Discussion Papers

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Pietro Guarnieri

Commitment to norms and the formation of institutions

Indirizzo dell'Autore:
pietro.guarnieri@unisi.it

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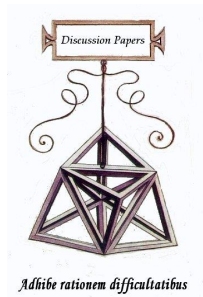
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Abstract

The paper discusses Searle's description of institutions in terms of deontological constitutive rules and collective recognition. It aims at integrating Searlian conception of commitment with an epistemology of rule-following capable to illustrate processes of formation of institutions. Social ontology *per se* cannot account for the formation of constitutive rules. Actually, it requires taking as given the object of collective recognition, i.e. the specific content of status functions. The hypothesis of interactive intentionality is introduced to account for the commitment to status functions as the result of an interactive decision-making process concerning alternative constitutive definitions. This interactive process, by acting on the normative interpretation of decision contexts, frames relevance and salience criteria and grounds the formation of institutions. Interactive intentionality hypothesis offers the opportunity to make social-ontological approach based on commitment theoretically commensurable with social-scientific approach based on equilibria and self-enforcement.

1. Introduction

The debate concerning the possibility to reconcile the "rule-based" and the "equilibrium-based" accounts of institutions (Hodgson, 2006; Greif, 2006; Aoki, 2007; Greif and Kingston, 2011) has been recently reactivated by Hindriks and Guala, who tried to "unify" social ontology by explaining institutions in terms of "rules in equilibrium" (Hindriks and Guala, 2014, 2015). However, the replies to this attempt reconfirmed the distance between the two approaches (Binmore, 2015; Sugden, 2015; Hodgson, 2015). In particular, John Searle opposed the reduction of "constitutive rules" to "regulative rules" at the basis of Hindriks and Guala unification attempt (Searle, 2015).

By reflecting on Searle's epistemology of normative commitment, this paper suggests an alternative strategy towards unification. To this purpose I will follow three steps. The first step consists in identifying the epistemological boundaries of Searle's account of institutions. These boundaries derive from Searle's use of the notion of collective intentionality to account for normative commitment. The second step consists in recognizing what is out of these boundaries, that is, the *formation* of institutions. Hence, the third step consists in complementing Searle's account of institutions with an epistemology capable to account for processes of constitutive rule formation.

The aim is bridging the gap between social-ontological and social-scientific accounts of institutions, by assuming that individuals adhere to specific normative definitions of social reality through an interactive decision-making mode – which I name *interactive intentionality.* Dealing with deontological commitment as the result of a decision makes Searlian constitutive rules paradigm commensurable with explanations of institutions as self-enforcing equilibria. The analysis of this type of decision illustrates epistemic pre-conditions that play behind both commitment and enforcement.

Searle's social ontology remains within defined explicatory boundaries. The scope of social ontology limits Searle account to the description of the necessary conditions under which institutional entities exist as the result of collective assignment of "status functions", that are functions deriving from the definition of a status in terms of deontic powers. These necessary conditions are summarized by the formula of "constitutive rules": provided that a group collectively recognizes (or "declares") that "X counts as Y in C", we have an institutional entity and hence social ontology (Searle, 1995, 2005, 2010). Commitment intrinsically derives from the collective assignment of status functions. By making reference to collective intentionality, Searle maintains that it is the collective statement of the declared status function at binding individuals in joint commitment to the constitutive rule.

However, no explanation concerning why individuals converge on *specific* status functions is provided. In other words, it is not described the process which leads to the selection of a determined scope of functions as based on a specific definition of the institutional status. Being interested in the analysis of formal and essential (irrespective of differences) properties of the normative structures of institutions, Searle's ontological description does not require to specify why determined status functions (and not others) are

attributed to (some) persons, objects, or state of affairs (and not others). But in this way, Searle's deontological ontology lacks the possibility to account for its own formation and persistence as a determined system of joint commitments.

The hypothesis of interactive intentionality is introduced to provide a representation of processes of convergence on specific status functions. It is based on three sub-hypothesises: 1) status functions are characterized by irreducible variety; 2) commitment to status functions results from decisions; 3) decisions concerning status functions are interactive processes. This group of sub-hypothesises are obtained from an analysis of epistemic preconditions of status functions disregarded by Searle's epistemology of collective acceptance of status function. I consider them epistemic preconditions because they affect the possibility that status functions are identified as determined status functions, before individual can declare a join commitment concerning them. Status functions identifiability depends on the cognitive availability of alternatives, i.e. of alternative normative specifications of status functions. Indeed, this epistemic conditions of identifiability has direct normative implications. Given the alternative possible interpretations of status functions, commitment to one specific definition of the status function results as an act of decision. In order to explain this kind of decision, it is necessary to investigate how normative shared references are formed through interactive normative agreements.

Interactive intentionality accounts for circumstances in which individuals engage interactively in practical reason and form shared normative interpretations of the decision context by attributing values and ends respectively to actions and consequences. Philosophical notion of "incommensurability of values" structures the relation between values and ends (and the relations within each of the two categories) with the values standing for the systems of valuation and the ends for the bearers of value (Chang, 1997) The main argument is that interactive practical deliberation forms the epistemic ground on which *powers* and *purposes*, behind the identification of status functions, are specified before they get subject to collective assignment. This approach reflects trends in moral philosophy that reconsider deontological ethics as the result of historical, linguistic, and interactive processes (Sandel, 1982; Habermas, 1990). Hence, it supports the reintroduction of practical reasoning as a fundamental component of institutional life and evolution (Crespo, 2007, 2016; Velleman, 2009).

To sum up, interactive intentionality serves the purpose of accounting for endogenous processes of formation of shared epistemic criteria which make status functions identifiable before they become objects of collective recognition and commitment. In order to investigate these processes of formation it is necessary to assume that normative definitions of status functions are characterized by variety and to study commitment as resulting from a decision, which at the same time set epistemic criteria of norm enforcement.

