Alessio Sardo, Fabrizio Esposito*

Homo Ludicus: Expected Strategies and Jurisprudence

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Abstract: Joint intentionality is a concept *en vogue* in general jurisprudence. Richard Ekins has relied on joint intentionality to account for how legislatures can have intentions. At a more foundational level, Scott Shapiro has relied on shared intentions for explaining the normativity of legality. In this essay, we propose a metaphysically parsimonious approach called "expected-strategies approach", combined with a team-reasoning approach to legislation. Based on a game-theoretic perspective, this approach anchors normativity to our capacity of coordinating our actions, both at the level of the law-maker, and at the level of the legal subjects. We show that for this coordinating function, an understanding of other players' expected strategies is sufficient. The expected-strategies approach portrays the rational agent as a *homo ludicus*, whose key social virtues are stability and predictability.

Keywords: Joint Intention; Legislative Intention; Game Theory; Legal Normativity; Expected-Strategy Approach

* Alessio Sardo is Alexander von Humboldt Fellow at the University of Heidelberg, Department of Public Law, Constitutional Theory and Philosophy of Law. He is also member of the Tarello Institute (Genoa). The Author remains grateful to the Alexander von Humboldt Foundation for sponsoring his research. He wishes to thank also Professor Martin Borowski for his helpful suggestions. Email: alessiosardo@ymail.com; Fabrizio Esposito is a Postdoctoral Fellow at UCLouvain, where he joined the ARC Project PROSEco (Platform Regulation and Operations in the Sharing Economy). Fabrizio is also an extramural fellow at NOVA Law School, Lisbon. He wrote this paper while being a Fellow at the Edmond J. Safra Center for Ethics, Tel Aviv University. He wishes to thank the fellows there and Professors Hanoch Dagan and Alon Harel for their insights on the subject of this paper. Together, the authors wish to thank the participants to the IVR World Congress 2019 Special Workshop "Economics, Law and Humanities: Homo-what?", organized by Paolo Silvestri. Special thanks to Professors Paolo Heritier, who kindly acted as our discussant, and Giovanni Tuzet, for his comments. Finally, the usual thanks to the anonymous referees.

1. Grounding Normativity in Equilibria

As the authors of this paper, we (namely, Fabrizio Esposito and Alessio Sardo) share an intention or, if you wish, a plan. Our shared intention or plan is to contribute to the growing literature in general jurisprudence and legal philosophy that relies on Michael Bratman's influential analysis of agency, which places planning activities at the core of the concept of agency. Our plan is offering new answers to old jurisprudential puzzles. More precisely, we engage with Ekins's account of how legislatures form intentions and with Shapiro's elucidation of legal normativity, here understood in the sense of having a "binding" force. Our theoretical proposal sketches out a metaphysically parsimonious and empirically oriented account of lawmaking and normativity with respect to those offered by these two authors, who have relied extensively on Bratman's work. In a nutshell, we will argue that lawmaking can be conceived as a non-cooperative, strategic, game, and that, accordingly, normativity *qua* binding force depends on the ability of legislators to create "choice architectures", "focal points", or "correlation devices" that, in turn, can be represented as games in equilibrium. To emphasize the game-theoretical foundations of our conceptual framework, we will refer to the prototypical agent as a *homo ludicus*, in contrast to traditional constructs such as *homo oeconomicus, homo socialis, homo moralis, and homo culturalis*[1]. The expression *homo ludicus* emphasizes the game-theoretical foundations of our approach because, as it is well-known, in game theory, agents choose these actions (their strategies) in the light of the expected pay-offs of these actions under the expectation that the other agent(s) choose a certain action. Hence, the expression *homo ludicus* shall not be understood as a term of art or as a precise philosophical concept: It simply maps a general, very, plausible point of view on human agency. Accordingly, we will not endorse any strong metaphysical commitment on the notion of agency, and we will not advocate for a reduction of human cognition to economic games.

Richard Ekins seeks to defend the notion of legislative intent from a number of severe criticisms that cast doubt over the very possibility of having a shared, collective, form of lawmaking. In order to do so, Ekins relies on an expansion of Bratman's model: When they pass a law, the Members of the Westminster parliament act basically as a group of persons that agree to take a constitutional walk together. There might be some disagreement on the pace, the distance, and the exact itinerary, but there is a widespread shared agreement on the masterplan, on all the deliberative procedures, and on the (external) common goal. This agreement is backed up by a set of consistent common beliefs that form part of a mutual knowledge about lawmaking.

1 Bicchieri, 1997, is one of the first attempt to develop a philosophical analysis of rationality *qua* result of a game-theoretic coordination. The present account is distinct from Bicchieri's analysis, for it focuses more on ontological issues connected to legal orders and less on epistemic issues of games in general (refinement, belief revision, and bounded knowledge). However, we share the idea defended in Bicchieri 1997: 227ff. that rules are, to a certain extent, forms of equilibria. For a more detailed account, see also Bicchieri, 2005.

Now, we agree with Ekins that, in some way, the notion of legislative intent is well-formed, and that it makes sense to use this notion as a canon for legal interpretation. However, we disagree with Ekins' choice to consider, following Bratman, legislation as a product of interlocking beliefs and intentions. As it will be explained in due course, under our view, laws are the product of non-cooperative bargaining games among legislative agents. Within these games, agents are not required to ascribe intentions and other mental states to the other members of the legislative body (which will become, in our mode, the co-players of a legislative game). In order to solve a coordination puzzle, the members of a legislature are only required to form rational expectations about the possible strategies that other agents (namely, players) might undertake, and to act according to the best strategy, either from an individual perspective, or from a team perspective. What is more, we will suggest that rational players select the decisions that yield to Nash equilibria according to focal points.

Scott Shapiro, too, uses Bratman when he seeks to solve a long-standing controversy in several jurisprudential debates, namely, to elucidate the concept of legal normativity–in Shapiro's jargon, "to solve the Possibility Puzzle". Taking cues from Bratman's research, the solution that Shapiro proposes in his volume *Legality* characterizes the law as a kind of large plan which is widely shared by the community. While *Legality* offers conflicting insights on this point, the particular, ambitious, way in which Shapiro tries to solve the Possibility Puzzle requires us to consider – to define, if you wish– legal norms as *our* plans as members of the community the plan is designed for. According to Shapiro, legal norms are, therefore, binding for the legal subjects in the same way as my plan to do X is binding on me. Thus, if you flash a red light at the cross-road, I may correctly complain by saying "you are not following the plan-norm we share, namely that the red light means that you stop, so that I can pass".

We agree with Shapiro that Bratman's research offers a valuable starting point for an inquiry into the normativity of the law, but we seek to follow a more parsimonious perspective. Our claim is that norms are not collective plans, for they are rather *focal points* that arise from a legislative strategic interaction, which is aimed at offering reasons for actions to the legal subjects[2]: If you flash a red light, I may correctly complain by saying "the game you are expected to play has as its solution that I pass and you stop, because the legal norm implies that the red light means that you stop, so that I can pass" (in the present essay, we will use "norm" and "rule" as synonym; accordingly, laws express a set of rules, or norms). In sum, as a *homo ludicus*, I am complaining that you did not play the "traffic light" game in the way you are supposed to. Focusing on plans as individual strategic choices highlights *inter alia* that laws help us in our daily planning activity, insofar they promote a "stabilization" of the patterns of behavior. In order to act, we shall develop a plan of action; in doing so, we shall take into consideration the actions of the other members of the community; by specifying which conducts are prohibited, obligatory, and permitted, legal rules can be used by the planning agent as tools for predicting the action of other people, and to know the moves that she is allowed, or not allowed, to make. In

2 Raz, 1975.

this respect, Shapiro is certainly right: Laws can be regarded, to a certain extent, as rules of instrumental rationality. Our account endorses this view without the need of stronger and scarcely plausible metaphysical constraints, namely, conceiving of laws as plans shared by the totality of the pertinent members of a given community.

The paper is structured as follows. Section 2 explains Ekins's conception of legislatures as joint intentions and some of its weakness. Section 3, instead, argues for an alternative conception of legislatures as game-like institutional frameworks. Similarly, Section 3 begins by presenting Shapiro's Planning Theory, with an emphasis on the role of shared planning, and shows how a more parsimonious account grounded in individual expectations is possible. Section 5 gives a hint of how our "expected-strategy approach" might look like: As explained above, the model proposed in the current paper is intended as a game-theoretic alternative with respect to Shapiro's model. The twofold structure of this paper is fully justified by the fact that, although they share Bratman's common ground, Ekins focuses on shared-intentions in lawmaking, whereas Shapiro's analysis is more focused on the role of coordination that plans have for their addresses. These two perspectives are, evidently, complementary, insofar as they map two different aspects of the complex phenomena captured under the head "normativity"[3]. Therefore, they shall be analyzed together. Finally, section 6 contains some concluding remarks.

