written and coded speech acts
WRITTEN AND CODED ‘SPEECH ACTS’

Mireille Hildebrandt
Preliminaries
written and coded speech acts
1. Things that matter are not computable
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2. They can nevertheless be **made** computable
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2. They can nevertheless be made computable
3. They can be computed in different ways and the difference matters
What’s new?

1. Preliminaries
2. On the shared Welt
3. On the shared Welt as in-formed by computing systems
4. The difference that makes a difference
5. Coded speech acts under the rule of law
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Late Husserl’s and Habermas’ *Lebenswelt*
- *Shared world*
- *Merleau Ponty and Ricoeur ‘problem of the other mind’*
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  - Shared world
  - Merleau Ponty and Ricoeur ‘problem of the other mind’

- Wittgenstein’s Lebensformen, Sprachspiele, Regeln folgen and Familienähnlichkeit
  - Forms of life, language games, to follow a rule and family resemblance
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  – Shared world
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Austin, Searle and MacCormick’s speech act theory
  – Further developed with regard to written speech legal acts
  – ‘Text-driven Jurisdiction in Cyberspace’ https://osf.io/jgs9n/
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- It is the world we find ourselves in when developing our embodied mind
- It is the ground we stand on, even though it is forever shifting and rebuilt
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Computing systems are not grounded in a shared Welt
- This is the difference that makes a difference between human and computational cognition
- They do not navigate our shared world but ‘parasite’ on it:
Welt: the difference that makes a difference

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  - They do not navigate our shared world but ‘parasite’ on it:
    - Simulation, representation, traces, computational inferences
    - Note that any ‘feedback’ or ‘experience’ is either data or code, not RL
    - An algorithm cannot be trained on future data
Welt: the difference that makes a difference

- Computing systems are, however, part of our shared Welt
Welt: the difference that makes a difference

- Computing systems are, however, part of our shared Welt

- The adaptive, relational and ecological nature of human cognition implies that computing systems transform both our shared Welt and our selves
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Computing implies quantification and formalisation
  – Mathematics assumes and depends on both
Computing implies **quantification** and **formalisation**
- **Mathematics** assumes and depends on both

- **Quantification IRL entails qualification**
- To count as the same entity, variable...
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Qualification is a speech act with performative effect
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- Computing requires deciding on proxies, e.g. groundtruthing in ML
  - The central notion in design, default settings and deployment is relevance
  - Relevance depends on purpose, actor(s) and environment
  - LoP: generic, operational, concrete (e.g. justice, fairness, equivalent error rate)
Computing

- Note that human judgement requires ranking and weighing
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- and close to quantification: ‘more’ implies a measure
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- that is rooted in the tacit dimensions of the shared world (life forms)
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- not a calculation of given target variable, objective function
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speech: orality

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  - *By performative speech acts that create* institutional facts
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ICT-infrastructures IRL

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- Natural language combines
  - stabilisation of meaning with adaptiveness and
  - the potential of novelty
  - against the background of shared life forms, patterns of interaction
  - the latter basically ‘count as’ brute facts
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  - Legal written speech acts play a major role here
    - Legislation, case law, treaties, fundamental principles, doctrine
  - They enable coordination of legitimate expectations
    - By attributing legal effect if specific legal conditions are fulfilled
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speech: computer code

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The power relationships that were institutionalised under the rule of law
ICT-infrastructures IRL

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- The power relationships that were institutionalised under the rule of law
  - are naked, invisible, not regulated in the case of coded speech acts
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- But the ‘performative effects’ also depend on
  - the ‘brute force’ of the code and its output:
    - decisions and behaviour
    - irrespective of meaning attributed
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- Decisions on relevance, proxies, ground-truthing, formalisation shape our shared Welt
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- This is why a human ‘in the loop’ will not do
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Under the rule of law?

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  - Economic, military, geopolitical
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- Their ‘speech acts’ should be brought under the rule of law:
  - Design, provision, deployment of computing systems cannot be part of a law-free zone
  - No ‘freies Ermessen’ for potentially high impact coded ‘speech acts’
Rule of law in a constitutional democracy is a normative undertaking:

- It aims to protect
Rule of law in a constitutional democracy is a normative undertaking:
- It aims to protect
  - the incomputable nature of human agency
  - a shared world that affords privacy, diversity, inclusion
  - transparency, accountability and contestability of big players
  - by way of a series of institutional checks and balances
  - notably ‘effective and practical’ fundamental rights
Under the rule of law?

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- The power that imposes legislation does not decide on its interpretation
- *Iudex non rex lex loquens*
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- Governments having equal respect and concern for each individual citizen
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- Written legal speech acts are ambiguous, multi-interpretable and thus contestable
Under the rule of law?

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  - Coded ‘speech acts’ must be contestable insofar as they impact fundamental rights
  - This is directly related to the fact that they ‘make things that matter computable’
    - In one way or another
  - Contestability implies speech acts rooted in our shared world
    - This is where written and coded speech acts meet:
      - Discussing design choices and anticipated decisions and behaviour of the systems built
      - This is not about ethics but about who has the power to decide
Closure