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Waking, Dreaming, Being: Self and Consciousness in Neuroscience, Meditation, and Philosophy. Evan Thompson. New York: Columbia University Press, 2014, 496 pages, \$32.95 hardcover.

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Consciousness is like no other object of study. In fact, it is no object at all, but rather the precondition for anything to be taken as an object of attention or thought. This unique status makes it very unlikely that ordinary, one-dimensional, objectifying strategies of research may bring much light to the nature and origin of consciousness (at least if these strategies are used in isolation). Consciousness must be approached from within, at least as much as from without, from the midst of lived experience, at least as much as from an objective scientific vantage point. Consciousness must be apprehended from where it is, not only from where one hopes to contemplate it. Prioritizing this lived, embodied, approach to consciousness is the program of phenomenology, as Edmund Husserl and his lineage defined it. Articulating the lived domain of phenomenology with the scientific study of objective correlates of mental structures, and buttressing the study of one onto the study of the other, is the extended program of neurophenomenology as developed by Francisco Varela. Some philosophers of mind also advocated such a balanced attitude, by prescribing a triangulated approach to consciousness (Flanagan, 1993) or a "reflective monist" theory of consciousness (Velmans, 2009). But, unlike neurophenomenologists, they did so shyly since they fell short from prescribing an extensive methodology of first-person inquiry, and adopted a kind of non-committal metaphysical standpoint instead.

Evan Thompson makes full use of the neurophenomenological strategy, in his remarkable book *Waking, Dreaming, Being: Self and Consciousness in Neuroscience, Meditation, and Philosophy,* which will soon be considered a landmark and a tipping point in consciousness investigations. He systematically confronts data from cutting-edge neurocognitive science with various sources of knowledge about the corresponding lived experiences; and he carefully extracts from each one of these approaches the most relevant information to make sense of the other one. True, the best possible neurophenomenological methodology would include experimental control on both sides of the first-person/third-person divide, but even though this requirement is not fulfilled in some of the cases studied by Thompson, his intellectual mastery of the subject is such that he offers a convincing compensation for it.

Yet, Thompson's most admirable achievement is probably not this one. It can rather be found in his thorough exploration of a host of so-called "altered states of consciousness," from lucid dreaming to near-death experiences. It can also be found in Thompson's masterly use of texts from the Indo-Tibetan civilizational area, which most valued the methodic culti-

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vation of these states and the study of the corresponding experiences. This input from such sources as the *Upanishads* and the *Advaita Vedânta*, as well as *Yogacâra* and *Mâdhyamika* Buddhism, is rich, accurate, scholarly, and immune from any temptation of syncretism. Thompson's book thus comes close to what I consider an ideal of consciousness studies: opening them to the full range of experiences that may occur in human conscious life (and beyond), taking into account all the data that have been accumulated in various spiritual traditions about such experiences, and yet remaining painstakingly critical about any speculative over-interpretation of these experiences. This book avoids both the Scylla of narrow-minded materialism and the Charybdis of facile esotericism, in a single stroke: the stroke which consists in adopting the phenomenological stance.

The importance of feeding the investigation about consciousness with its altered states pertaining to sleep, psychedelic drugs, or Yoga, is reluctantly accepted by philosophers, perhaps because discourse about these altered states has been hijacked by new-age circles. At any rate, the dominant prejudice in our Western culture is that there is just one reference state of consciousness which should be considered as the standard of validity for any statement, including statements about consciousness itself. This normative state of consciousness usually lacks a name, beyond its tautological characterization as "normal." But an important aspect of it has been captured by Husserl under the appellation of "natural attitude," which he differentiates from the attitude of "phenomenological reduction." The normative "natural" state of consciousness is alert, awake, and directed towards intentional objects (be they perceptive, imaginative, or intellectual). It thereby involves a spontaneous belief in the intrinsic existence of many of these objects, and it is mostly oblivious of the background condition for knowing and characterizing objects, which consists in being aware of their manifest presence and attentive to them. The natural attitude thus contrasts with other states of consciousness which are quite different from it either because they are not alert and awake (such as coma or sleep), or because they avoid any spontaneous ontological commitment towards their objects (such as lucid dreaming or phenomenological reduction). Considering the natural attitude as a standard for valid knowledge has mostly proved a good choice, in view of the technological achievements allowed by objective science. However, this is likely to become a hindrance when the sought knowledge no longer bears directly on objects of designation or manipulation, but reflectively on the preconditions for designating or manipulating, such as consciousness, the lived body, or the technical know-how of laboratory work.

