Volume 3
Monsters and Philosophy
Charles T. Wolfe, ed.

Volume 4
Computing, Philosophy and Cognition
Lorenzo Magnani and Riccardo Dossena, eds.

Volume 5
Causality and Probability in the Sciences
Federica Russo and Jon Williamson, eds.

Volume 6
A Realist Philosophy of Mathematics
Gianluigi Oliveri

Volume 7
Hugh MacColl: An Overview of his Logical Work with Anthology
Shahid Rahman and Juan Redmond

Volume 8
Bruno di Finetti: Radical Probabilist
Maria Carla Galavotti, ed.

Volume 9
Language, Knowledge, and Metaphysics. Proceedings of the First SIFA Graduate Conference
Massimiliano Carrara and Vittorio Morato eds.

Volume 10
The Socratic Tradition. Questioning as Philosophy and as Method
Matti Sintonen, ed.

Volume 11
PhiMSAMP. Philosophy of Mathematics: Sociological Aspects and Mathematical Practice
Benedikt Löwe and Thomas Müller, eds.

Volume 12
Philosophical Perspectives on Mathematical Practice
Bart Van Kerkhove, Jonas De Vuyst and Jean Paul Van Bendegem, eds.

Volume 13
Beyond Description: Naturalism and Normativity
Marcin Miłkowski and Konrad Talmont-Kaminski, eds.

Beyond Description: Naturalism and Normativity

edited by

Marcin Miłkowski

and

Konrad Talmont-Kaminski

ISBN 978-1-904987-91-8

College Publications
Scientific Director: Dov Gabbay
Managing Director: Jane Spurr
Department of Computer Science
King's College London, Strand, London WC2R 2LS, UK

http://www.collegepublications.co.uk

Original cover design by orchid creative www.orchidcreative.co.uk
Printed by Lightning Source, Milton Keynes, UK

Contents

16

Naturalising Illocutionary Rules*

MACIEJ WITEK

In this paper I consider the concept of an *illocutionary rule* – i.e., the rule of the form "*X* counts as *Y* in context *C*" – and examine the role it plays in explaining the nature of verbal communication and the conventionality of natural languages. My aim is to find a middle ground between John R. Searle's view, according to which every conventional speech act has to be explained in terms of illocutionary rules that underlie its performance, and the view held by Ruth G. Millikan, who seems to suggest that the formula "*X* counts as *Y* in context *C*" has no application in our theorising about human linguistic practice. I claim, namely, that the concept of an illocutionary rule is theoretically useful, though not explanatorily basic. I argue that using the formula "*X* counts as *Y* in context *C*" we can classify illocutionary acts by what Millikan calls their *conventional outcomes*, and thereby make them susceptible to naturalistic explanation.

My paper consists of three parts. In the first section I discuss Searle's account of illocutionary acts, assessing its strengths and weaknesses. In the second section I analyse Millikan's conception of illocutionary com-

* Work on this paper was supported by the research grant No. N101 012 31/1708 of the Polish Ministry of Science and Higher Education. I want to thank to Edoardo Fittipaldi, Maciej Makarewicz, Jakub Martewicz, Jurgis Šķilters and two anonymous reviewers for their helpful critical comments on an earlier version of this paper.

Beyond Description: Naturalism and Normativity.
Marcin Miłkowski and Konrad Talmont-Kaminski (eds.).

munication. In the third section I develop a naturalistic account of speech acts, the central idea of which is that conventional illocutionary acts are complete linguistic signs conceived as structured states of affairs that embrace both lexical and environmental elements.

It is worth stressing that in what follows I focus on communicative illocutionary acts whose performance requires no extra-linguistic institutions. It is not my aim to examine such formal acts as pronouncing a couple husband and wife, returning a verdict, adjourning a parliamentary session, and so on.

1 Searle on Illocutionary Rules

In his essay *Speech Acts* (1969) Searle adopts the Austinian view on human linguistic practice, the central idea of which is that "speaking a language is engaging in a (...) rule-governed form of behavior" (Searle 1969: 12). In particular, he assumes that to perform an illocutionary act of a certain type – such as stating, requesting, warning, advising, promising, and so on – is to utter certain words in certain circumstances in accordance with a certain set of rules that he calls *constitutive*. Roughly speaking, a rule is constitutive if its collective acceptance by the community creates the possibility of a new form of behaviour.

In order to define the central concept of his theory, Searle draws a distinction between constitutive and regulative rules, which differ in their form and function. Constitutive rules have the form "*X* counts as *Y* in context *C*". Their function is not only to regulate, but to create the possibility of a new form of behaviour. The rules of chess, for example, define what counts as playing the game or, more accurately, what counts as making particular moves in the game, such as castling or checkmating. Regulative rules, by contrast, have the form "Do *X*" or "While *G*-ing, do *X*". Their function is to regulate the conduct of antecedently existing form of behaviour *G*. For example, the rule of etiquette "While talking to others, do not yawn" does not create the possibility of a conversation, but determines how to make it in a polite manner.

Searle's crucial point is that in some respects speaking a language resembles playing a game. To wit, types of illocutionary acts – e.g., stating, promising, requesting, and so on – can be likened to types of moves in the game of chess, such as castling or checkmating. A particular arrangement of the pieces on the chessboard, for instance, is not checkmating in virtue of its physical properties alone. What makes it checkmating is the fact that it instantiates the relevant move type. The type, in turn, is defined by the system of rules that jointly determine that such and such a position in chess counts as checkmating. By analogy, the utterance of a sentence in a context is not itself the performance of a certain speech act unless it instantiates the relevant illocutionary act type. The type, in turn, is defined by the set of illocutionary rules according to which the use of certain linguistic devices – words, syntactic structures, moods, and so on – in such and such a context counts as the performance of such and such an act.

