2 A Perspective from Philosophy and Sociology of Law: Agreement and Relational Justice

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Abstract Relationships between empirical and philosophical approaches to the law have not been always peaceful. Agreement seems the most natural way to build up and implementing regulations and justice within human-machine interfaces (natural and artificial societies), and might help to bridge the gap between both theoretical approaches. Recent researches on *relational law*, *relational justice*, *crowdsourcing, regulatory systems* and *regulatory models* are introduced. These concepts need further clarification, but they stand as political companions to more standard conceptions of law in the Semantic Web.

2. 1 Introduction: Relational Justice

Ossowski (2012) introduced the issue of computing agreements. This chapter addresses the issue of legal agreements in a complementary way. The web fosters *personalization* and *democratization* (D'Aquin et al. 2008). I will refer to these legal forms as *relational justice*. From a theoretical point of view, let's assume broadly that relational justice intersects with *relational law* ―the concrete social and economic bonds among the parties in business, companies, corporations or other organizations.

User-centered strategies of the next Semantic Web generation ― the so-called *Web of Data*― fit well into this perspective, in which

rights and duties belong to a new regulatory framework because the networked information environment is transforming the marketplace and the relations with the state. Cloud computing, cooperation, multiple use of mobile phones, crowdsourcing, and web services orientation constitute the next step for the World Wide Web. This is the social environment of the relational justice field, where scenarios and contexts are shaped from a hybrid use of different technologies by a multitude of different users (including MAS).

   However, from the legal point of view, all what it seems new can sink into the deep waters of the legal ocean. What does 'agreement' mean in this kind of ecological environment? How can it be understood and theorized? *And how does it link with what 'agreement' means in the rich legal tradition*?

   This chapter, planned as a conceptual and historical overview, deals with the latter question. The issue around the concept of agreement in law is addressed in Section 2. Section 3 shows three different ways of theorizing agreements in the legal theory of the 20th century. Section 4 describes the origins and development of relational law. Finally, I will primarily discuss the implications for agreement technologies in Section 5.

2. 2 Agreement in law

One of the most popular legal Dictionaries online differentiates two different meanings of 'agreement' in law: "1) any meeting of the minds, even without legal obligation; 2) another name for a contract including all the elements of a legal contract: offer, acceptance, and consideration (payment or performance), based on specific terms."[1] These two meanings are carried on by a multitude of different legal words, which can be nuanced regarding to the specific terms and conditions of the agreement.[2] The "languages" of law, the symbols

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[1] http://legal-dictionary.thefreedictionary.com/agreement

[2] (I) Agreement as concurrence: *accord, amity, arrangement, assent, common assent, common consent, common view, community of interests, concord, conformance, congruence, congruency, congruity, consent, consentaneity, consentaneousness, consentience, consonance, cooperation, good understanding, harmony,*

through which law is expressed, conveyed and formulated, encompass all forms of ancient and modern natural languages (Mellinkoff, 1963), and foster legal dictums and mottos —the ancient (and not always consistent) *brocards*. Eg. *Conventio vincit legem* [Agreements overrule statutes], *Conventio facit legem* [Agreements make the law], or *Pacta sunt servanda* [Agreements have to be fulfilled].

It is worthwhile to highlight the strength of agreements in ancient and medieval law. In pre-modern societies, ties among relatives, social groups and the community had the additional value of being a survival bond in everyday life (Watson, 1989). We can understand then the non-intuitive point of a value-correlated chain between the two legal meanings pointed out, the epistemic and the behavioral one —the *implicit* cognitive agreement about something, and the *explicit* proactive and intentional agreement on some plan of action or expected behavior.

From the political point of view, the problem can be formulated as the limitation of the ruler's power (usually the monarch, but often the tyrant). From the legal point of view, it goes as the birth of the obligation to fulfill the agreement because of the existence of this same agreement. When might it be enforced? At what moment does it appear the *obligatio*, the binding power that qualifies as enforceable the link between the subjects of the agreement? And, even more important, can regulatory effects of agreements do exist outside of legal formalism?

This was the origin of the theory of *causality* in law, as explained by Lorenzen (1919):

> Roman law, even in the last stage of its development, did not enforce an agreement unless it could be brought under certain well-defined heads of contracts or pacts. In the time of Justinian all agreements would become actionable by being clothed in the form of a *stipulation*, which for practical purposes may be regarded as equivalent to a written form. (…). In all real contracts the obligation

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meeting of the minds, mutual assent, mutual promise, mutual understanding, oneness, reciprocity of obligation, settlement, unanimity, understanding, uniformity, unison, unity. (II) Agreement as contract: *alliance, arrangement, bargain, binding promise, bond, commitment, compact, concordat, concordia, contractual statement, convention, covenant, deal, engagement, legal document, mutual pledge, obligation, pact, pledge, settlement, transaction, understanding, undertaking.*

arose not from the agreement of the parties but from the delivery of property or the performance of the plaintiff's promise, that is, in our terminology, from an executed consideration[3].

In other words, *nude pacts* were not enforceable unless they entered into a more concrete formal way, in a process of ritualization in which certain use of words and *mise en scene* to produce artificial effects close to religion and magic were due.[4] These legal grounds were the *causa* of the contract. An agreement had to show an underlying "cause" to become a contract. There were no contracts *sine causa*, "without cause".

> With us an agreement is actionable unless there is some reason why it should not be so. With the Romans an agreement was not actionable unless there was some reason why it should be so. (Buckland, quoted by Lorenzen, 1919)

I think that at least three consequences can be drawn from this statement: (i) asserting what a legal agreement is or could be is a theoretical issue, in which jurists have been involved since the Roman times; (ii) defining 'agreement' as a concept means activating at the same time a certain degree of inner knowledge of the legal system in which the definition works; (iii) discrete categories of agreement are at odds with the continuum between nude pacts and more coercive forms of contracts.

