mediate decision making and further information processing takes place. If different populations of neurons, corresponding to different representations, are modulated by attention at the same frequency range, they enter into a state of *resonance*. Therefore, in Prinz's perspective, the unity of consciousness is considered as deriving from attentional resonance.

The relationship between the psychological characterization of conscious states as Attended Intermediate-Level Representations, and their neural correlates is also investigated with promising results. In fact, one of the core problems in the debate about mind/brain states results from the fact that a physicalist is committed to ascribing causal capability exclusively to the physical level, leaving aside the psychological level as ultimately irrelevant.

To avoid this epiphenomenalist consequence, Prinz advances a new position, which he calls *Neurofunctionalism*: «A mental state is neurofunctional if [...] its being the state that it is depends on its psychological role and its neural implementation [...] these levels are not only jointly required, but also interdependent. Function depends on realizers and conversely» (p. 286).

Conscious mental states are then neurofunctional states, which means that they are identified equally as their brain correlates and by virtue of their functional role in consciousness. The experience of a color is at the same time a particular pattern of activity in one or more populations of neurons and a representation of an environmental feature, associated in the brain with behavioral reactions, emotional response and other features, all of which constitute the scope and the subjective function, or aim, of consciousness.

The last and most difficult metaphysical puzzle addressed in the book concerns phenomenal knowledge. The notorious problem is that, when we have a particular phenomenal experience, we possibly acquire a kind of knowledge related to the experience we are having: we learn "what it is like" to have that experience.

This particular knowledge, if it is knowledge, is indeed, for the involved subject, not derivable from the sum of the possible physical information that the subject can obtain; thus, there appears to be something, regarding phenomenal states, which is not physical. But Prinz claims that the argument is misleading, insofar as there is nothing mysterious, and moreover nothing not physical, in the enhancement of actual knowledge that being in a particular phenomenal state provides to the subject itself.

Phenomenal knowledge is, in this perspective, obtainable through further inner information processing. When a phenomenal state becomes conscious, this means that it has been selected by attention to be possibly encoded in working memory, but it is not immediately encoded. When, at a following stage, it is encoded (and maintained) in working memory, it becomes available for further processing, and a *new* form of knowledge can be extrapolated from this condition.

This explains why a subject needs to be in a state in order to know what its like to be in that state, without appealing to anything beyond the physical world.

In the conclusion to his book, Prinz closes the circle by showing how the AIR theory he has been proposing can match every single *desideratum* identified in the first chapter. And the complex of his work does leave an impression of thorough, wide-angled analyses of most of the different positions available.

Starting from a sustained criticism of the various problematic aspects of previous theories and research, Prinz formulates an essential, consistent and straightforward theory of consciousness. More than that, he argues for his position both at a psychological level of description *and* from a neurobiologically consistent perspective.

Many of the topics in the book, as well as the analyses of the relevant data and experiments, are highly technical and complex, but the Author's fluent style, along with the many examples he provides, "facilitate" an understanding and appreciation of his work. Some of the positions proposed by this book may appear somehow radical, but they have the merit of always remaining coherent with both the theoretical background and the available data, and are also tightly, as well as compellingly, argued.

Francesco Marchi

Pietro Perconti Coscienza Il Mulino, Bologna 2011 Collana: Paperback Pagine: 210; € 13,50

Over the last few decades, the philosophy of mind has faced many challenging questions about its own methodology: in particular, the so-called problem of naturalization has given rise to a complex debate on the role of philosophy in elaborating, among other things, scientific models for the philosophy of mind and the neurosciences themselves.

In his book *Coscienza* [*Consciousness*], Pietro Perconti provides a thoughtful analysis of the state of the art in consciousness theories. In a brilliantly, clearly written commentary, he illustrates both the methodological challenges to philosophical research and the different ways in which philosophy and the sciences have approached the topic of consciousness.

In the first chapter, *Il lato evanescente della mente* [*The evanescent aspect of mind*], he starts quoting the psychologist Susan Blackmore. In her opinion, an improved scientific comprehension of consciousness will soon make philosophical questions about the mind obsolete, just as problems regarding the *élan vital* simply disappeared with the advent of contemporary biology: it is time, once again, for philosophers to step aside.

