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## THE NORMATIVITY OF INSTITUTIONS

abstract

Some philosophers have claimed that normativity is an essential feature of social institutions, and have identified the source of normativity in collective intentionality. In this paper I argue that (1) normativity is not essential for social institutions; (2) normativity has many sources and it is unlikely that a single theory is able to account for them all; (3) a powerful conception of institutions – the "rules in equilibrium" account – provides an adequate framework to represent the effects of normativity and to explain its social function; (4) it is a mistake to ask a theory of institutions to do more than that. While normativity is an important element of institutions, we should not build our social ontology on a single, specific conception of normativity.

keywords

institutions, norms, coordination

1. Introduction The topic of my talk is broader and narrower than the topic of the Spring School.<sup>1</sup> It is broader because I will focus on normativity, which is a more general phenomenon than commitment. But in another respect the topic is narrower because I will focus specifically on the normativity of institutions. This choice is determined mainly by my research interests, but what I will say has implications for social ontology in general – or at least I hope so. By way of an introduction, it is useful to place the problem in a wider framework. Normativity has become an increasingly important topic in contemporary philosophy. According to some scholars it is *the* most important question of philosophy. Partly this is because the domain of philosophers have retrenched in those domains where science does not seem to be able to make much progress. But one reason why science has made little progress is that normativity is a complex, even puzzling phenomenon. So philosophers have been lured toward a topic where progress may be difficult to obtain.

I should like to clarify at the outset that I do not mean to criticise those philosophers who work on normativity, and especially the normativity of collective or joint intentions. Collective intentionality is a fascinating topic in itself, and may turn out to be of utmost importance in ethics and the philosophy of mind. My view is simply that its role in social ontology has been misunderstood, and that it is important that we look at it from a different perspective. This position is not particularly original – I share it with those naturalists who believe that current debates in social ontology have become too detached from contemporary social science.<sup>2</sup> I fear that the divide between naturalists and anti-naturalists is growing deep (again) in social ontology, to the detriment of fruitful conversation, and this talk is a modest attempt to bridge the gap.<sup>3</sup>

Some of the thoughts that follow are admittedly only half-baked. I am addressing a huge topic,

<sup>1</sup> This paper is a revised transcript of the talk given at the Spring School on Joint Commitment, held at San Raffaele University in June 2015. Some of the material upon which the talk was based, and which is included in this written version, comes from my forthcoming monograph *Understanding Institutions*, as well as from papers written jointly with Frank Hindriks (see the reference section). Frank does not necessarily agree and is certainly not responsible for the views expressed in this paper, however. I am grateful to the members of the audience for their feedback, and especially to Margaret Gilbert and Christian List for subsequent conversations on the topic of this talk.

<sup>2</sup> See e.g. Kincaid (2012), Turner (2010).

<sup>3</sup> I have written about this in Guala (2015).

and I am concerned that social ontologists do not spend enough time thinking about it. If the talk will be at least a little provocative, I will have succeeded.

Social ontologists often make use of a classic philosophical argument that ought to be handled with care. The argument begins by claiming that current social science cannot explain X, where X is some interesting entity or phenomenon the existence of which we do not normally question. It then proceeds by saying that social science cannot explain it satisfactorily because Y is necessary to explain X, and our best scientific theories have no room for Y. Therefore, current theories must be revised or replaced by better theories that are able to account for Y. Raimo Tuomela, for example, has claimed that "central social notions as cooperation, social institutions, and the evolution of institutions, as well as collective and group responsibility, do require the full we-perspective as an underlying notion" (Tuomela 2002, p. viii), a perspective that standard theories in the social sciences lack. Therefore, his own research in social ontology "is meant in part to critically analyze the presuppositions of current scientific research and [...] to provide a new conceptual system for theory-building" (2002, p. 7). The structure of Tuomela's argument is the following: (1) Y (collective intentionality) is necessary to explain X (cooperation, conventions, institutions, responsibility). (2) Current social science has no room for Y. Therefore, (3) current social science cannot explain X, and ought to be reformed accordingly.