Indeed, let's consider the consequences of taking the natural attitude as an ultimate standard of our research about consciousness. In practice, this means that any advance in the latter research must take the form of a better understanding of a set of relevant objects, be they biological or psychological. However, by doing so, one commits a petitio principii, by presupposing from the outset that consciousness is to be treated either as a domain of (psychological) objects or as a property of (biological) objects, and by discarding thereby any truly alternative, non-objectifying, approach of consciousness such as phenomenology (which is at best replaced by "heterophenomenology"). More basically, by adopting the "natural attitude," one automatically moves away from the non-conventional field which is to be studied, namely away from the experiential origin of any intentional directedness towards objects. For any act of aiming towards an object, or towards a situation meant by a proposition of language, brings attention far from the source of the act, and rather projects attention onto the target of the act; a highly detrimental move when the target of the sought knowledge identifies with its source. The exceptional status of the non-object of the study (namely phenomenal consciousness) is then bound to be neglected or forgotten as an automatic consequence of endowing the "normal," objectifying, state of consciousness with the status of an impassable standard. No wonder this sophisticated form of self-contradiction gives rise to embarassing foundational difficulties such as the hard problem of the origin of consciousness, or the explanatory gap between the physical and the experiential.

To compensate for this wrong starting point, one may benefit from Merleau-Ponty's (1964) fascinating definition of philosophy. According to Merleau-Ponty, philosophy is "(...) the set of questions in which the one who questions is himself implicated in the question" (p. 47). The question about the nature of phenomenal consciousness is archetypically philosophical, in this sense. One cannot hope to address this question properly without accepting to be completely entangled into it. One cannot address the issue of consciousness without: (i) permanently realizing that any question about the origin of consciousness originates in a present act of consciousness (Bitbol, 2002, 2008, 2014); and (ii) bringing into play the variety of states of consciousness which one may adopt while addressing this issue.

Let us consider one example of this productive self-referential loop. It is clear that adopting the state of "phenomenological reduction" (and thereby suspending the "natural attitude") helps in moving the boundaries between what counts as explanans and what counts as an explanandum, when consciousness is at stake. For, in this state, lived experience presents itself as the manifest given, and therefore as a basis for any further explanation. Conversely, objects become what is to be explained, since one must account for the fact that they are considered as stable entities beyond their fleeting appearances presented in experience. In phenomenology, just as in Kant's philosophy, the latter issue is known as the problem of "constituting objectivity." Disclosing how objectivity is elaborated out of finite and transient episodes of phenomenal consciousness is considered by phenomenology as more relevant than asking, reciprocally, how phenomenal consciousness arises from certain objective processes. From this example, it appears that changing one's state of consciousness from the "natural attitude" to "phenomenological reduction" may be sufficient to invert the hierarchical relation between problems and solutions. At least, this inversion is likely to be carried out if the alternative state of consciousness is taken as a new norm, which, until now, has not happened outside the narrow circle of professional phenomenologists.

Other non-standard (or "altered") states of consciousness have had similar effects on the very definition of the problem of consciousness; and they were even more powerful than "phenomenological reduction" in this respect, because they became normative in a broad civilizational area. This is the case of the practice of Yoga, which is associated to highly popular doctrines such as Advaita Vedânta or Kashmir Shaivism. Going one step further than phenomenology and transcendental idealism, the latter doctrines consider the objectified world as a fabrication, or even an illusion. They start their investigation from a mindful survey of the flux of lived experience, and then describe at length how this experience feeds a (mistaken) twofold belief in (i) the existence of permanent and autonomous objects, and (ii) the identification of the ego to an objectified body or substance (Bansat–Boudon, 2011). It then turns out that each alternative state of consciousness might well have an important lesson to teach about how to tackle the problem of consciousness. Hence the remarkable effect of renewal of ideas and ways of thinking that can be expected from an accurate exploration of these states of consciousness, as it is beautifully undertaken in Thompson's book.

Summary of the Argument

The nucleus of Thompson's argument is likely to be found in a methodological remark, and in the correlative contrast between contemporary Western and traditional Eastern analyses of consciousness. The methodological remark is that the last resort criterion of consciousness used in modern cognitive science is verbal report (p. 98). Inability to elicit a verbal report, be it a retrospective report long after the events, is taken as a mark of the complete absence of consciousness. Relying on this criterion, a sharp divide is established between situations