The idea of rules that create the possibility of certain forms of behaviour, though popularised by Searle, has been independently put forth by other philosophers. Amedeo G. Conte (1997), an Italian legal philosopher, offers his own conception of eidetic-constitutive rules. He remarks that it was Wittgenstein who used the "verb 'to constitute' when talking of the rules of chess" (Conte 1997: 135). According to Conte, the idea that the types of moves in the game of chess are constituted by its rules can be found in the work of Czesław Znamierowski, "the Polish philosopher who put forward the concept of *norma konstrukcyjna* [a constructive norm]" (Conte 1997: 135). Another interesting conception of constitutive rules comes from William P. Alston, who in his *Illocutionary Acts and Sentence Meaning* (2000) accounts for illocutionary acts in terms of the speaker's taking a normative stance with respect to his utterance (for a critical discussion of this topic see Harnish 2005). Timothy Williamson, in turn, in his paper "Knowing and Asserting" (1996) claims that what is constitutive of assertions is the so-called knowledge rule (for a discussion of this topic see García-Carpintero 2004).

Constructing his theory, Searle focuses on a few closely related topics concerning (*i*) the nature of speech acts and linguistic conventions, (*ii*) the nature of illocutionary competence and (*iii*) the explanatory standards that every adequate account of language has to meet. In short, his aim is to construct a comprehensive theory that solves ontological, epistemological and methodological puzzles connected with speech acts. Let me, therefore, reconstruct it as a conjunction of the following four theses:

(1) Illocutionary acts are performed within language in virtue of the system of constitutive rules.

(2) Illocutionary conventions of different languages are different realisations of the same underlying constitutive rules; the rules, in turn, are conventional because they are collectively accepted by the language community.
(3) An agent knows how to perform and interpret certain illocutionary acts if and only if he has internalised the appropriate system of constitutive rules.
(4) In order to explain a linguistic characterisation of the form "In uttering sentence *T* in context *C* speaker *S* performs illocutionary act *F(p)*" – where "*F*" stands for the type of which the act is a token and "*p*" stands for the propositional content – one has to formulate the set of constitutive rules in accordance to which speaker *S* utters sentence *T*.

Thesis (1) defines the nature of illocutionary acts that are conceived as real components of our social environment. We describe them by means of sentences of the form "*S* performs illocutionary act *F(p)*" – e.g. "John states that Peter is a secret agent", "Sue asks whether Peter is a secret agent" and "Paul requests Peter to become a secret agent" – that can be true or false in virtue of facts. According to Searle, statements about illocutionary acts are *epistemically objective*, since they "can be established as true or false independently of the feelings and attitudes of the makers and the interpreters of the statement" (Searle 2005: 4). Facts that these statements register, in turn, have *subjective ontology*, because "their mode of existence requires that they be experienced by a human or animal subject" (ibid). Notice, then, that the necessary conditions for the successful performance of an illocutionary act token made in uttering sentence *T* are, *inter alia*, that (*a*) the speaker intends the hearer to recognise that the state of affairs specified by the rules of the relevant components of *T* obtains and (*b*) this intention is fulfilled (see Searle 1969: 49–50). In short, what constitutes the particular illocutionary act token are, *inter alia*, certain intentional states – feelings and attitudes – of the speaker and the hearer. These intentional states, nevertheless, can only function against the presupposition of the system of illocutionary constitutive rules, whose existence requires the collective acceptance by the community to which the speaker and the hearer belong. Illocutionary acts, then, have subjective ontology because, first, every act *token* requires for its successful performance that the speaker and the hearer have certain intentional states and, second, every illocutionary act *type* exists

in virtue of the collective acceptance of the relevant set of constitutive rules by the linguistic community.

As Robert M. Harnish points out, "the utterance of a sentence in a context is not sufficient for the performance of a speech act" (Harnish 2005: 11). To determine the nature of speech acts, therefore, is to specify what must be added. According to Searle, we must add both the speaker's individual intentionality and the set of constitutive rules that are collectively accepted by the linguistic community. The rules jointly constitute the possibility of performing acts of certain types or, in other words, the possibility of the speaker's expressing and the hearer's recognising certain illocutionary intentions (see Searle 2002: 150–151 and Searle 2005: 5–10). It turns out, therefore, that Searle attempts to reconcile two competing views on the nature of speech acts: the Gricean view, the central idea of which is that the performance of a speech act is best understood as the speaker's successful expression of a complex intentional state, and the Austinian view, according to which performing speech acts is engaging in a rule-governed form of behaviour.

Thesis (2), in turn, concerns the nature of linguistic conventions. Notice, however, that it involves two different criteria of conventionality which, it seems, fail to delimit a coherent class of conventional items. First, in different natural languages there are different conventional devices – illocutionary verbs, moods, syntactic structures, and so on – by means of which the speaker can indicate the illocutionary force of the act he performs. To call them conventional is to state that their forms are arbitrary in relation to their function. Second, there are underlying constitutive rules of language. To call them conventional is to state that they are products of collective intentionality.

Consider, first, the criterion of conventionality defined in terms of the arbitrariness of an item's form in relation to its function (call it the *arbitrariness-criterion*). Indeed, it is a matter of convention that the function of the French expression "Je promets" – as well as the German expression "Ich verspreche" and the English expression "I promise" – is to make a promise. In other words, these expressions are three different conventional devices for performing acts of the same type. In other words, they are arbitrary in relation to their illocutionary function, i.e., the function to bring about the institutional fact that Searle describes as *the undertaking of an obligation*. Generally speaking, to issue an utter-

ance with a certain illocutionary force is to express the intention to get the hearer to recognise that such and such an institutional fact obtains. Provided this intention is recognised by the hearer – i.e., the *illocutionary uptake* or *effect* is secured – the act is successfully performed. In short, Searle classifies illocutionary acts, *inter alia*, in terms of their illocutionary effects that are determined by what he calls *essential rules*. The essential rule of promising, for example, is "The utterance of *Pr* counts as the undertaking of an obligation to do *A*", where "*Pr*" stands for a linguistic device indicating the illocutionary force of promise (see Searle 1969: 63). It is a matter of convention that in French *Pr* is "Je promets" and in German it is "Ich verspreche".

