Anchoring Regulations: Intermediate Institutions, Meta-rule of Law

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Problems

• How to bridge institutions, rules, norms, apps and people to set up specific ecosystems that turn “legal”?

• How to regulate “legally” the information flow on the Web in order to empower people (individuals and communities) and make the balance between liberty and security?

• How to make “legally” effective artificial devices (electronic institutions, REL…) on the Web of Data?
• Legal models (classic) → Intermediate Institutional Models (SWRM)
• (i) CAPER (regulatory model)
• (ii) Relational Justice
• (iii) Web of data (REL)
(i) Data and metadata to structure the flow of information

(ii) Social intelligence and crowdsourcing taking into account the collective properties both of human and computational cognition

(iii) Formalisation of languages of law making norms and rights manageable

(iv) Security and privacy to protect individuals and communities from ancient and new threats (to prevent violence across the web)
1. Dialogue, and not only power, is emerging as a source of law across technology. People, *we the people*, have a new opportunity to take the floor.

2. Information principles can be embedded into the making of this new digital society.

3. *Privacy by design, data protection by design, security by design* are other terms used for the construction of a new Rule of Law, or Meta-Rule of Law, comprising humans and programs, rights and languages, alike.

4. We have to face in the next years the management of a new self, a personal identity which is complex, plural, multidimensional and durable on the Web.
What is the difference?

• Regulations are switching forms and manners. The difference lies on the regulation of data (actions, intentions, results ...). In the past, rulings assumed a simple ontology, where human knowledge could be treated as separated *knowledge about* human behavior (be understood as experience or as external behavior).

• Now, the structuring of data by means of metadata incardinate *action and knowledge* at the same time in a more complex dynamic flow in real time (action, knowledge, shared knowledge, meta-knowledge): i.e. it is endowed with an *intelligent flow*.
Drafting the rulers?

Quoted from: GONORRÉIA
25.media.tumblr.com/tumblr_m3mrkmJhXQ1qzfebyo1_250.gif
<table>
<thead>
<tr>
<th>SOCIAL RULES</th>
<th>PRIMARY RULES</th>
<th>SECONDARY RULES</th>
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</thead>
<tbody>
<tr>
<td>(1) General</td>
<td>(1') Lack of certainty</td>
<td>(1'') Recognition</td>
</tr>
<tr>
<td>(2) Permanent (stable)</td>
<td>(2') Static quality</td>
<td>(2'') Change</td>
</tr>
<tr>
<td>(3) Coactive</td>
<td>(3') Spread social pressure</td>
<td>(3'') Adjudication</td>
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<table>
<thead>
<tr>
<th>SOCIAL SYSTEM CONDITIONS</th>
<th>SIMPLE SOCIETY</th>
<th>COMPLEX SOCIETY</th>
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<tbody>
<tr>
<td>LAW'S MINIMUM CONTENT: &quot;NATURAL NEEDS&quot;</td>
<td>EXTERNAL POINT OF VIEW</td>
<td>INTERNAL POINT OF VIEW</td>
</tr>
<tr>
<td>(1) Vulnerability (Prohibition of violence)</td>
<td>EXTERNAL FACTUAL STATEMENT (Effectiveness of rules)</td>
<td>INTERNAL SENSE STATEMENT (Validity of rules)</td>
</tr>
<tr>
<td>(2) Approximate equality (Obligations and concessions’ system)</td>
<td>DESCRIPTIVE USE OF LANGUAGE (Prediction, explanation)</td>
<td>OPERATIVE USE OF LANGUAGE (Understanding)</td>
</tr>
<tr>
<td>(3) Limited altruism (Obligations and concessions’ system)</td>
<td>PRIMARY RULES’ OBEDIENCE BY CITIZENS</td>
<td>EFFECTIVE ACCEPTATION BY THE CIVIL SERVANTS AS A GUIDELINE OR PUBLIC MODEL OF OFFICIAL CONDUCT</td>
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<td>(4) Limited resources (Property)</td>
<td></td>
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<td>(5) Understanding and limiting power (Need of sanctions)</td>
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Valid rule = Legal rule

International law = Interstate law

NATION-STATE! Vs. Global Law, Global Ethics

Hans Kelsen: *Reine Rechtslehre* (1911-1960)

Legality, legitimacy = *Rechtsstaat*

Democracy: state form
Democratic behavior: citizen participation
Law = Norms = Drafting, enactment, interpretation, implementation, enforcement


Inferential representation of ‘legal validity’ (Sartor, 2008)

The concept of legal validity provides a sufficient condition for legal bindingness; to say that a norm is legally valid strictly entails that it is legally binding (a strict entailment, as opposed to a defeasible one, does not admit exceptions). This leads to the conceptual model of Figure, where the concept of legal validity provides a bridge connecting the fact of a norm having certain features and the conclusion that the norm is legally binding (the double-stroked arrow indicates strict entailment, while the single-stroked arrows indicate defeasible entailment).
CAPER objectives

• a) Implementing a framework to perform the task of connecting multiple data sources with multiple visualization techniques via a standardized data interface, including support for data-mining components.