But, according to Perconti, Blackmore's claim faces at least two problems. Firstly, it is not clear at all whether the cognitive sciences are comparable with a discipline like biology. The cognitive sciences are not (in Kuhn's terminology) a "normal" science. It is still controversial whether the scientific procedures adopted by researchers are methodologically reliable.

An example: using functional magnetic resonance imaging we can observe a correlation between brain activity and certain introspective reports. But it is not clear whether this correlation between brain activity and the content of an introspective report can be used to *explain* the latter by invoking the former as cause or ground (such an approach is sometimes ironically called "*voodoo* correlation method").

The second problem with Blackmore's claim is that researchers disagree about the *nature* of mental phenomena. Ned Block distinguishes between two fundamental components of consciousness: *access* and *phenomenal* consciousness.

Is it possible – Perconti asks – to formulate a rigorous scientific theory even with respect to phenomenal aspects of consciousness? Answering this question raises deep epistemological problems about the nature of *qualia*, i.e. about a crucial aspect of the "evanescent nature of mind".

In light of these objections, it seems a foregone conclusion that philosophy must play at the very least a normative role by regulating the process of the "naturalization" of mind.

Perconti focuses on a topic which has been pervasive from the time of the ancient Greek philosophers up to the Scholastic thinkers (including Thomas Aquinas), that is, the close relation between consciousness, freedom and moral responsibility. In Perconti's opinion, this relation should, and could, be better examined in the light of recent developments in the philosophy of mind: moving from the twofold meaning of the word "consciousness" ("be aware" and "be responsible"), he asks whether our freedom depends on the fact that we have consciousness (or vice versa).

Perconti partly follows Dennett's approach in regard to the well-known dispute on the realism on mental states, thus enlightening in an interesting way a key methodological point: it is better to focus on the *rules* for the attribution of freedom, instead of analyzing the concept of freedom from an ontological point of view. In other words, it is better to examine *why* we consider persons free, instead of directly asking whether freedom exists or *what* "freedom" means.

According to the author, this approach is likely to lead to a far more suitable analysis of free will, also connected to a better analysis of consciousness.

Moreover, Perconti introduces the so-called "Cartesian mind-body problem". Showing the influence of Descartes in cognitive science, he underlines his role as a philosophical ace as well as a worthy enemy: on the one hand, Noam Chomsky (see N. Chomsky, *Cartesian Linguistics. A Chapter in the History of Rationalist Thought*, Harper & Row, New York-London 1966) owes to Descartes the basis for his idea of linguistic innatism.

On the other, the work of Antonio Damasio (see A. Damasio, *Descartes' Error. Emotions, Reason and the Human Brain*, Avon Books, New York 1994) and Martha Nussbaum (M. Nussbaum, *Upheavals of Thought: The Intelligence of Emotions*, Cambridge University Press, Cambridge 2001) reveals a weak point in Cartesian thought: *pace* Descartes, emotions do play a key role even in our rational choices.

From this point of view, the rigid Cartesian dichotomy between emotions and reason must collapse under the cognitive inquiry itself – maybe also bringing to an end the much-debated Cartesian consideration of non-human animals as mere brutes.

Moving from the Cartesian idea of an incorporeal, conscious "strong self", in the fourth chapter Perconti also takes into consideration the stimulating philosophical problem of personal identity. He gives an exhaustive overview of the debate on personal identity starting from John Locke and his "mnemonic" account.

Locke's motto is "no person without consciousness": he considers memories as essential for a thing to be a person. This merely intuitive idea was effectively criticized in various ways from the very beginning (Thomas Reid, Joseph Buttler and so on and so forth). As Perconti further correctly remarks, following David Hume contemporary psychological accounts of personal identity do not consider consciousness as a necessary and sufficient criterion of identity – see, in particular, the work of Derek Parfit, who rejects the very possibility that something like a "Cartesian Ego" could exist at all.

Furthermore, Perconti provides a quick overview of what we could call a "skeptical standpoint": many philosophers, including Wittgenstein, Ryle, Russell and Quine, have convincingly raised the suspicion that questions about the nature of consciousness are something of a red herring.

For example, in view of his philosophical behaviorism, Ryle rejected any explanation of observable behavior in terms of mental states. He considered consciousness to be an ontological myth. Underscoring instead a supposed methodological problem, the psychological version of behaviorism proposed by John Watson refutes the possibility of studying consciousness within a naturalistic framework.