One point shall be clarified from the outset: In this paper we will not try to reduce the totality of the cluster concept of normativity to rules in equilibria, although we think that there might be good reasons for this move. Instead, more modestly, we will consider that legal rules are also the result of game-theoretic equilibria within a particular institutional framework that defines the rules of the game. More specifically, we will distinguish between two types of equilibria: The equilibrium *that produces the rule*, and the equilibrium *that the rule produces*. The former is the result of a coordination among the players of a legislature; the latter is one of the most fundamental effects that legal rules, once adopted, produce on their addressees, which is captured by the notion of the expressive function of a rule. To be sure, the equilibrium produced by the rule is not the only reason for its acceptance; however, it has a strong connection to the binding force of a norm. Rational norms are both the product and a source of coordination. According to our intuition, this proposition holds for every legal norm. In some cases, the connection between norms and coordination is more explicit, such as for those rules that regulate vehicle traffic. In other cases, the connection is less evident, but still present: Consider, for instance, a norm that establishes the prohibition of abortion after three months; also this norm is both the result and a source of coordination among agents. The fact that there might be further reasons for adopting or applying this prohibition does not undermine the coordination element, which, according to our perspective, is more fundamental[4].

3 See Paulson & Litschewski Paulson, 1998 for an overview on the concept of normativity.

4 The same, or at least a very similar, point is made in the game-theoretic literature by pointing out that coordination and cooperation problems are not sharply distinct concepts.

A further clarification is in order: The current essay will not deal with the symbolic elements connected to ideologies, propaganda, and aesthetical showcase of a legal power. These element are also constitutive of the notion of normativity, and they can legitimately be regarded as part of the "expressive dimension" of a legal order[5]. We will not try to reduce these elements to equilibria[6]. What is more, we will rely on a purely technical, more restricted notion of "expressive function" of legal norms, connected to the very idea of a strategic interaction.

Finally, we will not claim that our game-theoretic model is the *only* possible model for reconstructing the legislation process: We cannot provide any conclusive argument for the supremacy of game theory vis-à-vis other descriptive models for rational lawmaking. However, we shall argue that game-theory is, all things considered, better than the alternative based on Bratman: Game-theory makes sense of our common intuitions and knowledge about lawmaking and allows prediction, whereas the models based on Bratman's theory have a very limited predictive and explicative power. What is more, we will question the validity of the most fundamental assumption that underpins both Ekins' and Shapiro's views: The idea that a piece of legislation is the product of a *shared intention.* Instead, it shall be regarded as the product of a rational coordination through mutual expectations.

2. Richard Ekins: Lawmaking and Joint Intentions

Richard Ekins claims that legislatures can be perspicuously understood as shared cooperative activities that presuppose interlocking intentions by their members: Ekins argues that the central, paradigmatic case of legislatures (the Wenstminster Parliament, for instance) is formed by cooperative groups that arise from the interlocking intentions of their members. Under the expected-strategies approach, Ekins's view is mistaken: Legislatures shall rather be understood as game-like institutional frameworks characterized by incomplete information and imperfect solidarity. Coordination is mainly individual. However, this does not mean that an *homo ludicus* cannot sacrifice her payoffs for the team. We will return to this point in due course. The idea that legislators act for the common good of the people, and share intentions and belief is, at best, a wishful thinking. A more realistic explanation of the "legislative game", instead, necessarily requires an account of legislation *qua* shared cooperative activity[7], based on the notions of *team reasoning* and on *game theory*[8].

Ekins claims that legislatures are the central political institutions in any well-formed legal order[9]: Any act of lawmaking must be based on *good reasons* that justify

5 Heritier, 2012.

6 An important study to this end is offered by Binmore, 1994 and 1998.

7 Pacherie, 2011: 173–92; Pacherie, 2013: 1817–39. For a critical analysis of Bacharach, see instead Hindriks, F. 2012: 198–220.

8 Bacharach, 1999: 117–47; Bacharach, 2001; Bacharach, 2006. For an extensive analysis, see Roversi and Sardo, 2019: 79ff.

9 Ekins, 2012: 22.

enacting the law in question[10]. In a word, legislation is not simply a matter of counting votes[11]. Skeptical takes on legislative intent – such as the ones notably endorsed by Gustav Radbruch and Ronald Dworkin – inevitably fail to recognize the fundamental role that *interlocking intentions* and the presence of a *common plan* play in the formation of a group[12]. By contrast, according to Ekins –who basically follows the philosophy of action elaborated by Michael Bratman– the members of a group necessarily seek coordination, by means of a common plan and meshing subplans[13], both based on joint intentions[14]. If the members of party *x* vote, in agreement with the members of party *y*, for a total ban on the importation of chlorinated chicken in Europe, according to Ekins, we shall consider that: *x* and *y* have a common external common goal; the relevant members of *x* and *y* share the common intention of banning the importation of chlorinated chicken; the common plan, the content of the law, and the totality of the procedures for passing the law are part of common knowledge; the members of party *x* and *y* vote for the total ban because of the abovementioned elements, which are treated as good reasons for action by Ekins.

In order to explain the notion of group action Ekins relies on Michael Bratman's model, which has become what we might call the "received" view of shared collective activities in the philosophy of action[15]. However, Bratman's account was originally created for small-group interactions. In fact, the cases studied by Bratman normally involve situations such as: Jenny and John go out for a walk; Tim and Tom want to have dinner together; Francis and Immanuel want to wash the dishes together, and other interaction between two or three persons. Being aware of the dissimilarities between legislatures and these small groups, Ekins introduces some adjustments in order to adapt the account to larger groups, such as legislative assemblies. In this sense, it seems appropriate to consider Ekins' theory as an extension of Bratman's.

The core of Bratman's conception of shared cooperative activity, which Ekins fully endorses[16], is captured by the well-known scheme that defines shared intention[17]:

> We intend to J if, and only if,
> 1) (a) I intend that we J, and (b) you intend that we J;
> 2) I intend that we J in accordance with and because of 1a, 1b, and the meshing subplans for 1a and 1b; you intend that we J in accordance with and because of 1a, 1b, and the meshing sub-plans for 1a and 1b;
> 3) 1 and 2 are common knowledge between us.

10 *Ibid.*: 9.
11 *Ibid.*: 13, 24, 49 ff.
12 *Ibid.*: 20 ff.; 49 ff.
13 *Ibid.*: 55.
14 *Ibid.*: 52.
15 See at least Bratman, 1993: 97–113; Bratman, 1999.
16 Ekins, 2012: 54, 57.
17 Bratman, 1999: 106.

In Bratman's account, the scheme that defines shared intention is combined with the notion of plans: a rational agent is assumed to be able to take commitments that constraint her future behavior. Plans dispose meta-rankings, namely, rankings that are binding over the possible preference that an agent, or a group of agents, might take in the future. Going back to our previous example, the plan of a total ban on the importation of chlorinated chicken takes priority over the plan of a partial ban on chlorinated chicken both for the relevant members of *x* and *y*. The non-relevant members of *x* and *y* (for instance the backbenchers *qua* agents of the parliament that have a very limited power) simply accept to conform with the proposition, which is known by them, just as the procedures for voting. In Section 4, Shapiro's discussion of Bratman's account will clearly show that this feature is central for coordination. Bratman's model provides an analytic scheme for analyzing the core of any shared cooperative activity.

So, for instance, Matteo and Elisa have the shared intention to prohibit the consumption of "cannabis light" together *if and only if*: (a) Matteo intends to issue the prohibition with Elisa, and Elisa intends to issue the prohibition with Matteo; (b) Matteo intends to issue the prohibition with Elisa (and vice versa) precisely (or at least also) because Elisa intends to prohibit the consumption of cannabis with Matteo, under the meshing subplans of a master plan labelled "prohibiting the consumption of cannabis light together"; (c) the propositions under (a) and (b) are common knowledge between Matteo and Elisa. The common goal is to prohibit the consumption of cannabis light[18]. They might then decide to adopt a common plan, which is normally regarded as binding.

According to widely shared intuitions, this account is highly demanding, from both a metaphysical and a cognitive point of view. The high demands of Bratman's model can be appreciated even by those who are not inclined to accept the game-theoretic approach. These requirements *per se* offer a good reason for departing from Bratman and, in our view, for endorsing a model that, precisely as game theory, is based on a purely subjective characterization of human coordination: Common beliefs are substituted by expectations about the behavior of the other agents, and the goal is seeking individual payoffs maximization by playing the best strategy. These shortcomings of Bratman's model, first pointed out by Elizabeth Pacherie[19], make it clearly unsuitable for capturing the real nature of lawmaking. In order for an action to be a joint action, all participants are required to have (a) a shared knowledge of everyone else's beliefs and intentions, (b) good control over subplans, and (c) a common masterplan, along with meshing its subplans. Evidently, these requirements cannot be satisfied by a legislature conceived as a hierarchical, competitive, framework where several teams (political parties, coalitions and, individual agents) play against each other. With respect to legislation, the hierarchical structure of the group changes the dependence relations between the participants and the amount of shared information varies from

18 See Bratman, 2009: 41–59.
19 Pacherie, 2011: 176 ff.

symmetrical to asymmetrical[20]. So, for instance, the attribution of the intention 'X Y' to the Bagman that votes because he is ordered to do so would be misleading, whereas the intention 'X Y' might be correctly attributed to the leader of the party.