What has collective intentionality to do with normativity? Seminal theories of collective intentions typically begin with a critique of standard accounts of coordination and cooperation such as those that are commonly used in rational choice theory. The idea is that institutional behaviour cannot be explained as the aggregate outcome of a multitude of actions guided by individual intentions ("I want X, I believe Y", "you want X, you believe Y", etc.), plus some reflexive or recursive notion such as common knowledge. An adequate account must be built on the observation that the intentional states of human beings engaged in institutional activities are usually formulated in a collective mode ("we want X, we believe Y"), and such intentions have an intrinsic normative component.

I am simplifying a lot here, and I do not mean to say that anyone subscribes exactly to this simple version, but it gives the gist of the idea. Here are some examples to it back up. The first two are from Margaret Gilbert's seminal book *On Social Facts*:

Our conception of a social convention is the conception of a quasi-agreement which is generally regarded as grounding an ought judgment, where it is common knowledge in the population that this is so (Gilbert 1989, p. 369).

The link is a conceptual one: normative attitudes are to social conventions as femaleness is to sisterhood (Gilbert 1989, p. 350).

John Searle similarly identifies "deontic powers" as fundamental building blocks of social ontology:

An institution is any collectively accepted system of rules (procedures, practices) that enable us to create institutional facts. [...] The creation of an institutional fact is, thus, the collective assignment of a status function. The typical point of the creation of institutional facts by assigning status functions is to create deontic powers. So typically when we assign a status function Y to some object or person X we have created a situation in which we accept that a person S who stands in the appropriate relation to X is such that (S has power (S does A)). The whole analysis then gives us a systematic set of relationships between collective intentionality, the assignment of function, 2. Collective intentions and normativity the assignment of status functions, constitutive rules, institutional facts, and deontic powers. (Searle 2005, pp. 21-22)

Finally, according to Tuomela,

if there was an agreement to perform the joint action, there is also a non instrumental, intrinsic "ought", due to the very notion of agreement, to paint the house together and to perform one's part (Tuomela 2002, p. 142).

Collective acceptance in the strict we-mode sense entails that the participants have as their joint intention to do X in C and are collectively committed to this (Tuomela 2007, p. 207).

3. Is normativity necessary for institutions? The claim that the normativity of collective intentions is a necessary constituent of human sociality is not very plausible. The main reason is that the distinction between collective and individual mental states does not mirror the distinction between institutional and non-institutional, or even social and non-social phenomena. In other words, a taxonomy based on collective intentions does not cut the social world where it should.

To see why, it is sufficient to realise that many social institutions do not rely on normative commitments engendered by a joint intention. Consider racist institutions such as those that used to be common in many countries until not so long ago. Such institutions were constituted by many rules, some of which were encoded formally in the legal system and some of which were enforced by other means. In South Africa for instance, during the apartheid era, black people were expected to use different public transportation, to live in segregated townships, and white people could decide how to allocate resources (such as land) among the various "races" or ethnic groups. Informal conventions were also an important part of the system. In his autobiography, *Long Walk to Freedom*, Nelson Mandela for example recalls that at tea-time the black lawyers of the firm where he worked were expected not to use the same cups used by the white employees.

Now, to say that these rules were based on a collective agreement seems very bizarre. The rules certainly carried deontic force: the black person who refused to conform was breaching a norm. Those who conformed in turn did it because they were expected to, and did not dare contradicting these expectations – because they feared the punishment inflicted on deviants. But the norm did not rest on a collective agreement or a group intention: the whole point of apartheid in fact was to undermine the notion that black and white people belonged to the same community.<sup>4</sup>

The underlying problem is that normativity is an ambiguous notion. On one reading, a normative behaviour is just a behaviour that is expected and sanctioned in the community. This is the standard social science interpretation and does not require any notion of collective intentionality. On another interpretation, a normative behaviour is mandatory in virtue of a stronger binding relation – like a pact or a promise – that has been forged in the community. The normative force, in this case, is not based merely on expectations but on some underlying contract that provides legitimacy to the sanctions.