The second criterion of conventionality – that I call the *agreement-criterion* – is met by the set of underlying illocutionary rules that are realised in one way or another by different natural languages. The rules exist – or, more accurately, are in force – in virtue of their collective acceptance by the community of speakers (see Searle 2005). In other words, they have subjective ontology, since they exist as correlates of acts of collective intentionality.

It turns out, therefore, that we are faced with two distinct criteria of conventionality – the arbitrariness-criterion and the agreement-criterion – that delimit two different domains of conventional items. According to Searle, the latter is explanatorily prior to the former, i.e., one cannot understand the conventional nature of illocutionary verbs – as well as other illocutionary force indicating devices – without a prior understanding of their function. The function, in turn, is conventional because it results from the collective agreement or acceptance. In other words, a considerable portion of linguistic conventions remain unintelligible unless they are conceived as particular realisations of the constitutive rules of language.

Thesis (3) is epistemological. It defines the kind of competence that underlies illocutionary communication. According to Searle, every agent who knows how to issue and understand illocutionary acts of certain types must have internalised the appropriate system of illocutionary rules. The individual knowledge of such a system constitutes the agent's illocutionary competence. According to Searle's modified definition of non-natural meaning, the speaker intends the hearer to recognise the intention to produce the illocutionary effect in virtue of the hearer's knowledge of the relevant set of constitutive rules. Moreover, due to this kind

of competence the agent is able to issue and understand novel speech acts, i.e., acts they have never encountered before. Such an ability – that can be, following Chomsky, called the *creative aspect of normal language use* – is, according to Searle, an important mark "of rule-governed *as* opposed to merely regular behavior" (Searle 1969: 42). In this respect – though, of course, not in others – Searle's individualistic account of illocutionary competence can be likened to Chomsky's conception of I-languages. "In addition to what is internalised in the minds/brains of the speakers – Searle declares – there isn't some social practice that is, so to speak, out there independent of them. Social capacities are realised entirely in the individual brains of the members of any given society." (Searle 2002: 154)

Theses (1), (2) and (3) support methodological principle (4). According to Searle, to perform an illocutionary act is to utter words in accordance with the relevant system of illocutionary rules. Moreover, the agent's knowledge how to perform and interpret illocutionary acts amounts to his mastery of the rules he has internalised. In order to explain illocutionary act tokens, therefore, one has to formulate the relevant rules that underlie their performance. What is more, every speaker who is able to participate in illocutionary communication is also able, after careful and systematic reflection, to provide such an explanation. Why? Because they can speak the language they investigate and, in this connection, can come to know explicitly the rules that shape *their* linguistic behaviour.

Searle's account of speech acts in terms of constitutive rules offers a unified explanation of various linguistic phenomena, such as indirect speech acts and performative utterances. It also provides the basis for an interesting taxonomy of speech acts. Moreover, it accommodates the Gricean idea – that meaning is a matter of expressing a complex intentional state – within the broader Austinian framework. Despite these and similar advantages, however, Searle's account faces at least two serious problems.

First, there seems to be something wrong with Searle's two-step account of the conventionality of natural languages. To wit, it fails to delimit a coherent region of conventional items. First, Searle explains conventions of particular languages in terms of their arbitrariness-conventionality and the underlying constitutive rules. Next, he claims

that the underlying rules have subjective ontology, which means that they exist in virtue of the collective acceptance by the linguistic community and, in this connection, are agreement-conventional. It seems to me, however, that for an item to be conventional it has to meet both the arbitrariness-criterion and (a version of) the agreement-criterion: a pattern of behaviour is conventional only if its form is arbitrary in relation to its function and its performance presupposes a kind of collective attitude. I return to this topic in the second section of this paper, where I consider Millikan's account of natural conventionality.

Second, there are reasons for doubting whether illocutionary competence does require the internalisation of the system of illocutionary rules. Notice that claim (3), though epistemological, carries one disputable metaphysical assumption. It presupposes, namely, that the speaker's illocutionary competence comes down to his knowledge of the system of illocutionary rules and, as such, is a natural property of his brain. The point is that, according to Searle, (*i*) the system of illocutionary rules is a product of the collective intentionality and (*ii*) intentionality is a biological phenomenon (Searle 1992). It turns out, therefore, that Searle attempts to provide a naturalistic account of constitutive rules. In the third section I offer an alternative view on skills that underlie illocutionary communication. I claim that our ability to issue and interpret illocutionary acts rides piggyback on our ability to read natural signs, an ability that is further extended by our capacity to imitate what others do. Illocutionary rules are not in the head.

2 Millikan on Illocutionary Conventions

In her "Proper Function and Convention in Speech Acts" (2005) Ruth G. Millikan offers a uniform account of illocutionary acts. She claims, namely, that they all can be grouped and defined by their purposes. Allowing for the fact that speech acts do not form a homogeneous class, however, she mentions three different kinds of purposes one may attribute to them: (*i*) the purpose of the speaker in speaking, (*ii*) the purpose of the linguistic form used and (*iii*) the purpose of the extra-linguistic conventional move (if any) the speaker makes. Purpose (*i*) is the intention that underlies the speaker's utterance, whereas purpose (*ii*) can be identified with the conventional outcome of the utterance, i.e., the effect it has under the relevant convention (constraints it puts on what can count as the hearer's conventional response). Millikan claims that purposes (*i*) and (*ii*) normally coincide in content. But they can diverge: the speaker can be insincere or uncooperative; they can also perform an illocutionary act in a non-conventional way, thereby generating the Gricean implicature.