Taxonomies are entrenched with the concrete performance of *types* of agreements susceptible to variations. A set of "nearly considered" contracts do exist either in the Roman or in contemporary Civil Law.[5] Lorenzen's conclusion is nowadays a common belief.[6]

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[3] In the Common Law *consideration* is the correlative of *causa* in the Civil Law. "Something of value given by both parties to a contract that induces them to enter into the agreement to exchange mutual performances." http://legal-dictionary.thefreedictionary.com/consideration

[4] But see the warning by MacCormack (1969) on going too far in the "magical" interpretation of law in pre-modern societies

[5] Cfr. Radin (1937).The *Institutes* of Justinian (III, 13) divided obligations "into four species; *ex contractu, quasiex contractu; ex maleficio, quasi ex maleficio,* i. e. contract, quasicontract; tort, quasi-tort. Gaius, (about 150 A. D.) listed only contract, tort and an unclassifiable miscellaneous group, *ex variis causarum figuris.*

What happened, then?

The most natural explanation is the occurrence of the modern state, since the 17 c., and the formulation of the legal framework of the rule of law in the 19 c. One of the main contributors to the doctrine of causality in law was Jean Domat (1625-1696), the French jurist who at the same time, within the *Traité des loix*[7], organized in one single legal body the public order system of Louis XIV. There is a direct line from this theoretical body and the French Civil Code (1804), through which Napoléon intended the political reconstruction of the nation-state, stemming from the administrative organization of the Ancien Régime.[8]

Dialogue as a source of law disappeared from legal thought with the construction of the Monarchic state (16 c.17 c.).[9] Since the 18 c. agreements as covenants or pacts adopted other legal forms and had other roles, either grounding civil codes in the new private space or constitutions in the public one. Since the 19 c., what lies behind the gradual compulsory enforcement of a legal agreement is the compulsory force of the state under the rule of law.

2. 3 Agreement in legal theory

Legal theory in the 20 c. took seriously this mutual embedment between law and the state. Although it may come as a little surprise,

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[6] "There is in reality no definable 'doctrine' of causa. The term 'causa' includes a variety of notions which may equally well be derived from the nature of a juristic act and from considerations of equity." (Lorenzen, 1919) See also Orestano (1989).

[7] The *Traité des Loix* is the preface of *Les lois civiles dans leur ordre naturel* (1689), in which Domat equated Roman and Civil Law with rational order and with Christian principles. Law is *raison écrite*.

[8] See the intellectual and personal genealogy from Domat (17 c.), Pothier (18 c,) and the nine drafters of the Code Civile (19 c.) in Arnaud (1973). See also Tarello (1976).

[9] I have developed this subject in Casanovas (2010). For a specific study on the transformation of humanist dialectics and rhetoric in 16 c. and 17 c., cfr. Ong (1958) and Fumaroli (1980).

thinking simultaneously a theory of law *and* the state was not commonplace in jurisprudence until the last third of the 19 c., after the unification of the German State in 1871.

Perhaps the first full theory of this kind is Georg Jellinek's *Allgemeine Staatslehre* (1900). It was clear for him, following previous Romanist (i.e. von Jhering, Gerber) and Germanist (i.e. von Gierke) scholars, that the State could be considered a moral person, susceptible of holding rights and duties. If this is so, the private notion of agreement could be expanded to the public sphere: as subjects of law, states would behave and act as a person, and actually the regulatory value of agreements between private persons —their 'subjective rights'— would be defined by the 'objective' laws of the states in the public sphere.

2.3.1 Hans Kelsen

This is the path trodden on by Hans Kelsen's *Reine Rechtslehre* [*The Pure Theory of Law*] as well. In its last version, as late as 1960, he still fights the 'fiction' of freedom of self-determination as a source of law.[10]

To me, this denial it is not what it counts and it is important in Kelsen's approach for what he was really questioning through the critique of the concept of autonomy was the concept of legality itself. Why can we qualify an act of legal or illegal? How to define the obligation to do or not do something as legal? Kelsen would set up his theory of norms to answer this kind of questions. He conceived it as a complementary balance between norms —"schemes of interpretation", "the meaning of acts of will"— and normative decisions, in which the link between norms and facts would be performed by the formal quality of their normative content —the property of *validity*. Norms had to be legally 'valid' to acquire a 'binding' character and

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[10] "The fictiousness of this definition of the concept of the subject of law is apparent.(…). The legal determination ultimately originates in the objective law and not in the legal subjects subordinated to it. Consequently there is no full self-determination even in private law." (Kelsen, 1960, 1967: 170-71; see 258 as well)

be applied. In such a conception, the State was conceived as a logical *prius*, in a pure neo-Kantian way.

It is not my aim to go deeper into it. It is worth to notice that Kelsen broadened up the space to discuss legal issues on different grounds than plain jurisprudence. Instead of discussing just at the level of positive legal doctrine, he would have shown the need to structure a coherent theory about the tools employed to describe and operate on legal systems. And nevertheless, his conceptual framework remained solidly anchored onto the same doctrinal bases he tried to overcome. As Alf Ross (1936, 2011) would put it on the first edition of the full version of the theory (1935), in Kelsen´s view "legal science is not social theory but *normative cognition*, doctrine [emphasis added, P.C.]".

2.3.2 Alf Ross

However, although he wanted legal theory to be a non-doctrinal social science clearing up old and broad legal concepts, Ross remained close to Kelsen as regards the reflecting value of agreements as a source of law. His argument is interesting to follow, because in his major work he would compare agreements to promises:

> If it has been agreed that in order to gain admittance to a private night club a person must utter a meaningless word, this word in itself will remain meaningless even if by agreement it functions as a directive to the doorkeeper. The position is exactly the same in pronouncing a promise. In itself, abstracted from the legal order, the expression 'I promise' is meaningless. It would just do as well to say abracadabra. But by the effect the legal order attaches to the formula it functions as a directive to the judge and can be used by private parties for the exercise of their autonomy. (Ross, 1959)

May we substitute doorkeeper for judge, the private nightclub for the legal order and abracadabra for the 'will' of an agreement (or a promise) ad we would obtain a quite precise —and unintended kafkian— image of Ross' legal theory. "A legal rule is neither true nor false; it is a directive" (ibid.) addressed to judge, that is to say, an utterance "with no representative meaning but with intent to exert

influence" (ibid.).[11] What it counts then is the binding force of a "national legal order", which is an integrated body of rules whose function is to carry out the exercise of this physical force.