Returning to our example, it seems clear that the racist institutions of South Africa were endowed with normative power in the former, but not in the latter sense. And yet surely they were genuine institutions. But then we are forced to admit that the normativity of joint

<sup>4</sup> White people may have collectively agreed to enforce apartheid, of course. But the black did not, and nevertheless conformed most of the time. So clearly conformity with an institution does not require collective agreement.

commitment is not a necessary feature of institutions. Whether collective intentions are involved or not in social action seems to be a contingent rather than a conceptual issue, and we should better not build social ontology on this premise.

Some collective intentionality theorists have recognised the problem, and over the years have modified their position accordingly. For example, Searle now claims that institutions only require collective "recognition", instead of collective acceptance. This means that some institutions, like apartheid, exist even if some people are not bound by a joint commitment and do not take the rules to be legitimate: "one can recognize and act within institutions even in cases where one thinks that the institution is a bad thing" (Searle 2010, p. 57). But with commitment, collective intentionality also has to go. "This is an important point, because it shows that there are some forms of collective intentionality which are reducible to I-intentionality plus mutual belief" (Searle 2010, p. 58).

This line of argument, if correct, indicates that collective intentionality is not necessary for the existence of institutions. It does not demonstrate that collective intentionality does not exist or that it is useless, of course. We can happily concede that joint intentions and commitments are probably important for the functioning of *some* institutions.<sup>5</sup> But we should not make them the starting point of a controversial transcendental argument. As Stephen Turner has pointed out,

One oddity of transcendental arguments is this: they work only when there is no under determination, which is to say where the logical conditions for some possibility are univocal. But in the kinds of cases discussed by normativists, there are ordinarily a variety of theories. (Turner 2010, p. 22)

In this section I will argue that there is a viable alternative theory of institutions, and that normativity plays a different role in this theory than the one it plays in the collective intentionality programme. In various papers and in a forthcoming book I have argued that a satisfactory account of institutions can be found at the core of contemporary social science.<sup>6</sup> According to this account institutions are sets of *rules in equilibrium*. The main function of the rules is to indicate actions that promote coordination and cooperation. And, crucially, each individual has an incentive to choose those actions, if the others do the same.<sup>7</sup> For example, here is a sample of rules belonging to some familiar institutions:

- if the light is red you must stop, if it's green you can go (traffic);
- if the land has been registered in your name, you can use it (property);
- if the bill has been printed by the Central European Bank, you can use it as a medium of exchange (money).

Each rule codifies a behaviour – a set of actions – that solves a problem of coordination. A coordination problem is a strategic game with multiple equilibria. An equilibrium in game theory is a profile of strategies (or actions), one for each player participating in a strategic interaction. Each action may be described by a simple sentence of the form "choose X" or "do Y". The defining characteristic of an equilibrium – what distinguishes it from other

4. An alternative theory of institutions

<sup>5</sup> In fact there are good reasons to believe that reasoning in collective mode is useful for coordination, and hence for the existence and resilience of institutions, even though it is not necessary (see Guala 2016, Chs. 8-9).

<sup>6</sup> Cf. Guala and Hindriks (2015), Hindriks and Guala (2015), Guala (2016).

<sup>7</sup> For similar views, see Aoki (2011), Binmore (2010), Greif and Kingston (2011), Smit et al (2014).

profiles – is that each strategy must be a best response to the actions of the other players or, in other words, that no player has an incentive to change her strategy unilaterally. If the others do their part in the equilibrium, no player can do better by deviating. A classic example is the "driving game": drivers do not particularly care about keeping right or left, provided everybody does the same (Figure 1). So there are two possible equilibria in pure strategies, LL and RR. The theory, however, can be easily generalised to other cases, where the payoffs are asymmetric and the players have different preferences about the outcomes.

