NATURALIZING QUALIA, DESTROYING QUALIA.

DIANA I. PÉREZ

In recent years a host of philosophers have been engaged in giving a naturalized account of almost everything: epistemology, justification, reason, moral properties, meaning, mental content, propositional attitudes, phenomenal properties of experience (i.e. qualia), etc. However, it is not quite clear what a naturalized explanation of something has to look like. Thirty years ago Quine introduced the expression "Naturalized Epistemology" as the title of a paper that produced a great change in the way that certain philosophical problems were to be thought about. He was worried about the stagnation of the discipline concerned with the foundations of scientific knowledge, and urged us to "naturalize" it. His proposal consisted of rethinking epistemology as a chapter of psychology. He said:

Epistemology, or something like it, simply falls into place as a chapter of psychology and hence of natural science. It studies a natural phenomenon, viz., a physical human subject¹ ... Epistemology in its new setting ... is contained in natural science, as a chapter of psychology. But the old containment remains valid too, in its way. ... There is thus a reciprocal containment...: epistemology in natural science and natural science in epistemology.²

In my opinion, one of the main claims of Quine's attempt to naturalize epistemology is the idea that knowledge constitutes a corpus where we have to include both empirical knowledge and philosophical knowl-

Quine (1969) p. 82. In p. 26 be adds: "Knowledge, mind and meaning are part of the same world that they have to do with, and ... they are to be studied in the same empirical spirit that animates natural science. There is no place for a prior philosophy."

² Quine (1969), p. 83.

edge side by side. The thesis is that these two kinds of knowledge are not different in nature. From this fact follows, according to Quine, a thesis about the relationship between two disciplines, an empirical one, psychology -, and a philosophical one, -epistemology. It affirms that both disciplines deal with the same entity: our human knowledge. The consequence that was drawn beyond Quine was that philosophical concepts such as justification and in general all normative notions have to be eliminated -i.e. that their existence has to be denied- or reduced to the language of empirical sciences. Such a reduction could be achieved by means of a definition of normative terms appealing only to descriptive terms, or by means of an intertheoretic reduction between two theories, the normative one and the descriptive one.³

This naturalizing spirit has been generalized and applied to different areas: the philosophy of mind, semantics, ethics, etc. The common feature that underlined the diverse attempts to naturalize different subjects was the assumption of the existence of a continuity between scientific knowledge and philosophical knowledge. But when the time comes to "naturalize" a given item, what many philosophers usually do is develop a philosophical theory, containing substantive philosophical theses, defended with typical philosophical arguments, with the addition of some information coming from different sciences. The following examples are cases of this strategy concerning recent naturalizing attempts in different areas.

David Papineau, in his *Philosophical Naturalism*, tries to defend a naturalist point of view about different philosophical subjects. Although he recognizes that there is no consensus about the meaning of the word "naturalism", he develops a naturalist position build upon three different philosophical theses: (1) physicalism; (2) the rejection of dualism as an answer to the mind-body problem; and (3) an externalist approach to epistemology. Jerry Fodor unfolds his "naturalized semantics" as "a theory of content that is both physicalistic and atomistic". The key to his naturalized semantics consists in finding a natural link in order to relate each representation with its reference: the causal relation. Finally, Dret-

³ This conclusion is drawn by the majority of Quine's commentators. See, for example, Almeder (1990); Maffie (1990) and Siegel (1997).

⁴ See, for example, Maffie (1990); Papineau (1993).

⁵ Fodor (1990), p. 82.

ske, in his recent book *Naturalizing the Mind*,⁶ defends a naturalistic approach to the mental by developing the "Representational Thesis", which has two parts. The first one affirms that all mental facts are representational facts, and the second one states that all representational facts are facts about informational functions. In the rest of the book, he develops these two theses drawing consequences about some classical philosophical issues such as consciousness, introspection and *qualia*, and neglects the expression "to naturalize".