In this section I examine Millikan's idea of illocutionary acts as conventional moves. I start, however, with a brief presentation of her conception of *locally recurrent natural signs* (henceforth "LRNSs"), a conception that explains how it is possible for an organism inhabiting a certain domain to learn about one of its elements from the other. Millikan's point is that conventional signs in general and linguistic signs in particular are nothing but natural components of the human environment and as such "are read in exactly the same way that natural signs are read" (Millikan 2004: 109).

Consider a fox who perceives certain tracks left on the snow – call them, following Dretske and Millikan, "ε-tracks" (Millikan 2004: 38) – and recognises that there was a quail in its vicinity a short time ago. How is it possible? First – Millikan claims – in the wood the fox inhabits there has to be a nonaccidental recurrent correlation between ε-tracks and the presence of quails. Second, the fox's cognitive system has to be adapted to this correlation, i.e., it has to be able to keep track of it. The correlation in question does not have to be global: the fact that in a different wood ε-tracks are correlated with something else – or even with nothing at all – has no bearing on the fox's ability to read ε-tracks left in its local environment as signs of quails. By analogy, consider a beaver who splashes the water with its tail to signal the presence of a predator (Millikan 1989: 288). Other beavers who hear the splash looks for a place to hide. We can say, therefore, that in the beavers' local domain there is a recurrent correlation between certain splashes and the presence of predators. A beaver who is not able to keep track of this correlation has little chance to survive. In sum, as part of their adaptation to their environments, organisms have become sensitive – by means of learning or natural selection – to recurrent correlations characteristic to *local* domains they inhabit.

Notice that a LRNS of a thing is not a simple quality – such as a track of a certain shape or a characteristic splashing sound – but a structured state of affairs. The same holds for what it signifies. In the fox's wood, for example, states of affairs of the form "ε-track-of-size-*s*-at-*p*-and-*t*"

signifies states of affairs of the form "a-quail-of-size-*z*-at-*p*-and-the-moment-preceding-*t*" (where "*p*" and "*t*" are locational and temporal variables, respectively). Notice that there are systematic correlations between the time, place and size of a particular ε-track and the time, place and size of the quail it signifies. By the same token, in the beaver splash semiotic system the time and place of a splash vary systematically with the place and time of a predator. In other words, there is an isomorphism – which Millikan calls a *semantic mapping function* – between the class of signifying states of the form "a-splash-at-*p*-and-*t*" and the class of signified states of the form "a-predator-at-*p*-and-*t*" (Millikan 2004: 49). The former class is a sign type, which can, following Charles S. Peirce, be called *legisign*. Its every token, in turn, is a *sinsign*, within which one can distinguish (*i*) a characteristic splashing sound and (*ii*) the particular time and place of its production. Component (*i*) is qualitative and as such can be called *qualisign*. Components (*ii*) are *reflexive*: the time and place of a splash stand for the time and place of danger. Both (*i*) and (*ii*) are singled out by abstraction, since the real semiotic unit is a sign token that represents a respective type. Only in the context of the beaver semiotic system does a splash signify something. "It is a serious mistake" – Millikan points out – "to suppose that the architectural or compositional meaning of a complex sign is derived by combining the prior independent meanings of its parts or aspects. Rather, the meanings of the various significant parts or aspects of signs are abstracted from the prior meanings of complete signs occurring within complete sign systems." (ibid.: 50).

Consider now the concept of natural conventions. According to Millikan (1998), natural conventions consist of reproduced patterns of activities that proliferate due to weight of precedent rather than due to their capacity to perform certain functions. In other words, a reproduced item is conventional if its form has been reproduced from other items and is arbitrary relative to its function. For example, what explains the proliferation of chopsticks in the East and forks in the West – two different though equally effective devices for placing food in the mouth – is weight of their respective precedents.

In some cases, to reproduce an activity – for example, wearing green clothes on St. Patrick's Day – is to copy directly its relevant aspects or form. Another possibility is to follow explicit instructions. Consider, for example, a radio presenter who advises her listeners how to decorate a Christmas tree. The predominant form of reproduction, however, is what

Millikan calls *counterpart reproduction*. Within every counterpart-reproduced pattern one can single out two complementary portions. Their production does not consist in direct coping, but is guided by the need to fit in with one another. For example, "the traditional positions assumed by men and women for ballroom dancing were commonly reproduced in part by [counterpart reproduction], each woman settling into the traditional woman's posture in response to the postures of the men with whom she danced, and vice versa" (Millikan 1998: 164). The custom to greet each other by shaking right hands and the driving-on-the-left convention are other examples of counterpart-reproduced patterns.

According to Millikan, most language conventions consist of counterpart-reproduced patterns. It is a matter of convention – she claims – that we use the indicative mood to make assertions and the imperative mood to issue directives. Moods and syntactic forms, however, are not handed down by direct coping. They are abstract components of complex speaker-hearer patterns whose reproduction involves two complementary acts that are supposed to fit in with one another. Normally – Millikan claims – a speaker who utters an indicative sentence initiates the reproduction of the relevant pattern; the reproduction is completed if the hearer believes what the speaker says. Normally, the conventional pattern whose speaker's portion involves the utterance of an imperative sentence is completed when the hearer complies with what he is told. In short, we acquire our illocutionary competence by fitting in with what others say and do.

Two tokens – such as phrases and structures – are of the same type in virtue of their history rather than their shape. Roughly speaking, language conventions are sequences of pattern tokens that have the same evolutionary history. To recognise the type to which a given token belongs is to identify the family from which it comes.

I assume that Millikan's reproduction-requirement is an analogue of Searle's agreement-criterion. To reproduce a pattern of activity is to do what *others* have done before. When I do something in a conventional manner, *my* doing it this way presupposes *our* doing it the same way. It should be stressed, however, that this presupposition is not normally consciously represented by the agents who are engaged in the reproduction of conventional patterns. Note, next, that not all reproduced patterns are conventional. Technologies and skills, for example, are handed down as

well. That is why Millikan adds the second requirement, which is an analogue of Searle's arbitrariness-criterion: reproduced patterns are conventional if their form is arbitrary relative to their function. What, then, is the function relatively to which linguistic conventional patterns are arbitrary? According to Millikan, language conventions proliferate, in part, due to the fact that they perform *coordinating functions*.

