

BETWEEN LEGAL AND (NON) RESPONSIBLE AI

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SOMETHING SHORT ABOUT MY BACKGROUND

- Administrative law, how public authorities exercise power and make decisions
 - especially social security administration, where high volume decisions have high individual stakes
 - particular focus on automated and technology supported decision-making, including data protection, interoperability etcetera
- General interest in how “digitalisation” may shift discretion and responsibility, as well as affect rule of law values such as legality, transparency, equal treatment, and contestability

WHAT IS LAW?

- Law is not only “rules”. It is a social technology that authorises and limits the exercise of power, and makes it contestable
 - Law as rules
 - Norms, categories, conditions, prohibitions, permissions and consequences
 - Law as legality
 - Powers must be exercised through proper legal form, by proper actor, according to proper procedure, and within set limits
 - Law as justification
 - Exercises of power must be justified based on legal reasons

WHAT IS LAW?

- Law as analogue algorithms
 - Law is natural language dependent, as legal meaning is carried through words, concepts, and interpretive practices
 - Laws are often equipped with intentionally built-in discretion
 - Reasons matter, as law is not only expected to produce outcomes, but also to legally justify those outcomes
 - Designed for disagreement and review
 - Law is not a one-off operation but an institutional process meant to be produced and reproduced through institutions over time

CASUISTIC APPROACH TO LEGISLATION



BB (1736:0123 1), Chapter 12
**“How swine may be released
into an acorn forest”**



More easily computable but
**“hard to see the forest for all
the trees”**



Facilitates rigid
implementation but also risk
of gaps/loopholes

A GENERAL, PRINCIPLE- AND/OR RISK-BASED APPROACH TO LEGISLATION



More general, principled and high-level rules creating duties that scale with assessed risk



More challenging to compute but better equipped for addressing changing or unforeseen circumstances



Less clear but more flexible and less risk risk of gaps/loopholes

THE RULE OF LAW IS NOT A SINGLE VALUE



Formal values

Predictability and consistency.
Citizens and companies can plan
because authorities act under stable,
knowable rules

What must law provide in order to legitimately
guide us?



Substantive values

Laws aim at securing certain
outcomes based on equal treatment
in application without ignoring
relevant differences.

Where do we want to get?



Procedural values

Fair process. Affected citizens of
companies may be heard, enjoy
certain transparency and be
presented with reasons, including
possible paths to correction

Is there a way to get there?

DYNAMICS OF LAW AND TECHNOLOGY



Regulation 'of' technology

- Laws as boundaries for what technologies may permissibly do



Regulation 'for' technology

- Laws drafted to enable the use and computability of rules



Regulation 'in' technology

- Laws embedded in and executed computationally inside technological systems

REGULATION “OF” TECHNOLOGY

- Law sets the legal conditions for the development, deployment, and use of technology
 - Eg through rules on data processing, deployment, procurement, and accountability
 - Eg through requirements on use, human oversight, transparency, documentation, and safeguards
- Not just about regulations specifically targeting technologies
 - Technology specific regulations exist, such the new EU AI Act
 - Technology neutral regulations may, however, also shape technological development and use
 - Eg trade secret rules or administrative law regulations on competence, reason-giving, and review
 - The legal landscape for AI systems may thus be different between different sectoral development and use contexts

THE EU DIGITAL ACQUIS

- The EU Digital Rulebook, ‘digital acquis’
 - A body of EU legislation governing emerging digital technologies, cybersecurity, online platforms and electronic communications etcetera
- Laws are regional, but digital regulation often has cross-border and cross-sector effects, making the legal landscape interdependent
 - “The brussels effect” or first mover’s advantage
 - Legal design is typically in constant calibration, but especially so where technologies develop quickly and cut across multiple regulatory fields

Table 1: Overview of EU Legislation in the Digital Sector

Applicable law	Published in the Official Journal of the European Union
In negotiation	Proposal by the European Commission entered the legislative process.
Planned initiative	Mentioned by the European Commission as potential legislative initiative