As we can see, it is not quite clear what the connection between all these naturalized accounts of different things is, nor even what the shared features that make all of them cases of naturalized theories are. The situation among all these naturalizing attempts is even worse because not only is it ill-defined what it means to naturalize something but because there is a confusion also as to what kind of items are those that are waiting for a naturalization. As I have said above, the naturalizing program proposed by Quine had two parts: in the first place, it seems that the items that we have to naturalize are disciplines, like epistemology; but, in the second place, there are some items that are to be considered as part of the natural order, like knowledge, meaning and mind, and that is the reason why the disciplines that deal with them are to be naturalized; hence, to naturalize epistemology is simply to give a naturalistic account of knowledge. Therefore, it seems that what we can do with a naturalistic spirit is either to naturalize a given discipline or to give a naturalistic account of certain objects that surround us. But what about other kinds of items such as intentionality, propositional attitudes content, qualia, justification? These are philosophical concepts and it is far from obvious that we have to treat them as natural objects. What are we supposed to do in order to naturalize a philosophical notion?⁷ I think that an answer to this question is not quite clear in the majority of the recent naturalizing attempts. And this ambiguity is a source of confusions. I will try to clarify this question for the case of qualia.

If we consider the *qualia* naturalizing attempts, we can raise the following question: What, exactly, is the thing that is going to be naturalized? I think there are two different answers to this question. First, by

⁶ Dretske (1995).

Note that we could also include in the list of "philosophical notions" concepts like knowledge and mind when we consider them within the framework of a philosophical theory (I owe this point to Eduardo Rabossi).

the word "qualia" we can refer to a certain kind of properties possessing those specific characteristics that philosophers have postulated. Qualia, following the standard philosophical conceptions, are second order properties of mental states, that are intrinsic, non-relational, ineffable, subjective, private, etc. In the next section I shall explain each of these clusters of features. Secondly, we can sustain that "qualia" refers to a particular kind of phenomena in the world, to certain data of our own experience, certain states that everyone is aware of, no matter what our profession is. All of us, philosophers or not, know that we have certain experiences, that we have pains, that we are thirsty, etc. I believe that it is not quite clear which of these two kinds of things have to be naturalized.

In this paper I will examine three different naturalistic accounts of qualia: namely Churchland's, Dennett's and Dretske's. I shall try to show that these quite different ways of naturalizing qualia consist in giving a scientifically adequate explanation of the many different phenomena that constitute our common sense mental life: our visual experiences, sensations, itchings, smells, tastes, etc. As a result of constructing such explanations, they destroy the first kind of entities I have mentioned above, the philosophical conception of qualia. But this is exactly what a naturalizing program was expected to do. What we have to do, within this framework, is to give rise to scientific explanations of the many phenomena that usually appear in the discussions about qualia, like color sensations, tastes, smells, pains, etc. and, in so doing, thereby eliminating the philosophers construction that the tradition has labeled with the word "qualia". In what follows I shall examine three different attempts to "naturalize qualia", and I will show that each of them, in one way or another, destroy qualia by trying to naturalize them. But before proceed-

⁸ Keeping this distinction in mind, we can interpret an eliminativist position about *qualia* as the thesis that there is nothing in the world that satisfies all the properties that philosophers attribute to "qualia", but this does not involve the claim that we do not have pains, that we are not thirsty, that we do not experience red things, etc. This distinction, however, is not clear in the majority of the recent literature about *qualia*. For example, we can have a better understanding of the controversial paper "Quining Qualia" by D. Dennett by adopting the distinction I proposed. But I think that Dennett did not consider this distinction while writing his article; and that is why he starts it with the following statement: "Qualia' is an unfamiliar term for something that could not be more familiar to each of us: the *way things seem to us*" (Dennett (1988), p. 519). It is not only a terminological problem; it is a problem about what kinds of things exist in the world.

ing, I shall explain what qualia are, according to the philosophical tradition.