The article proceeds as follows. The second section investigates epistemic preconditions of status functions and introduces variety among them. The third section, while clarifying in which sense Searle's social ontology is bounded by its deontological foundation, illustrates why it is useful to interpret

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[1] The bearers of value are here interpreted as the state of the world which is projected as the consequence that is oght to be pursued on the ground of the assignment of intrinsic value to the relative action.

commitment to status functions as a rule-following decision. The fourth section introduces interactive intentionality as a process of institutional formation through conflict resolution.

2. Identifiability of status functions

As a description of conditions of social reality, Searle's social ontology does not account for the processes which makes those conditions exist, nor to the variety which characterizes institutional normativity (Viskovatoff 2003; Sanchez-Cuenca, 2007; Zaibert and Smith, 2007). However, there are epistemic conditions behind the identifiability of status functions and the processes that set these conditions have normative and ontological implications. The section focuses on these epistemic conditions to show that collective assignment and acceptance of status function depends on the specification of determined powers and purposes among alternatives.

Searle grounds his social ontology on three primitive notions: "collective intentionality", "function", and "status". Searle (2005:7) connects them pairwise. Collective intentionality intervenes in the collective attribution of "functions on objects where the object does not have the function, so to speak, intrinsically but only in virtue of the assignment of function." The assignment of the function goes together with the recognition of a certain status: "the object or person to whom the function is assigned cannot perform the function just in virtue of its physical structure, but rather can perform the function only in virtue of the fact that there is a collective assignment of a certain *status*, and the object or person performs its function only in virtue of collective recognition by the community that the object or person has the requisite status" (Searle, 2005:7-8). In sub-section 2.2 I discuss the connection between the notions of "collective intentionality" and "function", to show that it presupposes the cognition of a determined *purpose*. In sub-section 2.3, I discuss the connection between "function" and "status", which is mediated by the cognition of a determined *power*. I argue that the cognition of defined purposes and powers act as an epistemic precondition for the identification of status functions in collective intentionality.

Before entering into this analysis of Searlian notions, I briefly discuss in sub-section 2.1 Hindriks and Guala attempt of social ontology unification. The discussion is based on the claim that the "transformation" of constitutive rules in regulative rules – on which their attempt is based – actually erodes the fundamental epistemic, cognitive dimension which goes together with the commitment activated by constitutive rules. By investigating this epistemic dimension, it is possible to develop an alternative strategy toward unification.

2.1 A unification through reduction

Searle's idea that institutions consists in the collective assignment and recognition of status function is at odds with social science's explanation of rule-following and normativity as equilibria. Searle (1995, 2005,

2010) makes reference to the epistemology of collective intentionality in order to account for *commitment* (see also Gilbert 1989, 2013), but, as a matter of fact, this approach does not satisfy the requirement of *self-enforcement* which accounts for rule-following in conventions and social norms literature (Lewis, 1969, Schotter, 1981; Sugden, 1986; Young, 1998). Hindriks and Guala (2014, 2015) try to circumvent this difference in paradigm by translating the language of social ontology into the language of game theory (see also, Hindriks, 2009), but they do this by reducing Searlian constitutive rules to behavioural regulative rules, to the detriment of the epistemological dimension which goes together with the notion of status function.

Hindriks and Guala's "rules-in-equilibrium" relies on the "transformation" of "constitutive rules" into "regulative rules", i.e. on the possibility to translate the former in the language of the latter without semantic loss (Hindriks and Guala, 2014, 2015). However, as Searle has pointed out in his reply (Searle, 2015), the definition of the two notions does not allow for this kind of reduction. On the one hand, *regulative rules* "regulate activities which can exist independently of the rule". On the other hand, *constitutive rules* "not only regulate but rather constitute the very behaviour they regulate, because acting in accordance with a sufficient number of the rules is constitutive of the behaviour in question" (Searle, 2015:9). Ruling out this difference not only implies denying that status functions "create" social ontology, but also leads to smooth over the epistemic dimension of normativity on the behavioural one.

The conception of institutions as equilibria in regulative rules is developed on the ground of the solution concept of "correlated equilibrium" (Gintis, 2007; 2009) and on the idea that "players must be able to represent the equilibrium in symbolic form" in order to get to coordination in the context of games with multiple, asymmetric equilibria. This idea is borrowed from Aoki (2007; 2011), who treats rules as "coordination devices", i.e. publicly available representations of equilibria that induce *shared beliefs* concerning how the societal games have to be played. According to this view, rules correlate behavioural strategies only because they can condition beliefs by "specifying patterns of expected behaviours" (Greif and Kingston, 2011).

However, Guala and Hindriks disregard Aoki's distinction between the "behavioural dimension", in which the strategic choices are made, and the "cognitive dimension", in which beliefs concerning players' expectations about others' actions and expectations are formed. According to Aoki, institutions are an evolutionary process which connects the behavioural and the cognitive dimensions in a dynamic loop: on the one hand, equilibria in individual behaviours are represented in rules which act as cognitive-media, fostering the formation of shared beliefs about the game; on the other hand, shared beliefs sustain equilibria in behaviours and hence the behavioural regularities which identify the rule itself (Aoki, 2011). The cognitive dimension is crucial in so far as it is the dimension in which mutual beliefs are formed as "commonly cognized salient patterns of the ways in which societal games are recursively played and expected to be played" (Aoki, 2011). By dealing with institutions in terms of equilibria in regulative rules, Hindriks and Guala downplay the epistemic dimension of rules and equate institutions to behavioural regularities.

In what follows, I suggest an alternative strategy towards unification. Such a strategy does not imply the necessity to reduce constitutive rules to behavioural regulative rules. On the contrary, it is based on the idea

that constitutive rules are active on the cognitive, epistemic dimension, forming shared normative beliefs. The idea is that processes of constitutive rules formation frames decision contexts, by identifying relevant actions and salient outcomes. Consequently, individual's cognition of incentives and of her own preferences ends up depending on shared attribution of a normative meaning to relevant options, so that the decisions concerning behavioural strategies are based on them. To develop this idea, it is necessary to investigate under which epistemic conditions statuses and functions attributed to them are identified and cognized by individuals.

