John R. Searle: Freedom & Neurobiology. Reflections on Free Will, Language, and Political Power, New York: Columbia University Press, 2007, 113 pp.

It is not possible to talk about the content of this book without first making some clarifications about the curious editorial process that precedes it. Towards the end of Spring 2001, John Searle was invited to La Sorbonne to give several talks: a keynote conference about language and political power and other minor ones that dealt with a diversity of topics, from freedom of the will to the semiotics of wine tasting. At the end of the cycle of conferences, Searle accepted the publication of two of them (the keynote lecture about political power and one the minor ones on freedom of the will) thinking that they would appear in some type of academic journal. He was very surprised when, some time later, he received in his house in Berkeley a box that contained several copies of a book authored by him under the title Liberté et neurobiologie. Réflexions sur le libre arbitre, le langage el le pouvoir politique. Without Searle's knowledge, Patrick Savidan, his editor, had published both talks in a small and elegant book. As surprising as the appearance of the book, was its quick translation into German and Spanish (the latter is entitled *Libertad y neurobiología* and was published with a translation by Miguel Candel by Paidós in 2005). Due to all of this, the University of Columbia asked Searle to translate the book for its publication in English, which was not needed since the author had kept the original versions in his native tongue. However, by that time Searle had already modified significantly his text about language and political power; for that reason, the version that is published in English in 2007 differs greatly from the French book of 2001.

Searle took the opportunity to fill in a blank in the French book: the two talks did not seem to relate to one another. In the English version he adds an introduction, the purpose of which is to show the reader how the two talks are connected to the extent that they form part of a much greater research project. The project is based on a conflict that appears when two inconsistent but equally fundamental points of view are confronted. On the one hand is the belief in the image of the world presented by science, as a world organized according to universal and necessary causal laws. On the other hand, we believe that we are conscious, intentional, rational, social,

political, ethical agents in possession of a free will. The central question that summarizes Searle's general project is: how do we fit? It's about seeing how the idea man has of himself can make sense in a physical world such as that representedd by science. Searle has confronted this problem in his research, taking each of the topics separately: consciousness, intentionality, language, rationality, free will, society and its institutions, politics and ethics. In the introduction of this book he shows how each one of these topics ir related to the rest, which allows the reader to see how the two chapters that follow fit together in the general project.

This introduction is not of much use for those already familiar with Searle's work, for there is no argument or support for his ideas. It is simply a heap of assertions that intend to guide the reader about what comes in the book. However, it is an excelent bibliographical guide for those that wish to begin to study the work of the author, since, despite not offering the arguments here, he does refer the reader to each of the other works where they have been developed. Since this introduction covers all the fundamental parts of Searle's greater project, the references tell the reader which work is dedicated to which part and what he can expect there.

"Free Will as a Problem in Neurobiology" is the title of the first of the two chapters of the book. It is the English text on which the talk Searle delivered at La Sorbonne in May of 2001 was based, and it is a new and modified version of his text "Consciousness, Free Action and the Brain", which had already been published in issue 10 of the Journal of Consciousness Studies in the year 2000, and later appeared as the ninth chapter of his book Rationality in Action, at the end of 2001 (Rationality in Action is another book of Searle's that first came out in print in another language, in this case Spanish, under the title Razones para actuar (Reasons for Acting) published for Nobel editions in 2001- and which was later published in an amplified version in English; the Spanish version lacks the las two chapters in the Engish version). The differences are not great between the text "Consciousness, Free Action and the Brain" and its updated version "Free Will as a Problem in Neurobiology". Some things are omitted in the last text, such as the description of an approach to the study of consciousness that Searle calls "the construction block approach" and which he later critiques with a rather questionable argument. Others are explained in a more detailed manner, as is the case with the transcendental argument that intends to show the need to postulate an irreducible and non-humean I in the explanation of human actions. Despite these changes, Searle's argument and proposal are still the same in both texts. The fundamental problem that

he wishes to deal with is the tension that is produced in confronting our scientific viewpoint about the functioning of the brain (seen as a machine that obeys causal and necessary laws of physics) and the feeling of freedom that accompanies the taking of decisions and the actions of man. This feeling of freedom can be described as the feeling that the reasons prior to the taking of decisions are not causally necessary to determine the option to be taken; in Searle's words, a gap is opened between the reasons for acion and the decision. Now then, if the conscious states are produced by neurobiological processes, and at the psychological level the gap is real, is there also a gap at the neurobiological level?