We need two more ideas to complete the picture: (i) Compliance with rules and rule enforcement are related through patterns of behavior, operating in judges' mind or in the legal consciousness of the population, which eventually would agree to comply with the law according to the dynamics shown in Fig. 1; (ii) 'validity' is an empirical property of rules related to the judges' behavior, for "valid law is never a historical fact, but a calculation, with regard to future" (ibid.). 'Validity' stands for the binding force of the law, but it is not an inter-normative property, for it cannot be derived from norms but stems from the social behavior itself —"the relation between the normative idea content and the social reality" (ibid.).
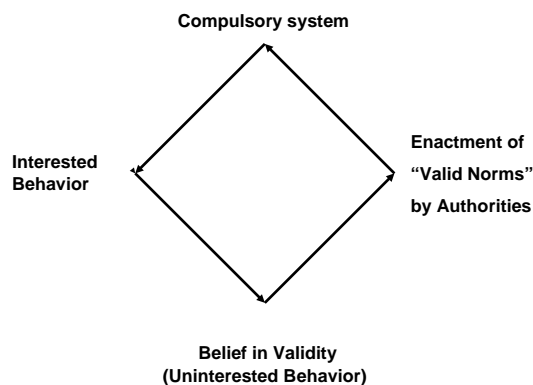

Fig. 1. Compliance with the law. Source: Ross (1946)

Ross' positions and the so-called Scandinavian realism have been recently revisited by legal theorists. For our purposes, I will single out only two revisions. The first one points at what Ross left out of

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[11] The interested reader is invited to follow the late formulation of the argument in Ross (1968): "Directives which are impersonal and heteronomous-autonomous include the rule of games and similar arrangements grounded on agreements."

the legal system: reasoning through the "intermediate legal concepts" of jurisprudence, the semantics of law. The second is in a sense complementary to the former one. It states the proximity between social positivism and Ross's approaches to fundamental problems, mainly the problem of validity of legal rules.

By intermediate legal concepts are meant "those concepts through which legal norms convey both legal consequences and preconditions of further legal effects" (Sartor, 2009). Sartor uses the term *inferential links* (broader than legal norms, or rules) to describe how legal concepts (but other concepts as well, e.g. moral or social) can carry on and transfer meaning. He is embracing then the Fregian view according to which the meaning of a term results from the set of inferential links concerning the *sentences* in which the term occurs (ibid.).

This view was advanced by Ross in a famous paper, *Tû-Tû* (1957), in which he figured out a fictional society with concepts representing fictional facts or states of mind (tû-tû).

FOR ANY (x) IF x eats of the chief's food THEN x is tû-tû, which really means, connecting this factual precondition to deontic conclusions FOR ANY (x) IF x eats of the chief's food THEN x should be purified, or x is forbidden from participating in rites.

Ross aims at stating that this kind of intermediate terms are also fictional, because they are not adding any deontic meaning to the whole reasoning and they are not needed to represent any semantic content. This reproduces the abracadabra argument for promises: doctrines about *ownership*, or other legal concepts such as *claims* or *rights*, are just meaningless terms to facilitate the deontic conclusions in a legal order. From a theoretical point of view they are useless, and we should get rid of them. This task "is a simple example of reduction by reason to systematic order" (Ross, 1957).

We encounter here the rejection of the "magic" power of words, one of the subject-matters of Hägerström philosophy (Pattaro, 2010). However, asserting that the concept of right has no substance is quite different than stating that it does not carry on any meaning.

Sartor is proposing an alternative solution, setting an inferential field for legal meanings to encompass dogmatic concepts as well

within the legal system. As I will show later on, this position has to do with the possibility to reasoning with ontologies in the web. However, it takes into account also what we may call the *pervasiveness* and *resilience* of some fundamental legal concepts that bridge the common understanding of what law is about.

2.3.3 H.L.A. Hart

Law expressed through its common or natural language, the semantics of law, constitutes the timber of perhaps the most influential work of legal theory in the 20 c., Herbert Hart's *The Concept of law* (1961).

I will chose an indirect approach here, because I will bring to the fore the second revision I mentioned above. It deals with the natural language in which Ross expressed his analysis, and it comes from the new generation of the Scandinavian legal theory that he helped to build. Svein Eng (2011) explains that the most central technical term in Alf Ross's book *Om ret og retfærdighed* (1953) [translated as *On Law and Justice*, 1959] is *gældende ret* [valid law, in Danish].[12] This corresponds to the Norwegian term *gjeldende rett* and the Swedish term *gällande rätt*.

Those Scandinavian terms have been translated into English as *validity*, but have different uses which express a broader and more context-sensitive meaning. In Latin languages, e.g., *gældende ret* has been translated by *derecho vigente*, *diritto vigente* or *droit en vigueur* for it points at the efficacy of the legal rules as well.

Hart made the review of Ross's book, pointing at the differences between their theories. Short after, he published *The Concept of Law* (1960), in which he sets up a broad conceptual framework to elucidate the meaning of the most common legal concepts assuming that

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[12] Eng (2011) recalls that in Ross' theory, the term *gældende ret* refers to "(i) normative meaning-content in the form of directives (ii) that have the property of being part of the judge's motivation when he is reaching a decision in the case at hand".

law is embedded into society and it *rules* over their members, including the members of the ruling elite.

Social and legal rules are differentiated, because in complex societies rules with social content adopt a legal form, according to which secondary rules —of change, recognition, and recognition— operate over the primary ones, controlling the production, enforcement and implementation of new rules, and solving possible conflicts among them. The rule of recognition plays then the same fundamental role than the set of directives than Ross would call "sources of law"[13] (and Kelsen, *Grundnorm*).

To our purposes, I will pinpoint only three points of the Hart model: (i) Hart maintains separate the "internal" and "external" points of view about rules, depending upon the degree of commitment and operability (according to different social roles in the system, citizen, judge, expert etc…);[14] (ii) the "rule of recognition" is in fact a complex criterion of identification that might encompass different kind of behaviors and rule interpretations (depending onto the legal system we are facing at); (iii) if the "rule of recognition" might be used not only to identify individual rules but to indicate also whether or not they are 'legal', then this criterion is not only about the 'validity' of rules but about the *existence* of the whole system as well.