2.2 Purposes

The notion of "collective assignment of functions" connects Searle's application of collective intentionality to the idea that constitutive rules specify institutional functions. Collective assignment is the basis of social ontology in so far as the attribution of a certain function to a specific object depends on the fact that individuals form collective intentions and adhere to a common re-cognition of that object as having a certain function. Searle makes reference to the epistemology of collective intentionality in order to interpret collective cognition of institutional functions. While assigning the function to the entity, individuals join in collective intentionality, interpreting that object as having that function.

Assigning and recognizing a function is necessarily identifying what purpose is served by the object, person, state of affair. As clarified by Searle, the identification of any kind of function always presupposes the specification of a purpose:

> "[...] *functions are always intentionality-relative* [...] When we discover functions in nature, what we are doing is discovering how certain causes operate to serve a certain purpose, where the notion of purpose is not intrinsic to mind-independent nature, but is relative to our sets of values. [...] Where do the values come from? The clue that there is a normative component to the notion of function is that once we have described something in terms of function we can introduce a normative vocabulary. [...] To put the point succinctly, if perhaps too crudely, *a function is a cause that serves a purpose*. And purposes have to come from somewhere; in this case they come from human beings. In this sense, functions are intentionality-relative and therefore mind dependent." (Searle, 2010:59)

Hence, we can consider that the relation between Searle's application of collective intentionality and his notion of institutional function is mediated by the notion of "purpose". Any institutional entity possesses a function in so far as it corresponds to a certain social purpose. In other words, the purpose is a necessary condition for the identifiability of the institutional function. It stands for the content of collective intentionality in the collective assignment of a status function.

It is the linguistic nature of collective intentionality – and in particular of the speech act of *status-function declaration* (Searle, 2010) – which implies that people involved in collectively assigning the function are for

the same reason committed to act in accordance to it (Zaibert, 2003; Gilbert, 2007). Searle's application of collective intentionality is compliant with Gilbert's theory of "joint commitment" for which adhering to a common purpose in collective intentionality is at the same time being normatively committed to the purpose that is stated as a joint objective (Gilbert, 1989, 2013). It is the collective determination of a purpose at making collective assignment of institutional functions not reducible to cooperation in the sense of I-intentionality plus mutual beliefs (Searle, 2010:45-50)[2].

However, it must be observed that in order to be an object of collective assignment a function must be already identified with respect to the purposes it serves. Only with reference to determined purposes the function can be recognized and consequently be stated as constitutive of the institutional entity. While behaving in accordance with constitutive rule individuals have to believe that the function they are assigning reflects the specific purpose that it has been originally identified as defining the function itself. Searlian assignment of functions depends on cognition of defined purposes that individual must realize before they engage in joint recognition and commitment. But then, what does identify the determined institutional function as the function satisfying that specific purpose and not others? Why do individuals identify that *specific* purpose and put it as the object of joint commitment?

2.3 Powers

The connection between the primitive notions of "function" and "status" derives from the consideration that assigning an institutional function is necessarily accepting a normative status. In Searle's words, the institutional object or person "cannot perform the function in virtue of their physical structure alone, but only in virtue of the collective recognition of the object or person as having a certain *status* and with that status a function" (Searle, 2005:7-8). The status is specified in terms of *deontic powers*, i.e. the formal definition of duties and rights, providing people within institutions with *desires-independent reasons for action*:

> "The essential role of human institutions and the purpose of having institutions is not to constrain people as such, but, rather, to create new sorts of power relationships. Human institutions are, above all, *enabling*, because they create power, but it is a special kind of power. It is the power that is marked by such terms as: rights, duties, obligations, authorizations, permissions, empowerments, requirements, and certification. I call all of these *deontic powers*. [...] They are structures of power relationships. [...] how exactly do these power relations function? The answer, which again is essential to understanding society, is that institutional structures create desire-independent reasons for action. To recognize something as a duty, an obligation, or a requirement is already to recognize that you have a reason for doing it which is independent of your inclinations at the moment. [...] the creation of the general field of desire-based reasons for

[2]See Tuomela (1988, 1991, 2005). For a discussion of the alternative theories of collective intentionality in relation to conceptions of the individual agent see Davis (2003:130-149).

action presupposes the acceptance of a system of desire-independent reasons for action." (Searle, 2005:10)

Deontic powers and status are linked by a mutual relation. An institutional entity is identified as possessing a certain status in so far as it displays certain deontic powers, and, *vice versa*, certain deontic powers identifies that person or object as having a certain status. Moreover, the function of the institutional entity (and hence its implicit purpose) reflects its status and relative deontic powers. By specifying "desire-independent reasons for action", statuses and deontic powers define a set of possible actions which are attributed with normative value. Duties and rights assigned to the institutional entity are defined in terms of potentiality of action and linked to the definition of the function in terms of purpose.

However, as observed for epistemic dependence of functions on purposes, also statuses result epistemically underdetermined with respect to the cognition of a common definition of power. Individuals have already cognitively identified a specific scope of powers before they join in the collective assignment of that specific status to the institutional entity. In this sense, the pre-determination of powers counts as a cognitive precondition of status acceptance and assignment. In general, the identifiability of functions and statuses behind the acceptance and assignment of status functions depends on the availability of a shared, cognition of purposes and powers, defining them. This in turn presupposes a process of selection among alternatives which will be dealt with in terms of a decision in the next session.

