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SMART RULES & REGIMES:
LEGAL DESIGN TOWARDS REGULATING INNOVATION

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LEGAL DESIGN TOWARDS REGULATING INNOVATION

“Getting legislation right is essential if we are to deliver the ambitious objectives for smart, sustainable and inclusive growth, set out by the Europe 2020 Strategy.”

European Commission (2010)

“There are no easy routes to regulatory improvement.”

Robert Baldwin (2005)
LEGAL DESIGN TOWARDS REGULATING INNOVATION

Leading Questions

[EU] How (so) can *smart rules & regimes* be relevant to fostering (prosperity through) *technological innovation*?

[Baldwin] Can such rules & regimes be the object of and inspire *legal design methodology* and if so, how?
LEGAL DESIGN TOWARDS REGULATING INNOVATION

Roadmap

1. Background - Innovation & Regulation
2. Focus - Smart Rules & Regimes
3. Introduction - Legal Design Methodology
4. Elaboration - Design of Rules & Regimes
5. Conclusions
1.0 REGULATING TECHNOLOGICAL INNOVATION

The ‘Dutch paradox’

“An excellent record in knowledge creation, but a mediocre record in innovation activity”
1.1 WHAT IS INNOVATION?

Exploration
(inventions)

Process ➔
(‘input’)

Result ➔
(‘output’)

Exploitation!
(valorization)
1.2 MARKET FAILURE

- Return on investment
  - spill-over or lack in demand

- Knowledge transfer
  - Complex and/or tacit

- Profit margins
  - Strong competition

- Cooperation
  - no chains/network

- Positive externalities
  - societal interests
1.3 SYSTEMIC PROCESS FAILURE

Open start ➔ Convergence ➔ Closure

ENABLING

Market ➔ Technical Standards ➙ Government

“Supply chain/infra standards and risk regulation

LOCK-IN/OUT
Fostering innovation by gov’t?

- Consider likely gov’t shortcomings:

  - Lack of knowledge
  - ill-judgments & regulatory capture
  - Policy fragmentation
  - failing coordination; anti-commons
  - Over-specification
  - too strict on innovation deliverables
  - Overregulation
  - admin. burden, int. processes/mind set
1.5 GOVERNMENT INVOLVEMENT

‘Additionality principle’:
- only if necessary (failure)
- as moderate (how/when) as possible

“Coordinate rather than Perform/Substitute”

Through (meta-)regulation?

Mind (1): other government roles:
(market) supervisor – owner – principal
1.6 REGULATORY GOVERNANCE

Mind (2) the shift:
Government Regulation, but increasingly also ➔

- Market

- Civil society
  NGO’s: techn standards

- Hybrid
  All: e.g. certification *(note: meta-regulation)*
1.7 REGULATORY CHANNELING

Regulatory policy (foll. Brownsword)

Red light – negative channelling – ‘Y shall not do X’ (prohibition)
Amber light – neutral channelling – ‘Y may (not) do X’ (permission)
Green light – positive channelling – ‘Y shall do X’ (command)

X = specific ‘technologically innovative conduct’
1.8 NEGATIVE CHANNELING

Red light – negative channelling – ‘Y shall not do X’ (prohibition)

‘Innovative Risk Regulation’

- avoid over-inclusiveness
- allow for adaptivity (robust but….)
- Indirectly create incentives
- ‘add a carrot to the stick’
1.9 POSITIVE CHANNELING

Green light – positive channelling – ‘Y shall do X’ (command)

Innovation-compelling regulation

- Set limits that call for innovation
- Innovative tendering demands
- avoid underinclusiveness (LPF)
- ‘add a carrot to the stick’

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1.10 NEUTRAL CHANNELING

Amber light – neutral channelling – ‘Y may (not) do X’ (permission)

Innovation facilitating regulation

- Basic legal infrastructure - (intell.) prop.rights; contract
- Tradable public rights
- Promote PPP
- Subsidies & tax and competition law exemptions

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2.0 A SMART APPROACH?

Framing regulatory relevance to fostering technological innovation as a challenge for Smart rules and regimes?

not only Smart ↔ Dumb
(although dumb should go…)

but esp. Smart in best addressing Wicked regulatory challenges
2.1 SMART RULES & .......

Rule – linguistic statement projecting a mode of conduct or a power conferred, as a norm, which ought be adhered to and consisting of: ..... 

a norm subject; a norm object; 
an operative mode; (possibly) a norm condition
Regime - a set or system of rules, which (in conjunction of rules) holds at least the prescriptive minimum of objective norms to underpin subjective rights or claims

Abstract regimes
- establishing legal institutions

Concrete regimes
- body of rules concerning a public interest
2.3 WICKED CHALLENGES

1. High (social/technological) dynamics
   Rules & regimes which ‘accommodate’
   Multi-culturalism; emerging technologies
   Robust and adaptive (change & legal certainty?)