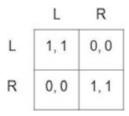


Figure 1. The driving game

It may be pointed out that the rules that govern our social interactions, from traffic to property, do not simply *indicate* an action ("do X"): usually, they have a normative element built into them ("you *must* do X"). The rules of traffic for example say that you *ought* to stop if the light is red, or that you *ought* to drive on the right-hand side of the road when you are in Italy. The rules of private property assign a right ("if it's registered in your name, you can use it"), indicating something that you have the possibility to do, and possibility is a deontic notion. Your rights, moreover, are typically my duties: to say that you can use a piece of land is tantamount to say that I must not use it without your permission. So deontic powers must be accounted for by the theory of institutions as rules in equilibrium.<sup>8</sup>

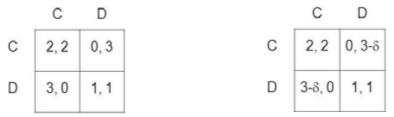
The observation is correct, and it is important to realise what it implies and what it does not. It would be silly for a theory of institutions to deny that norms play an important role in the regulation of human behaviour. But one thing is to say that normativity must be allowed some room in the theory, quite another is to build the theory on a specific notion of normativity. The sensible strategy is to make room for different kinds of normativity in the theory, without making a strong commitment to a single account.

How can normativity be represented in the framework of the rules-in-equilibrium theory? A convenient way of modelling the constraints introduced by norms is in terms of costs. As long as the latter are understood in a sufficiently broad way, we can say that compliance with a norm carries costs while conforming to a non-normative rule or convention (a rule of thumb for example) does not. For example, a littering norm imposes the cost of looking for garbage bins. A norm against cheating imposes the opportunity cost of not having extra-marital affairs, and so forth. Such costs call for compensation (counter-reasons) in order to be overridden. And counter-reasons may be represented as negative incentives – other costs, effectively – that deter norm violations.

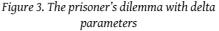
The representation in terms of costs is compatible with various enforcement mechanisms. Social scientists distinguish between internal and external costs, corresponding roughly to a distinction between "internalised norms" and "externally sanctioned norms". The first type of norm has been central in the sociology tradition, dating back to the work of Talcott Parsons: social norms according to this interpretation are internalised prescriptions that people follow

<sup>8</sup> See Searle (2015) for a critique of this kind.

partly out of habit, and partly because they do not want to feel bad about it. The costs may be seen as a form of self-inflicted punishment, in the form of guilt feelings. Another equally influential tradition sees social norms as supported by external punishment instead. In this case, the costs are inflicted by other members of society, either professional enforcers (judges, policemen) or fellow citizens who just happen to witness the transgression. Elizabeth Crawford and Elinor Ostrom (1995) introduce a delta parameter to capture the costs involved in violating a norm. In the case of externally sanctioned norms, the cost of transgression is generally known to the members of the community, and can often be quantified objectively. A century ago, for example, the cost of refusing to marry a Sicilian woman after a one-night stand was equal to the expected value of death. The cost of littering the floor in Singapore is three hundred dollars weighed by the probability of being fined. When the costs are internalised, deltas are more difficult to measure of course. But measurement is not impossible, if we have enough information about the desires that the norm is supposed to trump. The key is to know what people would have preferred to do if the norm had not been in place. The abiding citizen who regularly clears the pavement in front of her house from the snow invests precious time that she might have liked to spend differently (by watching TV in her warm living room, for example) had she not internalised the norm. Representing normative power by means of delta parameters (costs) facilitates the extension of the rules-in-equilibrium theory beyond the realm of coordination games. Many social theorists have pointed out that institutions improve the performance of players in games where there is an individual incentive to deviate from the socially optimal rule. A classic case is the prisoner's dilemma game (Figure 2). Instead of multiple equilibria - as in the coordination games examined so far - there is only one equilibrium in the one-shot prisoner's dilemma (DD). Augmenting the game by means of conditional strategies does not help, so there is no way to solve a prisoner's dilemma using an external correlation device. Defecting strictly dominates rule-following. By means of a suitably large delta, however, one can transform the dilemma into a game with two equilibria, CC and DD. Normative rules thus can turn a cooperation problem into a coordination problem: norms change the games that people play. And, of course, they also work as coordination devices in the new games that have just come about.