To recap, Searlian conception of normative commitment is grounded in the epistemology of collective acceptance and assignment of status function, which in turn is based on collective intentionality. This epistemology cannot be reduced to the epistemology of behavioural regulative rules, but implies an irreducible cognitive dimension in which beliefs concerning the common understanding of norms conditions behavioural strategies. By investigating constitutive rules' cognitive dimension, it emerges that there are epistemic conditions behind the identifiability of status and functions. In particular, a definition of institutional specific powers and purposes precedes the subsumption of the determined status function in collective intentionality. Collective intentionality approach takes the epistemic conditions behind the identifiability of status functions as given. However, investigating them introduces the possibility to deal with epistemic preconditions of normative commitment and with institutional formation.

3 Constitutive decisions

If the identifiability of status functions depends on individual cognition of shared normative specifications of powers and purposes, commitment to a given constitutive rules depends on decisions (and agreements) about those specifications. The section introduces the possibility that a given status function may be subject to multiple, alternative interpretations both in terms of powers and purposes. Allowing for multiple alternative interpretations of status functions implies that the collective adherence to a given status function derives

from a decision which leads to the selection of a specific normative determination of status and the relative functions.

Once variety in the possible specifications of status functions is admitted, we become able to characterize *negative commitment*. I consider negative commitment as the kind of commitment which sustains the deviation from a given status function assignment, and hence from a given constitutive rule. Searle's epistemology of collective recognition and assignment is only *positive* since it is confined to defined status functions and to the adherence to constitutive rules, which goes together with its positive statement. This approach presupposes that the selection of powers and purposes which make *that* status function identifiable has already been brought to completion. It is excluded the possibility that agents within institutions could make reference to alternative normative definitions of those purposes and powers, and deviate from given constitutive rules for the purpose of changing institutions.

As a consequence, Searlian treatment of institutional powers and purposes hides a peculiar aspect of *asymmetry* concerning constitutive normativity. This asymmetry has two aspects. First, only admitting negative commitment we can account for positive normative commitment. Second, only admitting the possibility to deviate from given constitutive assets, we can account for constitutive rules formation through rule change. Sub-section 3.1 shows that positive commitment depends on the possibility of not following a given constitutive rule. Sub-section 3.2 claims that it is necessary to allow for negative commitment in order to account for constitutive rule formation. Sub-section 3.3 highlights the role of *conflict* in the processes of individual and collective decision which leads to the formation of institutions.

3.1 Commitment requires alternatives

According to Searle deontological commitment is the product of collective assignment of the status functions. However, as noticed above, the identification of that status function in turn depends on the circumstance that individuals have already selected the powers and purposes that define the status function as a specific, determined content of collective intentionality. In order to be an object of recognition and of declaration the determined status function must be already be identified as enabling certain actions and serving certain purposes (and not others).

Consequently, it must be observed that if individuals have to share a common definition of powers and purposes before they engage themselves in collective recognition and assignment, any other alternative normative definition of institutional powers and purposes has already been ruled out. Ruling out any other alternative (and potentially conflicting) power and purpose is a decision with normative implications. It actually depends on commitment itself, to the extent that opting for certain powers and purposes against others reflects an attribution of normative value to them. In this sense, commitment is also a precondition of the collective adhesion to the given status function and its subsumption under collective recognition and attribution.

Searle needs to assume the selection of the relevant powers and purpose as given in order to take collective intentionality as the epistemological basis of social ontology and of commitment itself. However, the process of selection itself remains out of the picture. If normative commitment derives from collective recognition and attribution of a specific status function, what does ground the commitment required by the selection of institutional powers and purposes that identifies the status function as *that* specific status function? What does make people decide on the definition of institutional powers and purposes among multiple alternatives?

In order to complement Searle's social ontology with a theory of constitutive rules' formation, we have to account for how a common definition of normative powers and purposes is formed. This definition in turn requires admitting that institutional powers and purposes can be characterized by multiplicity and re-conceptualising normative commitment in terms of a rule-following decision. Decisions, by definition, presuppose the availability of alternatives. The decision to rule-follow is necessarily cognized as the choice between adhering to a given norm or deviating from it (complying to another norm). Hence, as far as constitutive rules are concerned, we have to presuppose a type of decision that leads to the selection of specific institutional powers and purpose among alternatives.

Interpreting constitutive rules recognition and assignment as conditioned on a decision process involving alternative definitions of powers and purposes enriches Searlian conception of normative commitment with the possibility to account for the formation of commitment itself. Actually, unless we allow for alternative normative interpretations of status functions and hence for alternative possible commitments, we cannot obtain a full-fledged conception of commitment to institutions. From an epistemological point of view, there cannot be normativity without alternatives. The decision to rule-follow is necessarily the decision not to deviate from it. If no alternatives were available in cognition, that decision could not be considered as the decision to comply to a norm, because it would be determined only by the availability of only one, unique, and given option.

In order to represent constitutive normativity and "positive" normative commitment, we have to account for individual decision among a plurality of institutional powers and purposes. In this sense, positive commitment depends on the possibility of negative commitment. Only admitting the possibility of alternative normative claims, we can account for norm commitment in terms of decisions and hence for the processes that lead individuals to adhere to institutions. Only dealing with a decision process concerning powers and purposes, we can account for the cognitive prerequisites behind the identification of status functions, and hence for their identification as an object of joint commitment.

3.2 The asymmetry of rule-following

Allowing for alternative normative interpretations of status functions, not only make a full-fledged conception of positive commitment to constitutive rules available, but also provides the possibility to analyse negative commitment. Negative commitment supports the decision not to comply with constitutive rules for

the purpose of institutional change. As far as constitutive rules are concerned, negative commitment consists in the possibility that individuals assign to a given status function an alternative interpretation in terms of powers and purposes. This type of commitment cannot be accounted within Searle's conception of normativity and of commitment. From the social ontological point of view, once a constitutive rule is defined, it is collectively adhered. On the contrary, intentional deviation from constitutive rules calls for the possibility that the individual treats as a possible object of choice alternative attributions of powers and purposes to the same institutional entity. This possibility is crucial to constitutive rules formation.