Research & Innovation	Industrial Policy	Connectivity	Data & Privacy	IPR	Cybersecurity	Law Enforcement	Trust & Safety	E-commerce & Consumer Protection	Competition	Media	Finance
Digital Europe Programme Regulation, (EU) 2021/694	Recovery and Resilience Facility Regulation, (EU) 2021/241	Frequency Bands Directive, (EEC) 1987/372	General Data Protection Regulation (GDPR), (EU) 2016/679	Database Directive, (EC) 1996/9	Regulation for a Cybersecurity Act, (EU) 2019/881	Law Enforcement Directive, (EU) 2016/680	Product Liability Directive (PLD), (EEC) 1985/374, 2022/0302(COD)	Unfair Contract Terms Directive (UCTD), (EEC) 1993/13	Technology Transfer Block Exemption, (EC) 2014/316	Satellite and Cable I Directive, (EEC) 1993/83	Common VAT system, (EC) 2006/112, 2022/0407(CNS)
Horizon Europe Regulation, (EU) 2021/695, (EU) 2021/764	InvestEU Programme Regulation, (EU) 2021/523	Radio Spectrum Decision, (EC) 2002/676	Regulation to protect personal data processed by EU institutions, bodies, offices and agencies, (EU) 2018/1725	Community Design Directive, (EC) 2002/6, 2022/0391(COD)	Regulation to establish a European Cybersecurity Competence Centre, (EU) 2021/887	Directive on combating fraud and counterfeiting of non-cash means of payment, (EU) 2019/713	European Standardization Regulation, (EU) 2012/1025	E-commerce Directive, (EC) 2000/31	Company Law Directive, (EU) 2017/1132, 2023/0089(COD)	Information Society Directive, (EC) 2001/29	Payment Service Directive 2 (PSD2), (EU) 2015/2366, 2023/0209(COD)
Regulation on a pilot regime distributed ledger tech. market, (EU) 2022/858	Connecting Europe Facility Regulation, (EU) 2021/1163	Broadband Cost Reduction Directive, (EU) 2014/61, 2023/0046(COD)	Regulation on the free flow of non-personal data, (EU) 2018/1807	Enforcement Directive (IPR), (EC) 2004/48	NIS 2 Directive, (EU) 2022/2555	Regulation on terrorist content online, (EU) 2021/784	Radio Equipment Directive (RED), (EU) 2014/53	Unfair Commercial Practices Directive (UCPD), (EC) 2005/29	Market Surveillance Regulation, (EU) 2019/1020	Audio-visual Media Services Directive (AVMSD), (EU) 2010/13	Digital Operational Resilience Act (DORA Regulation), (EU) 2022/2554
	Regulation on High Performance Computing Joint Undertaking, (EU) 2021/1173	Open Internet Access Regulation, (EU) 2015/2120	Open Data Directive (PSI), (EU) 2019/1024	Directive on the protection of trade secrets, (EU) 2016/943	Information Security Regulation, 2022/0084(COD)	Temporary CSAM Regulation, (EU) 2021/1232, 2022/0155(COD)	eIDAS Regulation, (EU) 2014/910, 2021/0136(COD)	Directive on Consumer Rights (CRD), (EU) 2011/83	P2B Regulation, (EU) 2019/1150	Portability Regulation, (EU) 2017/1128	Crypto-assets Regulation (MiCA), (EU) 2023/1114
	Regulation on Joint Undertakings under Horizon Europe, (EU) 2021/2085, 2022/0033(NLE)	European Electronic Communications Code Directive (EECC), (EU) 2018/1972	Data Governance Act (DGA Regulation), (EU) 2022/868	Standard essential patents, 2023/0133(COD)	Cybersecurity Regulation, 2022/0085(COD)	E-evidence Regulation, 2018/0108(COD)	Regulation for a Single Digital Gateway, (EU) 2018/1724	e-invoicing Directive, (EU) 2014/55	Vertical Block Exemption Regulation (VBER), (EU) 2022/720	Satellite and Cable II Directive, (EU) 2019/789	Digital euro, 2023/0212 (COD)
	Decision on a path to the Digital Decade, (EU) 2022/2481	Roaming Regulation, (EU) 2022/612	ePrivacy Regulation, 2017/0003(COD)	Design Directive, 2022/0392(COD)	Cyber Resilience Act, 2022/0272(COD)	Digitalization of travel documents	General Product Safety Regulation, (EU) 2023/988	Geo-Blocking Regulation, (EU) 2018/302	Digital Market Act (DMA Regulation), (EU) 2022/1925	Copyright Directive, (EU) 2019/790	Financial Data Access Regulation, 2023/0205 (COD)
	European Chips Act (Regulation), 2022/0032(COD)	Regulation on the Union Secure Connectivity Programme, (EU) 2023/588	European Data Act (Regulation), 2022/0047(COD)	Compulsory licensing of patents, 2023/0128(COD)	Cyber Solidarity Act (Regulation), 2023/0109(COD)		Machinery Regulation, (EU) 2023/1230	Digital content Directive, (EU) 2019/770	Regulation on distortive foreign subsidies, (EU) 2022/2560	European Media Freedom Act, 2022/0277(COD)	Payment Services Regulation, 2023/0210(COD)
	European critical raw materials act (Regulation), 2023/0079(COD)	.eu top-level domain Regulation, (EU) 2019/517	European Health Data Space (Regulation), 2022/0140(COD)				AI Act (Regulation), 2021/0106(COD)	Directive on certain aspects concerning contracts for the sale of goods, (EU) 2019/771	Horizontal Block Exemption Regulations (HBER), (EU) 2023/1066, (EU) 2023/1067		Revision of the late payments Directive
	Establishing the Strategic Technologies for Europe Platform (STEP), 2023/0199(COD)	New radio spectrum policy programme (RSPP 2.0)	Regulation on data collection for short-term rental, 2022/0358(COD)				Eco-design Regulation, 2022/0095(COD)	Digital Services Act (DSA Regulation), (EU) 2022/2065	Platform Work Directive, 2021/0414(COD)		
		Telecoms Act / Fair Share initiative	Harmonization of GDPR enforcement 2023/0202(COD)				AI Liability Directive, 2022/0303(COD)	Right to repair Directive, 2023/0083(COD)	Single Market Emergency Instrument (SMEI), 2022/0278(COD)		