Officers, civil servants, are maintained separated from members of the community (the 'civil society'), following the empiricist dual pattern for sovereignty obedience/sovereign common since *The Leviathan* (1651) in political philosophy. Secondary rules have to be accepted by, and are really addressed to, state officers. Conceptual understanding of the rules is the common path to their compliance. Social interactions are glued by the dynamics of the internal and external point of view, which goes necessarily through the semantics of language. This position seems to open a gap between social posi-

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[13] In Ross's theory, sources of law "are understood to mean the aggregate of factors which exercises influence on the judge's formulation, of the rule on which he bases his decision." (Ross, 1959)

[14] According to Hart, "the observer may, without accepting the rules himself, assert that the group accepts the rules, and thus may from outside refer to the way in which *they* are concerned with them from the internal point of view." (Hart 1961)

tivism, as it is conceived by Hart, and Ross. Nevertheless, a closer look to the grounds of both positions leads to a unified and coherent conception of the law, referring not only to the validity of legal rules, but to their *existence*, as interpretive schemes are 'shared' by groups, be they lawyers, the population or (especially) judges (Eng, 2011). Interestingly, legal positivists discussed on the content of "agreements as concurrence", but accorded the same relative value to "agreements as contracts".

2. 4 Agreement in socio-legal theory

I have presented so far the conceptualization of agreements in the classical theory of law of the 20 c. But, before going further in the argumentation, let's go to the socio-legal side of legal theory. I will not describe in this section the traditions of pure sociology or psychology, but only the so-called Legal Realist tradition of the thirties, and some Law & Society approaches that followed up regarding relational law.

2.4.1 Karl Llewellyn

As his late editor, Frederik Schauer (2011) has recently reminded, according to Llewellyn's *The Bramble Bush* (1930), rules are no more than "pretty playthings". Rule reckonability would lay in multiple *situated* forms, adapted to what Llewellyn calls *situated concepts*, *working practices, devices.*[15]

Llewellynesque has become a common expression in legal theory to characterize informal writing. But I think that it would be mis-

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[15] "[…] I am not going to attempt a definition of law. (…). I have no desire to exclude anything from matters legal. (…). I shall instead devote my attention to the *focus* of matters legal. I shall try to discuss a *point of reference*; a point of reference to which I believe all matters legal can most usefully be referred." (Llewellyn, 1930a)

leading to believe that his loose and sometimes bizarre expressions are merely rhetoric. I have plotted in Fig. 2 the structure of the legal realist approach he was advancing in 1930 (Llewellyn, 1930a).
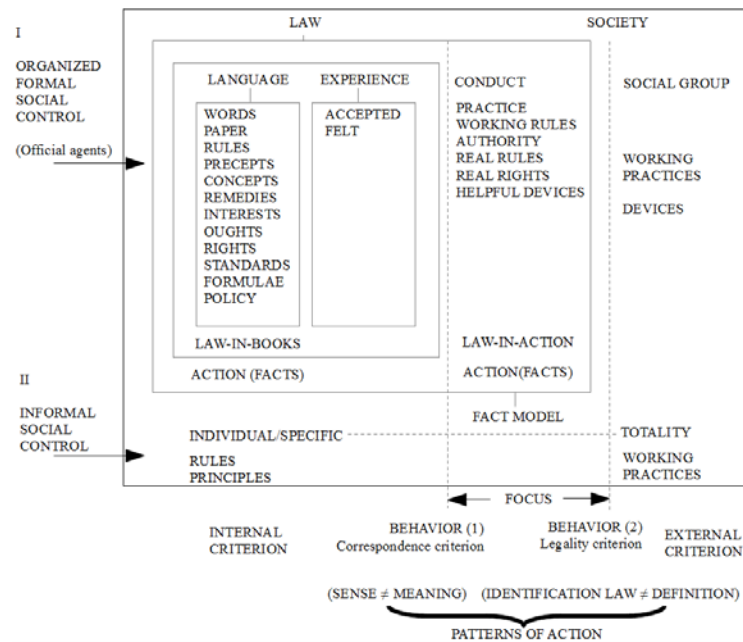

Fig. 2. Legal Realism approach, based on Llewellyn (1930a)

Following Pound, *law-in-action* is opposed to *law-in-books*, and *paper rules* are opposed to the *working* ones. There is no mechanical way to decide whether a rule is legal or not: this is left to the variable conditions set by the actors and to the conventions accepted by the market or the social community in which legal acts and rules operate. In a way, then, language is experienced and reflected as *felt* or *accepted* into the rules, but meaning is a function of too many variables to be structured as an object (in a contract e.g.). There is no way to fix a stable meaning, as there is no way to fix a stable legal standard or value. The internal criterion for meaning or legality is doubled and revamped by externalities, first within the legal community, and then within the open society (market sectors, organizations, and the political community).

It is worthwhile to notice the division between informal and formal control (performed by the law, especially through organized judicial institutions and behavior). But this comes from the first-hand knowledge that Llewellyn possessed of Max Weber's sociology and of German legal philosophy.

It seems to be a common bond between public law and legal philosophy. Jellinek, Kelsen, Hart, Ross… were all public law scholars. Llewellyn, on the contrary, was the Chief Reporter of the USA Uniform Code of Commerce from its inception in 1940 until his death in 1962. The code was his main contribution, and it was a revolutionary one. Section 1-201(3) of the U.C.C defines *agreement* as "the bargain of the parties in fact as found in their language or *by implication from other circumstances* including course of dealing or usage of trade or course of performance as provided in this Act. [emphasis added P.C.]"

American scholars have underlined the significance of this legal change with respect the understanding of contract as a formal promise (Patterson, 1989; Breen, 2000; Blair, 2006). It is a departure from previous Holmes, Landell and Willinston's interpretations of the offer-acceptance-consideration model.[16] Patterson (1989) has extracted the underlying conception of language —contract terms do not have a plain meaning, and written contract terms might not have priority over all unwritten expressions of agreement:

> Under the Code, as Llewellyn conceived it, the meaning of contract terms was not a function of intent, mercantile or otherwise. In construing the meaning of a contract, a court should focus not on what the parties mentally intended by their words but on what the trade took the words to mean. (...) Llewellyn believed that there should be no unitary concept of contract or agreement, *only a myriad*

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[16] As Breen (2000) puts forward, under the Code: (i) "the context of an agreement —the unspoken background of beliefs and understandings formed by repetition within an industry and familiarity among individuals, which are taken for granted by the parties involved— becomes central to the meaning of the contract. Contextual evidence is thus fully recognized as an 'effective part' of the agreement itself." (ii) Art. 2 states that the meaning of a written agreement is determined not only "by the language used by [the parties] but also by 'their action[s], read and interpreted in the light of commercial practices and other surrounding circumstances" (U.C.C. *Id.* § 1-205 cmt. 1.).

of ways that parties could come to agreement against the background of commercial practice. [Emphasis added P.C.]"