Perconti also quotes Steven Pinker's and Colin McGinn's claims that consciousness is not simply a problem, but rather a *mystery*. Nevertheless, some philosophers seem to embrace a more optimistic point of view. John Searle, for instance, holds that consciousness is a natural phenomenon, which presents some clear distinguishing features.

Endorsing this position, Perconti claims that the main features of consciousness are its personal, perspectival, unitary, phenomenal, representational, emotional, useful and moral nature. After this characterization, he leads the reader to the heart of some hard problems, the first of which concerns the relation between consciousness and language. He describes the famous experiments which the Nobel Laureate Roger Sperry carried out on so-called "split brain" patients.

These experiments crucially revealed that an essential level of consciousness exists and that it does not require language skills. Nevertheless, it seems that human beings – Perconti stresses – cannot exhibit responsible behavior until they develop the capacity to entertain Lewisian "*de se* beliefs".

Someone might also wonder whether language is necessary for self-awareness. In Ernst Tugendhat's view, the answer is yes. But what exactly is selfawareness? Developing on what is an essentially social theory of self-consciousness as self-awareness presented in his book *L'autocoscienza* (see P. Perconti, *L'autocoscienza*, Laterza, Roma-Bari 2008), Perconti draws a distinction between two different components of self-awareness: on the one hand, we can observe *self-recognition* phenomena. On the other, we can distinguish *reflexive reasoning* phenomena. When a cognitive agent recognizes herself in a picture, we have an example of a self-recognition phenomenon. When a cognitive agent reasons about her own life choices, we have an example of a reflexive reasoning phenomenon.

Another problem worth mentioning is the following. Can something like an "artificial consciousness" exist? Taking into account the broad debate on so-called "strong AI", Perconti clearly shows that anyone who wants to answer this question has to consider whether a genuine case of artificial *phenomenal* consciousness is possible.

In recent years there have been many complex debates concerning the possibility of a naturalistic approach to phenomenal consciousness. A still open question is: how can *qualia* be studied in a scientific manner? In the last chapter Perconti tries to answer this question by offering an intriguing theory of *qualia*. He distinguishes between *private* and *public qualia*. Someone's private *qualia* are sensory experiences that depend on both her personal experiences and a certain set of intersubjective relationships. By contrast, someone's public *qualia* are shared with other cognitive agents.

To sum up, in Perconti's opinion we can only study public *qualia* in an empirical manner, by studying how the functional architecture of the mind/brain regulates a certain sensory experience. His conclusion is that it is possible to investigate at least part of phenomenal consciousness using rigorous methods.

We conclude with a brief remark. Describing the famous "Chinese Room" thought experiment, Perconti claims that Searle's argument does not demonstrate that a *full* awareness of both syntactic rules and semantic content is necessary to be linguistically competent (p. 151). We agree, but – in our opinion – the object of Searle's thought experiment is rather to show that a *partial* awareness of both syntactic rules and semantic content is necessary to be linguistically competent.

The cognitive agent in Searle's experiment seems to respond appropriately to verbal stimuli. Nevertheless, we think that the agent does not understand Chinese because she is not (in Diego Marconi's terminology) *referentially competent*. But, while she cannot be referentially competent without at least a *partial* awareness of semantic content, she can doubtless be referentially competent also without a *full* awareness of semantic content.

Samuele Iaquinto Fabio Patrone

Pina Totaro Instrumenta Mentis. Contributi al lessico filosofico di Spinoza Leo S. Olschki Editore, Firenze 2009 Collana: Lessico Intellettuale Europeo, vol. CVII Pagine: XII-328; € 36,00

La filosofia è anche le parole in cui essa si esprime. Il lessico delle filosofie, il differente utilizzo di termini e concetti, dice dunque molto del loro senso. Un'analisi approfondita e sistematica del lessico diventa particolarmente importante e chiarificatrice delle molteplici radici, significati e conseguenze dello spinozismo, di un pensiero che non può essere inteso, compreso e ingabbiato in definizioni, schemi, rigidi paradigmi ermeneutici e che pur dovendo molto alle parole del suo tempo e della tradizione segna però uno scarto teoretico che lo rende inassimilabile a qualunque scuola, corrente, posizione.

