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# Materials from Recognise Intensive Study Programs

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# The Cognitive Structure of Legal Institutions

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## Law and Mind

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### A Survey of Law and the Cognitive Sciences

Searc 🗹 Sea

Information Conten	Subjects: ts Metrics	Law, Law and technology, science, communication, Psychology, Cognition	
	Series:	Law and the Cognitive Sciences	
LAW AND MIND A Survey of Law and the Cognitive Sciences Bartose Brobek, Jap Hage, Nicole A Vincent	Publisher: Online publication date: Print publication year: Online ISBN: DOI:	Cambridge University Press April 2021 2021 9781108623056 https://doi.org/10.1017/9781108623056	
	Get access Edited by Bartosz Brożek, Jagiellonian University, Krakow, Jaap Hage, Universiteit Maastricht, Netherlands, Nicole Vincent, Macquarie University, Sydney		

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The Cognitive Structure of Legal Institutions



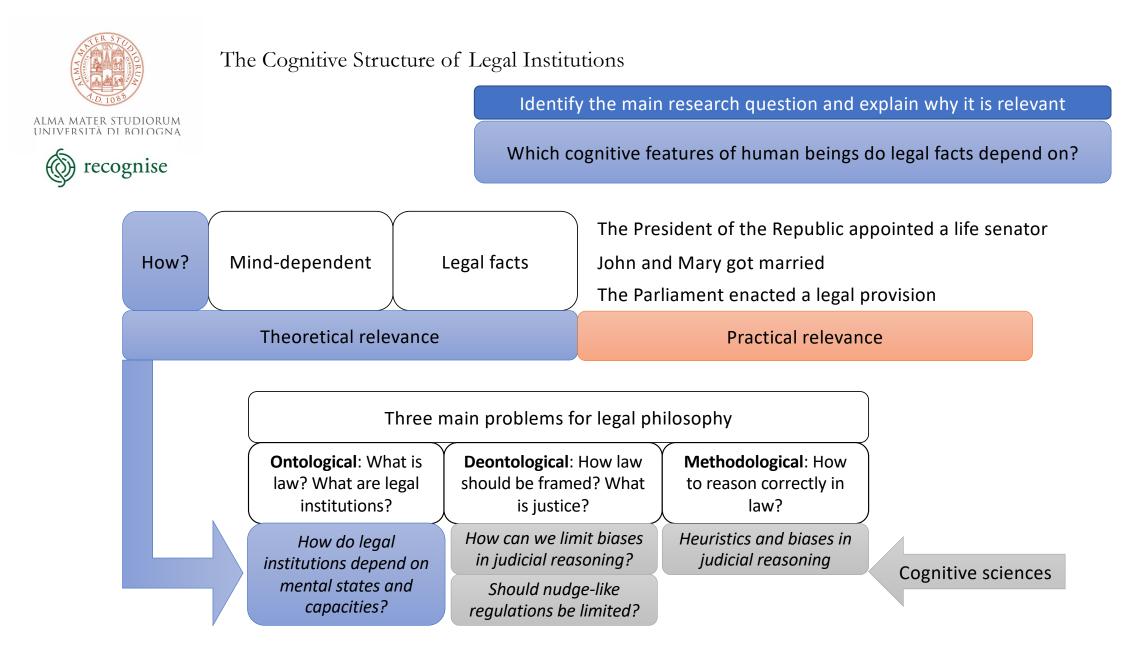
## What I am going to do:

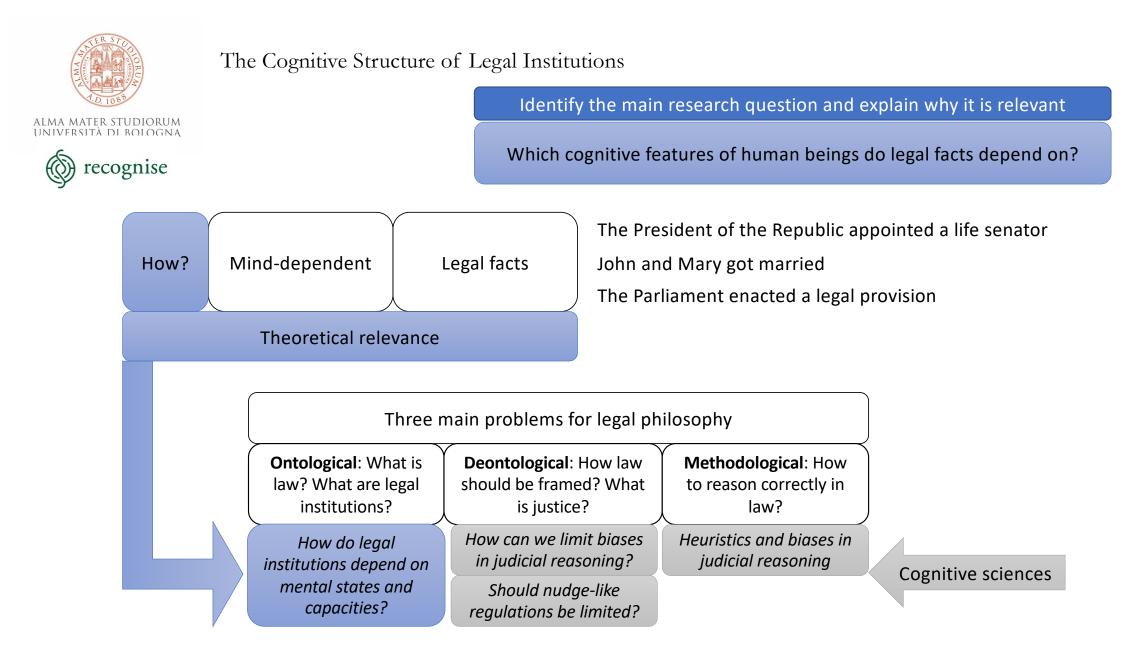
Identify the main research question and explain why it is relevant

Introduce two assumptions that are the starting point to address that question

Propose a possible answer to that question

Present some practical consequences of this research and evaluate a few normative questions connected with them







Identify the main research question and explain why it is relevant

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Which cognitive features of human beings do legal facts depend on?

## Introduce two assumptions that are the starting point to address that question

Legal facts are a subset of social-institutional facts

The peculiar element of legal institutions among social institutions is that...

A concept of law is needed here:

... legal institutions give the authority to create and apply formally valid norms, and to enforce them by way of sanctions



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Propose a possible answer to that question

Identify the main research question and explain why it is relevant
Which cognitive features of human beings do legal facts depend on?
Two assumptions:
Legal facts are a subset of social-institutional facts
Authority, punishment, validity

#### 1. Analyzing the structure of social-institutional facts (Social ontology)

- Bratman, M. (1992). Shared Cooperative Activities. *The Philosophical Review* 101, pp. 327–41.
- Epstein, B. (2018). Social Ontology. *The Stanford Encyclopedia of Philosophy*.
- Gilbert, M. (1989). On Social Facts. Princeton: Princeton University Press.
- Searle, J.R. (1995). *The Construction of Social Reality*. New York: The Free Press.
- Searle, J.R. (2010). *Making the Social World*. Oxford: Oxford University Press.
- Tuomela, R. (2013). *Social Ontology*. Oxford: Oxford University Press.
- Brigaglia, M., and B. Celano. (2021). Constitutive Rules: The Symbolization Account. *Ratio Juris* 34(3), pp. 244–62.
- Canale, D. (2014). Is Law Grounded in Joint Action? *Rechtstheorie* 45, pp. 289–312.
- Hage, J. (2018). Foundations and Building Blocks of Law. Maastricht: Eleven International Publishing.



