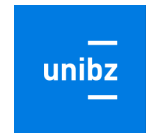




Legal Theories and Judicial Decision-Making: An Ontological Analysis

Cristine Griffo

Computer and Law – KRDB/Core



Judicial Decision-Making refers to the decision-making process through which judges make legal decisions.



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Judicial Decisions are affected by legal theories to which judges are affiliated.

Which legal theory should I choose as the base for building a legal ontology?



Legal Positivist Theory | Pure Theory of Law



Hans Kelsen - 1935



Legal relations as a
bound of legal norms

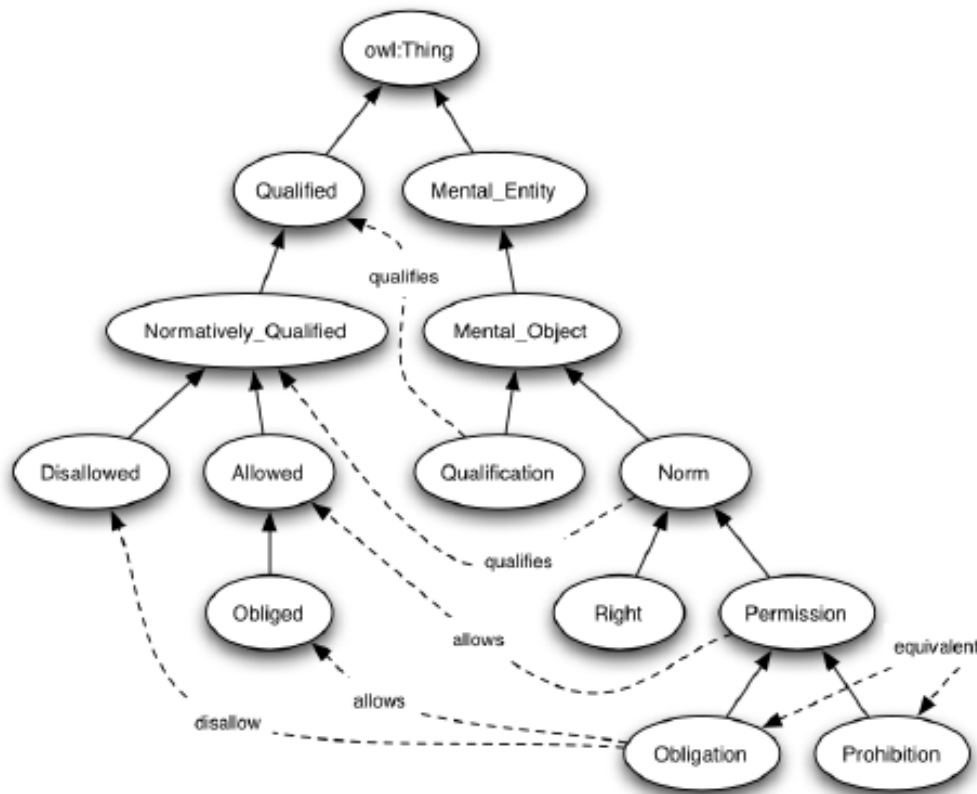
Legal Positivist Theory | Examples of Legal Core Ontologies

- Frame-Based Ontology (FBO);
- Functional Ontology of Law (FOL)
- Legal Top Ontology;
- LKIF Core Ontology.

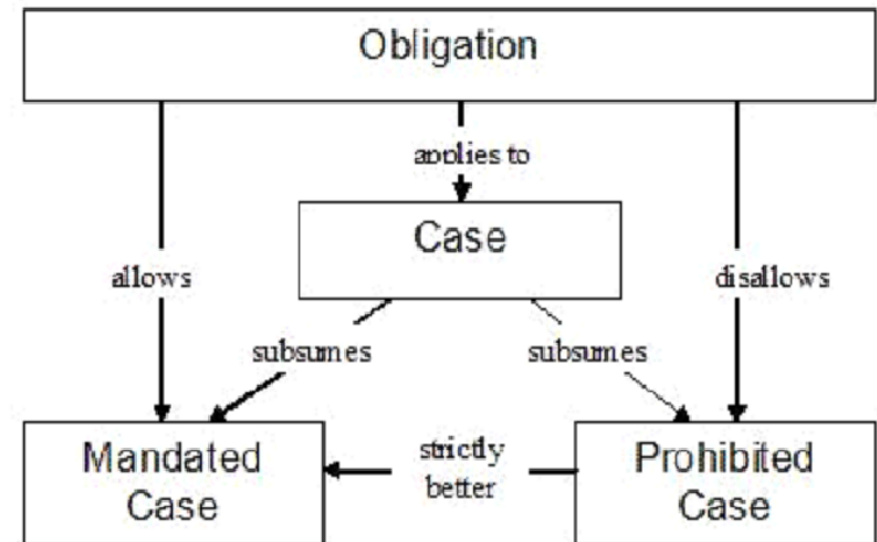


All or Nothing

LKIF – Legal Core Ontology based on Kelsen's Theory



Hoekstra R, Breuker J, Di Bello M, Boer A. The LKIF Core Ontology of Basic Legal Concepts. In: CEUR Work. Proc.. vol. 321; 2007. p. 43–63.



Boer A, Winkels R, Vitali F. Metalex XML and the legal knowledge interchange format. In: Computable models of the law. Springer; 2008. p. 21–41.