in which consciousness is present (waking or dreaming) and other situations in which consciousness is missing (deep sleep, coma, or general anaesthesia). Another similar divide is established between conscious and unconscious mental activities, or between intentional and automatic mental processes. However, this dichotomic black-and-white view of consciousness should not be construed as a warranted result of cognitive science. It is rather a basic presupposition of its investigations. Indeed, the search for neural correlates of consciousness in the central nervous system relies on studying the differences between those neural activities which are associated to unconscious, automatic processing, and other neural activities which are associated to conscious, intentional, reportable mental activities. If no such dichotomy between the unconscious and conscious minds were assumed from the outset, no possibility to find the specific "neural signature" of consciousness would be left. But, as Thompson cogently argues (p. 49), this methodological presupposition might well be flawed, because it relies on a confusion between immediate appearance and cognitive accessibility, or between phenomenal consciousness and access consciousness (to borrow Ned Block's celebrated distinction). How can we be sure that a mental event which is inaccessible to verbal report and/or episodic memory is thereby phenomenally unconscious?

This creeping doubt opens a large avenue of reflection in which many phenomenogical findings of the contemplative traditions of the East fit nicely. For, according to these phenomenological findings, there is no mental process which can be said to be entirely unconscious. Instead of a conscious–unconscious divide, the contemplative traditions of the East then propose a more fine-grained subdivision of the *continuum* of consciousness. Already in the *Upanishads*, one finds a distinction between four states of consciousness, with no mention of (or no interest for) absolute unconsciousness. These states are: waking, dreaming, deep sleep, and the "fourth" state (pp. 9, 237). The first surprise, for us, is that deep sleep counts as a state of consciousness; and the second surprise is that there exists an even deeper state, which is just called "fourth" (*turīya*, in Sanskrit) due to lack of an entirely articulate characterization. This latter state can however be construed as "pure awareness," non-dual, contentless, and unreflective but clear awareness.

When compared to this refined analysis of consciousness, modern cognitive research on consciousness appears to have missed a crucial point. True, it has produced an impressive amount of data about the neural correlates of higher-order functions of consciousness, such as meta-cognitive survey, or synthesis of a manifold of allegedly automatic mental processings; but it has remained mute about several basic situations which may involve subtle (hardly accessible) aspects of consciousness. Instead of the standard conscious-unconscious divide, Thompson writes, what should then be investigated is a threefold hierarchy of "awareness, contents of awareness, and self-experience" (p. xxxii). Here, awareness is the all-pervasive presence (or clarity) that can be modulated by contents, and further reflected in higher-order self-consciousness. A whole, and precious, chapter of the book is devoted to this usually unnoticed fact of pure awareness. Its very apt title is "Being" (p. 67): for pure awareness is just what it feels like to be, before any discrimination is made between various modalities and orientations of being. This chapter mostly relies on a discussion between the author and the Dalai Lama at the 2007 Mind and Life conference: a discussion which revolved around the Tibetan concepts of "subtle consciousness" and "clear light." It also ponders upon one of the most manifest and yet most neglected facts of our lives, namely that consciousness is present even before we think of it (p. 96), and indeed before the concept of its alleged "neural basis" has been elaborated. This primordial fact is precisely the starting point of phenomenology.

From that point on, certain states which are usually considered as unconscious, such as deep sleep, are envisioned under a very different angle. While accepting that they may lack higher-order self-experience, and be very poor of content, the question still arises as to whether they involve some sort of pure awareness. To decide this

difficult issue, neuroelectric recordings are of little help. Only retrospective phenomenological descriptions could bring some light on the question. This sounds contradictory, because pure awareness is supposed to be a non-accessed form of consciousness. But something like hyperesthesic and retrospective access might still be marginally available. It might be present in trained subjects, either yogis or highly sensitive writers (such as Marcel Proust, who is often quoted in the book). Their reports usually bear on the fringe moment of initial awakening, when a flavor of what has been lived during the periods of deep sleep is still present. And, according to them, it turns out that the form of consciousness which subsists during deep sleep is both egoless and objectless (p. 238); it is consciousness for nobody (no individual person) and of nothing (no specific object). Whenever this kind of experience does not remain dumb, reckless, murky, but is rather reflected and later reported by expert vogis, it can give rise to the "fourth" state or "clear light" (p. 265). From the case of deep sleep, one then suspects that the only way to "bridge" neurocognitive and Eastern approaches may well be to promote training in meditative or yogic states (p. 264). Another case which favors the same conclusion is the study of discrete moments of awareness (p. 35). While untrained subjects report a continuous "stream" of consciousness, and are usually unable to discriminate events which are separated by less than 200 milliseconds (thus fitting a typical rhythm of large scale neural phase synchrony), trained subjects confirm a much bolder claim of Abhidharma teachings: that one can "discern events as fast as 10-20 milliseconds" (p. 46).