Within the framework of an institutional context C, the agent A does not usually intent that 'we *J*' because she believes that the other agents B, C, D, …n intend that 'we *J*', and, by the same token, it is untrue that the success of *J-ing* depends on the persistence of A, B, C, D, …n's intention that 'we *J*'. The division of labor brings about differential contributions, and we cannot consider that every member of a team – let alone of legislation writ large – intends (and, perhaps, is accountable for) the same actions. The contribution of the Bagman is marginal, therefore, she deserves, at best, the attribution of participatory intention. What is more, only the "leaders", the "top dogs of the hierarchy", have planning, monitoring, and control responsibilities[21]. This marks is another contrast with the egalitarian situation, where everybody has good knowledge and control of the subplan, and everybody contributes to the joint goal. We might speculate that this has an impact on the strength of the sense of agency: the sense of agency is directly proportional to the capability of controlling, planning, and monitoring the actions of the group. Considered that the strength of agency depends on both self- and other- prediction, we can say that it depends on knowledge, planning, and control[22].

Therefore, should Bratman's account be applied straightforwardly to lawmaking, it would come with a major drawback. The account is clearly designed for small-scale egalitarian group actions, so it does not immediately capture the complexity of legislation, where a large number of participants is involved. Richard Ekins himself recognizes that, precisely for these reasons, Bratman's "standard" model shall be partly revised, and he proceeds in that sense[23]. As hinted above, this problem can be appreciated even without endorsing the game-theoretic approach. In fact, Ekins himself arranges a sort of "restatement" of Bratman's model.

First, in Ekins's restatement, the common-knowledge requirement applies only to the broad outlines of a statute coupled with the procedural rules adopted for deliberation[24]. This refinement is aimed at giving account of the role that backbenchers play: on the one hand, it is hard to see how these gregarious fellows can be aware of the details of the statutes, and of all the political "secrets" that determined the decision of their leaders; on the other hand, according to Ekins, it would be implausible to think that they don't have any knowledge of the statute that they are approving.

Second, Ekins assumes that, due to the institutional dimension that characterizes any legal system, we must introduce a further layer into Bratman's model. Law is a set of complex social facts, and according to Ekins the most convincing explanation of what a social fact is proceeds by way of John Searle's *constitutive rules*. Social facts

20 Kutz, 2000: 23.
21 Pacherie, 2012: 372.
22 Pacherie, 2012: 373.
23 Ekins, 201:, 54ff.
24 *Ibid.*: 13, 61 f.

are "nested within one another," and their deep logical structure corresponds to a constitutive rule, that is, a social norm in the form "*X* counts as *Y* in context *C*."[25]

Third, Ekins introduces the distinction between central and noncentral cases to explain all sorts of "deviant" situations that do not conform to what we have called the standard model[26]: a central case paradigmatically exemplifies a well-formed group; a noncentral case, by contrast, is a *defective* example of a group. So, for instance, a member of a certain group might attempt to advance her own agenda rather than the purpose of the group, as it happens when a public officer engages, so to speak, in forms of "espionage". In such a situation of "secret defection," even if the spy still takes part in many group actions, her action will be "parasitic on that of a good member"[27]. Other noncentral cases might be characterized by a breach of the intentional-action-coordination requirement, and by a lack of mutual responsiveness. According to Richard Ekins, a legislator is defective if she does not promote the *common good*.

Now, why shall we consider Ekins's account mistaken? It seems to us that lawmaking, so to speak, is not a friendly jamboree festival, as Ekins claims. In this respect, Ronald Dworkin – in spite of his idealist thoughts on the possibility of having "one right answer" for any legal case – was more realistic on the functioning of a legislature: strategic action and agenda-setting play a key-role in lawmaking[28]. What is more, the enactment of a law is a complex process that goes far beyond the halls of a legislative body: government officials and legislative aides draft the bill; citizens write to their legislators; lobbyists and political-action groups propose – basically, impose – revisions[29]; and finally, in most Western systems, the President or Prime Minister signs the bill into law[30]. Sometimes, the worry that he might refuse to sign can lead to a radical modification of the legislative proposal, which does not correspond, strictly speaking, to the will of the legislative assembly. Parliaments are always split into several factions, or groups,

25 *Ibid.*: 57–8.

26 *Ibid.*: 62ff.

27 *Ibid.*: 63. Ermakoff, 2008 offers a nice, strategic reconstruction of "collective abdications", a notion that, to a certain extent, corresponds to the concept of "defection". If our understanding is correct, our view is compatible with Ermakoff's theory, which is based on a sociological approach, too: We also believe that both surrender and defection *qua* actions are strategic response to coordination puzzles. In Ermakoff's jargon, we'd say that they are the outcome of a process of rational "collective alignment". Furthermore, we clearly agree with the idea that collective alignment responds to subjective beliefs and expectations. Then, one might legitimately ask: Why have we not used Ermakoff in our paper? The reason is quite straightforward: Ermakoff's analysis is primarily focused on two international law cases of unconditioned surrender of power –the enabling bill granting Hitler the right to amend the Weimar constitution without parliamentary supervision, and the transfer of full legislative powers to Marshal Pétain – whereas our analysis is primarily concerned with conditioned alignments among individual law-makers within a legislative bodies, from a perspective which is internal to a legal system considered in isolation. Dealing with deep changes of the material constitution of a wicked state in a context of international crisis goes far beyond the more limited scope of the current inquiry. On the notion of "wicked legal system" see Dyzenhaus, 1998.

28 Romer and Rosenthal, 1978: 27-43; Shepsle, 1992: 249ff.; Diermeier and Fong, 2011: 947.

29 Bennedsen and Feldman, 2002: 919–46; Helpman and Persson, 2001: 1538ff.

30 Dworkin, 1986: 317ff. Waldron, 1999: 119–46.

and many deputies and senators vote yes or no because they are pressured into doing so by their supporters or by their parliamentary leaders[31]. Politicians switch from one party to another, and, as it is well-known, they have a keen interest in winning the election, keeping their post, and exercise their power. In all these cases, the preconditions for shared intentions are simply absent. However, this does not rule out the possibility that, on many occasions, the degree of cooperation can be very high. Intelligent agents of the legislature will coordinate their efforts to achieve individual and team goals, but without sharing beliefs and intentions or adopting a common plan. In all these cases, cooperation arises from equilibria within a game, where politicians act like rowers on a boat. Seasoned politicians are, after all, good *homini ludici*: they know what they can expect from each other. All these features of the lawmaking process are well-known and their status is independent from the game-theoretic analysis, although they offer good reasons for endorsing the fundamental principles of the game-theoretic model.

Ekins's solution, instead, is to deny the pedigree of "central case" of all these situations. His mistake is extrapolating from his experience of good fellowship and mutual help that can be found within certain peculiar groups (families, religious groups, charity associations) to legislature writ large: The proponent of a central case thesis underestimates systematically the difficulty of designing a convincing (central) case that grasps all the essential properties of a relevant phenomenon, and to produce good arguments that show that everything that falls outside of the putative central case counts as only a defective or degenerate instance. This problem is amplified when the central case is too narrow with respect to the empirical phenomena that should be explained, such as in the case of Ekins vis-à-vis lawmaking. We submit that the expected-strategies approach offers a better option, for it explains coordination without resorting to the heavy-weight metaphysics of a central case. As hinted earlier, one can describe the activity of a legislature as a strategic, circumspect, game, where individual players have only partial knowledge of what is going on in the legislative assembly. In such a context, where the principle "I'll scratch your back if you will scratch mine" is dominant, individuals often face a dilemma: they might either choose the best option according to their preference as individuals, or they might decide to adopt a more "collectivistic" perspective, and maximize according to the "team perspective", although this might lead to a sacrifice on the short run, but, hopefully, to better gains on the long run. The collectivistic perspective is parasitic on the individualist perspective and, therefore, the priority relation advocated by Ekins shall be overturned. We will return to this point in due course. Before that, we shall take into consideration a possible objection.