What are qualia? The philosophers' answer

The philosophical tradition recognizes four clusters of properties that qualia possess. The first cluster of properties attributed to qualia are their non-relationality, and hence its non-functionalizability. Qualia it is said- are intrinsic, monadic properties of (at least some of) our mental states, and that is the reason why they cannot be functionalized.9 The philosophical intuitions about the inverted spectrum are behind this claim. The idea is that if we are exactly alike in our dispositions to act, it could not be possible either to verify, or to reject the claim that we have different qualia given the same objective situation in front of us. Two people¹⁰ could have exactly the same dispositions to react to different objects, for example, to say in front of an apple that it is red, or in front of the grass that it is green; to react adversely to red things, etc., but in spite of that, to have the associated qualitative states reversed. If this is the case, each time that I sincerely say: "I see a red thing", I have a red experience, but whenever you utter those words, standing in the same place that I am, with the same environment, you have a green experience. This intuition of the inverted spectrum was raised first by John Locke, but it is nowadays a common objection to every functionalist account of the mind. Functionalism, as is well known, affirms that every mental state has to be identified with a certain functional state, i.e. a state characterized by its causes and effects. But if the inverted spectrum is possible, one cannot distinguish two different qualitative states by their different effects; they could give rise to exactly the same behavior. From this possibility it follows (1) that qualia could not be functionalized, and (2) that qualia are epiphenomenal, i.e. that they do not have behavioral consequences.11

⁹ Block, for example, affirms: "[qualia are] the phenomenal character of conscious experience that goes beyond the intentional, the cognitive and the functional." Block (1995), p. 19.

Or the same person at different times, if we deal with the intrapersonal instead of the interpersonal inverted spectrum, that I shall not consider in this paper.

¹¹ Fodor and Block (1972); Harman (1990); Churchland (1981), p. 23, also characterize *qualia* as the intrinsic properties of our experience. For a compatibilist account between functionalism and *qualia* see: Shoemaker (1991); Kim (1996), pp. 175-6.

Secondly, *qualia* have a peculiar relation with language: they are supposed to be ineffable. They cannot be labeled with our public, shared language. The main idea here is that someone who has not experienced a given *qualia*, cannot understand what is it like to have it by means of a verbal communication people who have had the experience. Unless you had eaten blueberries, you shall not understand what it is like to taste blueberries, because the only thing that everybody will tell you is that you will experience the blueberry flavor. It is impossible to give a description of an experience to someone who hasn't have it yet.

The third feature of *qualia* is that they are private, ¹³ subjective: ¹⁴ they are "properties of sensations and perceptual states ... the properties that give them their qualitative or phenomenal character - those that determine 'what it is like' to have them". ¹⁵ The philosopher that has highlighted this property of our mental life was Thomas Nagel with his reflections about a bat's mental life. Recall Nagel's bat: only a bat could have a bat's feelings, or a bat's sensations. What it is like to be a bat is the particular way in which the bat experiences things. Each of us has a subjective point of view from which we experience the world. And this subjective point of view cannot be described from the third person perspective (the objective perspective); it has to be captured from an essentially first person point of view.

The last cluster of characteristics that *qualia* possess are epistemological. *Qualia* are known in a way that nothing else in the world is known. We have a direct or privileged, or infallible access to our own *qualia*. We know the qualitative properties of our experience not by the same mechanisms we use to know the external world, namely, external observation. Instead, we know them by a different kind of mechanism, an "inner" observation; exercised with an "inner sense", our "mind's eye". "Introspection" is the philosophers' word for this special kind of observation, the perception of our own internal, subjective, private, intrinsic, qualitative mental states. 17

¹² Dennett (1988), p. 522; Block (1990), p. 55, Loar (1990), p. 81.

¹³ Dennett (1988), p. 522.

¹⁴ Nagel (1974); Lycan (1990); Kim (1996), p. 157 and pp. 162-4.

¹⁵ Shoemaker (1991), p. 507.

¹⁶ Jackson (1982).

¹⁷ Loar (1990), p. 81; Dennett (1988), pp. 522-3; Churchland (1981) p. 23.

Summing up, what philosophers are talking about when they discuss the existence of *qualia* are those second order properties of mental states that are intrinsic, non-relational, non-functionalizable, ineffable, private, subjective, and intimately or directly acquainted. The most popular examples of *qualia* are the reddish way in which a red apple appears to me, the doggish way in which a certain animal that I perceive looks to me or the painful way in which a certain sensation seems to me. Our five senses generate in us the kind of qualitative states we are dealing with in this paper: visual experiences, smells, tastes, and the like; but also our sensations, for example, our pains, itchings, thirsty sensations, have a qualitative character. The question is whether we should accept that these states have all the properties that philosophers have attributed to them.