*Figure 2. The prisoner's dilemma game* 



Suppose there is a rule in the population that says "if the other player cooperates, then you ought to cooperate, otherwise defect", and the rule has normative force. This means that an extra cost (delta) must be subtracted from the payoffs, as in Figure 3. The payoffs in these two games may be interpreted in various ways: one possibility is to take the numbers in the original game (Figure 2) as representations of pre-normative desires. In the new game (Figure 3), then, the numbers may represent individual goals after the internalised desire to comply with the norm has been taken into account. Alternatively, the modified payoffs of Figure 3 may incorporate new information that has become available to the players, for example when they discover that a system of punishments has been set up to deal with those who transgress

the rule. In any case the deltas represent the force of normative rules, taking a given (prenormative) game as a benchmark.

Depending on the force of the rule, the second game may turn out to be quite different from the first one. If delta is at least as large as one unit of payoff, then the prisoner's dilemma is transformed into another simple game, where DD and CC are both equilibria. If delta is equal to three, for example, we obtain the hi-lo game of Figure 4.

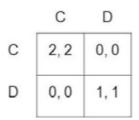


Figure 4. From a prisoner's dilemma to a hi-lo game

Notice that norms then "solve" dilemmas of cooperation only in a peculiar sense. Games such as the one-shot prisoner's dilemma cannot be properly solved, because there is no way to escape the disturbing conclusion that players ought to defect, without changing the rules of the game. The only "solution" is to change the game itself, and this is precisely what institutions endowed with normative power can do. They create new equilibria introducing costs that make defection unattractive, at least within a certain range of payoffs. But this is not the only function of norms. Deontic powers are useful in games of coordination as well. This may sound strange, since the players do not have any reason to deviate from a coordination equilibrium. Adding deontic power seems gratuitous, if there is no selfish desire to counter-act. But deontic power is unnecessary only if the players have full information and never make mistakes. In real life people have the unfortunate propensity to make mistakes, to misinterpret the rules, and sometimes they are also uncertain about the payoffs of the game. In such cases it is useful to have some extra mechanism that helps enforce conformity with a rule. People pay more attention to the signals they receive and to the structure of the game, if they know that they will pay an extra cost in case of non-compliance. So it is not surprising that many conventions have a tendency to turn into norms.9

Norms thus help fulfilling two key functions of institutions: they stabilise behaviour and make it more predictable in situations of uncertainty; but they also create behaviours that did not exist before, by changing the payoffs of a game. Thus norms facilitate not only the persistence of institutions, the fact that they are followed in the face of incentives to deviate; sometimes they also facilitate the emergence of new equilibria, when they are introduced ex novo. A central authority – like a government or a recognised leader – can reshape a game with "bad" equilibria, such as a prisoner's dilemma, and turn it into a better game, such as hi-lo. New rules may be introduced by decree: if the government announces that all cars will drive on the other side of the road starting from tomorrow (as it happened in Sweden in 1967); and if the announcement is supported by credible formal and informal sanctions, then the players will recognise that the game has changed and that a new equilibrium has been created. The punishment mechanisms will make the new equilibrium more salient than it would have been in virtue of the announcement alone. So the function of normativity can be accounted for within the framework of the rules-in-equilibrium theory.

<sup>9</sup> See Guala and Mittone (2010) and Guala (2013) for empirical evidence and philosophical discussion.