2.4.2 Relational law

Coming from legal realism, socio-legal scholars have embraced a pluralist perspective and they do not refer to a validity criterion or a validity rule to describe norms or rules as social artifacts. The legal field is defined, e.g., as "the ensemble of institutions and practices through which law is produced, interpreted, and incorporated into social decision-making. Thus, the field includes legal professionals, judges, and the legal academy." (Trubek et al. 1994) From this behavioral perspective, they actually do not embrace one version of legal pluralism but many, based on multiple regulatory forms that I have summarized elsewhere (Casanovas, 2002). Pluralisms lead to different social approaches and methodologies. However, legal theory and social studies have been often seen as opposite.

One of the reasons for such a situation lies on the first stages of relational law. Legal realists understood that law was 'relational' as an adversarial shift from the existing approaches and as a self-affirmative action. Llewellyn (1931) posed it as "Pound's development of 'relation' as a status-like element constantly latent and now re-emergent in our order". Roscoe Pound, in a series called "The end of Law as Developed in Juristic Thought" (1914, 1917) —the Harvard papers that constituted the bases for *The Spirit of the Common Law* (1921)— explained the history of the Common Law tradition as opposed to the Roman Civil Law tradition:

The idea of relation, and of legal consequences flowing therefrom, pervades every part of Anglo-American law. (…). The action for use and occupation may only be maintained where a relation exists. *When the relation does exist, however, a train of legal consequences follows*. (Pound, 1917)

Therefore, the "spirit" of Anglo-American Law would be *relational* (and not authoritative), bottom-up (more than top-down), and collective (as opposed to the individual trend of natural law philosophy). However, more recently, this way of constructing a broad legal

perspective contrasting to other concurrent ones has twisted in favor of particular approaches. This is the second step for relational law.

'Relational' is considered a common property that emerges from the existing social and economic bonds among companies, providers, customers, consumers, citizens (or digital neighbors). It seems to be a pervasive quality, perhaps straddling too many genres and fields, from psychology to jurisprudence, and from political science to business managing and marketing studies.[17]

Relational refers to the capacity to set up a common space of mutual relations —a shared regulatory framework— in which some reciprocity is expected with regard to goods, services, attitudes and actions. Thus, relational law is more based on trust and dialogue than on the enactment of formal procedures or on the enforcement of sanctions. This has been proved especially useful regarding the analysis of norms — e.g. in consumer research studies (Johar, 2005), in B2B relationships (Blois and Ivens, 2006), in relational governance (Ott and Ivens, 2009).

Either Stewart Macauley (1963), Ian R. MacNeil (1974, 1983, 1985, 2001) or Phillip Blumberg (2005) stress a view of contracts as relations rather than as discrete transactions looking at the evolving dynamics of the different players and stakeholders within their living constructed shared contexts. "Relational norms"[18], "relational exchange norms", and "relational contract" are concepts widely used since. By the term "relational thinking" it is meant an approach emphasizing the complex patterns of human interaction that inform all exchanges (MacNeil, 1985). But in fact this does not mean getting rid of a more conventional notion of what law is or how lawyers think (for a good comprehensive summary of MacNeil's works, see Campbell, 2001). More recent studies confirm that there is no simple

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[17] 'Relational' has been applied not only to *contracts* but to *sovereignty* (Stacey, 2003), *rights* (Minow and Shandley, 1996), *copyright* (Craig, 2011), *governance* (Zeng et al., 2008; Chelariu and Sagntani, 2009), and *conflicts* (Wallenburg and Raue, 2011), broadening up the field from private law to the public domain.

[18] MacNeil (1983) distinguishes five relational norms —role integrity, preservation of the relation, harmonization of relational conflict, propriety of means, and supracontract norms.

opposition or alternate choice, but different combinations in between: legal contracting and regulatory governance may intertwine, substitute each other, or co-apply (Poppo and Zenger, 2002; Fisher et al. 2011; Cannon et al., 2012).

This means that relational regulatory systems and models are complex, and that their strength certainly stem from sources other than the normative power of positive law only. But, again, legal drafting, contracting and sentencing matter and can play changing roles within the system. I will call *regulatory systems* this set of co-ordinated individual and collective complex behavior which can be grasped through rules, values and principles that constitute nowadays the social framework of the law. I will call *regulatory models* the set of structured principles, norms and rules that can be designed to control and monitor the interaction between technology and regulatory systems. I will call *relational justice* the set of procedural devices to manage and eventually solve disputes and conflicts within the framework of dialogue as a source of law.

This is the third step for relational law: when social patterns, networked governance, ethical principles and legal systems are entrenched through the regulatory protocols of technological environments. This is properly the field in which Online Dispute Resolution developments (ODR), privacy by design, security by design or identity patterns take place and will operate in the next stage of the web (ubiquitous computing, cloud computing, open data, XML standardization etc…). In this third sense, relational law refers to the point in which the Social Web (2.0) and the Web of Data (3.0) intersects with the way of regulating systems and end users behavior alike (be the users considered as citizens, consumers, companies or political organizations). A visualization of what I mean by the third stage of relational law may arise in the overlapping of Figures 3 and 4 (in 2.4.3). Fig. 4 has been proposed by Jim Hendler thinking of Semantic Web Services. Fig. 5 is a simple ordered schematization of the regulatory fields.

Web 3.0	
Web 2.0	Semantic Web (RDFS, OWL)
	Linked Data (RDF, SPARQL)

Fig. 3. Linked Data and the SW. Source: Hendler (2009)

2.4.3 Regulatory systems, relational justice, regulatory models

Regulatory systems are broader than their legal side because they include all aspects set by players in the social, political and economic games at stake. They are situated, flow-driven, and work specifically in a multitude of similar but different evolving scenarios. As long as they contain procedural ways to solve and manage conflicts as well, they shape relational systems of justice.[19]

Relational justice is thus the type of justice emerging from the different conceptualizations, practices and strategic moves of the actors dealing with, managing, or solving a controversy, quarrel, dispute, conflict or fight within these situated contexts and frameworks (Casanovas and Poblet, 2008, 2009). Personal attitudes, moral and political beliefs are highly relevant in this kind of situations which can be initially unstructured and eventually embedded or plotted onto bigger organizational or social conflicts. Institutions may be involved (or not) at different stages and at different times (Lederach, 2005).