Legal Post-Positivist Theory | Theory of Constitutional Rights



Robert Alexy
1978;1985



Based on open legal
normative systems



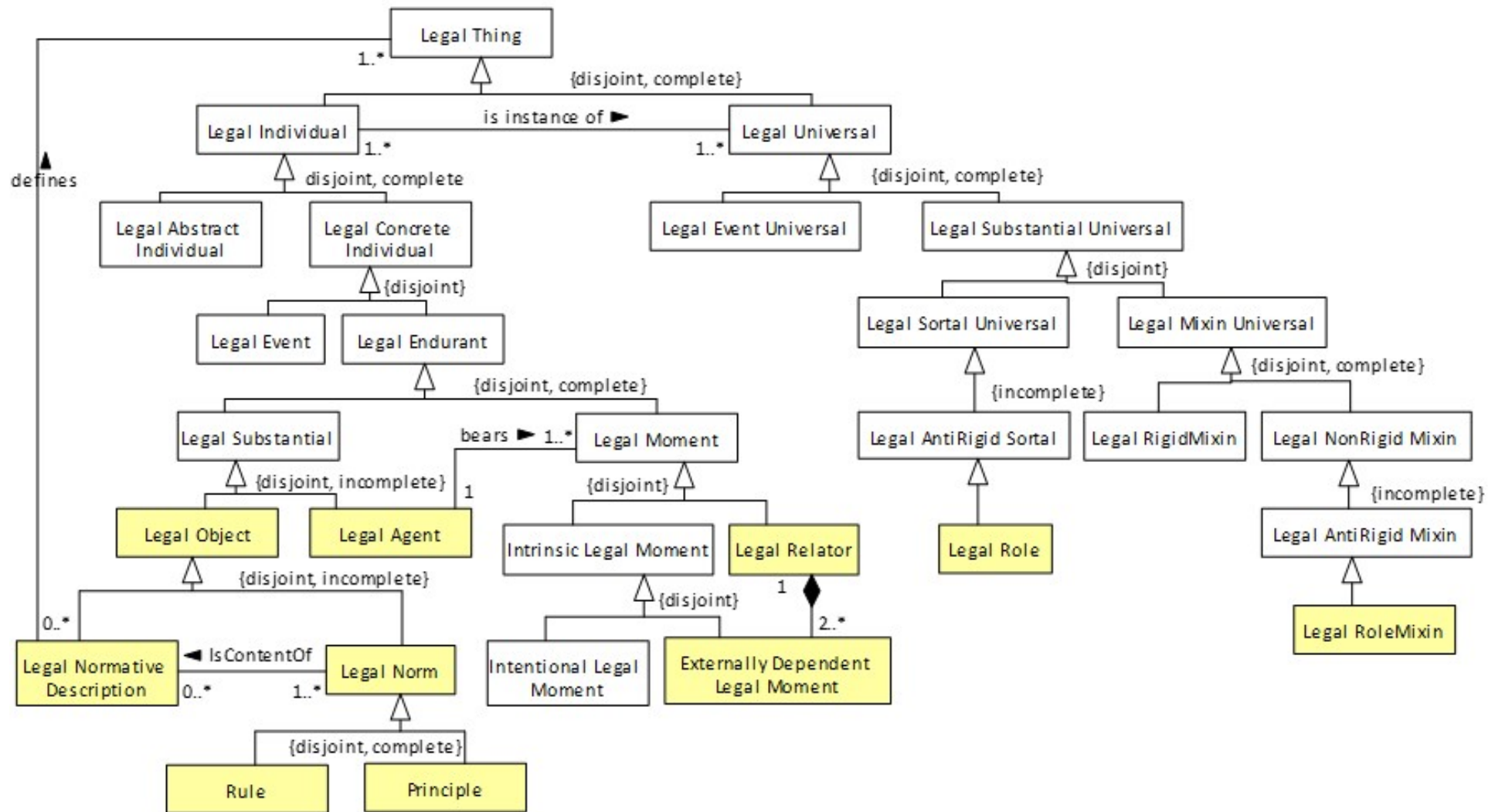
Legal relations as a
bound of subjects
playing roles