Ekins might claim that we are simply focusing on two altogether different things: evidently, we are endorsing a perspective which is very common in "choice theory", aimed at analyzing the political process that leads to the enactment of a law, whereas Ekins' theory is primarily aimed at analyzing the act of enacting a law[32]. In one word, Ekins might contend that a "choice theory" account confuses the political dynamics with the act of enacting a statute. Although the idea of a

31 Dworkin, 1986: 322.
32 Ekins, 2019: 152.

shared intention might be less plausible during the formation of political preferences, it is certainly more plausible if understood as an explanation of the very last act of a lawmaking process, namely, the enactment of a statute. We think that this argument is not sound, for it is affected by two major flaws.

First, it clearly begs the question. In fact, it assumes that the act of enactment is a sort of "one shot" that happens at the end of a legislative bargaining, whereas our claim is exactly the opposite: if we look at legislation as an empirical phenomena, we can easily realize that the adoption of a law is not a single act, for it is rather the result of a complex interaction of institutional agents. There is no confusion in the idea that the enactment of a law is a dynamic process; instead, the very idea that the enactment is a single collective act is reductionist.

Second, the idea that an account based on Bratman's theory is more focused on the "final result" of an action, rather than all the preparatory phase, is mistaken, too. It is well-known that Bratman's intentional model accords priority to the mental states that precede the actual performance of shared action, and appears to neglect the distinctive intersubjective (deontic) aspects and the social aspects (the creation of rights and duties) of acting together that follow the performance of the action, and which are also part of the institutional dimension that characterizes law and lawmaking.

So far, we have only offered a critical analysis of the model proposed by Ekins and a first series of arguments in favor of an alternative view based on game-theory. We have not yet illustrated the core of our proposal, which shall be presented in Sections 3 and 6. Sure enough, our proposal is conceptually independent from the critical analysis of Ekins (and Shapiro). However, the purpose of the current analysis is to propose the game-theoretic model as a new alternative to the dominant paradigms in legal theory; hence, the necessity of juxtaposing theories of competition arises.

3. Team Reasoning

As hinted above, we claim that a better account of legislation is based on team reasoning and game theory. Here, we will rely on Bacharach's model, because it allows at the same time rational individual reasoning and rational reasoning according to a team perspective, namely, a kind of reasoning that is aimed at maximizing the team's payoffs instead of the player's individual payoffs. A *team* is a group of agents with a common goal, which can be achieved only through an efficient combination of individual actions; accordingly, *teamwork* is a species of cooperation. The term *team reasoning* maps a distinctive pattern of reasoning: acting as a member of a team primarily entails being guided by the team's objectives. To put it in Bacharach's own words: "Somebody 'team reasons' if she works out the best possible feasible combination of actions for all the members of her team, then does her part in it."[33] Team reasoning is the result of an agent's cognitive act of self-framing: the agent considers herself as part of a team and, from that very mo-

33 Bacharach, 2006: 121.

ment, starts to think with specific concepts and descriptors that make it possible to engage in we-reasoning[34]. When an agent frames herself as a member of a team, she starts to think in an altogether different way: Her main problem switches from "What should *I* do?" to "What should *we* do?"[35] The first question frames a coordination problem within an entirely subjective perspective: the agent confronted with a coordination puzzle takes individual payoff maximization as the main goal of her actions. The second questions, instead, frames the coordination problem within a collective perspective: the agent confronted with a coordination puzzle ascribes priority to the team's interests (nota bene: not the shared intentions). Sure enough, team reasoning can occur in a game-like context such as lawmaking: a politician might frame herself either as an individual, selfish, agent, or as part of a wider project (a certain political party, commission, sub-group, a specific lobby). In other words, the strategic solution of a coordination puzzle can assume either a selfish or an altruistic standpoint. The selection of the frame constitutes the point of departure of any rational agent.

The actions of any individual agent of a legislature take place in a complex institutional framework. Let us consider the Westminster parliament as the paradigmatic case of a legislature. If we rely on the team-reasoning model, the British Parliament, taken as a whole, cannot be considered a team, but should rather be portrayed as an *institutional framework* where several teams (parties, internal commissions, coalitions and lobbies) play a bargaining game. Constitutive rules create the basic structure of the institutional setting (House of Lords, House of Commons, Government Miniseries, Prime Minister), the fundamental empowerments, and the procedures for the adoption of the statutes. Politicians are individual players who can decide to be part of more than one team at once: for instance, a politician might frame herself as a member of both the Labour Party and an internal committee; but she might consider herself as a selfish individual, too. In such a political context, relations between teams are clearly characterized by *imperfect solidarity* and *incomplete information*: There might be coalitions and alliances, but teams and players are both clearly competing for winning the election, getting majority support, , and obtaining purely economic benefits. A policy of full-disclosure would be out of place: most of the time, individual players are not aware of what the members of the other parties are up to; and it is not infrequent at all the circumstance in which they are not aware of what the other members of the same times are going to do. Therefore, they can elaborate only rational expectations about the possible moves of the other players, without being sure about their

34 *Ibid.*: 69.

35 *Ibid.*: 182ff.; italics added. The relation of association between object and description can be represented as follows: there is a function $E(.)$ that assigns to items of the set of object S a predicate in the set P of predicates. Let us take the predicate φ that belongs to P: $E(\varphi)$ is the extension of φ in S which, on its turn, is constituted by the set of objects that fall under the scope of predicate φ, that is, the objects that are associated with φ. Example: three objects $S = \{x_1, x_2, x_3\}$; x_1 is a cherry, x_2 is a banana, x_3 is an apple granny smith; and a frame constituted by a set of predicates P= {red, yellow, green}. Then $E(\text{green}) = \{x_2\}$. See Bacharach, 2006: 11.

mental states and without forming shared intentions. In this respect, lawmaking is more similar to a game of poker than to a decision to do the dishes together, or to have a constitutional walk in the park together.

Both individual and team reasoning must be *circumspect*. Being *homini ludici*, players must have expectations about each other's action. To wit: sound team reasoning must take account of *comember unreliability*, or unreliable team interaction[36]. A context in which we are not really sure whether our comembers truly identify with the group or are truly committed to the group's goal is an unreliable context. It goes beyond the modest purpose of this paper to offer an account of all possible legislative games. Here, it will suffice to say that, among the common cases of elementary unreliable interaction, is a situation in which a "selfish" player lapses and plays for another team.

We will elaborate a "toy game" that shows the explicative power of this game-theoretic model. Let us consider a legislative puzzle that is altogether similar to the Prisoner's Dilemma, which is possibly the best-well known game-theoretic situation. Ann and Bob are suspected of having robbed a bank together and a guard was killed during the heist. They are interrogated in separate rooms at the same time and cannot communicate with each other. The detectives make the same offer to both: "if you confess and blame your partner of first degree murder, you walk free". Detectives are making these offers because they have a weak murder case, and if both Ann and Bob stay silent, they will be charged of the robbery only. What is rational for Ann and Bob to do in this situation is determined by the payoffs of different courses of actions. In the Prisoner's Dilemma, the best course of action for Ann and Bob, if they were capable of cooperating, would be to stay silent–the sentence for robbery softer than the one for murder. But they face a dilemma exactly because they cannot cooperate. What is rational for them to plan since they cannot cooperate? What strategy is rational for them? Game theory says it is rational for them to confess. A confession is the best course of action on the assumption the other suspect will also take the best self-interested course of action–it is a dominant course of action. Accordingly, double confession is called a Nash equilibrium–a solution that no player has reason to change unless another player changes her strategy (or plan). In fact, Ann is better if she confesses when Bob confesses, but also when Bob stays silent. But so is Bob. So they both confess.

The Prisoner's Dilemma portrays a situation where the individual agent is confronted with a fundamental choice: From a purely individual perspective, the option *defect* dominates the option *cooperate*, because the former grants a higher payoff, irrespectively of what the opponent choses. The Prisoner's Dilemma faced by Ann and Bob can be represented through the following payoffs matrix, where the numbers indicate the maximum years of detention for Ann, who is Player 1, and Bob, who is Player 2. In each box, the number on the right indicates Ann's possible outcomes, whereas the number on the left shows Bob's possible outcomes:

36 Bacharach, 2006: 163.

		Player 2	
		cooperate	defect
Player 1	cooperate	6,6	0,7
	defect	7,0	1,1

Crucially the solution of the game depends on the moves of the Player 2: the equilibrium is given by the situation in which both Players decide to defect (lower-right corner). Now, Prisoner's Dilemma-like situations are frequent in legislation. Let us consider the following, simple scenario. Player 1 is a politician of the party X. He gets an offer from party Y, which is the direct competitor of party X, to vote against the proposition of party X, in order to make X lose majority support. The offer is not a form of corruption, strictly speaking, but provides individual benefits that can be quantified with the numeric values of the matrix (say, the offer of a stronger position within the competing party Y after the party X loses majority support). Player 2 is another member of party X, who might receive a similar offer from party Y. Let us further assume that, in order to lose majority, it is sufficient that only one of the two players votes against the proposition. Therefore, only if both Player 1 and Player 2 decide not to vote against the proposition, the majority will be confirmed. A further assumption of this simple game, is that Player 1 is *expecting* that Player 2 will receive an analogous offer by party Y. It is clear enough that this puzzle is a "twin brother" of the Prisoner's Dilemma.