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Propose a possible answer to that question

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#### 1. Analyzing the structure of social-institutional facts (Social ontology)

The President of the Republic appointed a life senator

John and Mary got married

The Parliament enacted a legal provision

#### Facts that are made possible by rules

#### rules constitutive of statuses

X (a person elected under circumstances ...) counts as Status Y (The President of the Republic) which entails Z (the power to appoint life senators...)



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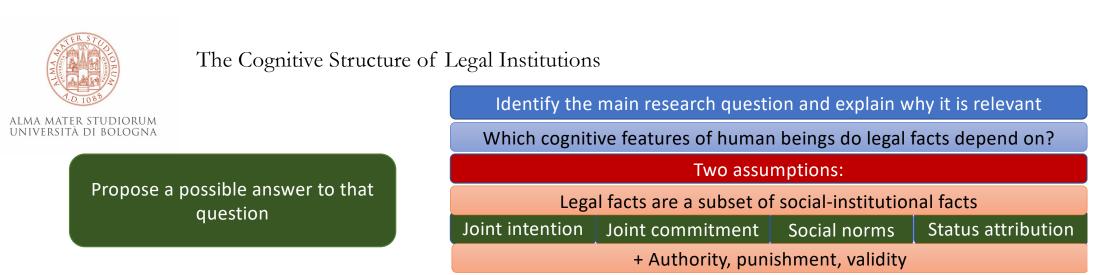
Facts that are made possible by rules

rules constitutive of statuses

#### collectively accepted

We collectively intend and commit to accept an institution (a set of constitutive rules)

Joint intention Joint commitment Social norms Status attribution



- Dubreuil, B. (2010). *Human Evolution and the Origins of Hierarchies: The State of Nature*. Cambridge: Cambridge University Press.
- Tomasello, M. (2016). A Natural History of Human Morality. Cambridge, Mass.: Harvard University Press.

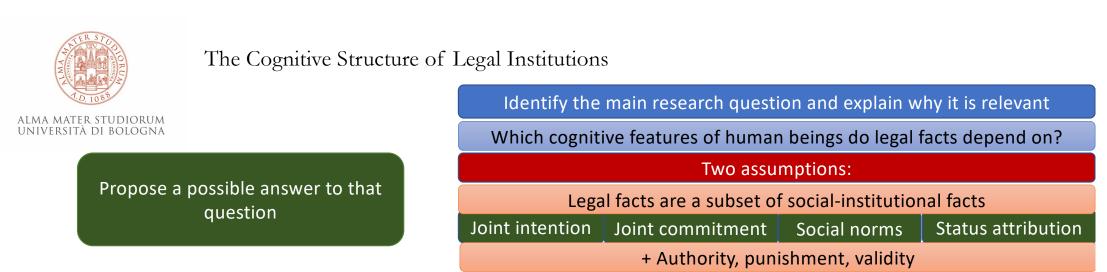


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Propose a possible answer to that question



- Becchio, C., Del Giudice, M., Dal Monte, O., Latini-Corazzini, L. & Pia, L. (2013). In Your Place: Neuropsychological Evidence for Altercentric Remapping in Embodied Perspective Taking. *Social Cognitive and Affective Neuroscience* 8, pp. 165–70.
- Michael, J., Sebanz, N. & Knoblich, G. (2016). Observing Joint Action: Coordination Creates Commitment. *Cognition* 157, pp. 106–13.
- Tomasello, M., Carpenter, M., Call, J., Behne, T. & Moll, H. (2005). Understanding and Sharing Intentions: The Origins of Cultural Cognition. *Behavioural and Brain Sciences* 28, pp. 675–735.
- Tsai, C.-C., Sebanz, N. & Knoblich, G. (2011). The GROOP Effect: Groups Mimic Group Actions. *Cognition* 118, pp. 138-43.
- Warneken, F. & Tomasello, M. (2009). Varieties of Altruism in Children and Chimpanzees. *Trends in Cognitive Science* 13, pp. 397–402.