Legal Post-Positivist Theory | Examples of Legal Ontologies

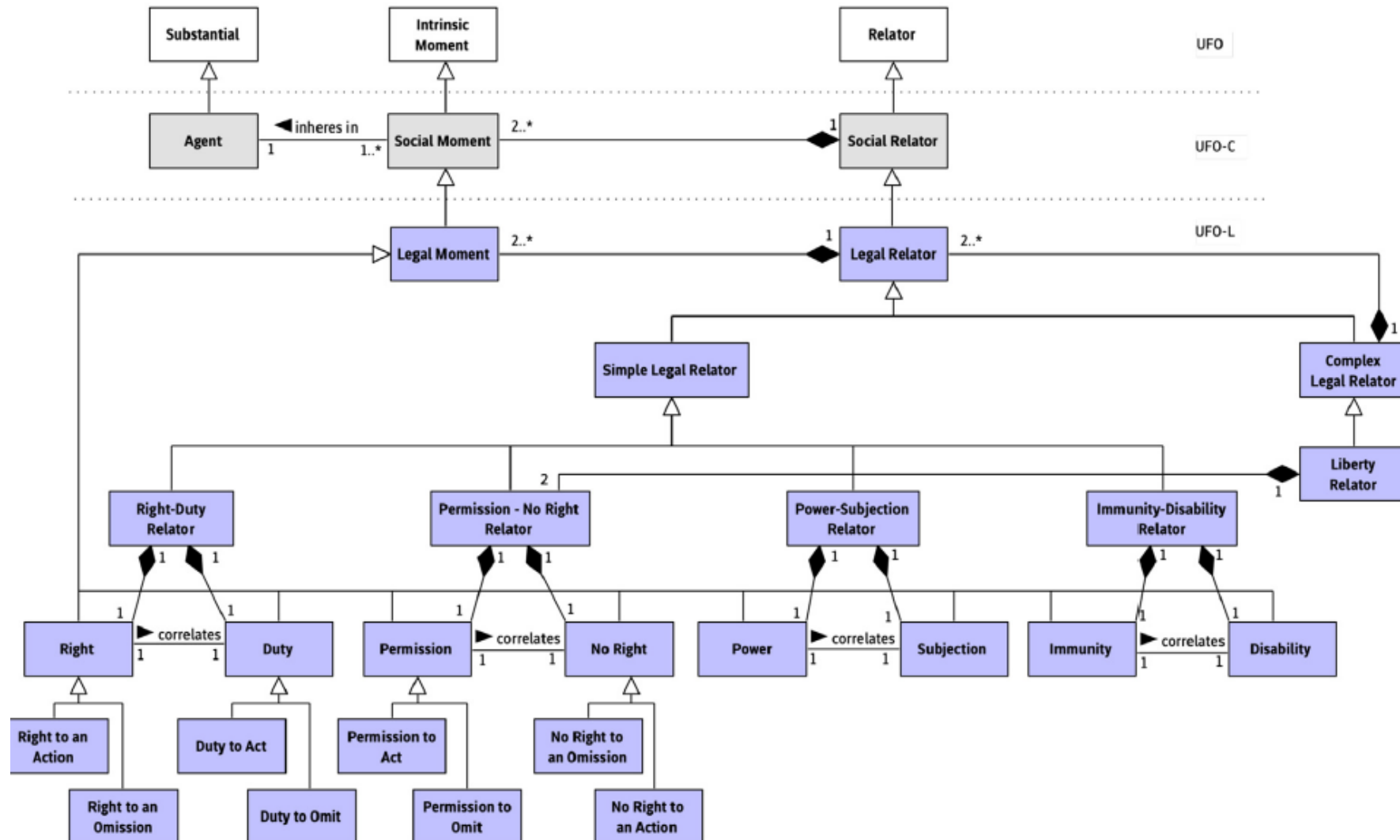
- An OWL Ontology Set Representing Judicial Interpretations;
- A Constructive Framework for Legal Ontologies; -> **CLO** (?)
- UFO-L: legal core ontology.



UFO-L (Fragment)



UFO-L (Fragment)