Now, let us first consider Player 1 as an individualistic maximizer who ranks her wealth as the first best. Under such condition, if we endorse Bacharach's model, we would say that Player 1 is framing herself in the 'I-mode'. According to the principles of rationality, and the individual ranking of preferences at stake, Player 1, in 'I-mode', should prefer to accept the offer, and betray her party. Player 1 has only a partial information of what is going on, and must act in a circumspect way with respect to the possible choices of Player 2: in fact, Player 1 does not know what Player 2 will do, and she is in doubt whether to expect that Player 2 will either take or reject the offer, too. Therefore, she should definitely betray Party X, and go for the Equilibrium, which is the best option no matter what Player 2 does: if Player 2 betrays, then they are both better-off. If Player 2 does not betray, too bad for her.

However, the same situation will radically changes if Player 1 decides to endorse a team-reasoning perspective, namely, to assign priority to the team's payoff's, instead of maximizing her individual benefit. If Player 1 decided to act for the team, and, accordingly, considers that *her* team is Party X, she should reject the offer of Party Y, and vote for the proposition. No matter what happens, this this would give Party X at least one chance to keep the majority. Also in this case, Player 1 can form only expectations about what Player 2 might do, for she does not know her beliefs, and there are no interlocking intentions between the two players. However, there is at least a possible scenario where Player 2 does not take the offer and, even if this would be the least probable scenario, the mere possibility of defect/

defect would be sufficient for preferring that option from the team's perspective. Sure enough, this is not the best option according to the I-mode, but it is the best option according to the We-mode, if the We-frame portrays Player 1 as a member of Party X. If the We-frame was different, that is to say, if Player 1 was a playing for a different team – say, Player 1 frames herself a future member of Party Y, or as a two-men team with Player 2 – the solution of the dilemma would be different, too. But if we stick to the view that Player 1 considers herself as acting for the benefit of team X, and, accordingly, decides to do the best for her team, in spite of the possibility that Player 2 might decide to defect, the decision of Player 1 not to defect is the only move that could give a chance to his party not to lose the majority support. We can concede that, should Player 1 have absolute certainty (100% probability) that Player 2 will take the offer, then there would be no reason to sacrifice her individual wealth for a lost cause. However, under condition of uncertainty, playing for the team would be more rational from the We-mode perspective. As the present analysis clearly shows, a frequent situation of lawmaking bargaining – what Ekins would dub "secret defection" – is not considered, implausibly, as a degenerate or defective case of legislation. The game-theoretic model can frame both situations of selfish political agents seeking individual payoff maximization and altruistic team players. The former individual acts in I-mode, whereas the latter acts in We-mode. Furthermore, the possible outcomes of the secret defection can be predicted using the payoff matrix and the best strategy can be identified through Nash Equilibrium. This predictive capacity is absent in Ekins' model.

This example shows how the best strategy changes according to the frame (I-mode or We-mode). From a conceptual point of view, the Players are choosing among act-descriptions. What is more, Players are not ascribing mental states (beliefs, desires, and so forth) to each other: they are simply elaborating expectations about the possible strategies of the various Players, formulated as act-descriptions. Finally, the expectations about the possible moves influences the determination of the best decision. There are no interlocking intentions, here, and the explicative power of the "toy-model" is evident once we think about we think about how simple negotiations work within a parliamentary within a parliamentary assembly. Of course, this reconstruction offers only a tiny *prolegomena* to the game-theoretic analysis of "legislative games", which most of the time are much more complex forms of sequential bargaining among a plurality of players. This framework provides a new basis for analyzing lawmaking without relying on Bratman.

4. Scott Shapiro's *Planning Theory of Law*

In Legality, Shapiro follows Bratman in celebrating how our ability to plan allows us as both individuals and community members to coordinate our actions in the face of conflict and uncertainty. In our social life, conflict and uncertainty arise because of the complexity, contentiousness, and arbitrariness of the choices we have to make. The law is one of the ways in which we deal with these problems. Shapiro turns our planning ability into nothing less than an essential feature of the

law. More precisely, Shapiro articulates a theory of law which relies extensively on the concept of plans, the Planning Theory of Law: "legal systems are institutions of social planning and their fundamental aim is to compensate for the deficiencies of alternative forms of planning in the circumstances of legality"[37]–i.e. "whenever a community has numerous and serious moral problems whose solutions are complex, contentious, or arbitrary"[38]. First and foremost, Shapiro uses the Planning Theory to solve the Possibility Puzzle, namely, how can legal authority be conferred by legal norms that already have legal authority? This chicken-egg paradox has always been a prominent problem in jurisprudence that has not yet received a convincing answer. It is also the main focus of our engagement with the Planning Theory[39].

This section describes Shapiro's Planning Theory, putting emphasis on the role that the notion of planning plays in addressing the Possibility Puzzle. The next section exposes some limitations of this account and explains how the expected-strategy approach leads to a more parsimonious and convincing – or so we argue – solution to the Possibility Puzzle.

The Planning Theory of Law is constructed around the concept of plan; Shapiro breaks the whole theory down to the conjunction of three thesis, namely, the Planning Thesis, the Shared Agency Thesis, and the Moral Aim Thesis. We intend to identify some of the problems the widespread reliance on the concept of shared plans generates in the Planning Theory, to suggest, at a later stage, that a more parsimonious answer to the Possibility Puzzle deserves attentive consideration. Let us proceed by first describing what a plan is for Shapiro, to then articulate the above-mentioned theses.

As a comparison with Section 2 will make clear, Shapiro, too, relies on Bratman's conceptual apparatus and, in particular, on the concept of a plan. In Shapiro's own terms, "plans are abstract propositional entities that require, permit, or authorize agents to act, or not act, in certain ways under certain conditions"[40]. Plans are typically produced by a purposive process, have a setting and dispositional capacity as well as a partial and nested structure. Planning is purposive because it "has the function of producing norms"; planning is settling because it "produces norms that are supposed to settle, and purport to settle, questions about how to act"[41]; planning is dispositive because it "disposes addresses to obey"[42]; finally, planning has a partial and nested structure because plans begin as "empty shells" and they get filled by a myriad of sub-plans meshing together[43]. Think again of prohibition-

37 Shapiro 2011: 171.
38 *Ibid.*: 170.
39 Shapiro deploys the Planning Theory to offer original insights on a number of jurisprudential topics, including theoretical disagreements and legal interpretation, as well as the internal feud between inclusive (soft) and exclusive (hard) positivists.
40 Shapiro 2011: 127.
41 For a full articulation of this feature of plans, see Gilbert 2014: 108-113.
42 *Ibid.*: 201.
43 *Ibid.*: 121.

ism, from the perspective of a layman subject to the prohibition. The prohibition of alcohol consumption is the result of purposive activity; it is also settling with regard to what the layman ought not to drink; it is well-known that prohibitionism was not entirely dispositivite, but it was also not mere ink on paper either; finally, the prohibition of alcohol consumption will have to mesh with multiple other plans that the layman will form during his daily activities.

Let us proceed to the articulation of the three core theses of the Planning Theory of Law, beginning with the Planning Thesis: Legal activity is an activity of social planning and "legal activity" basically means "the exercise of legal authority"[44]. Social planning is a planning activity with distinctive features. The Planning Thesis extends these features to legal activity. As a type of planning, legal activity produces norms. As seen, planning is settling, dispositive, and purposive and, according to the Planning Thesis, so is legal activity–the exercise of legal authority. The distinctive features of social planning are: creating binding standards of behavior for community members which are general and normally publicly accessible. In addition to social planning, legal authorities normally engage in enforcement activities[45], but sanctions are not a necessary feature of a legal system[46]. The explicit form of a norm establishing the income tax rate is, accordingly "Everyone, pay x percent of your income in taxes"[47]. It is general because it refers to everyone, it is publicly accessible, and it purports to settle the question of how much of your income you are supposed to pay to the state.

Alongside the Planning Thesis, Shapiro defends the Shared Agency Thesis: Legal activity is a shared activity. The exercise of legal authority (legal activity) is a *shared activity* because "the various legal actors involved play certain roles in the same activity of social planning … . Each has a part to play in planning for the community"[48]. For legal activity to be shared, "A legal authority is simply required to accept the shared master plan of the legal system"[49]. The Shared Agency Thesis rests on two concepts, acceptance and shared master plan. Acceptance is a concept with a long history in legal theory[50]; it describes the attitude of someone using the law as evaluation parameter of past actions and as guidance for future actions. Acceptance of rules and plans is in fact described by Shapiro as the willingness to use rules and plans as binding in practical reasoning. The shared master plan is, instead, an original element of Shapiro's research. The master plan is supposed to settle disputes about the exercise of legal authority[51]. Notably, accepting plans is open-ended, in the sense that the reason why someone accepts a plan is not important. Two agents can be sharing a plan even when they accept it for very differ-

44 *Ibid.*: 195.
45 *Ibid.*: 204.
46 *Ibid.*: 169-170. For an insightful discussion of this point, see Schauer 2010.
47 *Ibid.*: 231.
48 *Ibid.*: 204.
49 *Ibid.*: 204.
50 See, Hart 1960.
51 Shapiro 2011: 166, 177-178, 205-208.

ent reasons. Repeatedly, Shapiro emphasizes how planning allows the enlisting of alienated agents–agents that do not care about the good execution of the plan, but care only of the benefits they will receive by performing their part in it[52].