Up to this point I have tried to make clear what kind of things are those that some philosophers proposed to "naturalize". In what follows I will present three different attempts to naturalize *qualia*: Churchland's, Dretske's and Dennett's. I will try to show that all of them reach their objective by destroying the philosophers' notion of *qualia*. Therefore, it seems that the only way we have to save our subjective experience, within a naturalistic framework, is by destroying *qualia*.

Churchland's account of qualia

Churchland proposes the following definition: "Qualia' is a philosopher's term of art denoting those intrinsic or monadic properties of our sensations discriminated in introspection." But, according to Churchland, the intrinsic properties we know by introspection, and that allow us to identify the psychological state we are having are *identical* with physical properties in our brains. Therefore, Churchland holds: "... the explication of the nature of qualia does not reside in the domain of psychology. ... the nature of specific qualia will be revealed by neurophysiology, neurochemistry and neurophysics." Churchland is also defending a realist approach to *qualia*: a "scientific realist approach" According to Churchland (1981) *qualia* could be functionalized, and hence a physical property of our brain could play the causal role which is identified with a given qualitative state. It is a reductionist approach to *qualia*

¹⁸ Churchland (1981), p. 23.

¹⁹ Churchland (1981), p. 30.

²⁰ Churchland (1981), p. 31.

²¹ Churchland (1981), p. 31.

but it is not an eliminativist position because the existence of *qualia* need not be denied. That is the reason why Churchland holds that he is defending a scientific realist approach to *qualia*.

Let us see if this account of qualia preserves the features that the philosophical tradition has attributed to them. Qualia are objective, physical properties of our brains, and hence they have objective causal properties.22 Thus, qualia are not epiphenomenal. Given that they have causal powers, they can be functionalized. From this point of view about the qualitative features of our experience, it follows that the first characteristic that the tradition used to attribute to qualia is not a property of the entities with which Churchland identifies them, i.e. some special properties of our brains. For, they are not epiphenomenal, they do have causal powers and affect our behavior, and so they could be considered the occupants of a certain causal-functional role. The second and third properties I have mentioned above, the ineffability and the subjectivity in Nagel's sense, are not properties of Churchland's qualia either. Given a mature neuroscience with a different -more accurate- vocabulary, qualia will be expressible in public (scientific) language. Qualia will be left without their ineffability. And their subjectivity (in Nagel's sense) too, because, as I said above, they will be just certain properties of our brains, and so they could be referred to by words of our third person, objective, scientific framework.

The only feature of the philosophical conception of *qualia* that Churchland preserves is the idea that the way we know them is different from our knowledge of the rest of things. But he gives an explanation which tries to reveal how introspection works, and why our knowledge of our own mental life is so different given that the object known (the brain) is as objective as any other thing in the world. Introspection is a kind of observation, in fact it is an observation of some internal features of our own body. However, Churchland reminds us, every observation is theory laden.²³ Therefore, in order to observe our own internal states we have to use an appropriate framework. And the framework we inherited to describe our own internal states is folk psychology, according to Churchland, is a theory, a common sense theory that could be true or false. This theory is used to describe the knowledge that we manage about our own internal states, but also to explain and

²² Churchland (1985), p. 57; and Churchland (1981), pp. 29-30.

²³ Churchland (1989a), p. 228.

predict the future behavior of our fellows. Within this theory (Churchland (1979)), framework (Churchland (1986)), or set of concepts, we could find a subset of concepts, the common sense mental concepts, that possess a different criterion of application between the first and the third person. The criterion we use to ascribe to other people a mental concept is their behavior, but it is not this criterion the one we use to ascribe a mental concept to oneself. That is the reason why it is claimed that folk psychology is a first person account. Churchland says: "What makes an account a "first-person account" is not the content of that account, but the fact that one has learned to use it as the vehicle of spontaneous conceptualization in introspection and self-description".24 But this framework, as every conceptual framework we need to acquire knowledge, can be replaced by an alternative one. In the case of folk psychology it can be replaced by a third person, objective, natural account, given by the neurosciences. Here we have Churchland's example: "Dopamine levels in the limbic system, the spinking frequencies in specific neural pathways ... could be moved into the objective focus of our introspective discrimination . . . We will of course have to learn the conceptual framework of a matured neuroscience in order to pull this off. And we will have to practice its noninferential application".25 But this change of framework is a possible one.