Notice that the rules-in-equilibrium theory only provides a formal apparatus to represent normativity, but it remains neutral about the nature of normativity or where it comes from. And I think that this is just as it should be. Normativity is one of the thorniest issues in contemporary philosophy, and it would be foolish to make a theory of institutions depend on a specific account. Part of the problem is that normativity may not be a single thing. When we say that "you ought to do X" we usually mean that we expect you to do X, even if you have reasons (especially selfish reasons) to do otherwise. But the "ought" may have several different sources. For example, when I say that "you ought to slow down" I can mean any (perhaps more than one) of the following:

- 1. if you don't, you will be fined;
- 2. if you don't, I will be angry at you;
- 3. If you don't, your reputation will be ruined;
- 4. If you don't, you will not belong to this community anymore;
- 5. If you don't, you will contradict yourself and behave irrationally;
- 6. if you don't, and you cause an accident, you will become a bad person;
- 7. if you don't, and you cause an accident, you will feel bad about it;
- 8. if you don't, and you cause an accident, God will punish you.
- (And so forth the list is certainly not exhaustive.)

Each of these sentences refers to some mechanism that is a plausible candidate for behavioural regulation. Scholars disagree on which one (or ones) is more important. Some philosophers and social scientists believe that normativity can be explained in terms of mutual beliefs and the feeling of resentment that we experience when our expectations are frustrated (Lewis 1969; Sugden 1998); others believe that normativity requires a stronger notion of collective or joint intention (Gilbert 1989); some philosophers and social scientists argue that normativity depends on emotions (Frank 1987; Gibbard 1990; Nichols 2004); and still others believe that normativity has to do with the possibility of justifying our actions by means of rational arguments (Broome 2013; Raz 1999; Skorupsky 2010). Whether any of these accounts is able to capture "true" normativity - whatever it may be - is an open issue that we do not need to settle. In fact choosing among them may not be very sensible: if normativity is important for institutions, then it is likely to take several different forms. As an analogy, consider the multiple ways in which an organism tries to accomplish a goal that is important for its survival. If perceiving the existence of a prey is important, it is likely that a predator has more than one way to accomplish that task (by vision, hearing, and smell for example). Nature likes redundancy. Similarly, normativity probably has different sources and many facets, which means that more than one account is likely to be right. So instead of asking what normativity is, it is more sensible to ask what it does, or what its function is. One drawback of this approach is that it does not allow one to make any substantial normative assessment of institutions. It does not allow to distinguish good from bad institutions - dictatorship from democracy, capitalism from socialism, or poligamy from monogamy, for example. My own view is that judgments of this sort belong to the realm of ethics, rather than social ontology, and that it is best to keep the two projects separate. Other philosophers disagree and have tried to construct more robust theories of institutions, but I will let the readers make up their own minds on this point (see e.g. Miller 2010).

By way of a conclusion, let me summarise the overall argument of this talk. The twin notions of collective intention and joint commitment lie at the core of a hugely successful research programme in social ontology. In fact the project has grown so large that it constitutes the bulk of the research that is currently done on in this subfield of philosophy. 5. Conclusion There is nothing wrong with this situation, in principle, because collective intentions and commitments are interesting phenomena that deserve philosophers' attention. But ever since its inception the programme had higher ambitions: the goal was not simply to better understand a peculiar kind of mental state, but to build social ontology (a whole theory of institutional reality) on collective intentions and their deontic force.

This programme, I have argued, is bound to fail because institutional reality does not require collective intentions, joint commitments, and the like. It is easy to find counterexamples (institutions that do not depend on collective intentions) as we have seen in section three. I have been careful to say that this does not mean that commitments, normativity and related notions are unimportant for the existence and persistence of institutions. On the contrary, they are among the mechanisms that facilitate coordination and cooperation in situations of strategic interaction. But these mechanisms differ from one another, and normativity is unlikely to have a single source. For this reason, a theory that aims at providing a general account of institutions should be flexible enough to make room for several types of normativity without committing a priori to one of them.

In section four I have argued that the account of institutions that is implicit in contemporary social science – the theory of institutions as rules in equilibrium – meets this criterion. Philosophers may dislike it because it does not shed light on the "true" nature of normativity, but if I am right this is a virtue rather than a defect. An entirely general theory of institutions can only highlight the *function* of norms and commitments.<sup>10</sup> The way in which the function is fulfilled is probably context-dependent and is a matter for psychologists and sociologists to discover by means of empirical research, rather than by armchair theorizing that is prevalent in social metaphysics.