Let me say a word on the relationship between three concepts: *cooperation*, *coordination*, and *convention*. It is worth stressing that (*a*) not all cases of cooperation involve coordination and (*b*) not all cases of coordination involve conventions.

To illustrate thesis (*a*), let me consider a cognitive system made up of two cooperating input-output subsystems: the perceptual system and the executive system. Assume, for simplicity, that the former consists of the retina, the optic nerve and the primary visual cortex. When triggered by a distal stimulus (e.g., a predator), it produces a topographically organised neural pattern in the primary visual cortex. The function of the executive system, in turn, is to translate such a perceptual pattern into a corresponding behavioural reaction (e.g., to fly away). Following Millikan, we can call the perceptual system a *sign producer* and the executive system a *sign consumer*. Provided the former operates *normally* the pattern it produces is a LRNS of the relevant distal stimulus. (Note that "normally" is a historical rather than statistical term; for an item to operate normally is to operate in a way that explains the item's continuous reproduction; for a discussion of this topic see Millikan 1989: 284.) The sign, next, is consumed by the executive system. The crucial point here is that these two systems in question cooperate with each other. They have a purpose in common – or, borrowing the term from Searle, a *collective purpose* – which is to adapt the organism's behaviour to variations in its environment. Moreover, it is their collective purpose – or, more accurately, their *collective proper function* – that explains their continuous reproduction within the relevant species. The producer's part of the collective purpose is to engender whatever the consumer needs for doing its part in a normal way. The consumer's function, in turn, is to adapt the organism's behaviour to variations in perceptual patterns. The consumer performs its function normally only if its triggering pattern is a true representation. Therefore, the producer function is to produce representations that are true as the consumer reads them. Provided the producer performs its function in a normal way, the sign it engenders is not only true, but is also a LRNS.

In short, the representation that stands midway between the producer and the consumer is a *cooperative intentional sign* (see Millikan 2004: chapter 6), which, unlike a LRNS, can be false.

It is not my aim in this section to reconstruct Millikan's concept of intentional signs and her original theory of proper functions. What I want to stress now is the fact that the cognitive system under discussion contains two subsystems that have been designed to cooperate with each other. In other words, they have been selected for performing their collective proper function. We cannot characterise proper functions of the perceptual system and the executive system without reference to their collective purpose. In short, the purposes we attribute to both the producer and the consumer are *cooperative* purposes. These two subsystems cooperate despite the fact that their interactions involve no coordination. Generally speaking, what underlies the most primitive forms of cooperation is evolutionary design rather than coordination.

Now consider thesis (*b*). Notice, first, that what Millikan calls the producer and the consumer can be two distinct organisms. Consider, then, two or more partners that have a collective purpose. Assume, next, that "achieving this purpose requires actions by each of the partners", and that "more than one combination of actions will achieve the purpose" (Millikan 1998: 168). In order to achieve their collective purpose, then, the cooperating participants have to be able to predict each others' moves and, as a result, adapt their individual actions to what others are predicted to do. In short, their collective behaviour has to involve a form of coordination.

Millikan maintains three types of coordination: *open*, *blind* and *half-blind*. Open coordination is completely unproblematic and as such requires no conventions. Consider, for example, two people whose collective purpose is to sit at the same table in the restaurant. One of them – the leader – sits at an arbitrary table, whereas her partner follows after. In other words, the follower does not have to predict the leader's move in order to achieve coordination; he just sees what he is supposed to do. Blind coordination, by contrast, necessarily involves conventions. Consider, for example, the driving-on-the-left convention, whose function is to achieve coordination between drivers that otherwise – i.e., in the absence of such a convention – would not be able to predict each other's behaviour. Their collective purpose is to avoid the oncoming traffic. An

interesting type of coordination is half-blind coordination. Like open coordination, it involves interaction between a leader and a follower. Like blind coordination, however, it involves conventions. In short, half-blind coordination is conventional leader-follower coordination. Examples of this kind of coordination "began when a leader reproduces a certain portion of a pattern, which portion is observable to a follower. The follower is familiar with the pattern, recognises it, and reproduces the complementary part, resulting in a coordination of a sort that is partly responsible for the proliferation (due to precedent) of the pattern." (Millikan 1998: 172) Consider, for example, two mechanics whose collective purpose is to repair a car engine. One of them (the leader) wants to remove a broken carburettor, but cannot do this until his partner (the follower) undoes certain nuts. The leader's intention to get the hearer to undo the nuts is an unobservable part of the collective activity under discussion. In other words, the follower cannot directly recognise it. This intention, however, is an unobservable part of the relevant speaker-hearer pattern that involves (*i*) the use of the imperative mood on the part of the speaker and (*ii*) complying with what the speaker says on the part of the hearer. Reproducing his portion of the pattern, the leader makes his intention overt, thereby facilitating the achievement of coordination.

To sum, only blind and half-blind coordination necessarily involves conventions. Most language conventions, in particular, have coordinating purposes. Speaker-hearer conventional patterns proliferate because they help to achieve half-blind coordination between cooperating partners.

Recall that "the utterance of a sentence in a context is not sufficient for the performance of a speech act" (Harnish 2005: 11). According to Millikan, what must be added are conventional patterns that are reproduced by cooperating speakers and hearers. In other words, to perform an act of a certain type is to initiate or complete the reproduction of a corresponding speaker-hearer conventional pattern. For example, to perform an assertive act is to utter an indicative sentence in such and such a context and thereby initiate the reproduction of a corresponding conventional pattern. Normally – Millikan claims – the speaker's portion of the pattern involves two components: the speaker's belief and his publicly observable utterance. In other words, the speaker who performs an assertive act translates his belief into an *outer cooperative intentional sign*. The hearer's portion of the pattern, in turn, is to believe what the speaker says. In other words, the hearer's cooperative response is to translate the

sign produced by the speaker into a corresponding belief. In short, assertive communication, when it proceeds in a normal way, can be best understood as a transfer of knowledge, the purpose of which is to achieve coordination between the leader (i.e., the speaker who is a sign producer) and the follower (i.e., the hearer who is a sign consumer). To perform a directive act, in turn, is to utter an imperative sentence and thereby initiate the reproduction of a corresponding conventional pattern. What completes the reproduction is the hearer's cooperative response, i.e., his complying with what the speaker says.