Thus, the only characteristic of *qualia* that Churchland redeems is the direct knowledge we have about them, but he ties this characteristic to a contingent fact: the fact that our folk psychological language has the concepts it has to describe our brain states. However, opposing the traditional view, this first person access to *qualia*, this intimate connection with those properties, is not due to the special nature of these properties, because they are physical properties of our brains, and it is not due either to a peculiar faculty which we could have to "see" our inner states.

²⁴ Churchland (1986) p. 75

²⁵ And he also says "A matured and successful neuroscience need only include or prove able to define, a taxonomy of kind with a set of embedding laws that faithfully mimics the taxonomy and causal generalizations of *folk* psychology. Whether future neuroscientific theories will prove able to do this is a wholly empirical question, not to be settled *a priori*." Both in Churchland (1985), p. 55.

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Dretske's account of qualia

Dretske defends a naturalistic theory of the mind that he calls the "Representational Thesis". The representational thesis is constituted by the following claims: "(1) all mental facts are representational facts; (2) all representational facts are facts about representational functions"26 He defines "representation" as follows: "A system, S, represents a property, F, if and only if S has the function of indicating (providing information about) the F of a certain domain of objects".27 The function of the system determines which information the system could carry.28 Each system has a function derived from its design. There are different sources of design, and, correspondingly, there are different kinds of representations. If the designer is someone who has intentions and purposes, the representations generated are conventional; otherwise they are natural.29 The senses, for example, have information-providing functions, derived from their evolutionary history. "The representations they [the senses] produce by way of carrying out their informational functions have a content) something they' say or mean, that does not depend on the existence of our purposes and intentions. This is why the senses -or more precisely, the internal states (experiences, feelings) the senses produce by way of performing their function - have original intentionality, something they represent, say, or mean, that they do not get from us. That is why the perceptual representations in biological systems . .. make the systems in which they occur conscious of the objects they represent."30

Mental states, according to Dretske, are natural representations, and mental representations could be divided into two groups: conceptual and non-conceptual representations. The first ones involve the ability to entertain concepts. Examples of conceptual representations are beliefs, desires, knowledge (thoughts); examples of non-conceptual representations are those derived from sensorial awareness: smelling, seeing, etc.

²⁶ Dretske (1995), p. Xiii.

²⁷ Dretske (1995), p. 2.

²⁸ An information-providing function is something that can represent or misrepresent the world. In this way, this notion captures the normative element of the mental.

²⁹ In Dretske's words: "When a thing's informational functions are derived from the intentions and purposes of its designers, builders, and users in this way, I call the resulting representations conventional. Representations that are not conventional are natural I assume that there are naturally acquired functions and, thus, natural representations. I do not argue for this, I assume it" (p. 7).

³⁰ Dretske, (1995), p. 8.

(experiences). Non-conceptual representations are those determined by what Dretske calls "systemic indicator functions".³¹ Some of the representations produced by this kind of function become experiences, but not all of them do: only those that can affect behavior.³² In sum, experiences are non-conceptual representations that provide information to our behavior control system.

Dretske remarks that "experience", like "story", is an ambiguous term. In the first place, it can refer to the vehicle, the words that tell the story or, secondly, it can mean the content of the story, independently of the terms used to tell it. What is in the head are experiences' vehicles, not contents. "According to the Representational Thesis, the facts that make what is in the head mental, the facts that convert electrical and chemical activity in the cortex into blue-dog experiences, are facts that are not identifiable by looking, exclusively, at what is in the head. What makes a certain pattern of electrical activity in the cortex into blue-dog experience is a fact about what this activity represents, what it has the function of indicating."33

With all these distinctions in mind we could face Dretske's characterization of qualia. He holds: "The Representational Thesis identifies the qualities of experience -qualia- with the properties objects are represented, as having. ... If you know where to look, you can get the same information I have about the character of my experiences." The qualitative character of experience are real properties of external objects, they are public, objective; everyone could have knowledge about them, it all depends on being in the right place at the right time. Qualia, according to Dretske's account, are identified with experienced properties, and experienced properties are the properties represented, by our senses,

³¹ Dretske distinguishes two kinds of functions: systemic indicator functions vs. acquired indicator functions. Systemic indicator functions (functions_s) are those whose states are derived from the system of which it is a state. (p. 12) Acquired indicator functions are those that depend upon the type of state of which they are a token of (p. 12-13). From this distinction it follows that the representational_s character of experience is hard-wired, is determined phylogenetically, so we cannot change it. Contrariwise, the representational_a character changes with calibration (learning), is ontogenetically determined (p. 15).