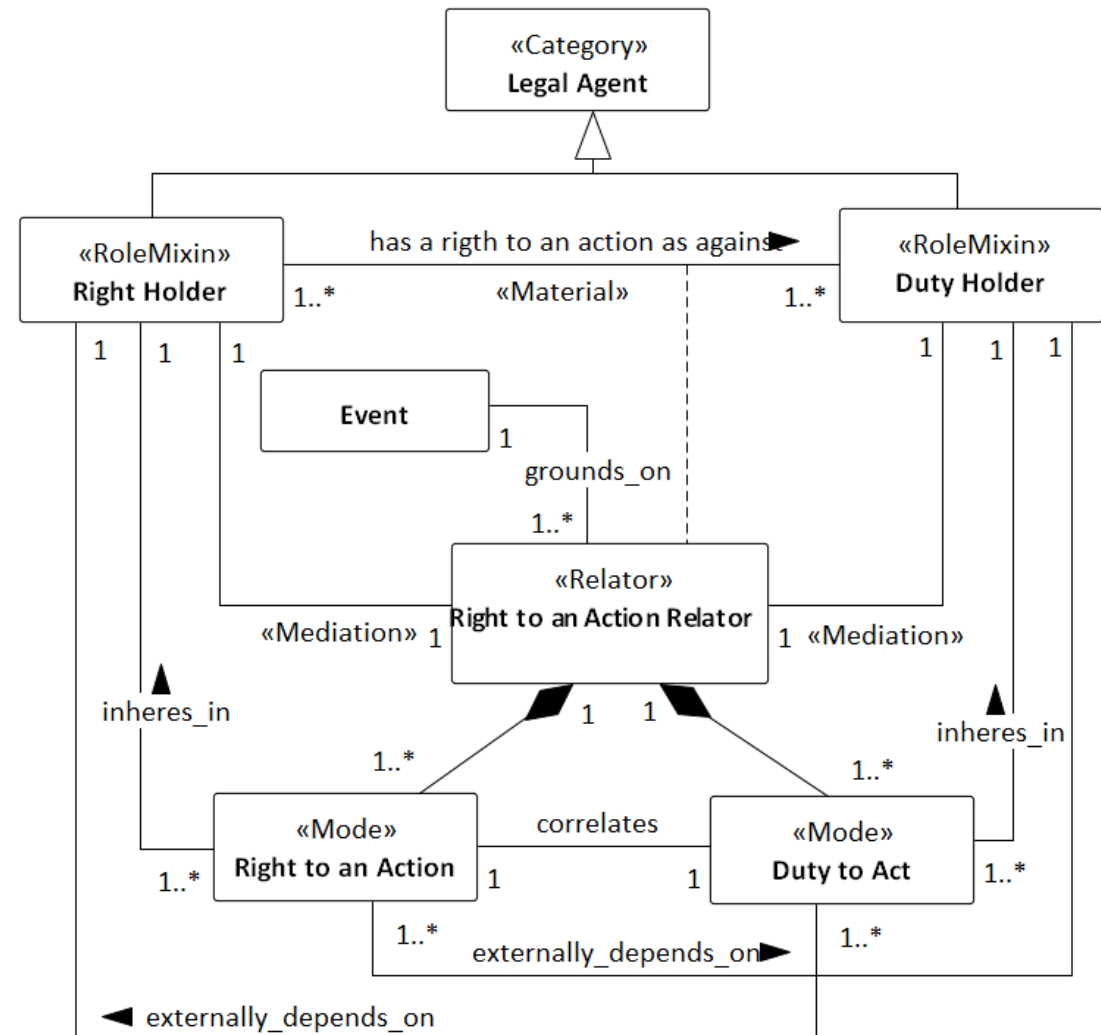


UFO-L

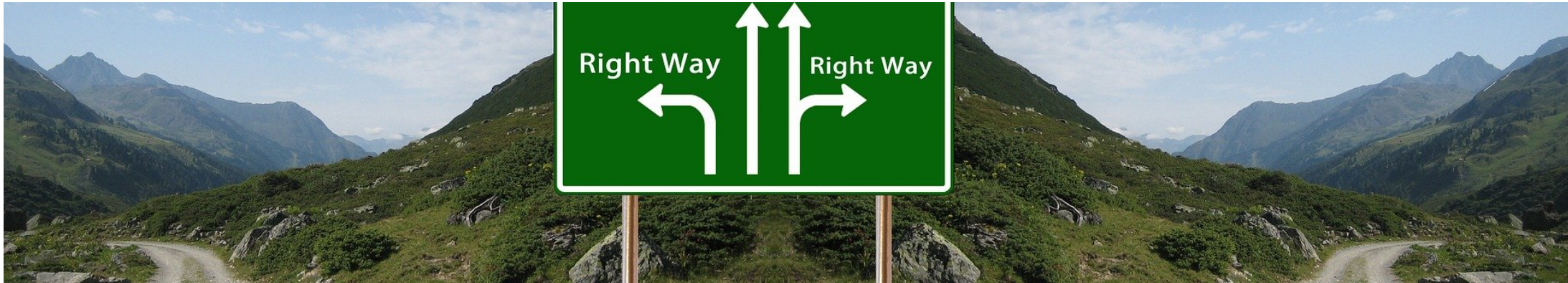
Right-Duty to an Action Legal Pattern

Pattern elements:

1. Legal Agent;
2. Right Holder;
3. Duty Holder;
4. Event;
5. Right-Duty to an Action Relator;
6. Right to an Action;
7. Duty to Act.



Our Approach “*The chosen legal theory matters*”



USE

Use a Legal Core Ontology (LCO) based on a “*Open Legal System*” legal theory and UFO

APPLY

Apply this LCO to represent a real legal case where there was a collision of principles

COMPARE

Compare our approach with LKIF core ontology approach

APPLY

Case Study: The Dedier Case

Dedier, a civil police officer, public servant in probationary period (PE), required a **leave of absence for dealing with private affairs (LDPA)**, more specifically, a leave from his work so that he could attend a clerk training course at the National Academy of Federal Police. This position as a trainee at the National Academy is considered a Public Position in itself.

However, the Civil Police Chief of the State of Espírito Santo (PC-ES) denied his leave request based on the paragraph of article 41 of Complementary Law LC n.46/94 that does not allow the granting of LDPA for public servants in probationary period.

Dissatisfied with Chief decision, Dedier filed a writ of mandamus with a summary judgement injunction invoking the Brazilian constitutional principle of access to public positions prescribed in Article 5º of Brazilian Constitution and the right to LDPA.

The judge of the first instance denied summary judgement because he understood that, *prima facie*, the right to leave would not apply for servants on probationary period.

Once more, discontented with the judge's decision, Dedier filed an appeal before the Court of Appeals of the State of Espírito Santo (TJES).

Justice '*ad quem*' partially overhauled the first instance judge's decision, in view of the fact that, in applying Alexy's Proportionality Postulate, he found that the most appropriate rule-principle was that which least violated the principles involved: principle of probationary period versus principle of access to a public positions and principle of due process of law.

Dedier Case



Dedier is a Civil Police Officer at Civil Police Dept. of Espírito Santo State. He is a public servant in a probationary period.

Dedier Case



As every candidate approved in the public tender of Federal Police, Dedier is obliged to attend a clerk training course at the National Academy of Federal Police.

Dedier Case



Dedier wrote a petition addressed to his Chief, requiring a leave from his work so that he could attend a clerk training course at the National Academy of Federal Police.

Dedier Case

Dedier has not right to require a LPDA because he is in probationary period. By the Law of Espírito Santo State he would need to be in a tenured position to get this kind of leave.

Dedier's Chief decides the Dedier's LPDA petition based on legal rule that only tenured public servant can get LPDAs.

Dedier Case

Also, if I allow the granting of LPDA for Dedier, I will violate the constitutional principle of probationary period. Therefore, I reject the leave application.

Thus, he denies the Dedier's petition.

Dedier Case

My LPDA's petition was denied!!!

Dedier receives the notification that his LPDA's petition was rejected by the Civil Police Chief.

Dedier Case



Dissatisfied with Chief decision, Dedier hires a lawyer who filed a writ of mandamus invoking the Brazilian constitutional principle of access to public positions.

Dedier Case



The judge of the first instance denied summary judgement because he understood that, *prima facie*, the right to leave would not apply to servants on

Dedier Case



Once more, discontented with the judge's decision, Dedier's lawyer filed an appeal before the Court of Appeals of the State of Espírito Santo (TJES).

Dedier Case

I overhauled the first instance judge's decision based on Alexy's Proportionality Postulate.



Justice partially overhauled the first instance judge's decision, ordering the Dedier's Chief grants the LPDA to Dedier.