• b) Enabling a quick and robust import of data types from disparate data sources in order to improve the ability of different LEAs to work collaboratively.

• c) Supporting pattern discovery, documentation and reuse, thus increasing progressively detection capabilities.

• d) Four major components: (i) Data harvesting (knowledge acquisition: data gathering), (ii) Analysis (content processing), (iii) Semantic Storage and Retrieval, and (iv) Advanced visualization and visual analytics of data
## CAPER Rules to regulate LEA's behaviour

<table>
<thead>
<tr>
<th>Section</th>
<th>Rule</th>
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</thead>
<tbody>
<tr>
<td><strong>I Data Collection and Storage</strong></td>
<td>R1.1 Every LEA should perform a specific Privacy Impact Assessment (PIA) according to the general framework offered by the CAPER Regulatory Model (CRM).</td>
</tr>
<tr>
<td></td>
<td>R1.4 No automated classification of suspects, victims and witnesses can be inferred from CAPER results.</td>
</tr>
<tr>
<td><strong>II Data Management</strong></td>
<td>R2.3 Access to CAPER database should be granted for the purpose of prevention, detection or investigation of organized crime.</td>
</tr>
<tr>
<td></td>
<td>R2.4 Any other request of access for other purposes should be rejected.</td>
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<td></td>
<td>R2.5 Non-authorised LEA and intelligence services or administrative bodies of authorized LEA should not have access to CAPER data.</td>
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<td></td>
<td>R2.6 The use of system integrity tools should enable detection and reporting of changes applied on servers. In case of such an event the system should be able to notify specific users such as the creator of the query which results have been modified.</td>
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<tr>
<td></td>
<td>R2.7 Regular audits of the CAPER system should be performed by the external supervisor. The competent authority should be informed of the results, if necessary, according to national legislation, including the plans for enforcing recommendations.</td>
</tr>
<tr>
<td><strong>III. Data Reuse and Transfer</strong></td>
<td>R3.2 No automated classification of suspects, victims and witnesses can be inferred from CAPER results.</td>
</tr>
<tr>
<td><strong>IV Right of Data Access</strong></td>
<td>R4.2 The reasons to deny access should be clear and defined. Access can be denied when the access may jeopardise the fulfilment of the LEA tasks, or the rights and freedoms of third parties.</td>
</tr>
<tr>
<td></td>
<td>R4.2 The alleged reasons to deny access should be open to external supervision. The external supervisory authority should have free access to documents justifying the refusal. A short time-span of three months to give an answer to a previous request of access should be implemented.</td>
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## PRINCIPLES OF FAIR INFORMATION PRACTICES (FIPs)

<table>
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<tr>
<th>Principle</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>1. Openness and transparency</strong></td>
<td>There should be no secret record keeping. This includes both the publication of the existence of such collections, as well as their contents.</td>
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<tr>
<td><strong>2. Individual participation</strong></td>
<td>The subject of a record should be able to see and correct the record.</td>
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<tr>
<td><strong>3. Collection limitation</strong></td>
<td>Data collection should be proportional and not excessive compared to the purpose of the collection.</td>
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<tr>
<td><strong>4. Data quality</strong></td>
<td>Data should be relevant to the purposes for which they are collected and should be kept up to date.</td>
</tr>
<tr>
<td><strong>5. Use limitation</strong></td>
<td>Data should only be used for their specific purpose by authorized personnel.</td>
</tr>
<tr>
<td><strong>6. Reasonable security</strong></td>
<td>Adequate security safeguards should be put in place, according to the sensitivity of the data collected.</td>
</tr>
<tr>
<td><strong>7. Accountability</strong></td>
<td>Record keepers must be accountable for compliance with the other principles.</td>
</tr>
</tbody>
</table>

FIPs. Source: Langheinrich (2001), Alan Westin (1967)
Not enough! : R1.1, R1.4, R2.3, R2.4, R2.5, R2.6, R2.7, R3.2, R4.2, R4.3 cannot be plotted!
Regulatory Model