Tra i meriti di questo libro c'è una ricchissima lista di Concordanze – curata da Ada Russo – che consente di muoversi agevolmente tra le ricorrenze nelle diverse opere dei dodici lemmi presi in considerazione: Acquiescentia, Amor Dei intellectualis, Amor sui, Experientia, Machina, Mens, Natura, Obedientia, Politica, Religio, Signum, Theologia. L'unica voce poco convincente è quella intitolata Signum, che di Spinoza parla assai poco dedicando invece gran spazio a Descartes e in generale al rapporto tra passione d'amore e disturbi somatici nella filosofia e nella medicina del Seicento. Per questa ragione, forse sarebbe stato opportuno collocare l'analisi di tale lemma in appendice.

Le altre voci disegnano un percorso lucido e argomentato dentro la complessità di Spinoza, per il quale la "natura" non coincide con la materia, l'essere non è la struttura fisico-chimica, atomistica e molecolare del mondo, ma costituisce una funzione d'ordine, un legame tra le più disparate forme – i modi – nei quali la materia si dà: «il termine *natura* coincide già qui [nel *Tractatus de intellectus emendatione*] con l'ordine eterno, fisso e immutabile, secondo cui ogni cosa è scandita e agisce sia su un piano generale sia sul piano della serie delle *res singulares*» (p. 105). In quest'ordine naturale, l'umano non può costituire un *imperium in imperio*, ma è una parte dell'intero. Esattamente quella parte in cui l'intero comprende se stesso. L'umano, infatti, condivide con ogni ente l'impulso a esserci ancora, il *conatus sese conservandi*, la volontà di vivere e sopravvivere, una *«cupiditas»* che *«est ipsa hominis essentia»* (p. 41, a proposito del lemma *Amor sui*).

Questa macchina del desiderio ha uno scopo ben preciso: la felicità. Uno stato che non ha a che fare con «una condizione ancora soggetta all'instabilità delle passioni, per assumere il significato di felicità intesa come acquisizione per l'uomo del suo più alto grado di potenza» (p. 10). La gioia spinoziana non è un elemento psicologico, ma una dimensione metafisica. Ed è anche per questo che sulle passioni non pesa l'ostinato e innaturale pregiudizio della loro negatività e di un superamento che le annulli. Ciò è infatti semplicemente impossibile, poiché le passioni non sono dei «vizi da estirpare», ma costituiscono delle «strutture fondamentali e fondanti del dinamismo della nostra vita interiore, attraverso cui si manifesta e si esprime il nostro sé individuale» (p. 17).

I loro effetti non dipendono quindi dalla loro natura, ma dalla funzione passiva o attiva che esercitano nella vita della mente, frutto di una conoscenza confusa o viceversa adeguata della loro struttura e dell'influenza che esercitano sull'esistenza umana. Gli affetti possono e debbono essere indagati come un elemento tra gli altri della natura, sottoposto alle stesse leggi e regole universali che tutta la pervadono e alla natura danno ordine. È su tale fondamento che Spinoza può scrivere: «sedulo curavi, humanas actiones non ridere, non lugere, neque detestari, sed intelligere» (*Trattato politico*, I, 4; qui a p. 20).

La possibilità di comprendere le azioni umane, al di là dei giudizi del soggetto, affonda anche nella struttura ancora una volta naturale, e quindi legata al tutto, della mente. Essa è «idea corporis, non nel senso che la mente abbia come contenuto il corpo, ma che mente e corpo non si danno come realtà separate in quanto, coerentemente con l'impianto metafisico spinoziano, essi sono un'unica sostanza la quale si manifesta attraverso i due soli attributi attingibili agli uomini, ora come estensione ora come pensiero» (pp. 82-83). Nessuna separazione, contrapposizione, dualismo o confusione. La mente è una funzione molteplice, una «articolazione di ragione ed esperienza, dinamismo dell'intelletto e della corporeità umani» (p. 98). La mente è incarnata e il corpo è funzione che comprende. La loro dinamica è un legame simultaneo - questo il significato dell'avverbio simul che spesso ricorre in Spinoza - il quale assicura la naturalità di ogni moto,