## REFERENCES

Aoki, M. (2011), "Institutions as cognitive media between strategic interactions and individual beliefs", *Journal of Economic Behavior and Organization*, 79, pp. 20-34;

Binmore, K. (2010), "Game theory and institutions", *Journal of Comparative Economics*, 38, pp. 245-252;

Broome, J. (2013), Rationality Through Reasoning, Blackwell, Oxford;

Crawford, S. E. S. and Ostrom, E. (1995), "A grammar of institutions", *American Political Science Review*, 89, pp. 582-600;

Frank, R. (1987), Passions Within Reason, Norton, New York;

Gibbard, A. (1990), *Wise Choices, Apt Feelings*, Harvard University Press, Cambridge, Mass.; Gilbert, M. (1989), *On Social Facts*, Princeton University Press, Princeton;

Greif, A. and Kingston, C. (2011), "Institutions: Rules or equilibria?", in N. Schofield and G. Caballero(eds.), *Political Economy of Institutions, Democracy and Voting*, Springer, Berlin, pp. 13-43; Guala, F. (2013), "The normativity of Lewis conventions", *Synthese*, 190, pp. 3107-3122;

----. (2015), "Philosophy of the social sciences: Naturalism and anti-naturalism", in P.

Humphreys (ed.), *The Oxford Handbook of Philosophy of Science*, Oxford University Press, Oxford; ----. (2016), *Understanding Institutions*, Princeton University Press, Princeton;

Guala, F. and Hindriks, F. (2015), "A unified social ontology", *Philosophical Quarterly*, 65, pp. 177-201; Guala, F. and Mittone, L. (2010), "How history and conventions create norms: An experimental study", *Journal of Economic Psychology*, 31, pp. 749-756;

Hindriks, F. and Guala, F. (2015), "Institutions, rules, and equilibria: A unified theory", *Journal of Institutional Economics*, 11, pp. 459-480;

<sup>10</sup> For an instructive example, see Michael and Pacherie (2015).

Kincaid, H. (2012), "Introduction: Doing philosophy of the social sciences", in H. Kincaid (ed.), *The Oxford Handbook of Philosophy of Social Science*, Oxford University Press, Oxford, pp. 3-20; Lewis, D. K. (1969) *Convention: A Philosophical Study*, Harvard University Press, Cambridge, Mass.; Michael, J. and Pacherie, E. (2015), "On commitments and other uncertainty reduction tools in joint action", *Journal of Social Ontology*, 1, pp. 89-120;

Miller, S. (2010), *The Moral Foundations of Social Institutions*, Cambridge University Press, Cambridge;

Nichols, S. (2004), Norms with Feelings, Oxford University Press, Oxford;

Raz, J. (1999), "Explaining normativity: On rationality and the justification of reason", *Ratio*, 12, pp. 354-379;

Searle, J. R. (2005), "What is an institution?", Journal of Institutional Economics, 1, pp. 1-22;

----. (2010), Making the Social World, Oxford University Press, Oxford;

----. (2015) "On status functions and institutional facts: Reply to Hindriks and Guala", *Journal of Institutional Economics*, 11, pp. 507-514;

Skorupski, J. (2010), The Domain of Reason, Oxford University Press, Oxford;

Smit, J. P., Buekens, F. and du Plessis, S. (2014), "Developing the incentivized action view of institutional reality", *Synthese*, 191, pp. 1813-1830;

Sugden, R. (1998), "Normative expectations: The simultaneous evolution of institutions and norms", in A. Ben-Ner and L. Putterman (eds.), *Economics, Values, and Organization*, Cambridge University Press, Cambridge, pp. 73-100;

Tuomela, R. (2002), *The Philosophy of Social Practices*, Cambridge University Press, Cambridge; ----. (2007), *The Philosophy of Sociality*, Oxford University Press, Oxford;

Turner, S. (2010), *Explaining the Normative*, Polity Press, Cambridge.