The options are only two: on the one hand, it is possible that the psychological gap not correspond with a gap at the neurobilogical level. This is conceivable to the extent that an agent is conscious of all the processes of the brain and it is possible that the feeling of freedom that he experiences be due solely to the fact that what occurs in the brain between the weighing of options and the decision taking is not made conscious. On the other hand, it may be that the psychological gap has its corresponding empirical gap. In the first case, what we call "freedom" would be a grand illusion, for the decision taking would be determined by neurobiological processes and the deliberation would simply be an epiphenomenon. The problem that Searle finds in this option is that it goes against everything we know about evolution, for there seems to exist no function of evolutionary value for the fiction of freedom to survive through generations (cf. p. 69). The objection leaves a bad aftertaste, for behind it hides the assumption that if deliberation does not play the role it seems to play in human life, then it plays no role. Couldn't it be a fiction and yet have a use for the species? The other option, to wit, that the psychological gap corresponds to an empirical gap, has the advantage of presenting a more substantive vision of freedom. However, it is not easy to think in a neurobiological process that shows gaps. How can a physico-chemical process have a causal development where the antecedent cause does not conclusively determine the following state? The possible solution to this problem demands, according to Searle, a shift in the manner in which we consider brain functionining in relation to consciousness.

For Searle, conscious states are produced by neurobiological processes of the brain. It would mean that two lines run parallel to each other, where the inferior produces the superior one. However, Searle resorts to an example by Roger Sperry to show how one can now understand the functioning of consciousness with relation to the problem of the gap. The example presents a wheel that rolls downhill. The wheel is composed of molecules. The set of molecules forms the wheel and, nonetheless, the solidity of the wheel is nowhere in any of the molecules. In the same way, in turning the wheel, it is its form and solidity that determines the place in which each molecule finds itself in a determinate place. In this way the characteristic of the whole produces effects in the parts. With the brain and consciousness something similar happens. Consciousness, just as intentionality, is not in any of the neurons nor in their parts. However, the set of parts allows the appearance of consciousness as a characteristic of the system as a whole. This system can affect its parts jut as the position of the molecules of the wheel depends on its solidity. The idea is that the brain, in acting as a whole, behaves as a system the performance of which is characterized by the psychological gaps that we experience. At the same time, these psychological gaps are also empirical gaps, for the parts of the brain are affected by the functioning of the whole system. It is clear that there is much that is still left to explain, that Searle is conscious that his proposal is still far from being complete. What he intends is to show that this is a possible way to find an answer to the question about the empirical component that would accompany the psychological feeling of freedom.

One of the most obvious differences that the previous version of this text, published in *Rationality in Action*, with the new one here presented, is that now quantum physics, which previously was barely mentioned, plays a central role in Searle's proposal. If the hypothesis according to which the gap is also empirically real is to make sense, it only has it, in the eyes of the author, if we resort to the discoveries about quanta: "If hypothesis 2 is true, and if quantic indeterminism is the only real kind of indeterminism in nature, then it follows that quantum mechanics must enter in the explanation of consciousness." (p. 75). Searle supports the preceding with the following argument: Premise 1, all indeterminism in nature is quantic indeterminism. Premise 2, consciousness is a feature of nature that manifests indeterminism. Conclusion, consciousness manifests quantic indeterminism.

Two things are worthy of attention here: in the first place, premise 2 assumes the truth of the hypothesis for which the argument is put forward; that is, it is assumed that the gap is empirically real, a flaw of which Searle seems unaware. In the second place, even if quantum mechanics has a legitimate place in the explanation of consciousness, it is not clear which it is, nor that its inclusion in the topic is more beneficial than prejudicial, a problem of which Searle is aware. The indeterminism that quantum mechanics can bring to human actions eliminates at the same time the ele-

ment of control that the agent is to have over them. Actions are thought to be free, but at the same time, they are thought to be under the agent's control, that is, that they occur for a rational cause and not for a fortuitous random fact or, at least, a fact that is foreign to the will.

It is clear that both hypotheses are problematic. However, Searle does not intend to have the last word on the subject; on the contrary, he closes the chapter saying that "there is, I am sure, much more to say" (p. 78).

"Social Ontology and Political Power" is the title of the second and last chapter of the book. Searle picks up again on the research he had been pursuing previously, in his *The Construction of Social Reality* of 1995, on the question about the possibility of a social reality in a world composed of physical particles. In that previous work, the author dealt only very superficially with the topic of politics. However, Searle now asserts that if one sees that book in conjunction with *Rationality in Action*, one can find an underlying political theory. His objective in "Social Ontology and Political Power" is to make that theory, or at least its fundamental points, patent, showing at the same time the explicit role that language and collective intentionality play in the constitution of social reality and political power.

Searle begins with Aristotle's "zoon politikon" in both its usual translations: social animal and political animal. The ambiguity calls the author's attention, who claims that many animals are social, but only man is a political animal. Sociability is not such a problematic point, for many animals have the capacity of cooperation based on biological characteristics. This capacity allows a collective intentionality, intentionality that shows when, for example, a group of animals work jointly to capture a prey. The collective intentionality also shows itself in different forms of behavior, when various individuals have shared conscious attitudes, such as wishes and beliefs. The inminent question is: what must be added to the fact that man is a social animal to obtain the fact the he is a political animal? Two elements make up the answer: the imposition of function and constitutive rules.

