Program Transparency for Legal Machines

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1. Legal machines and transparency
Changeover

Text culture  Machine culture
General Norms
- Laws
- Decrees
Published

Technical changeover ‘legal text’→ ‘program’

Legal machine programs
No access

Text culture  Machine culture
Technical changeover ‘legal text’ → ‘program’

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Legal machine programs
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Legal machines
- Ticket machines
- Form proceedings
  - tax declaration
  - FinanzOnline

→ Problems
1. Transparency
e.g. RIS.bka.gv.at

2. Ex-post legal protection

- Horizontal level
- Vertical level

These 2 means were not from the beginning.
They were trained in the course of time, but now come as a standard.

**General Norms**
- Laws
- Decrees

**Individual Norms**
- Court judgements
- Administrative decisions

**Text culture**
1. Transparency

General Norms
- Laws
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Published

Legal machine program
No access

2. Ex-post legal protection

Individual Norms
- Court judgement
- Administrative decisions

These 2 standards are missing in the emerging machine culture!
We address these 2 standards in the emerging machine culture:

1. **Lack of transparency**
2. **No ex-ante legal protection**
Requirement 1:

Programs shall be accessible at least architecturally

Requirement 2:

Programs shall provide a trained, effective and rapid legal protection

Example 1. The law provides 10 variations but the program contains only 9. (e.g. declaration of travel expenses)

Example 2. A ticket machine gives no money back.
Goal

Transparency and legal protection in text culture and machine culture

• Same level standards
1. Transparency

General Norms
- Laws
- Decrees

Published

2. Ex-post legal protection

Individual Norms
- Court judgements
- Administrative decisions

Legal machines
- Ticket machines
- Form proceedings

Technical transformation ‘legal text’ → ‘program’

1. Lack of transparency

Legal machine programs
- No access

2. No ex-ante legal protection

Text culture

Machine culture
2. The context of justice in the paradigm change to e-procedures
Injustice in machine culture

• H. Kelsen’s objectives in his Pure Theory of Law:
  – Paradigm shift. Succeeded.
  – Overcoming of the natural law. Succeeded
  – To stop argue using the concept of justice. Did not succeed

• The principle of equality is an element of justice

• Equality is a challenge in e-procedures!
About injustice

• Injustice is
  – less of a normative problem
  – more a cognitive (interpretative) problem

• Subsumption is interpretative
  – i.e. cognitive at its core
Equality is challenged in e-procedures

• Subsumption is accomplished by the parties and not by the court
  – State of affairs is a basis for subsumption
    • Party fills in e-procedure input fields itself
      – not a court

• Equality ≠ justice
  – A party may be not skillful in law (and IT)
  – Intermediaries (in IT) are required

• Big difference between communicating with a human operator and a machine
Paradigm shift to machine culture

• Success in **middle areas**
• **Hard cases** will be handled as before with manual legal work
• **Trivial matters** will not be perceived as law
Implementing transparency

Requirement 1:
Programs shall be accessible at least architecturally

Requirement 2:
Programs shall provide a trained, effective and rapid legal protection

• No one-off, best-of-breed solution in software engineering
• Requirements flowdown – to low level specifications
Conclusions

• There is a problem of the transparency of legal machines
• There is no silver bullet to implement transparency requirements easily
Thank you