³² "Experiences . . . are the states whose functions it is to supply information to a cognitive system for calibration and use in the control and regulation of behavior." (p. 19)

³³ Dretske (1995), pp. 36-7, my italics.

³⁴ Dretske (1995), p. 65.

they are those which our senses have the natural function of providing information about. Given that Dretske holds that the representational thesis identifies *qualia* with the property that the experience represents, things as having,³⁵ the external real-world properties of objects, *qualia* are not functionally definable (like discriminative powers are) but are physically definable. In this way, the representational thesis (1) respects the intuition that the qualitative aspects of experience are private or subjective, in the sense that they are not expressed necessarily in behavior, but (2) accepts that qualitative aspects of experience are objectively determinable "as are biological functions of organisms."³⁶

Let us examine which of the properties that the tradition has attributed to *qualia* are present in Dretske's account. The first cluster of properties mentioned above is their non-functionalizability, non-relationality, etc. Dretske accepts that *qualia* are non-functionalizable. In fact, he holds that his account allows the possibility of the inverted spectrum.³⁷ *Qualia*, according to him, are not identifiable with discriminatory powers, they are not functionally definable, but, in spite of that, they are physically characterizable. Given that they are physically describable, they are not ineffable, we could have labeled them with our objective, third person, physical language. And hence, they are not subjective in Nagel's sense either, they are not accessible only from a first person language, they are not private, they can be known by every person who is standing in the right place.

In sum, the first feature of *qualia* is preserved in Dretske's account, but the second and the third have disappeared. And what about the last one, the epistemological property of our mental life that allow us to know it in a way that no other thing could be known? Dretske recognizes that we have better knowledge of our own mental states than the knowledge we have about the others". The reason is as follows. Introspective knowledge, following Dretske, is a case of displaced perception, a kind of knowledge where we acquire knowledge of our internal states by an awareness of external, physical objects. Given that mental facts are representational facts, introspective knowledge is a representation about a representation. To acquire knowledge about a mind, what we have to know about the representation involved is what information

³⁵ Dretske (1995), p. 72.

³⁶ Dretske (1995), p. 72.

³⁷ Dretske (1995), pp. 69-72.

it has the function to provide. But there is a difference between the knowledge we could have about other minds and the one that we have about our own mind, because while trying to determine what is the function that my representation has, I am occupying a state that carries some information (about the external world) that an external observer does not have. In this asymmetry Dretske grounds the asymmetry between self-knowledge and the knowledge about other minds. In Dretske's representational theory, the fourth feature of *qualia*, our privileged access to them, is preserved; however, it is explained within a naturalistic framework.³⁸

Dennett's account of qualia

Dennett discusses the problem of *qualia* in his "Quining Qualia" and as a chapter of his book *Consciousness Explained*. In the article, he destroys the concept of *qualia*, whereas, in his book he sketches a positive account of *qualia*. This account presupposes his account of consciousness. The model he proposes in order to understand consciousness is what he calls the "Multiple Drafts Model". This model is designed to replace the Cartesian Model both in its dualistic³⁹ and its materialistic⁴⁰ versions. The main claim of this old conception of consciousness is that there is a "crucial finish line or boundary somewhere in the brain, marking a place where the order of arrival equals the order of "presentation" in experience because *what happens there* is what you are conscious of."⁴¹ According to the Cartesian Model, whatever "touches" that point in the brain becomes a conscious experience. The alternative model proposed by Dennett, the multiple drafts model,

³⁸ In Dretske's words: "When I, an external observer, try to determine what state P means in system S, I do not, whereas S does, occupy the state whose representational content is under investigation. S, therefore, has information . . . that I do not.... That is the difference between the representational system itself and external observers (you and me) trying to find out how it is representing the world. ... [S]elf- knowledge [is] an instance of displaced perception -a process whereby a system gets information about itself (sufficient for knowing facts about itself) by perceiving, not itself, but something else. On a representational theory of the mind, this is the source of first person authority" Dretske (1995), pp. 52-3.