2. Strong conflicts of interests (clashing values)
   Rules & regimes which balance
   Privatization: public↔private values
   New technologies: benefits↔burdens
## 2.4 SMART RULES & REGIMES

### Dynamics focus: effectiveness and efficiency

### Conflict focus: legitimacy and justice

Assuming question 1. to be answered positively……………

<table>
<thead>
<tr>
<th>Dynamics*</th>
<th>Societal</th>
<th>Technological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value conflict**</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Private/Innovat.</td>
<td>-</td>
<td>-/-</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td>Public/Risk</td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-/-</td>
</tr>
</tbody>
</table>

* Dynamics focus: **effectiveness and efficiency**

** Conflict focus: **legitimacy and justice**
3.0 LEGAL DESIGN
(OF SMART RULES & REGIMES)

How to design smart rules & regimes?
(The 'Baldwin challenge')

Does *legal* design methodology make sense?
- beyond common sense or tacit wisdom?
- with practical promise & feasibility?

Possibilities and Positioning
(with Dick W.P. Ruiter)
3.1 DESIGN & METHODOLOGY

What is a design?
outline something non-existent but realizable on the basis of the outline (object with a function)

What is a design method?
well-considered, systematic, reproducible manner of making designs

What is a design methodology?
a well-considered, systematic, reproducible manner of making well-considered, systematic, reproducible manners of making designs
3.2 DESIGN OF LEGAL ARTEFACTS?

Drawing of dress ↔ dress Made

Design: the projection of types of artefacts with a function determining their form

Analogy: legal artefacts?
E.G. (property) rights, obligations, powers, legal personality
= legal artefact types ➞ specific design guidelines?

In practice: no clear method or methodology of legal design; suitable to different legal area’s only ‘rechtsvinding’
3.3 DESIGN VERSUS EVOLUTION

Design (intelligent creation) v. Evolution

Can a system of tradable allowances result from legal evolution alone?

EVOLUTION: (many) non-directional steps to the final result on *individual & concrete* basis, from inside (e.g. case-law)

DESIGN: (one) directional step to a result of *general & abstract* nature, by outsider (e.g. a regulator) (... acknowledging evolutionary legal dynamics)
3.4 TWO APPROACHES OF LEGAL DESIGN

Twofold approach: building blocks

Proper extent of abstraction – institutional perspective
(concerning types of rules/regimes + design guidelines)

Legal theory – legal institutions
- abstract perspective on internal structure of norms

Regulatory theory – regulatory concepts
- abstract perspective on the external context
4.1 ELABORATION ON LEGAL DESIGN (OF SMART RULES & REGIMES)

FIRST: LEGAL THEORY

Methodology through ‘legal institutions’

“(1) Systems of rules (2) projecting a state of affairs (3) that ought to be realized (4) by a social practice regulated by those rules and (5) expressive of the common belief that the state of affairs is (6) actually the case.”

Not empirical facts, but institutional (legal) facts
4.2 LEGAL THEORY: BASIC LEGAL INSTITUTIONS

Projections of states of affairs (2)

- legal quality – characteristic of person (e.g. minor)
- legal status – characteristic of object (e.g. res nullius)
- personal legal relation – relates persons (e.g. marriage)
- objective legal relation – relates person&object (e.g. ownership)
- legal configuration – relates objects (e.g. servitude)
- legal entity – personification (e.g. foundations)
- legal object – reification (e.g. tradable rights)

With legal institutes: general guidelines (all) and specific guidelines (class) (9 elementary design guidelines)
4.3 ‘INTERNAL DESIGN’
NORMS

Norms constitutive of Rules & Regimes

Design guidelines for norms
Following norm components:

Subject – Object – Operator - Condition

1. Norms of conduct
2. Norms of competence

Look at normative oppositions
Establish legal relations
4.4 ‘INTERNAL DESIGN’

OPPOSITIONS - NORMS OF CONDUCT

Oppositions: Object ((not)do) - Operator (shall/may)

Square of 4 types of norms

<table>
<thead>
<tr>
<th>Operator (shall/may)</th>
<th>object ((not)do)</th>
<th>Do ‘Perform act’</th>
<th>Contradictory (&gt;-&lt;)</th>
<th>Contrary (&lt;&gt;-&gt;)</th>
<th>Subaltern (++&gt;)</th>
<th>Subcontrary (/&lt;&gt;)</th>
<th>Not do ‘Omit act’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shall ‘Ordered’</td>
<td>Command</td>
<td>&lt;&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prohibition</td>
</tr>
<tr>
<td>Converse</td>
<td>++&gt;</td>
<td>&lt;-&lt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May ‘Permitted’</td>
<td>Permission</td>
<td>&lt;/&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dispensation</td>
</tr>
</tbody>
</table>