#### 2. Finding the cognitive underpinnings for each of these elements

Kalish, C.W. & Cornelius, R. (2007). What is to be Done? Children's Ascriptions of Conventional Obligations. *Child Development* 78, pp. 859–78.

Kalish, C.W. & Lawson, C.A. (2008). Development of Social Category Representations: Early Appreciation of Roles and Deontic Relations. *Child Development* 79, pp. 577–93.

Noyes, A. & Dunham, Y. (2017). Mutual Intentions as a Causal Framework for Social Groups. *Cognition* 162, pp. 133–42. Noyes, A., Keil, F.C. & Dunham, Y. (2018). The Emerging Causal Understanding of Institutional Objects. *Cognition* 170, pp. 83–7.

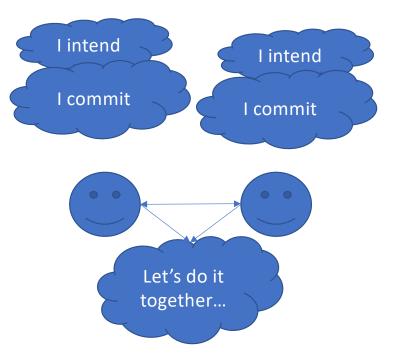
Roversi, C., Borghi, A.M. & Tummolini, L. (2013). A Marriage is an Artefact and Not a Walk that We Take Together: An Experimental Study on the Categorization of Artefacts. *Review of Philosophy and Psychology* 4, pp. 527–42.



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Which cognitive features of human beings do legal facts depend on?

#### 2. Finding the cognitive underpinnings for each of these elements



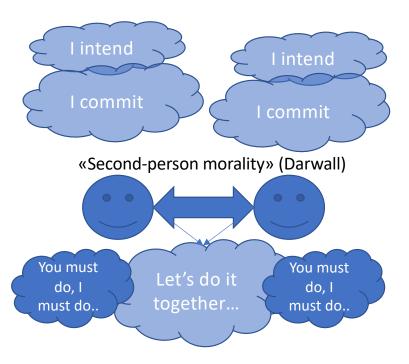
Joint intention Joint commitment



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Joint intention Joint commitment Social norms

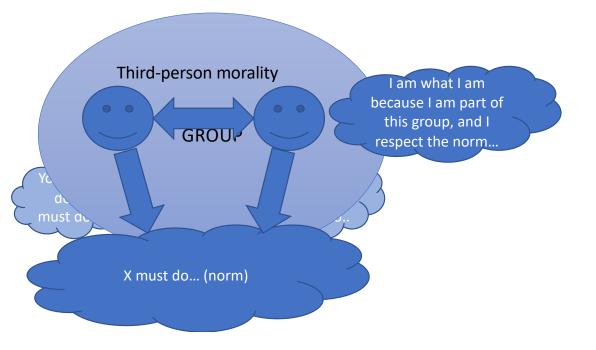


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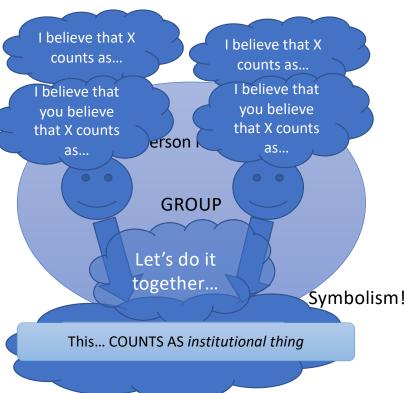