The speaker who initiates the counterpart reproduction of a conventional pattern makes a *conventional move* that can be characterised by its *conventional outcome*, i.e., in terms of constraints put on what counts as the hearer's cooperative response (Millikan 1998: 178). To perform an illocutionary act, then, is to make a conventional move. Every illocutionary act type can be defined as a set or family of conventional move tokens that have the same conventional outcome or, in other words, have the same cooperative purpose. It should be kept in mind, however, that an utterance token can be a determinate conventional move even though the hearer to whom it is addressed behaves uncooperatively. What matters is the fact that the speaker who makes the utterance initiates the reproduction of the relevant pattern. Whether the reproduction is completed or not has no bearing on the identity of the illocutionary act the speaker makes. (Of course if hearers were systematically uncooperative, speakers would not be motivated to initiate the reproduction of the pattern in question.)

3 Natural Sign and Convention in Speech Acts

Following Millikan, I assume that the central class of illocutionary acts is conventional in nature. Normally, to perform an illocutionary act is to make a conventional move that can be defined by its conventional outcome. Unlike Millikan, however, I am far from claiming that the conventional outcome of an act is usually identical to the purpose of the linguistic form used. My point is, rather, that the latter should be analysed in terms of what it contributes to the former. I claim, moreover, that in order to characterise an illocutionary act type Y – i.e., a class of act tokens that have the same conventional outcome – we can invoke the formula "X_n counts as Y in context C_n" and represent the tokens of Y as ordered pairs

of the form "$\langle X_n, C_n \rangle$", where "X_n" stands for the utterance made by a speaker and "C_n" stands for its environmental context, i.e., the context that is built of LRNSs that are readable to the speaker and the hearer..

Let me reconstruct my view as a conjunction of the following four theses:

(1) Illocutionary acts are performed within a given domain in virtue of (*a*) the system of LRNSs that are specific to that domain and (*b*) the relevant system of speaker-hearer conventional patterns, where the latter is built on the former.

(2) Illocutionary conventions consist of speaker-hearer patterns whose form is arbitrary relative to their coordinative function; to perform a conventional illocutionary act is to initiate the reproduction of the corresponding pattern by supplementing LRNSs that are available to the speaker and the hearer with an appropriate utterance.

(3) An agent knows how to perform/interpret certain illocutionary acts if and only if he is able to (*a*) read the relevant LRNSs and (*b*) initiate/complete the reproduction of the relevant speaker-hearer patterns.

(4) In order to explain a linguistic characterisation of the form "In making utterance X_n in context C_n speaker *S* performs illocutionary act *Y*" – where "*Y*" stands for the type of which the act is a token – one has to identify family *Y* of tokens of the form "$\langle X, C \rangle$" to which the token $\langle X_n, C_n \rangle$ can be assimilated.

Let me justify my view by testing it against the following three examples. The first one comes from Grice (1989: 32):

Scenario 1.
A is standing by an obviously immobilised car and is approached by *B*. The following exchange takes place:
A: I am out of petrol.
B: There is a garage around the corner.

According to Grice and his followers, *B*'s utterance carries a conversational implicature: by saying that there is a garage around the corner, *B* non-conventionally means that the garage is open and selling petrol. Notice, however, that *A*'s opening remark can be also analysed along the Gricean lines: by saying that he is out of petrol, *A* non-conventionally asks *B* for help in finding petrol for his car (see Korta and Perry 2006: 169).

I claim that there is nothing unconventional in *A*'s and *B*'s behaviour. I assume that *A* and *B* reproduce a speaker-hearer conventional pattern, whose speaker's portion is to produce a *complete cooperative linguistic sign* (henceforth "CCLS") that is a conventional request for help in finding petrol for the speaker's car. The hearer's portion of the pattern, in turn, is to respond cooperatively. The main idea behind my account comes from Millikan, who claims that "there are many conventional ways of using context as a proper part of a linguistic sign" (Millikan 2004: 139). Hence thesis (2): to produce a CCLS by uttering certain words is to add something to the domain of LRNSs that are available to the hearer. The resulting sign is a structured state of affairs one aspect of which is the speaker's utterance. Its other aspects are LRNSs that constitute the *external* or *environmental context* of the utterance as opposed to its *internal* or *cognitive context* (see Carston 2002: 81). External context is a complex world affair, whereas internal context can be represented as the set of propositions that are mutually believed by the hearer and the speaker.

Assume – in agreement with thesis (1) – that in the traffic domain there is a trackable and non-accidental correlation between structured states of the form "*x*-stands-by-immobilised-*car*-at-*p*-and-*t*" and states of the form "*x*-needs-help-with-*car*-at-*p*-and-*t*". (Note that the way the signified states are characterised presupposes the existence of a cooperative society: only members of a cooperative society can be described as being in need of help.) "*Car*", "*p*" and "*t*" are variables representing reflexive elements of sign tokens, i.e., elements that stand for themselves (see Millikan 2004: 49). We can say, therefore, that there is a semantic mapping function that defines an isomorphism between the class of signifying states and the class of signified states. States of the form "*x*-stands-by-immobilised-*car*-at-*p*-and-*t*" naturally signify (i.e., carry natural information of) corresponding states of the form "*x*-needs-help-with-*car*-at-*p*-and-*t*".