The distinction between awareness and self-experience has momentous consequences when non-standard experiences such as lucid dreaming are touched upon. In ordinary dreams, one is fully aware of the dreamt contents, and fully implicated in the situations they represent (p. 137). But in lucid dreams, while the awareness of their contents is retained, the dreamer distanciates from them and contemplates the show, so to speak, from without, thus realizing that it is "only a dream" (p. 143). Better still, lucid dreamers can go beyond monitoring their dreams; they can guide the unfolding of their dreams (p. 173), thereby "downwardly causing" an alteration of their neurobiological processes. A phenomenological description of what it feels like to have a lucid dream can be given in terms of a splitting of the ego into two centers of perspective. On the one hand, there is the dream-ego, who holds the position of an unselfconscious "hero" of her own movie; and on the other hand there is the dreaming ego who has gained the position of a spectator and sometimes of a stage director of the said movie (p. xxxvi). Such splitting sometimes occurs spontaneously, but it can also be trained systematically by practicing "dream Yoga." However, the aim of this training should not be to replace ordinary dreaming with lucid dreaming altogether, for ordinary dreaming also has some value as an "expression of a kind of selflessness, radical acceptance, and full presence" (p. 199). The training is just meant to open us to additional modes of being, and to offer us additional capacities to transform our waking life together with its biological correlate (p. 173). This possibility to master somehow the contents and unwinding of our dreams vields a balanced conception of their status. According to Thompson, they are not to be considered as mere hallucinations or epiphenomena of a wild working of the brain stem; nor should they be considered as revelations of some other-worldly reality. A proper phenomenological analysis of dreams and hypnagogic states rather shows their kinship with (more or less controlled) imaginative processes (p. 188).

Such strategy, which I fully approve, is a healthy comeback to the firm ground of what appears, after having been stuck in a false opposition between two unwarranted "realisms": the exclusive realism of material bodies, and the shaky realism of immaterial worlds. Thompson consistently follows his phenomenological middle-way between a neurobiological reductionist construal of lived experiences, and a "transcendent" or "supernatural" interpretation of the same experiences, by applying it to several other modalities of consciousness. In particular, he carefully explores this middle path when he evaluates sensitive issues such as out-of-the-body experiences and near-death experiences.

Thus, after a careful examination of testimonies and experimental work about out-of-body experiences, Thompson concludes that such experiences do not show that our consciousness is, so to speak, separate from the body, let alone that there exists some "astral body" apart from the visible and tangible body (p. 208). However, even though elementary out-of-body experiences can be triggered by many artifacts such as virtual reality headsets, drugs, or brain stimulations, they should not be taken as mere "illusions" (not any more than lucid dreams should). Actually, they disclose the deepest fabric of our lived embodiment. Indeed, embodiment is no simple feature of our experience (p. 206). It is a complex interplay of a feeling of ownership (of our body), a sense of agency (by means of our body), a process of self-location (where our body is situated), and the adoption of an egocentric perspective (here, at this very place). Out-of-body experiences, in which self-location separates from the sense of ownership, reveal this composite structure of embodiment. They show that the usual coincidence of the perception of our body as an object and the self-perception of our body as a subject (p. 210), cannot be taken for granted, but must constantly be re-elaborated. To a certain extent, this remark squares with Indian doctrines according to which our identification with what we call "our" body is a fabrication. However, it should be borne in mind that identification with the body is not fabricated by some immaterial soul-like entity; it is self-fabricated or self-constructed in experience as an aspect of the enactive process by which a unifying dynamic nucleus called the "ego" is elaborated and maintained (p. 362). In the same way as the processual ego is a construction but not an illusion (p. 359), the full sense of embodiment is clearly constructed vet not illusory.

The application of this phenomenological middle path to near-death-experiences is perhaps even more striking. Here again, a fierce debate is taking place as to whether near-death experiences are demonstrations of a real after-life, or just illusions triggered by altered physiology of the dying brain. As Thompson declares, and as I myself argued (Bitbol, 2014), this alternative does not exhaust the issue. Instead, one should pay attention to the self-ascribed meaning of this experience, to the way the dying (and ressucitated) human being is transformed by this experience. Being a transformative moment of life, a moment which has (usually positive) consequences for the worldview and the self-understanding of those who underwent it, near-death experiences can by no means be discarded as mere "illusions." In fact, as it is widely accepted, no experience can be called an illusion by itself; only its (spontaneous or speculative) overinterpretations are usually illusory.

