

# The Role of Power in Legal Compliance

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**Abstract**—Many jurisdictions devote a significant portion of their legislation to powers. This reality is yet to be reflected in Requirements Engineering (RE) where more familiar deontic notions have prevailed for years. We explore different kinds of power and crucial factors to be considered for modeling them.

**Index Terms**—Power; Deontic Logic; Legal Compliance; Requirements Engineering;

## I. INTRODUCTION

The impact of legal compliance on RE is increasingly evident as the discipline restructures to handle legal as well as other requirements [1]. Regrettably, powers have been ignored in RE [2] in favor of more familiar deontic notions. This is even more pressing as regulations “transform” from text to dynamically structured computational artifacts [3] at the disposal of indiscriminate Multi-Agent Systems on the web in transnational, multi-level and multi-lingual jurisdictions. Our research question is: how to model power in legal RE. We will explore different kinds of legal power, their dynamics and essential factors for modeling them.

This abstract is inspired by a growing research interest to solve the IT-Law misalignment by defining a unifying methodology for all of the branches of computer science dealing with the law [4]. At its core, this methodology entrenches a juristic conceptualization of the law that:

- Promotes a sufficient level of acceptability among legal practitioners to facilitate relevant applications that would transfer academic research to legal industry and
- Promotes dialogue for IT professionals to appreciate the complexities of the judicial process while helping jurists understand the formalization of the law.

## II. DEFINITION OF POWER

Power is a complex concept and its definition remains problematic. In the legal domain, Hohfeld [5] defines the intrinsic nature of a legal power as the change in a legal relation which may result from (1) a super-added fact or group of facts not under the volitional control of a human being(s); or (2) from such facts where they are under the volitional control of one or more human beings. In the second scenario, the persons with the volitional control are said to have the (legal) power or ability to impact change in legal relations. Such an ability is expressed through Sartor’s “proclamative” power [6] linking an effective proclamation and its binding content, Kelsen’s equivalent of “authorization/empowerment” [7] and Ross’ “competence” [8]. For Hohfeld, however, close synonyms in

law have distinct legal meanings - “right” is used exclusively for a legal claim, “capacity” and “authorization”. The aforementioned “competence” also denotes mental capacity. Legal power, on the other hand, can create and terminate obligations, extinguish or transfer property, confer permissions, confer power to others or renounce power altogether, e.g. agency relations or be the recipient of the power of public officers.

## III. NORMATIVITY OF POWER

Legal powers usually involve normative conditionality, which Sartor [6] expresses as generic, action and enabling powers. Generic power in the simplest, being a direct reflex of the normative conditionality i.e. “If A then B” holds. This could be the initiation of holding of a given state or an event. An action power is where an agent’s action forms the antecedent of a normative connection i.e. J has the action power of achieving B by doing A. However, it is too general and includes negative outcomes e.g. sanctions. Enabling power is the most suited to the legal environment for the agent intends to achieve the normative result. Hence, a legal power only arises when the normative connection between one’s action and the normative result is aimed at enabling one to achieve that result by performing the action if he so decides. It is this enabling factor that facilitates the pursuit of various interests above. Sartor characterizes Hohfeld’s conceptualization of power as an abstract enabling power i.e. without referring to the action through which it is exercised. This is the counts-as relation used by [9] referencing Searle [10] to define institutional power. We need to distinguish between operative and evidential facts in such situations. Operative facts (constitutive, or causal facts) are those which suffice to change legal relations while evidential facts prove operative facts and are subordinate to them. Operative facts bestow validity and are the substance of a legal power. A valid power has the normative conditionality necessary to enable one to achieve a normative result [5], [9].

## IV. DIFFERENTIATION WITH PERMISSION

Owing to their inter-definability with obligations, permissions have been doubted as an independent normative category. A permission is typically considered as that which is not forbidden by the law and in [5] would equate to a privilege. Boella et al. [11] have persuasively argued that permissions cannot be considered as the mere absence of obligations. They

reference Wright's dichotomy of weak and strong permissions [12] where strong permissions are established in law. Permissions also exhibit a normative conditionality but unlike powers, they assume the existence of imperative norms (read powers), which, they repeal or derogate. Quoting Brinz [13], Sartor [6] underlines that although linguistically indistinct, a power is quite different from a permission since the latter occurs in both ordinary and legal acts while the former can only occur in legal acts. In that way, the act empowering one towards a certain result will usually imply granting the permission to exercise that power although this is not always the case.

## V. THE DYNAMICS OF POWER

Whatever definition a power takes, it is their normative conditionality, enabling factor, validity, differentiation from strong permissions and the logic of their application that help us appreciate the dynamic functioning of legal institutions. As conceptualized in Kelsen's [14] theory of the dynamics of law, legal systems can be both static and dynamic. The static aspect is directly reflected in substantive rules and preconditions. The dynamism is seen in how legal frameworks enable syllogisms and other logical inferences concerning rules and acts of proclamation. This fluidity presents particular challenges for extracting or formalizing legal requirements. Modern legal systems give people the power to permit acts that would otherwise be forbidden e.g. under the Health Information Portability and Accountability Act (HIPAA), a patient has the power to direct a "Covered Entity" to disclose information otherwise disallowed. This is a static provision under the privacy domain of law. Compare this with the dynamic power that arises from the interaction of different domains of law e.g. the power granted to national security officials to compel the Entity in question to release patient information without his/her consent. The static system references in-domain definitions of powers while dynamic implicit power only manifests at runtime, altering the deontic clauses at play.

## VI. POWER IN RE

RE builds on research in AI-Law to formalize legal requirements such as Jones and Sergot [15]'s deontic and action logics. That work informally demonstrates; an operational layer where agents perform actions, a deontic layer that exhibits permissions or obligations from the first Hohfeldian square (right, duty, privilege and no-right), a sanction layer that entails the forbidden behaviors and impacts from non-compliance and the power layer with the second Hohfeldian square (power, immunity, disability and liability). The power layer affects the

rest of the layers depending on the roles enforced by various actors. Each layer has particular requirements and changes to any of them requires a revision with regard to the rest. The challenge for RE is to determine how to represent the normative conditionality, the enabling factor, differentiation from permissions, validity and the logic of their application to help model dynamic functioning of legal requirements.

## VII. CONCLUSION

This abstract has analysed the role of power in legal practice with a view to informing legal RE. We provided a review of the notion of power in legal philosophy and AI & Law and selected suitable definitions to be used in RE and Law. Our future work will extend legal compliance frameworks to capture the dynamic aspects of power.

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