Negative commitment reveals three main epistemological features. First, intentional deviation from constitutive rule presupposes the recognition of the given constitutive rule and of the institution as such. If the given status function was not recognized by the deviant individual or group, it could not be addressed as the object of change. Individuals who deviate from a given constitutive rule must recognize it in order to think at and pursue its change. Second, intentional deviation from constitutive rule must be treated as a deontology-based behaviour. It indeed presupposes the commitment to an alternative normative definition of the same institution. It entails the alternative attribution of normative powers and purposes to the same institution and the alternative interpretation and definition of the status function itself. Third, in order to count as an alternative definition of a given status function it has to be object of collective recognition and assignment. Indeed, individual deviation necessarily presupposes that the deviant agent thinks at herself as part of a collective which assign the alternative interpretation of powers and purposes to the given status function.

Only admitting multiple possible alternative interpretations of status functions in terms of purposes and powers, we can account for processes which bring institutions into existence. Institutions actually emerge as the result of processes of formation which presuppose a) the deviation from norm as a means of institutional change and b) the composition of shared definition of status functions via the resolution of conflicts concerning alternative normative definitions. Only accounting for these modes of change, we can represent institutional formation. Negative commitment introduces institutional change into the picture of social ontology. Unless we allow for negative commitment, we cannot account for the formation of determined institutions through change in the normative interpretation (and practice) of status functions.

The asymmetry of rule-following consists in the circumstance that we can describe the subsistence (positive commitment) and the formation of institutions (change) only if we account for negative commitment. Variety in the definitions of status function and a decision concerning them are necessary epistemological tools. Only allowing for the possibility that individuals deviate in cognition (or in practice) from the given (collectively adhered) definition of a determined status function, we can take into consideration processes of formation of institutions. These processes necessarily presuppose the availability of alternative specifications of status functions in terms of powers and purposes and decisions concerning them.

Given the multiplicity of alternative and possibly conflicting interpretations of status functions, institutions may be considered as emerging from processes of decision which entails the deliberative

discussion - both within individuals and within groups - of alternative normative claims. In order to understand the formation of institution we focus on the epistemic conditions of deliberation, in which individuals find a composition for their respective normative specifications of status and functions. To this purpose I develop an epistemology which elaborates the idea of collective intentionality in order to account for the formation of shared normative contents, in the context of interactive processes of decisions among alternatives. This epistemology allows for a representation of cognitive conditions, acting behind both positive and negative commitment and grounding constitutive rules formation.

3.3 Conflicts within institutions

In order to represent decisions process behind the formation of status functions, it is necessary to allow for multiplicity of normative powers and purposes. Allowing for multiple powers and purposes entails that alternative status and functions can be attributed to the same institution in a given moment, within a determined social context. We can for example have that: a) group A considers that X and hence Y serve a certain purpose, while group B attributes to X and hence to Y an alternative purpose; and/or b) group A considers that X and hence Y have a certain power, while group B attributes to X and hence to Y an alternative power. In both cases, the two groups collectively recognize that "X counts as Y", but for group A, Y is Y^1, while for group B, Y is Y^2. Note that, from an ontological point of view, the status function remains identical to itself. It only changes the normative commitment of the two groups and it reflects the respective interpretation of purposes and powers.

The two examples above represent circumstances of *conflict*. Such a conflict can be interpreted both as a *norm-compliance* problem (individuals level) or as a *social cohesion* problem (groups level). The first problem is the rule-following problem consisting in the individual's conflict concerning whether a) to accept and get committed to a given institution, despite her normative commitment toward an alternative interpretation of the status function or b) to deviate from it, complying to the normative definition of powers and purposes recognized within her social group to the purpose of constitutive rule change. The second problem consists in social conflict. How can different groups may get to recognize a common shared interpretation of the same institutional status function? The issue here concerns how institutions may adjust for differences across social groups so that the status functions are representative of shared interpretations of institutional powers and purposes. The two problems shed a light on institutional *formation* respectively at the levels of individuals and of groups. Collective acceptance and assignment of status functions requires that conflict concerning the normative attribution of powers and purposes to institutional entities are solved both at the level of individual rule-following decisions and groups orientations.

I investigate conflict from an epistemic perspective, by dealing with alternative attributions of powers and purposes to institutions. These attributions go together with individual beliefs about what they consider normatively right or licit. Within the epistemic dimension of belief, conflict can condition, not only the adherence to a given institution, but also the possibility of equilibrium in behavioural strategies. Dealing with

normative conflict in terms of beliefs offers two main theoretical advantages. On the one hand, it allows for a specification of necessary cognitive conditions behind collective acceptance and assignment of status functions. On the other hand, it accounts for epistemic preconditions of social norms equilibria, by illustrating how shared normative believes concerning available strategic options are formed and sustain self-enforcement. The epistemology of normative conflict sets the ground on which both commitment motivations and enforcement determinants are formed and cognized. The decision processes through which institutional powers and purposes are selected among alternatives have a framing power. They provide individuals with normative beliefs about how to interpret the available options and strategies in the decisions they face, while grounding mutual beliefs concerning others' commitment.

Allowing for multiplicity and conflict within status functions interpretations offers the opportunity to investigate the epistemological conditions under which conflicts are solved. Given variety and potential conflict among alternative interpretations of status functions, resolution of normative conflicts can be considered as representative of constitutive rule formation. This idea is developed in the next section by elaborating the epistemology of collective intentionality in order to account for the formation of shared normative contents, in the context of interactive processes of decisions among alternatives. This elaboration allows for a representation of cognitive conditions, acting behind both positive and negative commitment and grounding constitutive rules formation.

4. Interactive Intentionality Hypothesis

In this section, I provide a simple formalization of conflict and conflict-resolution by translating Searlian notions of powers and purpose in the normative notions of *values* and *ends*. The formalization is aimed at representing the dialectics that involves normative beliefs concerning which actions and which consequences get to be acknowledged and institutionalized as deontological universals. In particular, I consider that Searle's deontic powers and institutional purposes derives from values and ends, which respectively identify the two sets of actions and consequences that individuals in institutions believe to be normatively right. In other words, in order to deal with the formation of constitutive rules and relative commitment, it is necessary to represent how the epistemic conditions behind the identifiability of status functions are shaped by practical reasoning.