³⁹ Dennett attacks the traditional dualist cartesian model of consciousness throughout Dennett (1991), chapter 2.

⁴⁰ Dennett's arguments against materialistic cartesianism can be found in chapter 5 of his (1991).

⁴¹ Dennett (1991), p. 107.

could be summarized as follows. The information arrives in different ways to the brain. The information is parallel processed in the brain, so that at every moment there are many different contents (items containing information) in competition within the brain. But every time one intends to draw a line in the stream of processing in the brain to divide the contents between conscious and unconscious ones, the line would be inevitably arbitrary.⁴²

Dennett sums up his theory of consciousness in the following way:

There is no single, definitive "stream of consciousness", because there is no central Headquarters, no Cartesian Theater where "it all comes together" for the perusal of a Central Meaner. Instead of such a single stream (however wide), there are multiple channels in which specialist circuits try, in parallel pandemoniums, to do their various things, creating Multiple Drafts as they go. Most of these fragmentary drafts of "narrative" play short-lived roles in the modulation of current activity but some get promoted to further functional roles, in swift succession, by the activity of a virtual machine in the brain. The seriality of this machine (its "von Neumannesque" character) is not a "hard-wired" design feature, but rather the upshot of a succession of coalitions of these specialists. The basic specialists are part of our human heritage. They were not developed to perform peculiarly human actions, such as reading and writing, but ducking, predator-avoiding, face-recognition, grasping, throwing, berry-picking, and other essential tasks. They are often opportunistically enlisted in new roles, for which their native talents more or less suit them. The result is not bedlam only because the trends that are imposed on all this activity are themselves the product of design. Some of this design is innate, and is shared with other animals. But it is augmented, and sometimes even overwhelmed in importance, by microhabits of thought that are developed in the individual, partly idiosyncratic results of self-exploration and partly the presigned gifts of culture. Thousands of memes, mostly borne by language, but also by wordless' "images" and other data-structures, take up residence in an individual brain, shaping its tendencies and thereby turning it into a mind.43

Thus, our brains entertain lots of contents, and some among them are generated by our relation to the environment. The external world

⁴² Dennett (1991), p. 126.

⁴³ This quotation of *Consciousness Explained* is the one Dennett himself chooses in order to summarize his point of view in Dennett (1993), pp. 890 - 91.

causes us to enter into different discriminative states which underlie some of our innate dispositions and learned habits. Among our learned habits we can find our natural language, which, among other things, has words that are used to identify the discriminative states we have. These discriminative states are certain physical states of our brains, so they are objectively describable, they are not ineffable nor subjective in Nagel's sense. They have primary qualities, intrinsic, non-relational physical qualities, if any physical thing has them. And they give rise to a variety of dispositions. Thus, according to Dennett's account of qualia, when we have the subjective experience of red, what there is in the world is a discriminative state of our brain that underlies the disposition to utter the words "I am seeing a red thing", among other things. With these elements we could make sense of statements like "I know the ring isn't really pink, but it sure seems pink": "the first clause expresses a judgement about something in the world, and the second clause expresses a second-order judgement about a discriminative state about something in the world",44 explains Dennett.

In sum, all there is in the world in Dennett's account of qualia are some brain and bodily states, and our common language, culturally built, that allow us to judge about our own internal states. All there is are brain states and some judgements we could make about them; for example: "I am having a red experience". And, following Dennett, there are no reasons to claim that there exists, in addition, some special kind of properties because the kind of a priori arguments that drives philosophers to postulate the existence of qualia are also refuted. The inverted spectrum is discarded once the multiple draft model is adopted because it is intelligible only from the Cartesian perspective.45 He also rejects those arguments for qualia that are grounded in dubious philosophical intuitions like the argument proposed by F. Jackson about Mary, the neurophysiologist who has never seen colors. Dennett holds that those who accept the premises of Jackson's argument suffer the "Philosophers' Syndrome: mistaking a failure of imagination for an insight into necessity."46

What about the four clusters of properties that the tradition attributed to qualia? Are all of them taken into account in Dennett's theory?

⁴⁴ Dennett (1991), p. 373.

⁴⁵ Dennett (1991), Ch. 12, § 4.

⁴⁶ Dennett (1991), p. 401.