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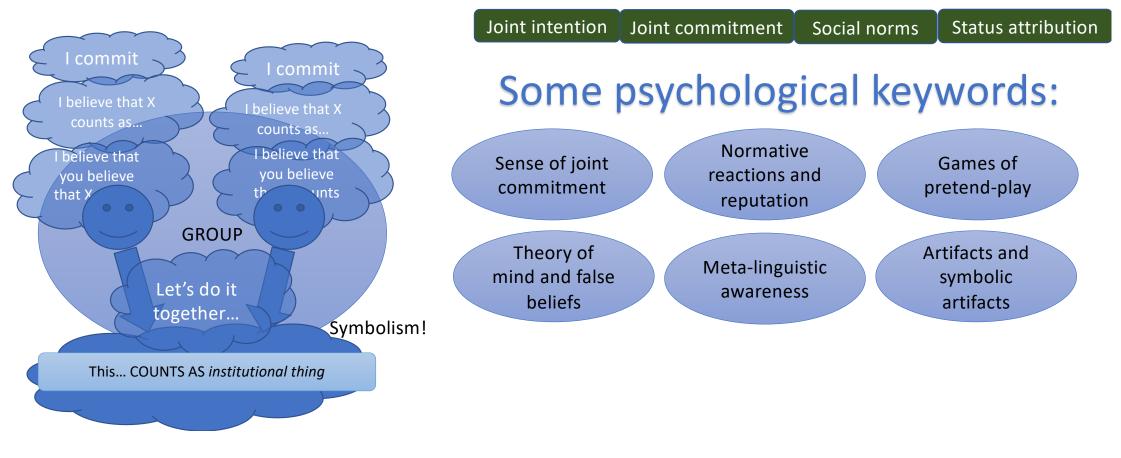
«Mutual beliefs» (Lewis, Lagerspetz, Celano)

Joint intention Joint commitment Social norms Status attribution



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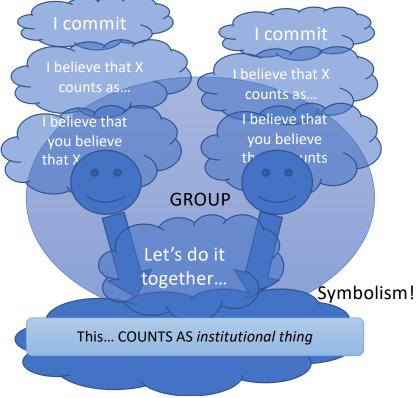
Which cognitive features of human beings do legal facts depend on?





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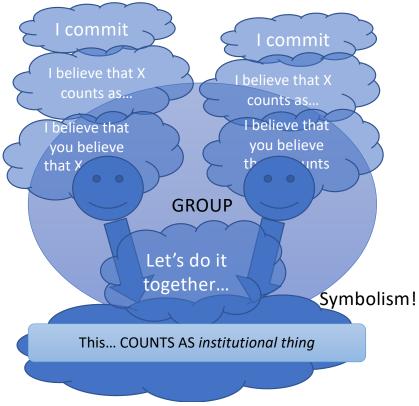


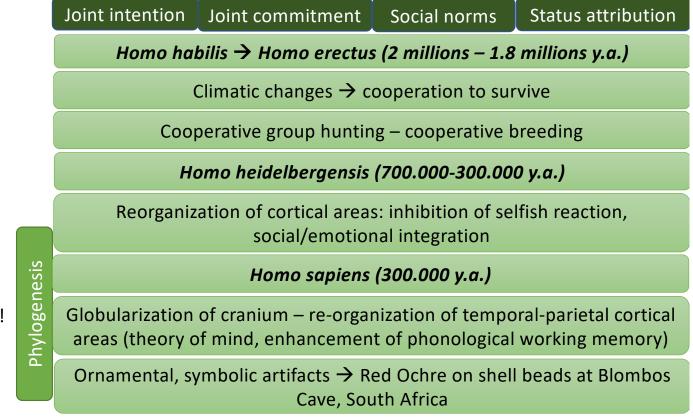
	Joint intention	Joint commitment	Social norms	Status attribution		
sis	Already at the age of 6 months, human children show some capacity to share a goal					
gene	At 2 y.: first «pretend-play» games (let's do it together that X is the Orc)					
Ontogenesis	At 3 years, they help others even if already rewarded; they feel the responsibility to make amends when dropping the game; they react to violations even when not directly affected					
	Since 5 years, explicit reputational concerns (group, normative identity)					
	At 4-5 years, human children develop a full-fledged perspective-taking → an understanding of others' false beliefs Meta-linguistic awareness					
	Inhibition of one's own cognition, different perspectives ove multi-modality of objects. Institutional objects as artif					