LKIF – Legal Core Ontology based on Kelsen's Theory

Dedier case in LKIF-core

Fact F	Dedier, a public servant on probationary period at the Civil Police of the State of Espírito Santo, applied for a leave of absences for the dealing with private affairs (LDPA).
Thesis₁	Dedier is a public servant on probationary period and, thus, he does not have the right to a LDPA.
Principle P_1	Constitutional Principle of probationary period seeks to allow for the evaluation of the aptitude of a public servant to occupy a given public position.
Normative Act NA_1	<i>Article 41 of LC 46/94. The types of leaves prescribed in article 122, V and VIII will not be granted to public servants on probationary period.</i>
Rule R_1	<i>Ought not</i> (grant the types of leaves prescribed in article 122, V and VIII to public servants on probationary period). Article 122, VIII combined with Article 41, paragraph of the Constitution of State of Espírito Santo (LC 46/94) are adequate to promote the Constitutional Principle P_1 .
Legal Relation in P_1	There is no legal relationship between Dedier and the Civil Police Department of the State of Espirito Santo in terms of granting a LDPA because Dedier is in a probationary period.

LKIF – Legal Core Ontology based on Kelsen's Theory

Dedier case in LKIF-core

Module NORM allows
(ALLOWS) situations that match the following description:

$\text{PUBLIC_SERVANT_ON_LEAVE} \sqcap \text{TENURED_PUBLIC_SERVANT}$

(DISALLOWS) situations that match the following
description:

$\text{PUBLIC_SERVANT_ON_LEAVE} \sqcap \neg \text{TENURED_PUBLIC_SERVANT}$

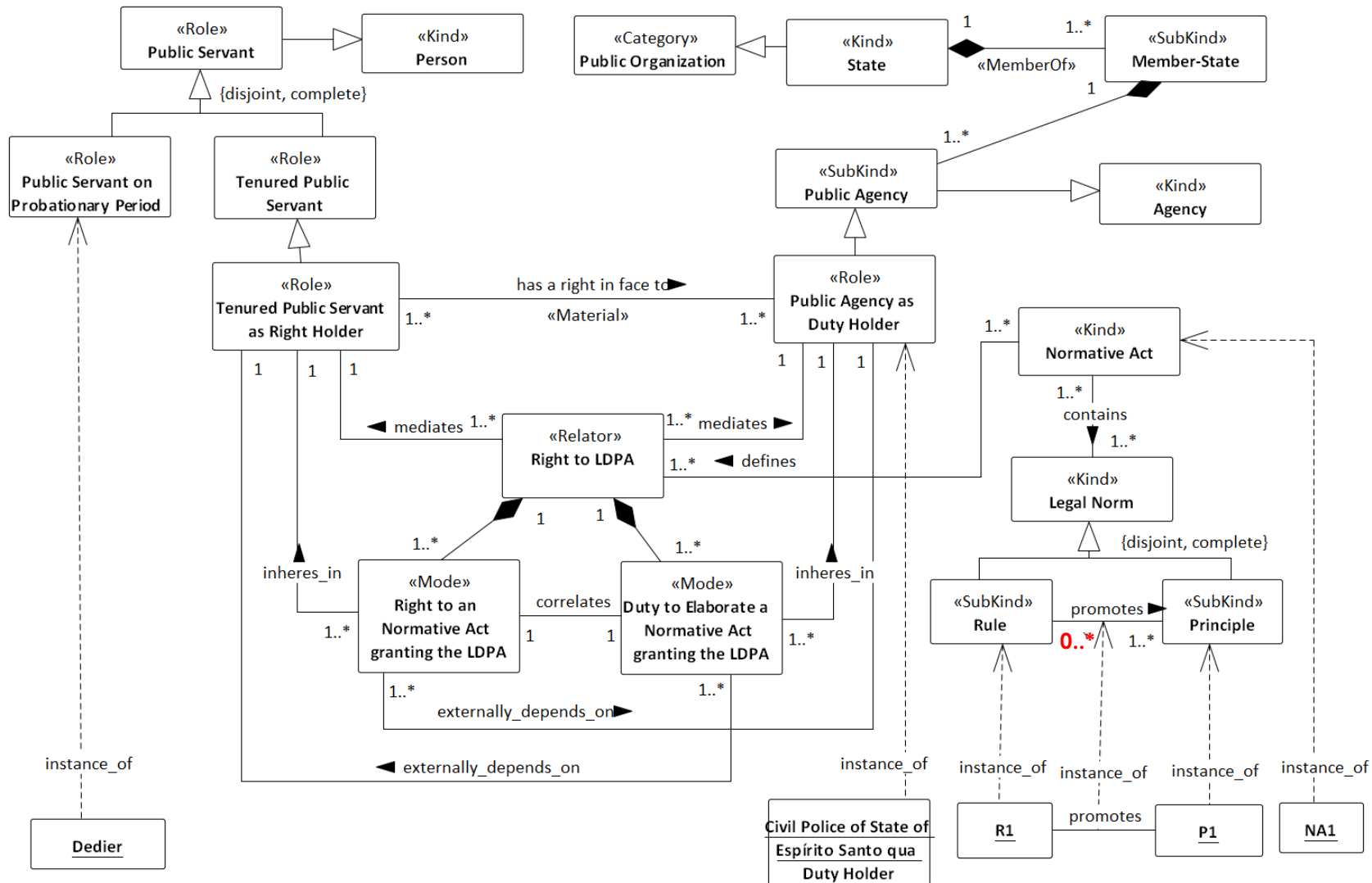
LKIF – Legal Core Ontology based on Kelsen's Theory