None of the elements which Dennett appeals to explain our conscious life, our experiences of red things, our smells, our likes and dislikes, our states of pain, etc., have the four clusters of properties that the tradition attributed to qualia. They are not intrinsic, nor epiphenomenal (he rejects the idea that there could exist something epiphenomenal in the philosophers' sense),47 ineffable nor subjective in Nagel's sense. All there is in the world (and all that is enough to explain our subjective experience), are properties of external objects, discriminative states of our brains, having objective, physical properties that science could find, and certain dispositions, some of them innate, others acquired, that give rise to the different judgements we make about our own internal states. The last cluster of properties, the epistemological properties that I mentioned above are not considered in Dennett's account. He mentions the existence of epistemic asymmetries between the first and third person while explaining the Cartesian model, but he does not mention them while describing his own account of consciousness. I believe that we could assume that he rejects the very idea of any epistemic asymmetry.

Conclusion

Throughout this paper I have examined three different naturalizing accounts of *qualia*. They are quite different; all of them take some results from the empirical sciences to deal with the problem of the qualitative features of our own experience, but each of them makes use of quite different ingredients in order to give its account. Some of them refer to the knowledge that the neurosciences bring us of the brain and how it works, others ground their account in the notion of "biological function", and still others make a cocktail with some information provided by the neurosciences, evolutionary theory, artificial intelligence, and some cultural ingredients, including natural languages. It is beyond the scope of this paper to argue for one of the theories and against the others. What I am trying to highlight is that all of them have the same consequences about the features of our experience: there is no room for the philosophical notion of *qualia* within a naturalized framework.

Qualia have been destroyed. But what does it mean exactly that qualia are destroyed? In the first place it means that we have to eliminate (destroy) the philosophers' notion of qualia. It should not surprise us that any naturalistic account involves a kind of elimination: as I have said

⁴⁷ Dennett (1991), Ch. 12, § 5.

in the first part of this paper, the original quinean proposal about naturalizing knowledge (or mind or language) involves the elimination of certain philosophical concepts like justification (in the case of knowledge) or intentionality (in the case of the mind).48 Secondly, I believe that the expression "we have destroyed qualia" means that when dealing with natural objects such as our human minds, the right thing to do is to set apart the different phenomena that are usually mentioned while discussing the qualia problem. One fact that a scientific theory has to explain is our color vision another one is why do we feel pain in certain situations, still other fact to explain is why we dislike a particular taste and like another. We have to destroy qualia in the sense that we have to divide the multiple phenomena involved, avoiding the search for a common explanation to all of them. Some of them could be explained by the neurosciences, others by evolutionary theory, and still others would need the help from psycholinguistics or even a scientific study of culture. But all of the many natural phenomena involved are to be explained within a given scientific theory or other, if our pretention is to be a naturalistic philosopher who accepts the thesis about the continuity between science and conceptual knowledge. And it is inadequate to pretend that a naturalistic account of qualia has to take into account the logical possibility of the inverted spectrum, nor the consequences that logically follow from some thought experiments like the one of Mary the neurophysiologist, or the possible existence of zombies. These conceptual possibilities are beyond the scope of a naturalistic theory of the mind.49 Naturalistic theories have to explain the multiple facts about our minds that are within the limits of the nomological possibilities. If we adopt a naturalizing account of the mind, we have to accept that the mind is a natural object, and hence, that it could be exhaustively known by means

⁴⁸ Quine (1960) Ch. VI, § 45.

⁴⁹ As Dennett puts it: "An impossibility in fact is theoretically more interesting than a possibility in principle", Dennett (1991), p. 4.

of scientific theories. Philosophical intuitions, and philosophical science fiction tales are not the right way to walk through if our aim is to naturalize the mind.⁵⁰

Universidad de Buenos Aires - CONICET

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⁵⁰ I presented a previous version of this paper at the *III Encontro Brasileiro Internacional de Ciência Cognitiva*, UNICAMP, Campinas (SP), April, 15 - 18, 1998. This last version of the paper was improved due to the helpful comments that P. Brunsteins, C. Gonzalez, M. Pestarino, E. Rabossi, P. Rychter, M. Sabatés, L. Skidelsky, and J. Vergara made to a previous version.

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