Finally, Shapiro defends the Moral Aim Thesis, which holds that "(t)he fundamental aim of legal activity is to remedy the moral deficiencies of the circumstances of legality". The moral deficiencies Shapiro refers to consist essentially in cognitive limitations, excessive deliberation costs, and coordination problems[53]. Accordingly, "(t)he circumstances of legality obtain whenever a community has numerous and serious moral problems whose solutions are complex, contentious, or arbitrary"[54].

At first glance, the idea of grounding normativity in expectations and equilibria and the construct of the *homo ludicus* may appear to have little in common with Shapiro's conceptual apparatus. To show that this is not the case, we will have to dig deeper into Shapiro's solution to the Possibility Puzzle. On the surface, in fact, only the Shared Agency Thesis seems to emphasize what we try to downplay, namely the role of shared intentions. Moreover, the Shared Agency Thesis is a thesis about the exercise of legal authority (legal activity) not about how community members interact with the law. The next step of the analysis casts doubts on this superficial account.

Shapiro's original solution to the Possibility Puzzle capitalizes on the normative power of plans for the planners–plans are settling for the planners, so that my plan is settling for me, and our planning is settling for us. The Possibility Puzzle is solved because the law is settling for its addresses because the law is a form of social planning: The law has the same settling power that my plan has for me and our plan has for us. An intuitive and relatively straightforward solution would be explaining how a plan can be settling for a third-party. Such intuitive solution would allow for the plans laid by legal authority to be settling for third-parties, namely the addresses of legal activity. This intuitive solution, however, does not solve the Possibility Puzzle. The normativity of plans comes from the means-end relationship between the goals of the planner and the plan that is intended to reach these goals. When the plan is meant to reach the goals of the planner(s), plans are settling for the planner(s). Yet, there is no reason to extend this settling feature to third parties that do not share these goals[55].

If legal plans cannot be settling for third-parties, and surely they are not my plan, the only remaining option available is that legal plans are settling because they are our plans. In other words, in some sense, legal authorities and their subjects would be, so to speak, co-authors of legal plans–accordingly, legal plans would be our plans and the Possibility Puzzle would be solved. But to solve it, we need shared plans between legal authorities and their addresses[56]. Ultimately, Sha-

52 See, in particular, *Ibid.*: 144-146.
53 See, for example, *Ibid.*: 134.
54 Ibid,, 170.
55 See Celano 2013: especially 130-137.
56 See Shapiro 2011: 134–137.

piro's way out is deriving the normativity of law directly from the normativity of our plans because the law can be adequately conceived as our plan–the plan of the community members. As discussed above, we find the idea of shared plans (and intentions) too demanding for reconstructing legislative intent and it is patently the case that those concerns apply *a fortiori* here. In what follows, we want to offer a different conception of the idea that the way in which the law fulfills its moral aim – that is, planning for the community – can be brought to coherence with the expected-strategy approach. In fact, this game-theoretic view of normativity is grounded in individual instrumental rationality, without the need of shared plans and intensions. When the law 'plans for the community' it creates game-theoretic frameworks that allow individuals to plan better for themselves. In so doing, the law helps its subjects in being more predicable – in being more of a *homus ludicus.*

5. A Different Solution to The Possibility Puzzle: The Normativity of Legality Derives from Expectations

This section questions the necessity of shared plans and intentions to explain the features of the law Shapiro is mostly interested into, namely how legal norms have normative power–how, in other words, we can solve the Possibility Puzzle. It will be argued that the law is settling because it enables it addresses to form better, more effective individual plans.

To be sure, the Planning Theory has many attractive features. First of all, individual planning is an insightful concept. In particular, the idea that individual plans are settling because of the rules of instrumental rationality is a powerful one. Moreover, we accept the Moral Aims Thesis and the conception of laws as universal means–"all-purpose tools that enable agents with complex goals, conflicting values, and limited abilities to achieve ends that they would not be able to achieve, or achieve as well, without them"[57]. Furthermore, coercion can be aptly understood as a useful tool for delivering better legal norms, rather than an essential feature of legal systems. Finally, the basic intuition that social coordination in complex situations is better achieved when agents can rely on legal norms is a plausible one.

What is unconvincing is the prominence given to shared plans. What we intend to show is that strategic individual planning shall have this prominence instead. Ultimately, Shapiro downplays the scope of strategic or game-theoretic deliberations because we cannot always rely on the decisional competence of others and we often face predictability problems. Shared planning solves this problem[58] because and insofar as it "enables some participants to channel the behavior of others in directions that they judge to be desirable"[59]. This observation is agreeable, but its

57 *Ibid.*. 173.
58 Shapiro presents these two issues as separate, but we see no harm in treating them as one.
59 Shapiro 2011: 132.

scope is rather limited. Consider two cars at a crossroad[60]. Who passes? In other words, how are the drivers going to solve their conflict over the use of the crossroad? Negotiation would be costly and prohibitively so in many situation. The law steps in and it introduces norms conveyed by traffic lights–the Traffic Light Game, the main rule of which is "if red, stop; if green, pass". One has a red light, and the other one has a green light. These colors are a correlation device – they inform the two drivers of who can pass. The Traffic Light Game solves their conflict over the use of the crossroad and avoids undesirable outcomes, such as a crash or a stand-off where the drivers have to decide who passes first. The point of the legal norm is thus to enable or empower the two drivers to design better individual plans. The legal norm does it the trick making the strategy of each driver expectable by the other.

Shapiro is aware that the idea of law as sharing plans is metaphysically demanding. In his view, for an activity to be shared, it is sufficient that "each person assesses the various options open to him based on his predictions about how others will act and chooses the option that he judges to be best"[61]. This is exactly the type of deliberation that game theory requires agents to perform in order to choose their individual strategy. And yet, we see no reason to conceive this strategic interaction as a set of shared beliefs and collective intentions. Consider again the Prisoner's Dilemma. As seen, Ann and Bob would be better off if they were to keep both their mouths shut, but they both end up spilling the beans because that is the best course of action independently of what the other player does.

It is obscure to us in what sense . As just shown, the Prisoner's Dilemma Ann and Bob face is a situation where "each person assesses the various options open to him based on his predictions about how others will act and chooses the option that he judges to be best"[62]. *Contra* Shapiro's view, for games with non-cooperative solutions like the Prisoner Dilemma, speaking of a shared activity is misleading. The solution of these games is determined by individual, strategic deliberation. It may make more sense to speak of a shared activity in games with a cooperative solution because in those games the strategy of the agents lead to some common activity–like hunting a deer in the Deer-Stag game or enjoying the same leisure activity in the Battle of the Sexes. However, as soon as one tries to explain cooperation in terms of shared activities, the objections developed above about legislation

60 This situation is similar to the Prisoner Dilemma discussed above. In particular, there is the following similarity between the strategies in the two situations: pass: confess=stop: silence. We prefer to discuss the crossroad scenario because the institutional dimension of the scenario is easier to emphasize. Moreover, we would like to address here a thoughtful critical remark raised by Giovanni Tuzet and Paolo Silvestri. They object that a game-theoretic perspective may be helpful in the analysis of normativity in simple coordination problems, but it is not particularly helpful in the analysis of more complex moral problems involving essentially contested moral concepts – for example, the rule establishing that abortion is permitted within the first 90 days of pregnancy. We agree. Our approach simply emphasizes a feature of legal norms that makes them settling, namely their capacity of making one's strategy expectable by the others.

61 Shapiro 2011: 131.

62 *Ibid.*: 131.

being a shared activity apply *a fortiori* when the cooperation involves large groups of agents. As the task is explaining both cooperative and non-cooperative interactions, a game-theoretic perspective is appealing. Strategic, game-theoretic deliberations operate at the level of individual planning pure and simple. Accordingly, they are significantly parsimonious in relation to the mental states of the agents.

Following this line of reasoning, a different–and astonishingly simple–answer to the Possibility Puzzle can be formulated: The law is settling, binding, or normative because it allows its addresses to plan better individually. Reconsider the example of the crossroad and imagine one driver runs the light. In Shapiro's account, the reason to complain goes like this: "you are not following the plan-norm we share, namely that red means that you stop, so that I can pass". A more parsimonious and intuitive account is way more plausible. The other driver's reason to complain is that "because of the legal norms, I expected that you would stop because red means that you stop, so that I can pass". Section 6 develops such an account.