Dedier case in LKIF-core

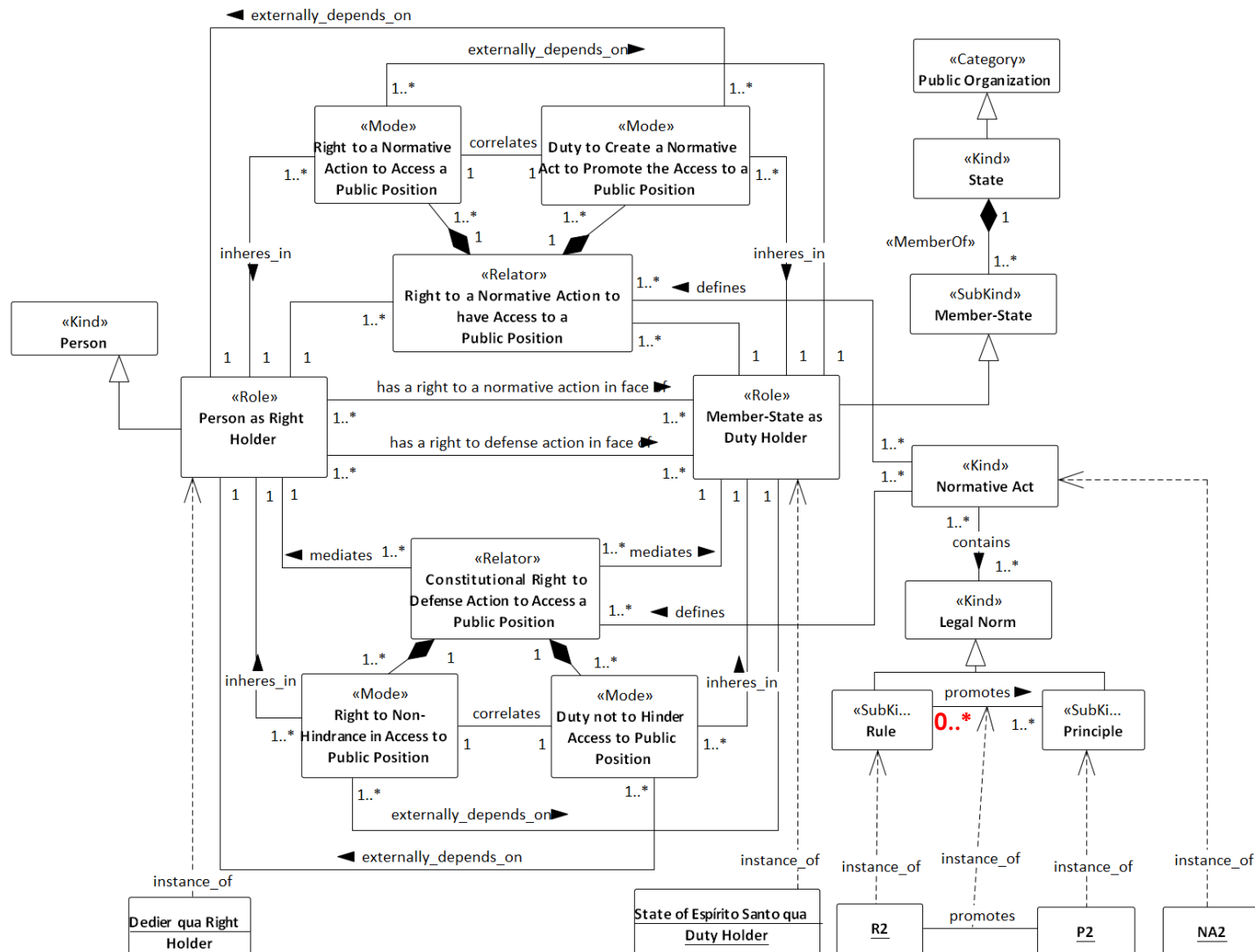
$LDPA \sqsubseteq \text{allows only } (\text{PUBLIC_SERVANT_ON_LEAVE} \sqcap \text{TENURED_PUBLIC_SERVANT})$

In summary, in this ontology and under the Kelsenian view, it is not possible to properly model the decision pronounced by the second judge of the case (the Justice of the Appeal Court), since this view is only based on 1) legal rules of a closed normative system; and 2) a subsumption operation of fact to a given legal type.