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[19] A regulatory system can be a broad social system, with several groups, networks and professional people involved. It can be described and explained by means of statistical measures (using social indicators e.g.) and qualitative methods. We had the opportunity, e.g., to describe the social system of mediation in Catalonia. Results are available in Catalan and Spanish at http://www.llibreblancmediacio.com . Chapter 16 of the Spanish version contains the state the art of ODR (years 2008-2009, Poblet et al. 2010), and the prototype of an electronic institution for mediation (developed by Pablo Noriega et al. 2010).

The situation is the same for state agencies, companies and corporate entities in the market.

Regulatory systems and relational justice can be monitored by regulatory models. A *regulatory model* is the particular normative suit encased by platforms built up to monitor a regulatory social system; the specific structure of principles, values, norms and rules that guide technical protocols, the '*interoperativity*' of organized teams and the 'interoperability' of computer languages.[20]

These concepts —relational law, relational justice, regulatory systems and regulatory models— have to be spelled out further. They have to be carefully distinguished from virtual or *electronic institutions*, *corporate governance*, all forms of *networked governance* and *ethical* informatics. From this point of view, agents, networks and principles are components of social regulatory systems and they have to be taken into account by the specific regulatory models built up to control and monitor the technology applied to particular fields —ODR platforms, security platforms, digital rights management, mobile applications etc. for e-commerce, e-administration, e-security etc. Figure 4 shows a possible structure for regulatory models, in which hard law (enforceable norms), soft law (non-enforceable norms), networked governance (administrative, managerial norms), and ethics and good practices (prudential norms, technical protocols) are ordered along the axes of interoperability and '*interoperativity*'.

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[20] I prefer to maintain separate *interoperativity* (referred to human coordinated or collective behaviour to team up) and *interoperability* (compatibility of computer languages).
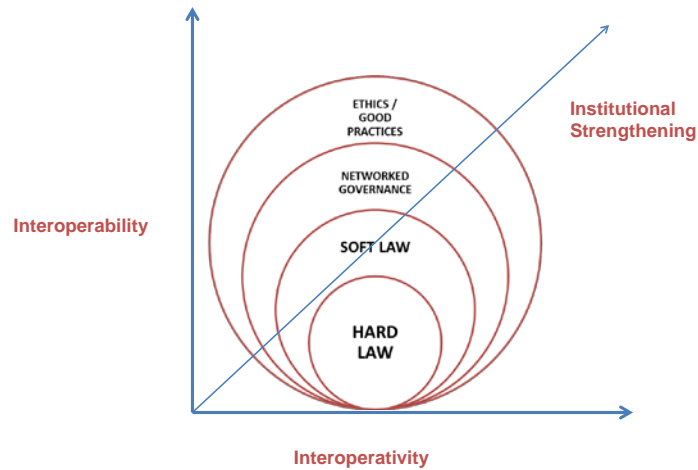
Fig.4. Scheme of regulatory spaces, Interoperability/Interoperativity Axes.
Source: Casanovas et al. 2012

2. 5 Discussion: Dialogue as a source of law

I have summarized so far the perspective of legal theory and so-cio-legal approaches on agreements. My brief description did not in-tend to be exhaustive. Three legal theories and three stages of rela-tional law have been exposed. It is time to come back at the starting point and ending up with a more open discussion on some issues that can be raised from them.

The starting points are the following: (i) a continuum line between the two poles of agreement —as a "meeting of the minds" and "agreement as a contract" (see section 2.2.); (ii) a history of agree-ments in modern and contemporary societies that reverse the value and role of agreements in ancient (and face to face) societies (2.2.); (iii) the prominent role of the state and public law in the value ac-corded to agreements in contracts under the rule of law (2.3.); (iv) the agreement in classical theories of law about the existence of a system based on the "legal" (i.e. "valid") use of the physical force by the state (or the final ruler) (2.4); (v) the agreement in classical

theories of law on describing theoretically the legal space as a single normative system with a criterion of validity; (vi) the agreement between Hart and Ross on the *existence* of the legal system, the existence of a method to test the validity of norms, and (most important) a "shared acceptance" or "common understanding" of law by state officers (e.g. judges) and the civil population (2.3.2-2.3.3); (vii) the clash of such a perspective with more behavioral and empirical approaches to contracts from a "myriad of ways that parties could come to agreement" (Llewellyn) and the importance of context and working practices of the field (2.4.); (viii) the shift towards relational contracts, and networked and corporate governance in the second step of the relational conception of law, in which positive statutes, acts and sentences are components of the regulatory framework (2.4.2.); (ix) the emergence of concepts such as regulatory systems, relational justice, regulatory models; and the entrenchment of technological environments and regulations in the next stage of the Web (2.4.3).

I will address four final issues related with these points: (i) crowdsourcing; (ii) the relation between agreement and disagreement; (iii) the notion of 'legally valid norm', (iv) and democratic values.

All issues have to do with the idea of dialogue in the cloud. We might consider as cloud services infrastructures, platforms, or software. According to the NIST standards the cloud model is composed of five essential characteristics, three service models, and four deployment models (Srivasta, 2011). E.g. the five essential characteristics are: on-demand self-service, broad network access, resource pooling, rapid elasticity, and measured service.

As information grows on the net, *personalization* and *empowerment* of users becomes an issue, because knowledge is increasingly produced through cooperation and participation. The Web fosters participation, but at the same time, risks or threads to citizens are higher too. Crowdsourcing is one side; identity management is the other side of the picture. Trust and security come along. The *Internet meta-system layer*, as was put forward by Kim Cameron (2005), co-exists with the Linked Open Data movement. Perhaps for the first

time, then, regulations have to cope with a semantic structure which organizes them as metadata.

2.5.1 Crowdsourcing

Originally, this term was introduced in relation to distributive labor. Different types of crowdsourcing have been distinguished in recent times (Geiger et al. 2011). Most of the more successful examples, like the Wikipedia, may be defined as non-profit collective aggregation of information stemming from micro-tasks widely distributed across the Web, and freely performed by people. Therefore, crowdsourcing implies much more than a new way to recollect information or to respond to labor offers or contests —following the Amazon Mechanical Turk or Microworks.com models— because (i) it points at the personalization of services and applications, (ii) it creates a link between Web 2.0 and 3.0 (the Web of Data), for it creates the conditions to transform the aggregation of individual information into the clustering, classification and enhancement of collective knowledge, (iii) it broadens up and enhances a democratic way of living and behaving in the global world.