Contradictory (>-<); Contrary (<>->); Subaltern (++>); Subcontrary (/<>)
Horizontal legal relations (Hohfeld)
- norms of conduct

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Rights in given relations (shall/may)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Claim</td>
</tr>
<tr>
<td>X</td>
<td>Of X against Y</td>
</tr>
<tr>
<td></td>
<td>No-Claim</td>
</tr>
<tr>
<td></td>
<td>X has no claim against Y</td>
</tr>
<tr>
<td>Y</td>
<td>Duty</td>
</tr>
<tr>
<td></td>
<td>Of Y against X</td>
</tr>
<tr>
<td></td>
<td>Privilege</td>
</tr>
<tr>
<td></td>
<td>Y is not under duty against X</td>
</tr>
</tbody>
</table>

X and/or Y: ‘unital’ (in personam) or ‘multital’ (in rem)

⇒ 8 types of legal relations......
### Vertical legal relations according to Hohfeld

- norms of competence

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Rights in creating/abolishing relations (can)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Power of X concerning relations of Y (in personam)</td>
</tr>
<tr>
<td>Y</td>
<td>Liability of Y to X’s power</td>
</tr>
</tbody>
</table>

X and/or Y: ‘unital’ (in personam) of ‘multital’ (in rem)

→ thus leading to 8 types of legal relations
4.7 ‘INTERNAL DESIGN’ OF LEGAL ACTS

EXPAND ON DESIGN OF DECLATORY ACTS

- Obligatory oblige another e.g. legal ban
- Purposive suggest oneself e.g. letters of intent
- Commissive oblige oneself e.g. contracting
- Hortatory suggest another e.g. submit appointment
- Expressive express oneself e.g. offer apology
- Assertive represent fact e.g. formal confession
- Sec state legal facts e.g. celebrate marriage
4.8 HOW TO ADVANCE ON ‘INTERNAL DESIGN’

Apply to Brownsword’s regulatory channeling

➔ Legal oppositions
  red and green = ‘shall’ (not do/do)

amber = ‘may’ (ditto) ➔ indifference
  … ➔ strong or weak permissions; tilt …..
4.9 REGULATORY THEORY: BASIC INSTITUTIONAL CONTEXTS

INSTITUTIONAL CONTEXTS

A - regulatory modes
   basic types of instruments
B - regulatory policy
   basic approach to smartness
C - regulatory governance
   basic normative scope
Regulation acc. to Julia Black:

“The sustained and focused attempt to alter the behavior of others according to standards or goals with the intention of producing a broadly identified outcome or outcomes, which may involve mechanisms of standard setting, information gathering and behavior modification.”

Possible strategies/forms.....
4.11 A: REGULATORY MODES & STRATEGIES 2

Different types of incentives

* Direct regulation – the stick

* Indirect regulation – the carrot

* Self regulation – the sermon

* Embedded regulation – the code
Relational scope of regulation

(David Levi-Faur)

- 1st party regulator = regulatee
- 2nd party regulator ⇔ regulatee
- 3rd party regulator <= NGO => regulatee

Increasing ‘hybridity’
4.13 B: REGULATORY POLICY: BETTER AND SMARTER

[From the 90’s - of the 20th century]

BETTER REGULATION: move beyond deregulation
Improve regulation; leading principles

SMART REGULATION: sustainable & inclusive growth
simplify, reduce burden, review (clauses);
regulatory impact assessment (alternatives);
stakeholder consultation & information
4.14 SMART REGULATION 1

Smart Regulation Gunningham et al. (1997-1998)

Focus .. (Environmental Policy)
- choose proper policy instrument
- seek proper instrument mixtures – lessons from practice

Smart design
- 4 regulatory design processes
- 5 regulatory design principles
- 4-5 frames for designing instrument combinations
C – Regulatory Governance

Applying different kinds of institutional environments
(O.E. Williamson)
as a normative framework for legal design……..

Government Hierarchy: unilateral command
Civil Society Networks: inclusive cooperation
Real Markets – bargaining & exchange
Establish an institutional framework of regulation to provide guidelines for defining types of legal design-spaces as a basis for the ‘internal’ design of (smart) rules & regimes.
5.0 CONCLUSION

Next steps

- formulate an overall model/methodology with synthesis internal – external viewpoint
- consider multidisciplinary scope how align normative and empirical work?
- focus on technological innovation robustness & adaptability; channeling