6. The Expected-Strategy Approach

In sections 2 to 5, we have advanced two connected views about the conceptual apparatus needed to describe the core features of lawmaking and law compliance according to Ekins and Shapiro, respectively. While relying on intuitions similar to theirs about the close connection between planning and the law, we have rejected the move of shouldering shared plans with the conceptual weight-lifting. Our claim is that planning has the potential to explain important features of the law already when we focus on induvial planning. In our view, individual planning has a large enough back to play this role, once we put the practical significance of expectations about others' planning in the spotlight. To stress this feature of our account, we call it "expected-strategy approach".

The expected-strategy approach focuses on the connection between legal norms and planning at the individual level. Legal norms give to an agent reason to plan on the assumption, prediction, or expectation that others will conform to the standard of behavior described by the law–reason to expect other's actions. To illustrate this idea, recall the Prisoner Dilemma entrapping Ann and Bob. As seen, Ann and Bob are stuck in a Pareto inefficient equilibrium–they would both be better if they were able to both keep their mouths shut. Unfortunately, in the context of their Prisoner Dilemma, strategic rationality implies they will both spill the beans.

Imagine a different game, the Gang-Member Game. The situation is exactly the same as in the Prisoner's Dilemma, but now Ann and Bob are part of the Cat Gang. This changes the pay offs dramatically because the motto of the Cats is "Cats eat rats"–the gang members who confess are killed by other gang members on sight. Confessing now expectably leads to death, so both Ann and Bob are better off staying silent regardless of what the other does. So they both stay silent. This is a better plan for both Ann and Bob because now they both get the lightest sentence they could get. In comparison to the Prisoner's Dilemma, in the Gang-Member Game Ann and Bob are capable of planning

better thanks to the institutional support provided by the Cat Gang. Shapiro suggests us to put emphasis on membership and on the fact that death in case of collaboration with the police is something Ann and Bob have accepted–so that it is part of their own plan and their instrumental rationality requires them to stay silent. We, instead, emphasize how the Gang makes it convenient for both Ann and Bob to stay silent.

For our purposes, gang membership in the Gang-Member Game is like the traffic light in the Traffic Light Game seen in section 5. Gang membership and traffic lights are correlation devices. Both signal to game players how others expect them to behave and motivate players to do so. As anticipated, sanctions are important, but not essential, for this stabilization of behavior to take place. Gang membership and traffic lights illustrate a general point about legal norms. Legal norms are binding because they stabilize and make expectable the strategies of others, thereby improving one's planning ability.

Similar insights are being explored in the ontology of collective agency and also in the theory of institutions. In the debate on the ontology of collective action, Butterfill has recently described a type of individual planning called "parallel planning". In case of parallel planning, each agent has a single plan in mind for all the agents involved. Contrary to Bratman's shared plans, parallel plans do not mesh–as the label emphasizes. Butterfill suggests that parallel planning is made possible by "processes and representations more primitive than full-blown intention and planning"[63]. These processes and representations enable us to make predictions and form expectations about how others will act. In the theory of institutions, Guala and Hindriks go deeper by conceiving of institutions as rules-in-equilibria. According to them, institutions are made of rules, and these "rules are representations in symbolic form of the strategies that ought to be followed in a given game"[64]. The key insight of their account is that being rules in not enough. Institutions are made of rules that followed – rules describing the actual solution of the game being played. Like our expected-strategy approach, these strands of literature in different disciplines advance accounts of their *explananda* that work perfectly without shared intentions. To do so, these theoretical accounts describe the critical role that predictions or expectations about the behavior of others play in individual planning. The strand of literature more congenial to our approach comes, perhaps surprisingly, from the economic analysis of law.

Economic analysists of law have long relied on game theory in the analysis of what is usually called "the expressive function of the law"[65]. This literature articulates a richer account of legal norms than the one reducing legal norms to prices to be paid for the taking of a certain conduct[66]. This literature points out two

63 Butterfill 2018: 15.
64 Guala and Hindriks 2015: 467. See also Guala 2016: 3 ff.
65 See, for example, Sunstein 1996, Cooter 1998, McAdams 2015, Basu 2018.
66 For a powerful critique from within the economic analysis of law of the price theory of

important features of the expressive function of the law. First, the law expresses social values and, if agents internalize these values, their payoffs change. Imagine a version of the Gang-Member Game where Ann has a strong negative preference for collaborating with the police ("I ain't no snitch"). In this game, silence becomes the equilibrium solution because Ann has internalized the value behind the idea that "cats eat rats". In this context, Ann acts in accordance with the norms imposing her not to collaborate with the police not because of the fear of the sanction, but because she has internalized the value of not collaborating with the police. To be sure, internalizing the values expressed by the law is an important phenomenon. For our purposes, the signaling dimension of the expressive function of the law is even more interesting–and it has also been explored broadly by economic analysts of law. The law tries to create focal points. Focal points, as the name suggests, catch the attention of the agents. Because of their saliency, focal points make the coordination of individual planning easier. Thus, the law is effective when it creates outcomes that are focal points and, therefore, foster coordination and individual planning. Like Guala, Hindriks, and Butterfill 's accounts, the economic analysis of law focuses on the relationship between individual agency and its decisional framework.

The insight common to these multiple disciplines is that coordination between agents can be achieved in non-trivial circumstances without the need of shared plans or intentions. Our ability to form reliable predictions and expectations over the behavior of others is enough. It is for this reason that we have chosen to use the expression *homo ludicus* to describe the key feature of human agents for the expected-strategy approach. This insight is coherent with our suggestion of shifting the theoretical attention from shared plans and intentions to individual expectations about the behavior of others. The resulting approach can be aptly called "expected-strategy approach" as it focuses on expectations and recommends to deploy the conceptual apparatus of game theory for analytical purposes.

We have already seen how a Prisoner's Dilemma-like game can be used to grasp one of the simplest and quite common forms of legislative bargaining. In this context, it is useful to emphasize how the choices of the politicians involved is accounted for by relying on their expectations about the strategy of the other politicians. As we have seen in our example, the moves of Player 1 might vary according to her expectations about the possible behavior of Player 2.

Let us now reconsider also Shapiro's Planning Theory. As noted, Shapiro is concerned by the way in which one should deal with moral deficiencies in the circumstances of legality. These moral deficiencies derive from cognitive limitations, excessive deliberation costs, and coordination problems. Shapiro's concern is also at the core of the expected-strategy approach and the game-theoretic perspective it relies upon. The expected-strategy approach holds that "planning

legal sanctions, see Cooter 1984. This misguided intuition is, unfortunately, still a powerful one in the field.

for the community" in Planning Theory shall be understood as a means to enable community members to plan better–to better coordinate their individual plans. A form of better individual planning is the reason why the law is settling. When looking at the interactions between individual plans and legal norms, also the expected-strategy approach salutes the capacity of legal norms to enable individual planning in the face of cognitive limitations, excessive deliberation costs, and coordination problems. Yet, differently from the Planning Theory, the expected-strategy approach does not rely on a shared plan or intention to explain the capacity of legal norms to be setting. The reason why legal norms are settling is not because they are our plan, but because they allow me, you, them–everybody! – to plan better. They do so by making our actions more predictable – by making us better *homini ludici.*

7. Conclusions: *Homo Ludicus* – A Predictable Fellow

In this essay we have challenged the necessity of building on the notion of shared intentionality or plans in order to account for the central features of legal practice. The first feature is the idea that, at the legislative level, lawmaking presupposes a certain amount of joint intention and shared beliefs. This idea featured prominently in Ekins's account, which places the emphasis on the lawmaker perspective. The second feature is the capacity of the law of creating genuine obligations and other deontic statuses–that is, of being settling. Shapiro points out that jurisprudence scholarship has yet to give a convincing account of this settling capacity, which he labels Possibility Puzzle, and which mainly concerns the effect of a law on the legal subjects. Therefore, coordination takes place at two levels: At the level of normative production, and at the level of application.

We agree with Ekins on the intuition that, to a certain extent, we can speak of "legislative intent". However, we contend that legislation is mainly the result of individual decisions, and not of shared intentions. What is more, we consider that the best explanation of the interactions of the agents of a legislature is a game-theoretic account.

Analogously, we agree with Shapiro that the reliability, predictability, and stability, the law creates is worthy of celebration and key to solve the Possibility Puzzle. We contest that these intuitions require us to conceive of legal norms as shared plans or intentions to explain their settling power. Legal norms allow everybody to plan better primarily because everyone has clearer expectations about what others will do. In this sense, coercion is not a necessary feature of the law, but it surely plays a pivotal role in stabilizing expectation because of its deterrent effect. Legal norms achieve this result because they make our plans more predicable to others by expressing values, giving prudential reasons for action, and creating focal points.

