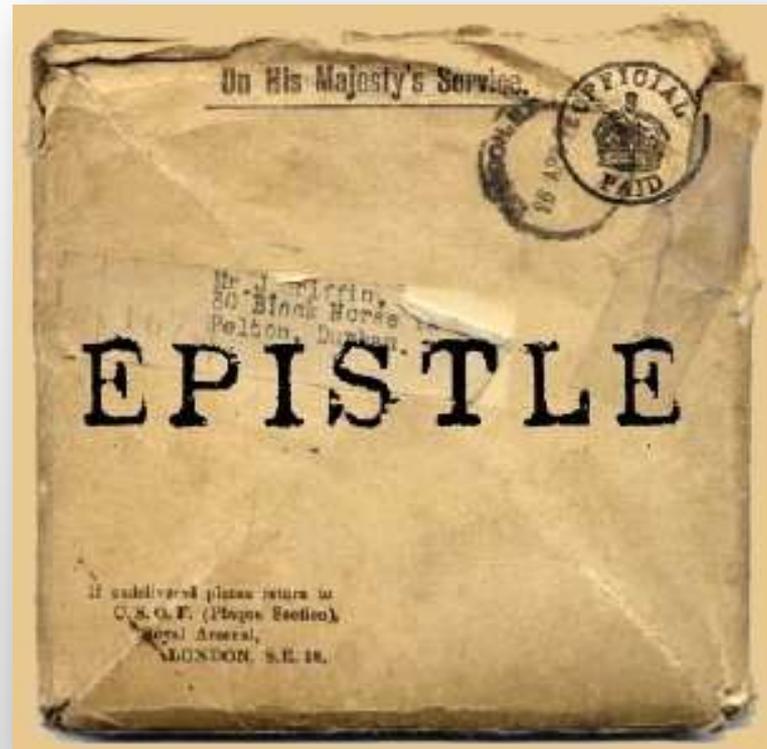
## An example: the letter



What kind of ‘cultural practice’?

**A letter is...**

**Epistle-like  
Whispered intimacies  
between two people**



**T**

# So, what is communication?

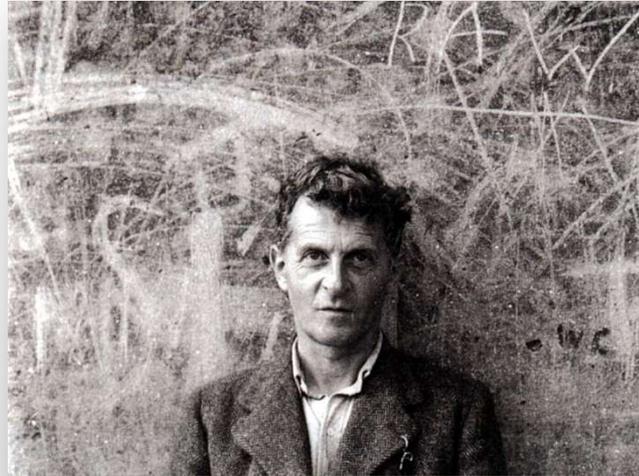
The question is better put this way:

*‘What is it that people are **doing** when they send a letter, summon a glance, or post to a family device?’*

*Think of it as **performative**, not as information exchange*

Notions of information processing and capacity get us only so far in explaining and understanding these acts

**What is the right language for this?**



***I think we have an incredibly rich set at hand given the form of lived experience – its diversity, experiential qualities, and our understanding of it***

# **We communicate because we want to:**

- **tell someone something**
- **show affection**
- **find out if others care for us**
- **pass the time of day**
- **be courteous to others**
- **entertain**
- **entrance**
- **because we are obliged to**

# **We communicate because we want to create a bond:**

- a bond of information exchange – bonds of work
- a bond of physical desire – bonds of the body
- a bond of longing – bonds through time
- a bond of presence – bonds in space
- a bond of status – bonds on society
- a bond of dizziness – bonds of play
- a bond of dull resentment – society or anger?

- Tell them something
  - show affection
  - find out if others care for us
  - pass the time of day
  - be courteous to others
  - entertain
  - because we are obliged to
- a bond of information exchange
    - a bond of physical desire
      - a bond of longing
      - a bond of presence
        - a bond of status
        - a bond of dizziness
  - a bond of dull resentment

# A *texture* of human relations

It turns out that different channels allow new ways of enabling these bonds, these weaves of connection

**Texting – intimate, whispers**  
**A written letter – calm reflective**  
**Voice calls – tantalisingly ad hoc**

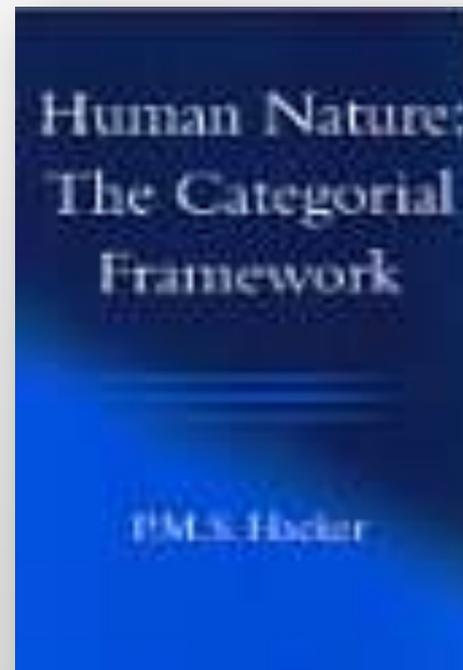
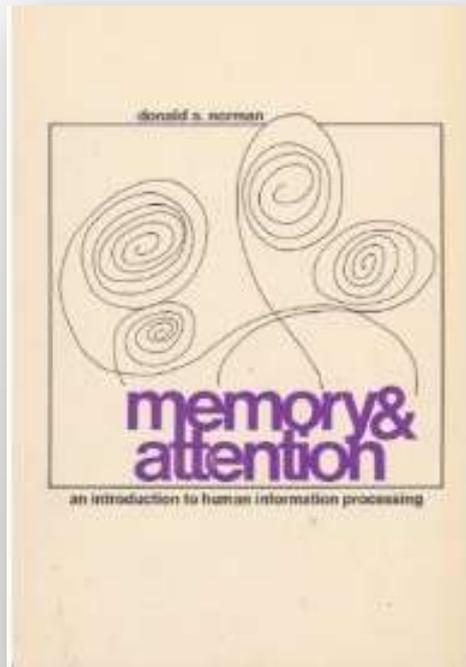
## **But**

**Texting – permanent, private, keep-able**  
**A written letter, permanent, give-able**  
**Voice – unrevisable, losable, refutable**

## **So why?**

**It depends on the relationship in question, and  
hence also the persons involved**  
**How they want to perform their bond-making**

**If you want an approach that is appropriate,  
It's a philosophical anthropology, not a  
processing modelling approach;  
It's Hacker, nor Bateson  
It's talk, not 'information'**



**That's our doing for you  
A bond of performing and listening**

***Thank you***