GDPR

- Governs personal data processing, and is thus sort of the “law of everything”
 - applies to the processing of personal data *wholly or partly by automated means* and to the processing *other than by automated means* of personal data which *form part of a filing system* or are intended to form part of a filing system.
- “Everything” is personal data?
 - ‘personal data’ means *any* information relating to an identified or *identifiable* natural person
 - Case law -> relative concept of personal data -> contextual assessment.
- “The so-called “Digital omnibus” package
 - A *proposed* regulatory package designed to simplify and harmonize digital laws, focusing on amending the GDPR, the AI Act, and other digital acquis regulations to reduce administrative burdens.
 - Includes, for example, proposals to consolidate clearly the relative concept of personal data

GDPR

- While one of the most important regulations of technology, it is also one of the hardest to compute
- Data protection principles
 - Lawfulness, fairness, transparency
 - Purpose limitation
 - Data minimisation
 - Accuracy
 - Storage limitation
 - Integrity and confidentiality
 - Accountability
- “Live” principles, that take meaning through interpretation and application in context, as well as needs to be complied with throughout collection, use and storage

AI ACT

- First legal definition of AI within the EU
 - 'AI system' means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments, Article 3(1) AI Act
- The AI Act sets out a risk-based rules for AI developers and deployers regarding specific uses of AI

AI ACT



UNACCEPTABLE RISK

- Prohibited systems (already applicable)
- High risk systems
- Limited risk systems
- Minimal risk systems
- General Purpose AI models

HIGH RISK

LIMITED RISK

(AI systems with specific transparency obligations)

MINIMAL RISK

REGULATIONS 'FOR' TECHNOLOGY

- Shifts in legislative techniques to facilitate computational methods
 - Enabling and governing technology use
 - Permissions and constraints for automated decisions and digital processes, interoperability regulations etcetera
 - Drafting rules with computability in mind
 - Formalised definitions and thresholds that map to available data
 - Decision tables and explicit conditional logic for core eligibility and obligations
 - Rules as code (RaC)
 - Authoritative machine-consumable expression of rules alongside legal text