This is the main reason why people use it when they need it, reacting to events that concern them or into which they want to get involved. No measures based on routine or loyal customer behavior are accurate enough to capture this public dimension. The broad democratic political model to be implemented cannot be taken for granted, as the integration between the regulatory forms of law, relational governance and what Charles Petrie (2010) calls *Emerging Collectivities* (EC) has to be thought on new bases. Crowdsourcing can be expanded then into *crowdservicing* (Davies, 2011).

5.5.2 Agreement and Disagreement

Classical positivist theories (including Ross') assumed the existence of a united central state —a national order— and a legal order as a *common project* to explain obedience or acceptance of norms.

Both aspects are interconnected, and point at a legal theory as a privileged approach. However, *power*, not empowerment, is the subject-matter or *idée force* that guides the argumentation process in classical legal theories.

This is not to blame. Hobbes, Kelsen, Ross or Hart had to tackle the problem of violence and survival in a convulse world. As Abizadeh (2011) has shown, the primary source of war, according to Hobbes, is not necessity, greed or even glory, but weakness, human disagreement. Disagreements can turn into *deep disagreements*; and this is an existential stage in which argumentation and rationality stop, for they undercut all essential conditions to arguing (Fogelin, 1985).

However, philosophical argumentation is *nonpreemptive*: "philosophical issues are always such that arguments of prima facie cogency can be built up for a cluster of mutually incompatible thesis" (Rescher, 1978: 220). This is the case for legal theory as well.

The notion of "genuine disagreement" was used by Ronald Dworkin (1986) to challenge what he called "the semantic sting" —that lawyers follow certain linguistic criteria for judging propositions of law. Therefore, Hart (and other positivists) would derive the use, the pragmatics of law from the semantics of legal language, a mistake that would prevent them of properly explaining theoretical disagreements.

Dworkin's criticism raised a passionate debate in legal philosophy, especially after Hart's posthumous *Postcript* to *The Concept of Law* (second edition, 1994), where Hart defended what was called *inclusive positivism*, a reassessment of his philosophy as a method for descriptive (non normative or interpretative) jurisprudence (see the essays contained in Coleman, 2001; especially Raz, 2001, and Endicott, 2001).

Dworkin pointed indeed at the nature of Hart's linguistic endorsement. What does exactly means for officers to *share* a rule of recognition? Where the *common understanding* of law or (for citizens) the *acceptance* of a primary rule come from?

Pettit has followed recently the same procedure at refining the meaning of natural language to better define what the content of a

norm is. He fills what he calls "the norm-normative gap" —the fact that a norm is such a norm and not a mere behavioral pattern "since people give acceptance or approval to those who conform with the regularity and or reject or disapprove of those who deviate" (2010). This is Hart's *internal* point of view, which Pettit elaborates to assess meaning to the norm of honesty as a particular case —"norms come about as a result of rationally intelligible adjustments between the parties" (ibid.).

The question of emergence of norms is an important one and can be studied empirically, because there is not a single general answer for the problem (see e.g. McAdams, 2010, for a different solution) it). At this level, it makes sense to distinguish carefully between two meanings of agreement: *B-agreements* (being in agreement) and *H-agreements* (having an agreement) (Paglieri, 2012).

From cognitive and social sciences it makes all the sense fleshing out these concepts seeking for micro-foundations for agents' behavior as well (Castelfranchi, 2003). Emergence of meaning and interoperability is another dimension of the problem, with a variety of approaches —specifying the conditions under which two individuals (or one individual at two points in time) will infer they share a diffuse referent (Chaigneau et al. 2012); or conceiving semantic interoperability as a coordination problem between the world, information systems, and human users (grounding semantics, semiotic dynamics) (Steels, 2006).

Philosophy can support theories and empirical testing on analytical grounds. We can find a correlative example on H-agreements in Black (2006), preferring the offer-acceptance model over the undertaking-based model.

It seems to me that we should maintain separate from the analytical point of view *agreements in language* and *agreements of language*. Wittgenstein made a substantial contribution when code or symbolism are involved, distinguishing in his late works *agreement in judgment* and *agreement in opinion*. To disagree means having the capacity to agree, first, in a common communicative ground. Agreement in judgment would mean that what is shared is the lan-

guage as a 'form of life'; the role inter-subjective agreement plays for the possibility of linguistic communication.

As said, this kind of fundamental questions can and should be faced not only from the philosophical point of view but from the empirical one. The assumption that obedience or acceptance of norms has an "internal" side than can be solved only by refining the natural meaning; *id est*, that normative agreements "emerge" naturally from the social body, is a strong assumption that can be put under the light of knowledge acquisition through data analysis.

Clearly, assumptions on the general picture —the sovereign state, the division onto citizens and officers…— played a role (and a major one) in the way classical legal theory faced the analysis of agreements and rules.

5.5.3 Validity and regulatory models

Equally, in the new scenarios raised by crowdsourcing, cloud computing, and relational law and justice, assumptions about the whole context have an impact on the way agreements and norms are faced. We generally deal with complex environments, in which power is fragmented and divided into multiple sources of authority, with different levels and degrees of compulsory force, and different jurisdictions.

In networked governance, legality anchors the intended behavior of state agencies, their relationships, and their relationships with citizens (see Fig. 4). Hard and soft laws are commonly differentiated by the existence of *legal* norms. But legality is *situated* within national, communitarian (European), or international borders. In the cloud, nevertheless, the sixty million controversies that e-Bay has to solve every year, e.g., occur in what we could understand as a *dereferenced legality*. There is a procedure to be implemented and followed that is eventually ground on the conditions of dialogue between the parties, and the incentives and disincentives at stake (e.g. reputation), not because there is no other way to enforce a final ruling, but because actually the technological nature of the web can

implement a new balance between public power and personal empowerment.