According to thesis (2), *A*'s utterance supplements the LRNS token whose structure can be described as *A*-stands-by-*CAR*-at-*P*-in-*T* (where "*CAR*" stands for the immobilised car under discussion and "*P*" and "*T*" stands for the location and time of the utterance respectively); to wit, words uttered by *A* specify the kind of problem that *A* is currently facing and, in the process, the kind of help he needs. The CCLS produced by *A*

is the state *A*-stands-by-*CAR*-at-*P*-and-*T*-and-utters-[I am out of petrol] and can be represented as an ordered pair $\langle X_1, C_1 \rangle$, where X_1 is *A*'s utterance of the sentence "I am out of petrol" and C_1 is the state *A*-stands-by-*CAR*-at-*P*-and-*T*. Notice that what determines the illocutionary force of $\langle X_1, C_1 \rangle$ is its contextual component, i.e., the LRNS token *A*-stands-by-*CAR*-at-*P*-and-*T*. In the traffic domain, it naturally signifies the state *A*-needs-help-with-*CAR*-at-*P*-and-*T*. Although the sentence uttered by *A* is indicative in form, the communicative act he performs is best understood as a conventional request. The point is that what *A* reproduces is not merely the sentence "I am out of petrol", but a complex state of affairs to which the sentence contributes; the resulting state is a conventional move whose conventional outcome can be described in terms of what can be counted as *B*'s cooperative response.

Observe – in agreement with thesis (3) – that what underlies *B*'s understanding of *A*'s opening remark – the understanding that is manifested in *B*'s cooperative response – is nothing but *B*'s ability to keep track of locally recurrent correlations that is essentially enriched by his capacity to reproduce speaker-hearer patterns.

By analogy, consider scenario 2:

Scenario 2.:
A four year old boy runs into the kitchen and cries: "I'm thirsty, mum!"
His mother gives him a glass of juice.

Note that according to the Gricean view, the boy directly states that he is thirsty and indirectly (*via* non-conventional implicature) asks his mother for something to drink. I claim, by contrast, that the act the boy performs is a conventional request. More precisely, it is a complex conventional sign within which we can single out its linguistic and contextual component. The former – element X_2 – is the utterance of the sentence "I'm thirsty, mum", whereas the latter – element C_2 – is the state boy-runs-into-the-kitchen-at-*T*. From the mother's point of view the occurrence of her son in the kitchen at *t* is a LRNS of his being in need of something at *t*. What she interprets, however, is a CCLS, i.e., a state whose structure can be described as boy-runs-into-the-kitchen-at-*T*-and-cries-[I'm thirsty, mum]. By giving him a glass of juice, she completes the reproduction of the relevant conventional pattern.

Consider the third example, which is borrowed from Carston (2002: 17):

Scenario 3.:
D and *E* live together. *D*, who notoriously eats marmalade on toast for breakfast, holds a slice of toast in his hand and visibly looks around for something. *E*, who is sitting at the kitchen table, says: "On the top shelf!"

Note that *E* behaves cooperatively. To wit, she recognises that her partner needs help – more precisely, that he is looking for the marmalade – and provides him with the relevant piece of information. How is it possible for *E* to come to know what *D* wants? My hypothesis is that in their kitchen domain there is a trackable and recurrent correlation between states of the form "*D*-holds-a-slice-of-toast-at-*t*" and states of the form "*D*-wants-the-marmalade-at-*t*" (or "*D*-looks-for-the-marmalade-at-*t*"). State tokens that exemplify the first type naturally signify corresponding state tokens that exemplify the second type. Note, that some elements of every signifying state contribute as such to the state it signifies. Agent *D*, for example, who is an element of the signifying state, stands for himself. The same holds for the moment *t* which is an abstract component of both the signifying and the signified state. It can be said, therefore, that there is a semantic mapping function that defines an isomorphism between the class of states of the form "*D*-holds-a-slice-of-toast-at-*t*" and the class that comprises states of the form "*D*-wants-the-marmalade-at-*t*". Being adapted to it, *E* is able to interpret *D*'s behaviour as the LRNS of his want of the marmalade.

Do *D* and *E* reproduce a speaker-hearer conventional pattern? Strictly speaking, they do not. Only cooperating agents can be in need of coordination and, a fortiori, in need of coordination achieved by means of language conventions. There is no reason to suppose that *D*'s behaviour is a cooperative intentional sign. Rather, it is a natural sign that has no cooperative function.

Notice, however, that *E* behaves cooperatively. She recognises that her partner is looking for the marmalade and, as a result, she provides him with the relevant piece of information. We can say, therefore, that what scenario 3 illustrates is a borderline case. It involves, namely, a natural non-cooperative sign produced by *D* and *E*'s cooperative response to it. That is why I am inclined to regard the former as a quasi-illocutionary act that evokes a proto-conventional, though entirely cooperative response.

Consider now the following three states of affairs:

1. *A*-stands-by-*CAR*-at-*P*-and-*T*-and-utters-[I am out of petrol]
2. boy-runs-into-the-kitchen-at-*T*-and-cries-[I'm thirsty, mum]
3. *D*-holds-a-slice-of-toast-at-*T*

States 1 and 2 are conventional CCSLs: they initiate the reproduction of relevant speaker-hearer patterns, i.e., patterns involving two complementary acts that are supposed to fit in with one another. State 1 – and the same holds for state 2 – can be represented as an ordered pair $\langle X_1, C_1 \rangle$, where "X_1" stands for *A*'s utterance of the sentence "I am out of petrol" and "C_1" stands for the state *A*-stands-by-*CAR*-at-*P*-and-*T*. In other words, state 1 exemplifies a type of illocutionary act that can be represented – in agreement with thesis (4) – as a sequence of ordered pairs of the form "$\langle X_n, C_n \rangle$" that share the same evolutionary history and, as a result, can be counted as having the same conventional outcome *Y*. It is not required, however, that all tokens of a given act type have exactly the same shape. Consider, for example, speaker *F* who enters a small shop, looks at the assistant, and says: "My car is on the shoulder. I am out of petrol". Like sign 1, the sign produced by *F* can be represented as an ordered pair of the form "$\langle X_n, C_n \rangle$". These two signs under consideration differ in their linguistic and contextual components. Nevertheless, they can be counted as instantiating *the same* illocutionary act type *Y* (two different cases of asking for help with finding petrol for the speaker's car). As John L. Austin put it, "'The same' does not always mean the same. (...) it is a (the typical) device for establishing and distinguishing the meanings of ordinary words. Like 'real', it is part of our apparatus *in* words for fixing and adjusting the semantics *of* words." (Austin 1961: 88, footnote 2) We can add that it is also part of our apparatus for fixing and adjusting the typology of illocutionary acts.