I conceptualize interactive intentionality as a kind of inter-subjective practical reasoning. It applies to normative values and ends which respectively are assumed to identify actions and consequences believed to be deontologically right in the decision situation. The value-end distinction articulates Searlian notion of "desire independent reasons for actions", by splitting it in two interdependent cognitive components. Values can be interpreted as intrinsic motives to act in a certain way and hence specify powers. Ends can be interpreted as the state of the world that is ought to be pursued, and hence specify purposes. The relation between values-ends is isomorphic with the relation between status and functions in Searle's deontological

ontology. As the deontological status – which specifies powers as potentiality of actions – entails certain functions (and determined purposes), the attribution of intrinsic value to an action entails the interpretation of its envisaged consequences as correspondent to an intrinsic end. This relation is one-to-one. As the institutional function entails that a determined status legitimates it, the identification of an intrinsic normative end implies that the correspondent action is attributed with a normative value.

The main argument is that individuals involved in conflict engage themselves in an interactive deliberative process concerning the attribution of normative value to actions and ends to consequences. Sub-section 4.1 introduces conflict in terms of non-compatibility of values and ends. Sub-section 4.2 investigate the epistemic conditions under which normative conflicts are solved. Sub-section 4.3 illustrates that interactive intentionality processes that solves normative conflict can be considered as representative of institutional formation. The process of formation of shared normative definitions of values and ends, while specifying powers and purposes behind status function, has a framing power. It forms what individuals believe it is ought to do in the institutional context. The description of the effects of interactive intentionality on normative beliefs allows for dealing with the adherence to constitutive normativity also in terms of self-enforcement, and provides an epistemological ground for the unification of accounts of institutions by social-ontology and economics.

4.1 Conflicting values and ends

The deliberation concerning values and ends set the epistemic context in which the status function is selected as a specific status function through the definition of powers as possibility of actions and functions as envisaged purposes. Thus, the notions of "value" and "end" are aimed at making explicit the processes of interpretation and definition of institutional powers and purposes. Specifically, the conflict among alternative powers attributions and among purpose attribution can be dealt with in terms of conflict among individual interpretations of actions in terms of intrinsic values and consequences in terms of ends. Therefore, the resolution of such a conflict can be considered representative of the way in which individuals get to a shared definition of purposes and powers, which paves the way to the collective recognition of the status function.

Conflict can concern both values and ends. It can affect the possibility that individuals share a common interpretation of the constitutive rule, and hence adhere to institutions in decisions and behaviours. I deal with conflict by introducing a simple relation of *compatibility* (and *non-compatibility*) [3], which specifies the epistemic conditions under which values or ends attributions are believed by individuals to be contemporary true (or false) statements over the normative, deontological definitions of actions and consequences respectively.

When conflict concerns values, individuals believe that the joint actions to which they respectively attribute intrinsic normative value are mutually non compatible. On the other hand, when two values are

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[3]The relation of compatibility (and not compatibility) as involved in practical reasoning can be interpreted in terms of commensurability of values and comparability of ends. See Millgram, Regan, and Raz contributions in Chang (1997).

compatible individuals believe that the actions to which they respectively attribute intrinsic normative value are compatible. When two values are compatible, there exists a common meta-value which is compatible with each individual value: individuals believe that the actions to which they respectively attribute intrinsic normative value can be jointly realized.

When conflict concerns ends, individuals believe that the envisaged state of the world that they respectively put as a purpose of joint action are mutually non compatible. On the other hand, two ends are compatible when individuals believe that the envisaged state of the world that they respectively put as a purpose of collective action are compatible. When two ends are compatible, there exist a common meta-end which is compatible with each individual end: individuals believe that there exists a state of the world in which the two individually envisaged states of the world can be jointly obtained.

Values and ends are linked by a double relation. Each value implies an end: a state of the world which come to existence after the action to which is attributed value is realized. Each end presupposes a value: an action which is attributed with a value because its envisaged consequence is viewed as a purpose. Given this relationship, when two values are compatible the respective ends are compatible and *vice versa* when two ends are compatible the respective values are compatible. On the other hand, when two values are not compatible the respective ends are not compatible and *vice versa* when two ends are not compatible the respective values are not compatible.

To schematise, let us introduce the following notation. Two values Γ and Δ are compatible (Γ C Δ) when individuals believe that the actions to which they respectively attribute intrinsic value can be jointly realized. In that case, there exist a common meta-value Ω compatible with individuals' values (Ω C $\Gamma \wedge \Omega$ C $\Delta \rightarrow \Gamma$ C Δ) and individuals believe that the actions to which they respectively attribute intrinsic normative value can be jointly realized. Vice versa, they are non-compatible when individuals don't believe so (Γ -C Δ).

Two ends γ and δ are compatible (γ c δ) when individuals believe that the envisaged outcomes of decisions can be jointly realized. In that case, there exist a common meta-end ω compatible with individuals' ends (γ c $\omega \wedge \delta$ c $\omega \rightarrow \gamma$ c δ) and individuals believe that there exists a state of the world in which the two individually envisaged states of the world can be jointly obtained. Vice versa, they are non-compatible when individuals don't believe so (γ -c δ).