This state of affairs reminds the situation of agreements in premodern societies, in absence of the state but with a strong need to maintain the balance of a living social regulation (see section 2.2.). Online Dispute Resolution procedures lie on ordered steps and the structure of rational agreements —usually between only two different sides (Lodder and Zeleznikow, 2010). However, there are other scenarios regarding public goods (e.g. ecological conflicts, polluters etc.) in which non-binding voluntary agreements are most effective if selective, because power is still an issue even in non-enforceable, i.e. non-legally binding, situations (Glachant, 2007). This is the first argument in favor of considering dialogue as a primary source of law.

I will elaborate this position stemming from a second argument on the emergence of validity as a result of agreements. My position is that this is so when bindness is put aside through the *same conditions* in which it appears in a conventional legal reasoning process. Validity, legal bindness is not strictly needed, but it is a factor that co-exists with other scenarios in the web. Let's elaborate on that.

Semantics has a long history in law as well, since Hohfeldian jural schemes. Hohfeld, von Wright, Alchourrón and Bulygin, Lindahl, McCarty, Sergot, among many others, built up a normative space in which it was held to perform the distinction of legal from non-legal norms (or deontic effects from other modal ones). One of the last contributions is due to Giovanni Sartor (2008, 2009a, 2009b). Following Ross's suggestions on inference (see section 2.3.2) Sartor dwells on *semantic* inference. He claims that "certain features of a norm entail the norm's legal validity on the basis of their ability to justify the norm's legal bindingness (through the mediation of legal validity". This means (i) that a norm is automatically enforceable if it is legal, (ii) that legality is a deontic property that "supervenes" in a process of legal reasoning; (iii) that legality is a moral property (in a broad sense).

However, if legal bindingness depends on a test on the acceptability of premises in an argumentation process, i.e., it is considered

strictly dependent on validity as an evaluative concept, then, I think that bindingness requires a theory of democracy (broader than legal theory) to set the acceptable criteria and values to be implemented in a legal reasoner. The political side of validity cannot be avoided, even accepting Sartor's moral distance. Even the late Ross asserted that "feelings of validity" are "the very foundation of all politically organized life" (1968).

I do not consider legality as a moral property, but as a political one; i.e., not only applies through legal reasoning, but through the diverse moves of negotiating agreements (and at the different layers of the possible disputes as well), soft law, good practices and ethical codes than constitute the line of *institutional strengthening*; that is to say, the resulting vector of a regulatory space which is broader than the application of legal norms. If this is so, validity goes along a continuum that cannot be only linearly determined by a unilateral process of reasoning, but by a set of variable procedures that are themselves negotiated, discussed, evaluated, and eventually changed, in a dialogical process among different agents or stake-holders (the notion of "meta-agreements" points at this situation).

In a situation of dereferenced legality, what it immediately pops up is not the rationality of the argumentation or the enforceability of the agreement, but the effective satisficing behavior of both (or more) parties, be they optimal or suboptimal.

There is still a third related argument in favor of considering dialogue as a source of law.

Many years ago, André Valente and Joost Breuker (1994) suggested that ontologies could help to bridge the gap between Artificial Intelligence and Legal Theory, and in fact many legal ontologies have been constructed since then. Sartor correctly states that conflicts between inferential and ontological approaches need to be considered "as a dialectical balance and co-evolution", and this would require that lawyers and ontological engineers "have the ability to continuously adjust their onto-terminological constructions as the law evolves" (2009b).

I think the analysis can go a bit further: reconciling ontologies and inferential schemes requires an adjustment not only on legal but on

social basis as well. Therefore, I would suggest the adjustment be produced taking into account the democratic values carried out by citizen participation and the evolution of the Web of Data. This means that a double and, if possible, coordinated process of dialogue has to take place —between personal, local (or singular) knowledge, and expert, global (or general) knowledge.

5.5.4 Democratic values

Democratic values are consubstantial to crowdsourcing, privacy, data protection, and the transparency and accountability principles that inform Linked Open Data, but they are not strictly necessary to construct artificial societies or MAS. This means that they have to be *consciously* designed, reflected and implemented, because I do not think they can be simply derived from any theoretical legal model alone. This goes back to dialogue and participation as a source both of legitimacy and legality.

A political reading, or a pragmatic epistemological position, emphasizes, as e.g. Robert Brandom (2008) does, that the possibility of disagreement and dissent is a condition of democracy. Disagreement is then viewed as "[...] an absolutely essential element of discursive practice. Without the right to disagree, there is no language".

Besides, from a linguistic point of view, it seems that free speech and dissent have (even through "non politically correct language") a positive effect on the evolving of democratic systems (Stromer-Galley and Muhlberger, 2009). Diversity of opinion seems to reinforce models of deliberation on the web too (Karlsson, 2010). However, I would not defend the existence of an implicit common law model to articulate a linguistic model of normativity as a political ground for the rule of law in the WWW. There are other means to seek for collective aggregation of information or knowledge than assuming normative restrictions at the speaker level.

The proposal of an I-thou structure of normative scorekeeping and discursive updating instead of an I-we structure (Brandom), or the "we-mode social groups" hypothesis put forward by Tuomela (2007)

stress the function of collective action in the construction of a common social order based on agreement (implicit or explicit).

From the legal point of view, it is my contention that the basic question posed by Cass Sunstein (1994, 1996) some time ago is still a valid starting point to reflect on the implementation of a democratic model:

> How is law possible in a heterogeneous society, composed of people who sharply disagree about basic values? (…) Much of the answer to this puzzle lies in an appreciation of how people who disagree on fundamental issues can achieve *incompletely theorized agreements on particular cases.*

People disagree everywhere and on everything, and very likely they will keep disagreeing everywhere and on everything. But (and this is Sunstein's strong point) they do not need to agree on general principles to reach agreements: "people from divergent starting-points, or with uncertainty about their starting-points, can converge on a rule of a low-level judgment" (ibid. 145).

More recently, Sunstein has warned against the biased reasoning trends and polarization to which the blogosphere is prone. There is an ongoing interesting discussion on *meta-agreements* —the conceptualization of issues at stake, the context of sets of judgments over multiple interconnected propositions— and *single-peakedness* —individuals rationalize their preferences in terms of a common issue dimension— to overcome the well-known voting paradoxes. (List, 2007; Ottonelli and Porello, 2012).

I still think that there is no valid argument against the capacity to produce new knowledge through the empowerment of individual participation in the web. Developing these theses falls out of the scope of the present chapter. However, I hope to have shown that both theoretical and empirical approaches are needed to face them in a consistent manner.

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