Man shares with other animals the capacity to use and create tools depending of their form. Just as certain primates use a stick to extract termites from a colony, man used certain sharp stones to cut meat. However, differently from animals, man has the capacity to use other objects whose function does not depend on their physical form, but on a certain form of collective acceptance. Money is the best example. Its function depends on the collective acceptance that said object has a certain status. It is for that reason that Searle proposes to call such functions "status functions".

Status functions are possible thanks to the second element that makes up Searle's answer: constitutive rules. Differently from regulative rules (that regulate preexisting forms of behavior), constitutive rules not only regulate but also create the possibility of new forms of behavior. An example of the first is "cross only when the traffic light is on green"; an example of the second is in the set of rules to play chess: without the rules there is no game. Thus, constitutive rules are what allow for the appearance of new forms of behavior, such as those found with money. It is for the same reason that they also allow for the status functions. All of this together allows for the appearance of certain facts that Searle calls "institutional facts". Differently from brute facts, as that certain mountain is higher than another, institutional facts require human institutions. An institutional fact is "to be a Mexican citizen", but for that certain human institutions are required such as the Mexican homeland and citizenship. Here we should underline that the status functions always carry with them negative and positive powers; that is, he who has money, is married or has a property acquires powers that he did not have before. Searle proposes that we clearly distinguish this power from what is called "brute power", such as the power of a car engine. The power attached to the status functions is a power that has to do with rights, duties, obligations and commitments, among others, and the existence of which depends on its being accepted and recognized by the others. For that reason, Searle proposes to call these powers "deontic powers".

Once Searle has identified the two elements that allow man to be a political animal, he asks himself, not any more about the individuals, but about the institutions. The Church, the clubs and the government are all institutional structures, created for man and based as much on constitutive rules as on impositions of function. However, government stands out amongst them as the most powerful, and Searle asks himself what it is that allows government to stand out and rule over the rest, while being in its nature equal to the others.

In the search of this answer, Searle highlights various points he considers to be fundamental characteristics of government: the first refers to the power of government, that is, to what Searle calls *political power*. All political power depends on the status functions, for it is not about brute power but of a power acquired through the collective acceptance of individuals. For that reason, it is about a deontic power. The second characteristic is intimately related to the previous one, for it follows from the dependence of political power on status functions, it follows that power itself comes

"from below", that is, from individuals. However, it is also a characteristic of government that individuals, despite being the source itself of political power, feel impotent before that same power. How can it be possible that the source itself of power feel impotent before it? Searle finds the answer in the fourth characteristic of government, perhaps the most controversial claim of all his proposal: the system of status functions works, at least in part, because the deontic powers provide the agent with reasons for action that are independent of desire (cf. pp. 101-105). Since the recognition of status functions brings with it powers and obligations, Searle considers that this too gives reasons for action that are independent of desire, since acting according to obligation or obeying the power can be contrary to the agent's desire and, nevertheless, they are actions that are realized rationally. Searle does not elaborate much on this topic nor is he detailed on the little he says about it. The greatest flaw is that the author is not clear on what he means by "independent of desire", for it seems that he only takes into account the agent's immediate desire and leaves aside his capacity to plan in order to fulfill his desires in the long term.

The author underlines next the role of language in the political power and government as something fundamental since, given that in the end all of it depends on status functions, they are to be linguistically constituted. The reason for that is found in the fact that political institutions, differently from natural facts, don't exist without agents that recognize them, nor do they exist as tangible objects; for that reason one requires a form of representation of those functions that the collective accepts or grants, and such a form of representation is typically linguistic.

Once Searle has shown the fundamental characteristics of government and political power, and also the function of language in them, he answers the question about why government can function as an institutional structure that is superior to the others: because government has the monopoly of organized violence. Since government has control over the police force and other armed forces (added to the control over the land), it can have a greater influence on the public than that of the Church and social clubs. The individuals accept, in the beginning, the status functions of government and with it they acquire duties and rights that provide them reasons independent from desire for their actions, but the government, differently from the other institutions does not remain at the mercy of individuals, but rather guarantees its continuity through organized violence. This is what Searle calls the paradox of government: "governmental power is a system of status functions and for that reason it rests on collec-

tive acceptance, but collective acceptance, despite not being based on violence, can only continue functioning if there is the permanent threat of violence in he form of the militia and the police" (p. 97).

Searle goes no further, offers no more arguments or makes deeper inquiries. Just as what happens with the first chapter of the book, what he offers here is a series of ideas about the possible approaches to a problem, but there is no intention here of providing a definitive answer nor a complete theory. This does not make his book any less attractive; it contextualizes within the general project of the author the two topics here considered, and offers new and modified versions of the published ideas in his other works, which differ even from the versions of this same book in other languages.

Carlos G. Patarroyo Universidad Nacional de Colombia

(Translated from Spanish by Victor J. Krebs)