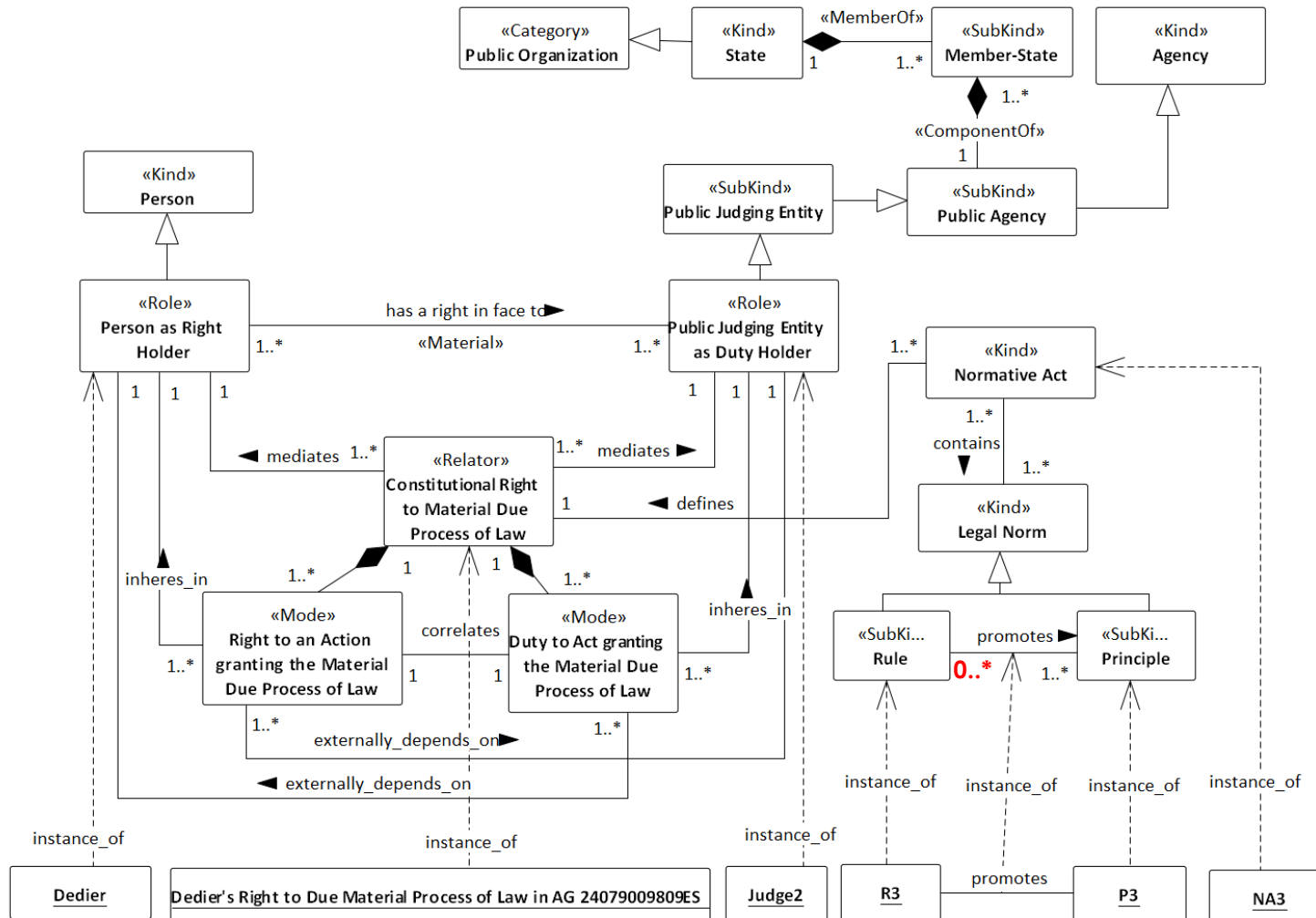
Perspective 1: Dedier does not have the right to a LDPA



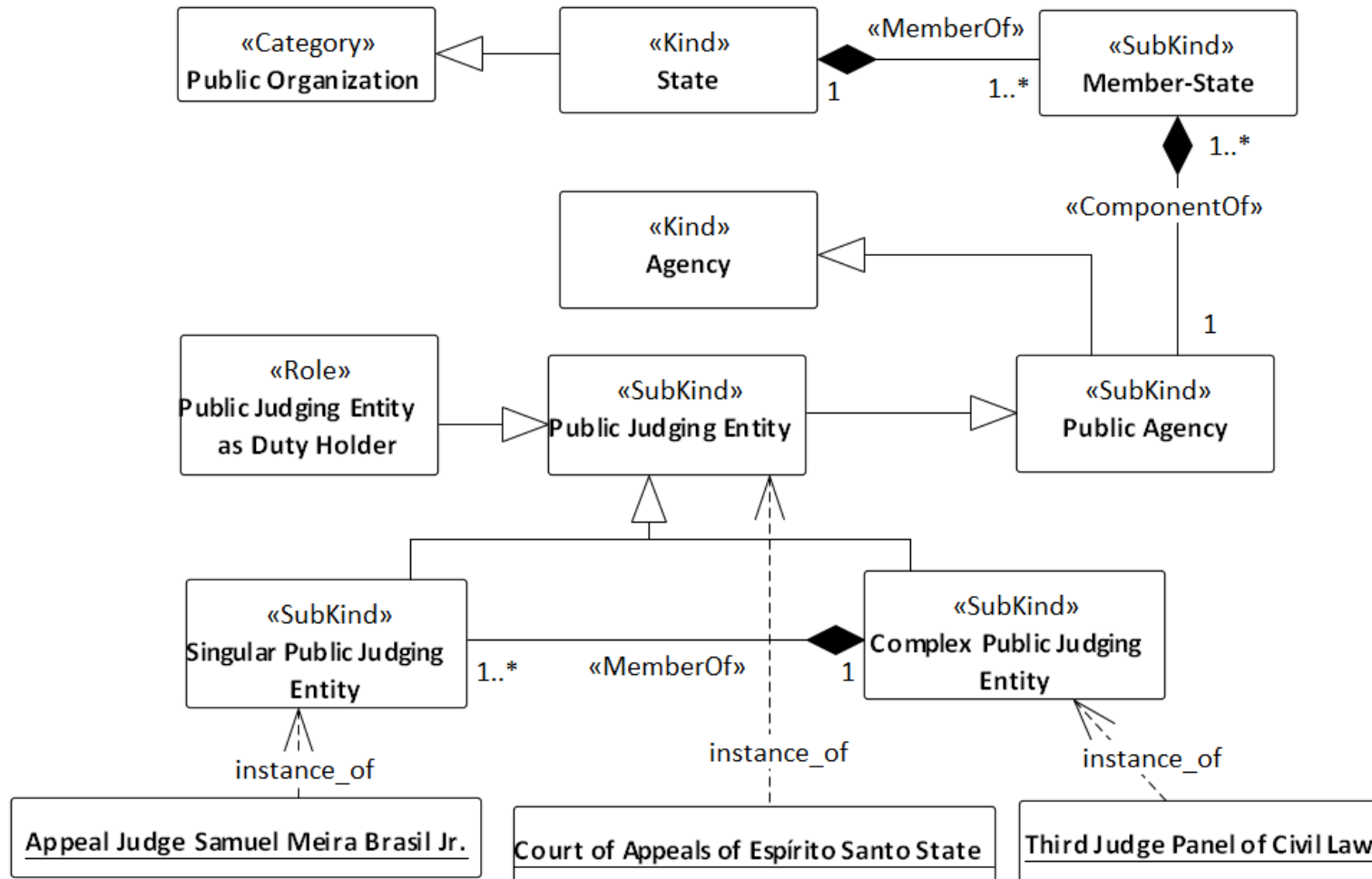
Perspective 2: Dedier has the right to a LDPA