We believe there is much to be gained by applying the game-theoretic approach to law: First of all, an approach based on game theory is ontologically parsimonious, for it does not rely on *sui generis* entities or *sui generis* mental states in order

to explain the notion of shared collective activities. All we need in order is a specific notion of reasoning, coupled with a cognitive explanation of the self-framing process and a set of constitutive rules by which the game is defined. We do not have to bother with the shaky idea of a "plural subject" that supervenes on individual actions. Cooperation arises from constantly shifting equilibria and transient Pareto-optimal conditions. The connections among the players–in virtue of which the shared collective activity is possible–are rooted in the *interdependence* of the players' courses of actions, which they are forced to choose independently under conditions of uncertainty[67]. The model is not too demanding from a cognitive point of view[68]: The game-theoretic approach does not require interlocking beliefs and intentions for the existence of a shared collective activity, for it based player's outcomes, profiles, individual acts, and expectations.

Second, the idea of self-framing can be used as a starting point for achieving greater accuracy in assessing degrees of team confidence and team identification. As Waldron explains, "legislators are a diverse body of people, drawn from different groups in heterogenous and multicultural society. […] there is very little in the way of shared cultural and social understandings among them beyond the stiff and rather formal language that they address to one another in their legislative debates"[69]. Empirical studies show that legislatures are "wholly chaotic and unpredictable," and subject to random shocks over time[70]. If that is the state of the art, we cannot design a model of legislature that places all the participants on a par. Some team members will have a higher level of identification with the team and its actions, while other members will have a lower level of identification.

Third, connecting the normativity of law to its capacity of improving the ability of individuals of planning does justice to the moral function of the law–remedying moral deficiencies (Shapiro's Moral Aim Thesis). Moreover, it does so by developing the same fundamental intuition animating the Planning Theory, namely that planning is an insightful concept, the explanatory potential of which deserves more attention in general jurisprudence. However, the expected-strategy approach turns this intuition is a simpler and yet more solid answer to the Possibility Puzzle than the one offered by Shapiro.

Ultimately, our disagreements with Ekins and Shapiro are grounded in the emphasis we put on individual expectations. Expectations about the behavior of others is central to our planning ability. The law makes the behavior of others more expectable in a number of ways, such as giving prudential reasons for action, creating focal points, and expressing social values. What all these features of the law have in common is that they make the behavior of others more predictable. Generalizing, we think that the view of agents as *homini ludici* is of great promise for

67 Bacharach, 1976: Chapter 1.
68 Pacherie, 2013: 1833 ff.; Pacherie, 2011: 187 ff.
69 Waldron 1999: 123.
70 Farber and Frickey, 1987: 874.

jurisprudence. The *Homo Ludicus* is an agent whose interactions with others can be insightfully analyzed with simple game-theoretic tools and whose main social virtue is the predictability of his future actions. By stabilizing expectations about others' behavior the law is of great service to us, *homini ludici*.

References

Bacharach, M. (1976), *Economics and the Theory of Games,* London: The MacMillan Press.

Bacharach, M. (1999), "Interactive Team Reasoning: A Contribution to the Theory of Co-operation", 53 *Research in Economics*, 117–47.

Bacharach, M. (2001), "Framing and Cognition in Economics: The Bad News and the Good." Manuscript Presented at the ISER Workshop 2001 Cognitive Processes in Economics.

Bacharach, M. (2006), *Beyond Individual Choice. Teams and Frames in Game-Theory*. Princeton: Princeton University Press.

Basu, K. (2018), *The Republic of Beliefs: A New Approach to Law and Economics*. Princeton: Princeton University Press.

Bennedsen M. and S. E. Feldman, (2002), "Lobbying Legislatures," 110 *Journal of Political Economy* 110 4, 919–46.

Bicchieri, C. (1997), *Rationality and Coordination.* Cambridge: Cambridge University Press.

Bicchieri, C. (2005), *The Grammar of Society.* Cambridge: Cambridge University Press.

Binmore, K. (1994), Game Theory and the Social Contract, Vol. 1: Playing Fair. Cambridge, Mass.: The MIT Press.

Binmore, K. (1998), Game Theory and the Social Contract, Vol. 2: Just Playing. Cambridge, Mass.: The MIT Press.

Bratman, M. (1993), "Shared Intentions", *Ethics*, 104 (1): 97-113.

Bratman, M. (1999), *Faces of Intention*, Cambridge: Cambridge University Press.

Bratman, M. (2009), "Shared Agency", in C. Mantzavinos (ed.) *Philosophy of the Social Sciences: Philosophical Theory and Scientific Practice*, Cambridge: Cambridge University Press, 41–59.

Butterfill, S. A. (2018), *Planning for Collective Agency*. On file with the authors.

Celano, B. "What Can Plans Do for Legal Theory", in Canale and Tuzet (eds.), 129-152.

Canale, D. and G. Tuzet (eds.) (2013), *The Planning Theory of Law: A Critical Appraisal*. Springer.

Cooter, R. (1984), "Prices and Sanctions", *Colum. L. Rev.* 84: 1523.

Cooter R., (1998), "Expressive Law and Economics", *J. Legal Stud.* 27: 585.

Diermeier, D. and P. Fong. (2011), "Legislative Bargaining with Reconsideration", *The Quarterly Journal of Economics*, 126: 947–85.

Dworkin, R. (1986), *Law's Empire*, Cambridge, Mass.: Harvard University Press.

Dyzenhaus, D. (1998), *Judging the Judges, Judging Ourselves: Truth, Reconciliation and the Apartheid Legal Order,* Oxford, Hart Publishing, 1998.

Ekins R. (2012), *The Nature of Legislative Intent,* Oxford: Oxford University Press.

Ekins, R. (2019), "Intentions and Reflections: The Nature of Legislative Intent Revisited", 64 *The American Journal of Jurisprudence* 1, 139–162.

Ermakoff, I. (2008), *Ruling Oneself Out. A Theory of Collective Abdication,* Durham: Duke University Press.

Farber, D. A. and P. P. Frickey. (1987), "Jurisprudence of Public Choice", 65 *Texas Law Review* 5, 873–97.

Gilbert, M. (2014), *Joint Commitment. How We Make the Social World*. OUP.

Guala, F. and F. Hindrick (2015), "Institutions, rules, and Equilibria: A Unified Equilibria", *Journal of Institutional Economics*, 11(3): 459-480.
Guala, F. (2016), *Understanding Institutions. The Science and Philosophy of Living Together*. Princeton University Press.
Helpman E. and T. Persson. (2001), "Lobbying and Legislative Bargaining", 1 *Advances in Economic Analysis and Policy* 1, available at: http://www.bepress.com/bejeap/advances/vol1/iss1/art3.
Heritier, P. (2012), *Estetica Giuridica,* Torino: Giappichelli Editore.
Hindriks, F. (2012), "Team Reasoning and Group Identification", 24 *Rationality and Society* 2, 198–220.
Kutz, C. (2000), "Acting Together", 61 *Philosophy and Phenomenological Research* 1, 1–31.
McAdams, R. (2015), *The Expressive Powers of Law*. Harvard University Press.
Pacherie, E. (2011), "Framing Joint Action", *Rev. Phil. Psych*., 173–92.
Pacherie, E. (2012), "The phenomenology of joint action: Self-agency vs. joint-agency." In A. Seemann (Ed.) *Joint attention: New developments* 343–389. Cambridge: Cambridge University Press.
Pacherie, E. (2013), "Intentional Joint Agency: Shared Intention Lite", 190 *Synthese*, 1817–39.
Paulson, S.L., Litschewski Paulson, B. (1998), *Normativity and Norms: Critical Perspective on Kelsenian Themes,* Oxford: Claredon Press.
Raz, J. (1975), *Practical Reasons and Norms,* London/Oxford: Oxford University Press.
Romer, T. and H. Rosenthal. (1978), "Political Resource Allocation, Controlled Agendas, and the Status Quo", 33 *Public Choice*, 27–43.
Roversi, C. and A. Sardo [year?], "Ekins of Groups and Procedures", 64 *The American Journal of Jurisprudence* 1, 79-103.
Schauer, F. (2010), "The Best Laid Plans", *Yale Law Journal* 120: 586-621.
Shapiro, S. (2011), *Legality*, Yale University Press.
Shepsle, K. A. (1992), "Congress is a 'They,' Not an 'it': Legislative Intent as Oxymoron", 12 *International Review of Law and Economics* 2, 239–56.
Sunstein C.R. (1996), "On the Expressive Function of Law", 144 *University of Pennsylvania Law Review* 2012, 2021-2053.
Waldron, J. (1999), *Law and Disagreement*, Oxford: Clarendon Press.