Conflict is characterized by the epistemic circumstance in which individuals believe that their respective values and ends are mutually non compatible. This condition, for which γ -c $\delta \leftrightarrow \Gamma$ -C Δ, is depicted in Figure 1.
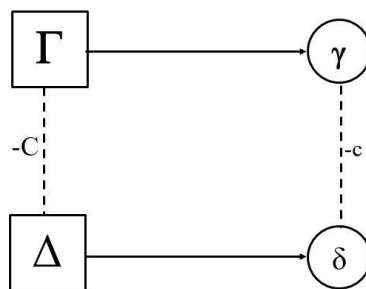

Figure 1: Conflict as non-compatibility of values and of ends

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4.2 Processes of conflict resolution

Variety among values and ends – as among alternative interpretations of institutional statuses and functions in terms of powers and purposes – calls for deliberative decisions capable to set both individual and collective resolutions in case of conflict. Such deliberative decisions are grounded in *practical reason* as the moral function through which rational scrutiny and decisions concerning values and ends are developed. I follow Habermas' *discourse ethics* in attributing a linguistic and performative nature to practical reason (Habermas,1990). Habermas reinterprets Kantian deontological philosophy, by grounding normativity – Kant's "categorical imperative" – in dialogical, interactive performance of practical reason, which gets to identify the universally valid norm through rational discussion of individual normative claims. Likewise, I treat the process which leads individuals to select and share the definition of institutional powers and purposes as a rational discussion developed through the inter-subjective performance of practical reason. Consequently, I consider that once this discussion comes to success, the obtained solution is recognized as universal and it is normatively and cognitively binding.

The conditions of conflict described in the previous sub-section (sub-section 4.1) are representative of institutional contexts in which the normative content of the status function is subject to debate – both with reference to powers and to purposes. I define *interactive intentionality* as an interactive mode of practical reasoning applied to the selection of values and ends among alternatives. The analysis of the epistemic conditions[4] under which conflicts concerning normative values and committed ends are overcome shows how interactive intentionality may get to shared normative definitions of institutional powers and purposes, contributing to institutional formation. More precisely, interactive intentionality can be thought as a deliberative discussion process in which individuals access their respective values and ends, compare and contrast them inter-subjectively, and eventually get to a shared identification of which actions and which consequences of action are to be held as normatively valid.

Interactive intentionality solves conflicts through a process of *discovery*. Individuals, through interactions in practical reasoning, can become aware of normative values and ends, pointing at possible available actions and consequences, not recognized in the initial epistemic condition. With reference to the conflict situation depicted in Figure 1, we may consider that, at time *t'* individual A and individual B mutually believe that their respective values and ends are not compatible. Specifically, A believes that the set of normatively possible actions identified by value Γ and the state of the world that the end γ point at as consequences to be pursued are not compatible with those entailed by B's normative value Δ and end δ. B believes the same about A's normative assumptions. We are hence interested in describing under which epistemic conditions this conflict could be solved. Two modes of solution can be identified.

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[4] The analysis is not aimed at specifying essential features of values and ends (and powers and purposes respectively) that are agreed in deliberation, but at describing which are the necessary epistemological conditions of normative agreements *per se*.

On the one hand, it may be the case that through deliberative discussion individuals start comparing their respective deontological attribution of values to actions. Through the comparison of values attributed to actions, many possible joint actions are put under scrutiny as object of possible attribution of normative (deontic) value. It is hence possible that thanks to deliberative discussion, besides many non compatible values, individuals become aware of a previously not considered value or that a new normative principle is developed on that occasion (moral/legal innovation). In this way, it can be the case that a value Ω emerges and individuals realize that it is compatible with each of their respective original values, so that they start to believe it as universal. Hence, there exist a joint action, compliant to the emergent normative principle, on which individuals can converge. The success of this deliberative process entails that at time *t"* individuals have changed their beliefs concerning the decision situation in such a way that now they view their respective values as compatible and subsumed under a common possible value Ω. The value Ω points at a joint action which satisfies both the originally conflicting value attributions. The process of conflict resolution through the emergence of a common compatible value is represented in figure 2.
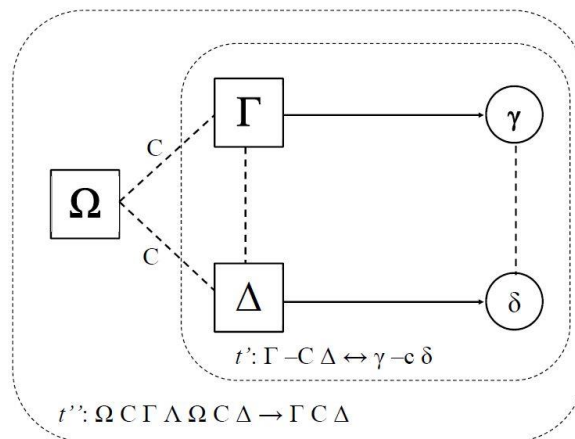

Figure 2: Conflict resolution via emergence of a compatible value

On the other hand, it may be the case that through interaction individuals start investigating the practical options available to them. This process may entail that many states of the world, as outcomes of individuals' interactions, are taken in consideration and evaluated as possible collective normative ends. Thanks to this discursive procedure, it may happen that previously not considered outcomes (states of the world which previously was out of the set of feasible outcomes for both individuals) or new combinations of feasible outcomes due to a creative process of knowledge sharing (technological innovation) become salient. Among these outcomes it can be the case that an end ω emerges and each individual realizes that it is compatible with their respective original ends. There exists a state of the world in which both original collective ends can be pursued at the same time. This means that at time *t"* individuals have changed their beliefs concerning the decision situation, in such a way that now they view their respective ends as compatible and subsumed under a common possible end ω. The end ω points at a state of the world in which both the original

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conflicting ends are realizable. The process of conflict resolution through the emergence of a shared compatible end is represented in figure 3.
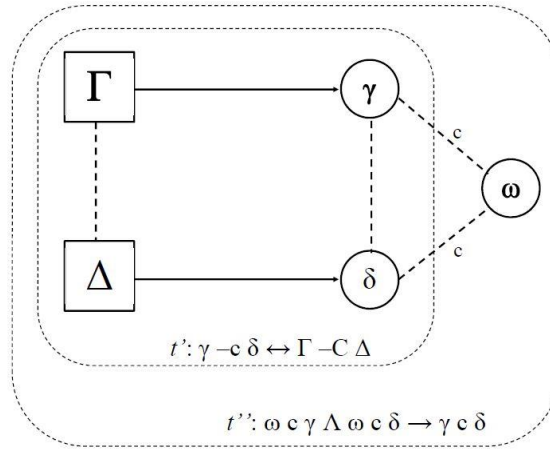