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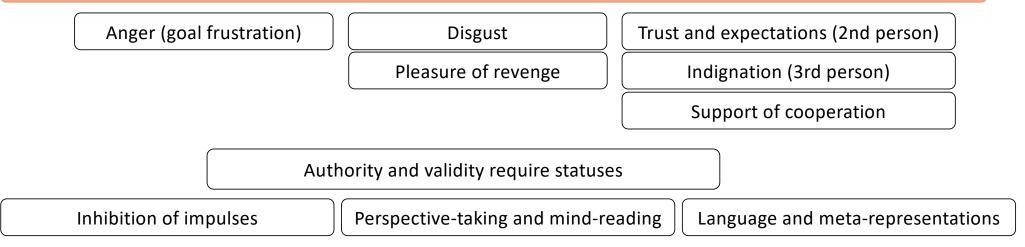
Which cognitive features of human beings do legal facts depend on?

#### 2. Finding the cognitive underpinnings for each of these elements

#### **Three theses:**

Joint intention Joint commitment Social norms Status attribution + Authority, punishment, validity

1. The cognitive roots of punishment are more ancient than the ones of authority and validity





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**Three theses:** 

Joint intention Joint commitment Social norms Status attribution + Authority, punishment, validity

1. The cognitive roots of punishment are more ancient than the ones of authority and validity

2. The cognitive roots of authority are connected with the idea of a justification in terms of groups and their goals

Milgram, S. (1974). Obedience to Authority: An Experimental View. London: Harper and Row.

Haney, C., Banks, C. & Zimbardo, P.G. (1973a). Interpersonal dynamics in a simulated prison.
International Journal of Criminology and Penology 1, pp. 69–97.
Haney, C., Banks, C. & Zimbardo, P.G. (1973b). Naval Research Reviews: A Study of Prisoners and Guards in a Simulated Prison. Washington, DC: Office of Naval Research.



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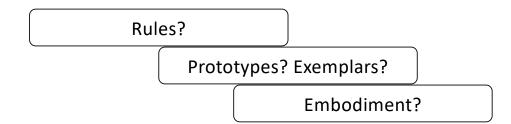
**Three theses:** 

Joint intention Joint commitment Social norms Status attribution + Authority, punishment, validity

1. The cognitive roots of punishment are more ancient than the ones of authority and validity

2. The cognitive roots of authority are connected with the idea of a justification in terms of groups and their goals

2. The cognitive roots of validity are connected with categorization



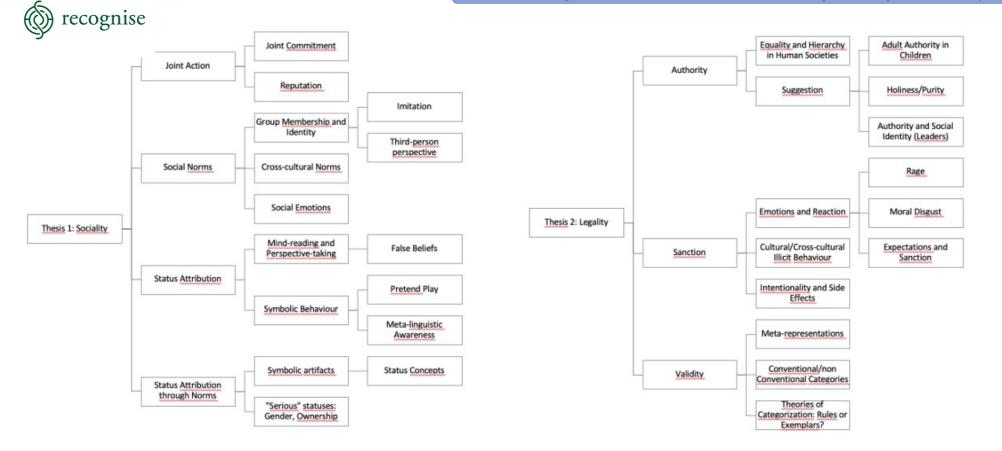
Is this a cat? Is this valid law?