Hard Law

Policies

Soft Law

Ethics

Institutional Strengthening

Justice

Effectiveness

Efficiency

Enforceability

Validity

Regulations

Social Dialogue (+/-)

Continuum of legal institutional strengthening

Binding Power (-/+)

26/11/2015
Regulatory Model

- Courts
- Agencies
- Expertise
- Balance
- Social Dialogue

Binding Power

(-/+)

Regulations

TRUST/SEC

Justice
Efficiency
Enforceability
Validity

Continuum of legal institutional strengthening

26/11/2015
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<th>Domains of research</th>
<th>Scientific areas involved</th>
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<tr>
<td>8. Legal, social, political and philosophical foundations</td>
<td>27. Socio-legal studies&lt;br&gt;28. Legal Theory, Rights and Jurisprudence&lt;br&gt;29. Philosophy and Ethics</td>
</tr>
</tbody>
</table>
Micro-foundations of Relational Justice

Behavioral research on mind, language, forgiveness, empathy and emotions

Social research on culture, language, apologies and micro-situations

Social, political, philosophical, and legal research on conflict resolution, dialogue and reconciliation

Social, political, philosophical, legal research on RJ and human rights and criminal and legal systems

<table>
<thead>
<tr>
<th>Fields</th>
<th>Authors</th>
<th>Focus</th>
<th>Object</th>
<th>Methodology</th>
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<tbody>
<tr>
<td>Social Neuroscience</td>
<td>Farrow, Clark Lawrence Singer, Saxe Damasio LeDoux, Harris, Iacoboni, Preston</td>
<td>Brain and neural functioning</td>
<td>Empathy and emotions (forgiveness) in brain areas. Somatic markers hypothesis (SMH).</td>
<td>Controlled lab experiments, Functional MRI (fMRI)</td>
</tr>
<tr>
<td>Cognitive Science</td>
<td>Gardner Minsky Rumelhart McClelland Hollan, Hutchins, Thagard</td>
<td>Intelligence and social behavior</td>
<td>ToM (Theory of Mind). Scripts and cognitive patterns in social cognition</td>
<td>Neural networks, scripts, cognitive modeling</td>
</tr>
<tr>
<td>Primatology</td>
<td>De Waal, Aureli Flack, Cords Schaffner</td>
<td>Aggression and conciliatory behavior</td>
<td>Empathy and cooperative interaction patterns in monkeys, apes and humans. Relational model of aggression.</td>
<td>Behavioral observation, social networks, distance analysis, kinship, social niches reconstruction</td>
</tr>
<tr>
<td>Basic Social Psychology</td>
<td>Ekman, Rolls Lazarus Bandura, Ortony, Gallup</td>
<td>Categorization, basic emotions and communicative behavior</td>
<td>Conceptual representation, empathy and universal (basic) emotions in human expression (bodily and linguistic)</td>
<td>Neural networks, controlled lab experiments, genetics, regression analysis, prototype and semantic analysis</td>
</tr>
</tbody>
</table>

**Table 1.** Basic empirical research on mind, language, empathy and emotions.

• 330- (inaudible) yo soy un currante, trabajaba obra, tengo testigos

• 331- empresa (inaudible) estaba trabajando en otra empresa en Vic

• 332- (inaudible) no soy

• 333- un traficante, ni trafico ni nada (inaudible).

• 334- JUEZ: m- bueno… ¡visto para sentencia!
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Taken together, these three layers of licenses ensure that the spectrum of rights isn’t just a legal concept. It’s something that the creators of works can understand, their users can understand, and even the Web itself can understand.
Rights Expression Languages (REL) [Renato Iannella]

Rights entity captures offers/agreements between parties and the content. REL model:

- **Permissions** (usages allowed over the content: play, print, sell…)
- **Constraints** (limits to permissions e.g. time-based restrictions…)
- **Requirements** (obligations needed to exercise the permissions, e.g. the need to have a valid credit card during the term of agreement)
Regulation: ontology design pattern  e.g. LicenseLinkedDataResources

Víctor Rodríguez-Doncel, Mari Carmen Suárez-Figueroa, Asunción Gómez-Pérez and María Poveda (2013). See Rodríguez-Doncel et al. (2013).
Some concepts

• Identity meta-layer system/\ Meta-rule of Law/\ Global Ethics
• Rights Expression Languages
• Relational Justice
• Semantic Web Regulatory Models
• Intermediate Institutions
Some publications I


Some publications II


Thank you!