Figure 3: Conflict resolution via emergence of a compatible end

4.3 The formation of institutions

The two modes of conflict resolution identify necessary epistemic conditions behind the adherence to the collective attribution of normative relevance to actions and consequences. They illustrate an epistemology capable to account for the formation of shared interpretation of powers – through the emergence of shared values – and purposes – through the emergence of shared ends. Accordingly, interactive intentionality acts as a precondition of collective recognition and assignment of status function. Hence, it offers the opportunity to represent the mode of decision which form normative commitment through the process of selection of defined institutional powers and purposes. Interactive intentionality is performative. Individuals commit themselves to the result of the process exactly because they engaged in it. The obtained shared decision presupposes that they put interactively under discussion their own original positions and eventually overcome them. The universal nature of the obtained solution is such that, once the individuals get to be aware of it, they are committed to implement it.

The whole decision situation is reinterpreted according to the emerged normative categories. The interactive process through which normative deliberation takes place brings about a change in individual's beliefs concerning compatibility of actions attributed with intrinsic value and states of the world envisaged as an end that ought to be pursued. In this way cognitive criteria which make status and functions identifiable – collective purposes and deontological powers, respectively – are formed and constitute the basis of collective declaration. Figure 4 illustrates how, once the shared normative interpretation of relevant actions and consequence has emerged, it entails a reconfiguration of the whole context of normative references. This

process can be interpreted as grounding the formation of institutions, through conflict resolution and constitutive rule change.
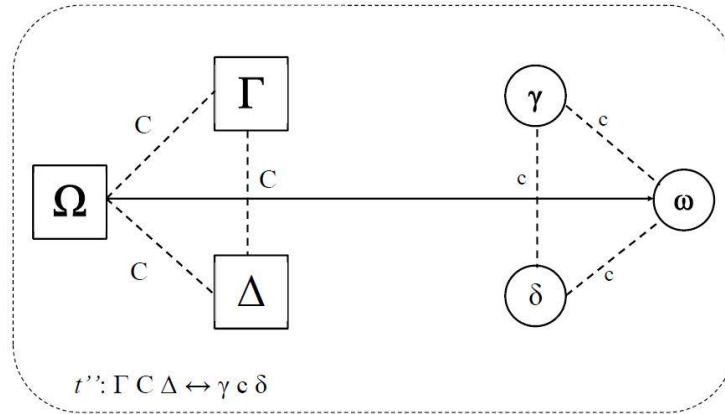

Figure 4: Formation and recognition of new purposes and powers

The fact that interactive intentionality entails beliefs change concerning the normative interpretation of actions and consequences affects individuals' interpretations of circumstances of decisions so that (social) preferences and payoffs may change accordingly. Moreover, the performative nature of interactive intentionality can be interpreted as grounding the common knowledge that sustain the mutual expectation that others will comply to the emerging norm. The gap between Searlian social ontology and conceptions of institutions as behavioural equilibria based on self-enforcement is bridged if we consider that interactive deliberation on normativity have an epistemic effect. Interactive intentionality acts over frames, so that when a normative agreement is reached it conditions relevance and salience criteria in the decision situation. Once interactive intentionality produces a shared normative interpretation of the decision situation, individuals stick to this normative interpretation, compute their decisions accordingly, and forms mutual believes concerning the other adherence to the constitutive rule.

To the extent that interactive intentionality is implemented as an interactive process, it commits individuals to its result. Institutions are (also) formed through deliberative discussions which commit individuals who take part in it, because the normative solution they get through interaction is cognized as representative of the universal norm. Moreover, by changing the beliefs concerning relevant actions and salient consequences, interactive intentionality changes both individuals' payoffs and mutual expectations concerning the others' compliance to the norm.

Once viewed as a result of interactive decisions, constitutive rules reflect a kind of self-enforcement. Only the value and ends that are agreed through interactive deliberations are implemented as constitutive rules. Moreover, constitutive rules as the product of interactive intentionality condition self-enforcement in behavioural strategy. Interactive intentionality structures the cognitive pre-definition of what is accounted as an incentive or as an enforcement in given social contexts ("punishments" and "rewards"). Institutional equilibria are consequent to implicit or explicit agreements concerning the normative interpretations of

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actions and consequences that precede the identification of behavioural strategies and decisions themselves. Constitutive rules, to the extent that they are formed through interactive processes of decision concerning alternative normative assignments, acts as frames for decisions within institutions.

5. Conclusions

By discussing Searle's foundation of normative commitment into status functions collective acceptance and assignment it has been possible to highlight epistemic interactive processes acting behind collective intentionality in institutions. I underlined that, as far as commitment to constitutive rules is concerned, it must be clarified how specific powers and purposes are selected among alternatives. Without this clarification we remain within the boundaries of deontological ontology, for which it is not possible to account for how institutions are formed as specific, defined institutions. The specificity of institutions and the fact that they are intrinsically subject to formation via conflict resolution and normative change are ontological traits which remain (legitimately) out of Searlian constitutive rule approach.

The attempt to complement Searle's deontology by looking for epistemic conditions of constitutive rules formation opens the possibility to think at commitment as a rule-following decision grounded in practical reason. Interactive practical reasoning constitutes an alternative both to commitment-based and enforcement-based conceptions of norms-compliance and suggests a way to reconcile the two. Interactive intentionality, as a processual and inter-subjective performance of practical reason, acts behind both deontological and instrumental rationality, constituting a cognitive basis for both commitment and enforcement. It accounts for the formation of shared cognition of normative values and ends as attributed respectively to actions and states of the world viewed as consequences. Interactive intentionality it is not only presupposed by norm compliant behaviours, but it also provides with shared epistemic interpretations the definition of the payoffs that constitutes the cognitive reference of self-enforcement.

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