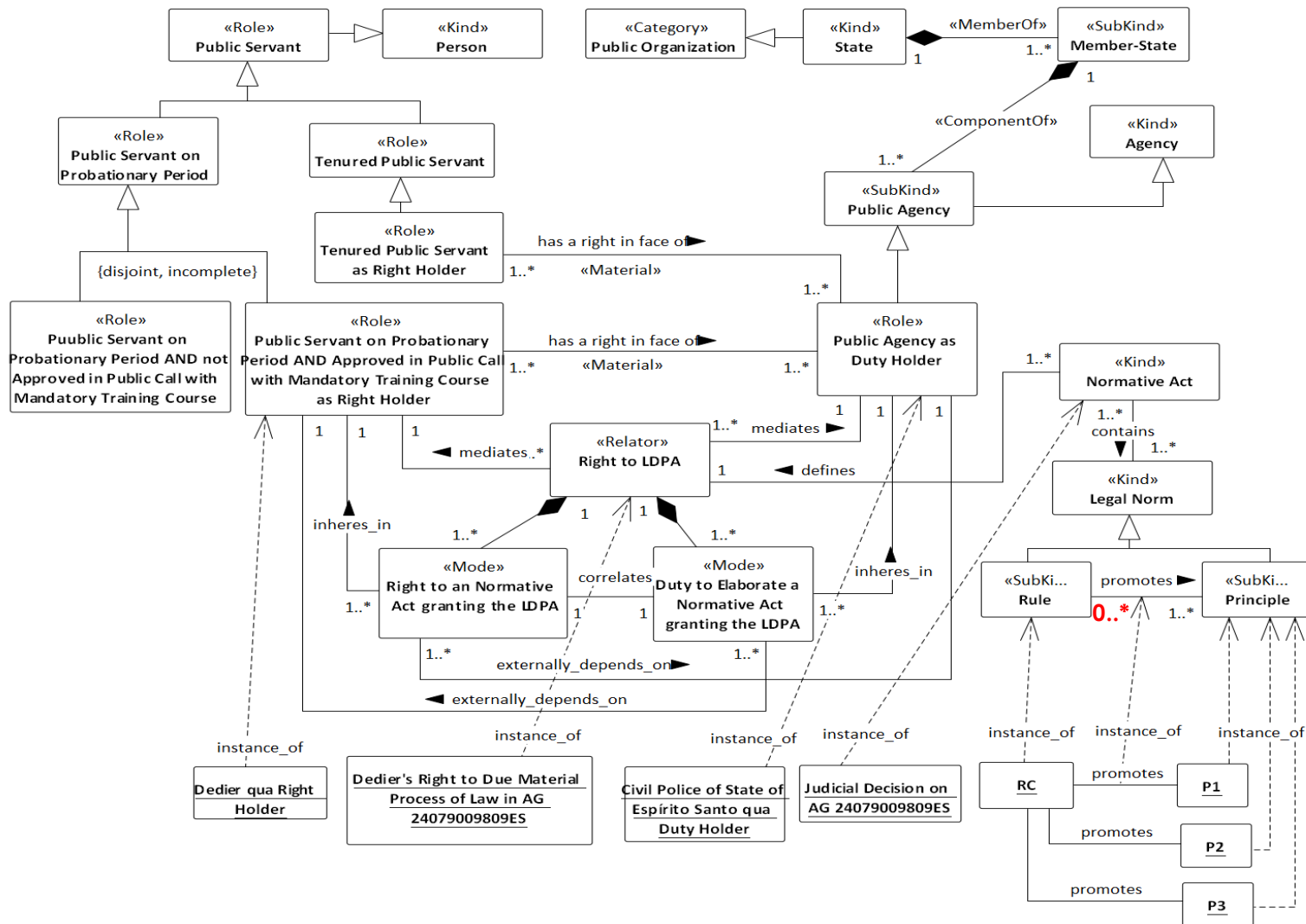
Perspective 3: Analysis of Justice



Perspective 3.1: Public Judging Entity



Perspective 4: Justice's Ruling



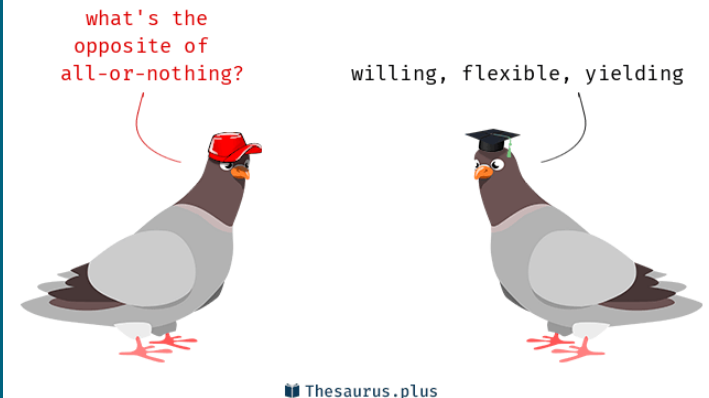
Final Considerations



The chosen legal theory matters

Future Works

1. Empirical experiments with a set of real cases in different normative systems;
2. Extend the representation of Alexy's theory in UFO-L;
3. How to find automatically the collision of principles?





Thank you

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