It turns out, therefore, that illocutionary rules of the form "X_n counts as *Y* in context C_n" do not *constitute* but *describe* types of illocutionary acts. The latter are nothing but sequences of ordered pairs of the form "$\langle X_n, C_n \rangle$" that are taken by members of the linguistic community to be of *the same* type. Illocutionary rules do not constitute our linguistic practice; rather, it is our linguistic practice that constitutes what they describe.

Observe, next, that what underlies the interpretation of signs 1, 2 and 3 is our ability to keep track of natural semiotic domains that is essentially enriched by our capacity to imitate certain aspects of what others do. In other words, there is a continuity between our ability to read

LRNSs – an example of which is state 3 – and our capacity to interpret CCLSs such as 1 and 2. Both *B* and *E* are trying to be helpful. *E* reacts cooperatively to the LRNS produced by her partner (i.e., to state 3), whereas *B* reacts cooperatively to the CCLS produced by *A*. The latter (i.e., state 1) is also a LRNS, provided *A* is truthful, sincere and cooperative. The correlation between states of the form "*x*-stands-by-immobilised-*car*-at-*p*-and-*t*-and-utters-[I am out of petrol]" and states of the form "*x*-needs-help-in-finding-petrol-for-*car*-at-*p*-and-*t*" spreads over a local time and place "through the medium of competent, reliable, and sincere speakers of the language who have learned from one another" (Millikan 2004: 109).

Let me end my paper with four remarks.

First, the view I develop here is a bit more radical than the one offered by Millikan in her "Proper Function and Convention in Speech Acts" (2005). She assumes, namely, that the conventional outcome of the speaker's move can be identified with the cooperative purpose of the linguistic form used. The problem is, however, that this assumption can hardly be reconciled with the observation that the primary bearers of linguistic meaning are CCLSs – complex states of affairs that essentially involve contextual elements carrying local natural information. That is why I claim that the cooperative function of a linguistic form should be analysed in terms of its systematic contribution to the meaning of CCLSs.

Second, Millikan's conception seems to be an attractive alternative to Searle's two-step account of language conventions. Unlike Searle's two criteria of conventionality, the reproduction-constraint enables us – together with the weight-of-precedent-constraint – to delimit a coherent region of conventional activities.

Third, the ability to issue and understand illocutionary acts does not require the internalisation of the set of illocutionary rules. Rather, it involves a more primitive and evolutionary older capacity to read LRNSs – signs that make up the environmental context of an utterance – that is enriched by the ability to reproduce what others have done before, i.e., the ability that underlies the proliferation of linguistic conventions.

Fourth, it turns out that formulas of the form "*X* counts as *Y* in context *C*" are theoretically useful. To wit, they are convenient devices for classifying illocutionary act tokens.

References

Alston, William P. (2000). *Illocutionary Acts and Sentence Meaning*. Ithaca and London: Cornell University Press.

Austin, John L. (1961). *Philosophical Papers*. Oxford: The Clarendon Press.

Carston, Robyn (2002). *Thoughts and Utterances. The Pragmatics of Explicit Communication*. Oxford: Blackwell Publishing.

Conte, Amedeo G. (1997). "Eidetic-Constitutive Rules". In *Law and Language: The Italian Analytical School*, ed. By Anna Pintore and Mario Jori. Liverpool: Deborah Charles Publications, pp. 133–146.

García-Carpintero, Manuel (2004). "Assertion and the Semantics of Force-Markers". In *The Semantics/Pragmatics Distinction*, ed. By Claudia Bianchi, Stanford: CSLI Publications, pp. 133–166.

Harnish, Robert M. (2005). "Commitments and Speech Acts". *Philosophica* 75, pp. 11–41.

Korta, Kepa and Perry, John (2006). "Three Demonstrations and a Funeral". *Mind & Language* 21, pp.166–186.

Millikan, Ruth G. (1998). "Biosemantics". *The Journal of Philosophy* LXXXVI, pp. 161–180.

Millikan, Ruth G. (1998). "Language Conventions Made Simple". *The Journal of Philosophy* XCV, pp. 161–180.

Millikan, Ruth G. (2004). *Varieties of Meaning. The 2002 Jean Nicod Lectures*. Cambridge Mass.: MIT Press.

Millikan, Ruth G. (2005). "Proper Function and Convention in Speech Acts". In Ruth G. Millikan. *Language: A Biological Model*. Oxford: Oxford University Press.

Searle, John R. (1969). *Speech Acts: An Essay in the Philosophy of Language*. Cambridge Mass.: Cambridge University Press.

Searle, John R. (1992). *The Rediscovery of the Mind*. Cambridge Mass.: MIT Press.

Searle, John R. (2002). "Individual Intentionality and Social Phenomena in the Theory of Speech Acts". In John R. Searle. *Consciousness and Language*, Cambridge: Cambridge University Press, pp. 142–155.

Searle, John R. (2005). "What is an institution?" *Journal of Institutional Economics* 1, pp. 1–22.

Williamson, Timothy (1996). "Knowing and Asserting". *Philosophical Review* 105, pp. 489–523.