REGULATIONS 'IN' TECHNOLOGY

- Rules and normative choices embedded in technical systems, where they are given operative effect through the system's functioning
 - A translational level, where legal norms are converted into technical operations that shape what the system permits, requires, blocks, or produces
 - Such as in automated decision-making, agentic AI, smart contracts etcetera
- A system being lawfully compliant does not always equal the supporting or producing of lawful decisions
- Regulations made 'for' technology might mitigate some risks, but might also normalise deeper embedding of legal norms in ways that makes the translation become less visible and less contestable

EXPLAINABILITY VS LEGAL REASON GIVING

- Explainability makes a system or output intelligible
 - how it works, what influenced the result, where uncertainty or limits lie
- Legal reason-giving justifies a decision as lawful
 - which facts were relevant, which legal norm was applied, and why the outcome follows
- They overlap, but are not the same
 - a technically explainable output is not necessarily a legally adequate reason
- Officials, affected persons, and reviewers need different forms of intelligibility
 - In legal decision-making, both may be necessary

PREDICTION VS. SUBSUMPTION

- **Prediction in a data-driven AI context**

- Takes features as inputs and outputs a score, probability, or classification
- Learns from patterns in past labelled outcomes
- Optimised for predictive performance
- Credibility comes from empirical fit, validation, and calibration

- **Legal subsumption**

- Relates legally relevant facts to a norm and a legal consequence
- Depends on interpretation of concepts, sources, and context
- Optimised for lawful justification rather than prediction
- Authority comes from legality, reasoning, and procedural fairness

Why the distinction matters

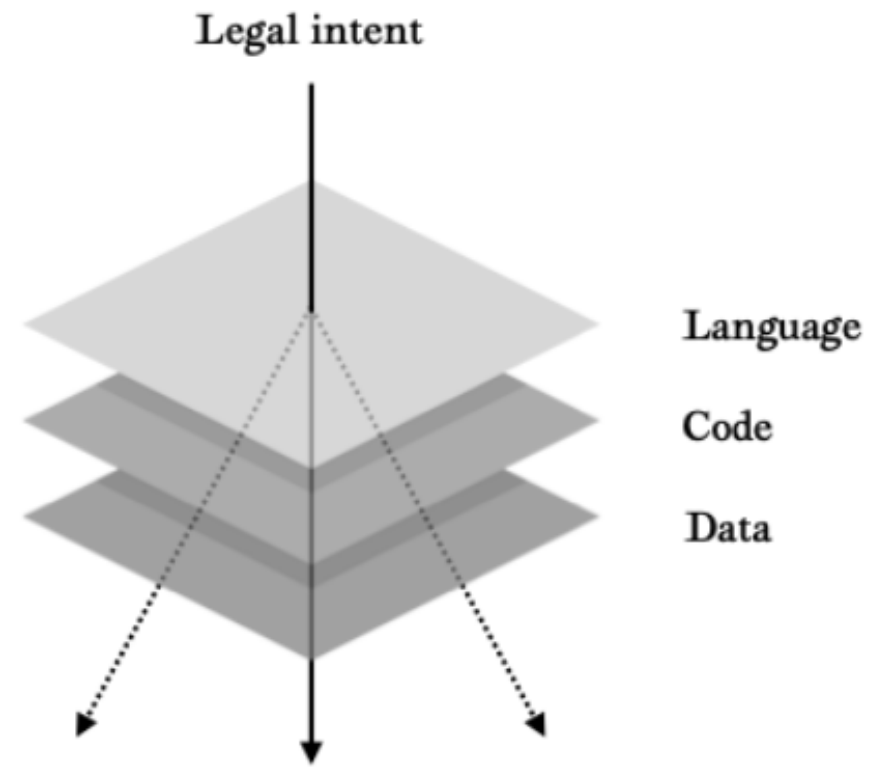
- A statistically accurate prediction is not the same as a legally justified decision
- Similar outputs do not mean the same underlying logic

NORMATIVE REFRACTION

Naartijärvi 2023

Situating the Rule of Law in the
Context of Automated Decision-
Making

NORMATIVE
REFRACTION



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THOUGHTS, QUESTIONS?