Is this a valid contract?



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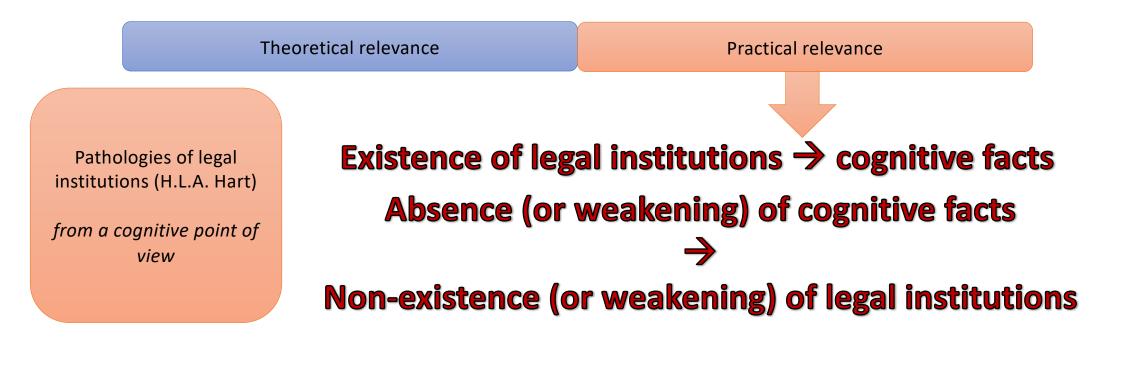






The Cognitive Structure of Legal Institutions

Present some practical consequences of this research and evaluate a few normative questions connected with them







Pathologies of legal institutions (H.L.A. Hart)

from a cognitive point of view

The Cognitive Structure of Legal Institutions

What happens if we reduce the general sense of social commitment by nurturing an individualistic illusion of self-sufficiency and solipsism?

> What happens if we completely detach punishment from revenge?

What happens if we demistify legal and political rituals as a kind of «bureaucracy»?

What happens if we are «bureaucrats» in the sense of not making explicit the connection between procedures and group goals?

Existence of legal institutions  $\rightarrow$  cognitive facts Absence (or weakening) of cognitive facts  $\rightarrow$ 

Non-existence (or weakening) of legal institutions



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## Rule of law

Existence and supremacy of legal institutions

Pathologies of legal institutions (H.L.A. Hart)

from a cognitive point of view

### Existence of legal institutions → cognitive facts Absence (or weakening) of cognitive facts → Non-existence (or weakening) of legal institutions



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The Cognitive Structure of Legal Institutions

Should we avoid reducing the general sense of social commitment by nurturing an individualistic illusion of self-sufficiency and solipsism? Rule of law

Should we avoid detaching completely punishment from revenge?

Should we avoid demistifying legal and political rituals as a kind of «bureaucracy»?

Should we make explicit the connection between procedures and group goals?

Pathologies of legal institutions (H.L.A. Hart)

**Existence and supremacy** 

of legal institutions

from a cognitive point of view

Existence of legal institutions  $\rightarrow$  cognitive facts **Absence (or weakening) of cognitive facts Non-existence (or weakening) of legal institutions** 





# Thank you!

Corrado Roversi Department of Legal Studies University of Bologna