A Debate Between Mild and Radical Phenomenologists

Despite Thompson's clear choice in favor of a phenomenological approach of the delicate issue of "altered" states of consciousness, one may feel that he persistently balks at drawing the ultimate consequences of this option. His hesitation is reflected in the table of contents of the book, insofar as the decisive reflection about "being" qua pure experience only appears in chapter 3, as if it were only one among many aspects of consciousness. Yet, on a phenomenological scale of priority, this point should be considered first and foremost. The effective primacy of lived experience should be given such prominence that every other aspect, content, achievement, distortion, and physicalist account of consciousness, is made conditional upon it. If "science always moves within the field of what consciousness reveals" (p. xxxv), if there is "no access to consciousness that's independent of consciousness" (p. 99), this is a compelling reason to start the inquiry from where we are, namely from the midst of a complex, situated, conscious experience. One should above all avoid any initial concession to the "natural attitude" of common sense

or to the spontaneous beliefs of scientists. Instead, the genealogy of objective knowledge should be traced in lived experience (say, by way of Husserl's descriptions of intentional directedness or of noetic and noematic strata of experience), just as much as, conversely, one looks for correlates of elaborate aspects of consciousness in certain objective facts of nature. Such firm decision as to the most appropriate and primeval starting point of the investigation of consciousness would avoid many ambiguities which may arise from a non-critical reading of Thompson's book.

One central ambiguity bears on the status Thompson ascribes to neurobiological findings, and to scientific knowledge in general. From a (radical) phenomenological standpoint, and in agreement with its Kantian background, one must not mistake objectivity for reality. Reality is what is given and manifest, whereas objectivity is what is constituted by extracting structural invariants from the given experience. Along with this phenomenological approach, an objective science is not supposed to disclose reality as it is beyond appearances, but only to circumscribe some intersubjectively recognized features of the appearing reality. Having said that, neuroscientific data should not be granted a higher ontological status than phenomenological descriptions; they should not be given the power to render a compelling verdict about what is real and what is deceptive in our experience. Let's consider, for instance, the sentence according to which "near-death experiences are contingent upon the brain" (p. 309), which echoes the more general sentence that "consciousness, including pure awareness, is contingent on the brain" (p. xxxv). If the latter sentence is meant to avoid reification of consciousness (p. 95), and to deny the dualist view according to which consciousness (or at least subtle aspects of it) is some "thing" independent of spatio-temporally located things, so far, so good. If it is used against the âtman-view of Advaita-Vedânta, which tends to raise consciousness to the rank of an absolute; and if it is taken, conversely, as supporting the Buddhist anâtman-view according to which consciousness is "contingent upon the name-and-form" which we call matter, that's fair enough. The problem however, is that this expression "contingent upon" is asymmetric, and that, in the book, it is always used in the same biased way, namely with consciousness as a grammatical subject, and the brain as a grammatical object. This surreptitiously generates the feeling that neurobiological entities are ascribed a higher (or deeper) status than lived experience itself in the "great chain of being," despite several paragraphs wherein downward causation from mental to neural processes is invoked.

Indeed, notwithstanding the aknowledgement of downward causation, nowhere does one read that, conversely, neurobiological processes are contingent upon the mental conscious processes to which they correlate, let alone that they are contingent upon the phenomenological "constitutive consciousness." This asymmetry, which constrasts with the strict symmetry of the Buddhist concept of dependent origination, could just be a slip of tongue, or an indebtedness to the dominant language of the cognitive sciences. But in the end, it turns out that Thompson comes very close to accepting the physicalist hierarchy. Indeed, he declares that "sentience depends fundamentally on electrochemical processes of excitable living cells while consciousness depends fundamentally on neuroelectrical processes of the brain" (p. 343). As a negative statement, namely as a claim that information processing by cortical neurons can only correlate to the integrative and self-reflective functions of consciousness, but not to the underlying "sentience" or pure awareness, this is perfectly fine. But the positive aspects of the sentence look problematic to me. Firstly, saying that sentience depends on electrochemical processes is overspeculative, because (i) many other physical processes could play the same role (e.g., quantum coherences in neuron's microtubules, or global magnetic fields generated by local electrochemistry, etc.); and (ii) one cannot even figure out how this crucial role

of electrochemistry or other physical processes can be proved or disproved (not any more than one can prove or disprove the opposite statement that sentience arises in sufficiently complex non-living information processing machines). Secondly, and even more disturbingly, the verbal expression "to depend fundamentally" suggests a hierarchical dependence between what is fundamental (objectively characterized electrochemical processes) and what is derivative (subjectively lived sentience). But, again, this lopsided dependence cannot be reconciled with a serious phenomenological approach in which objectivity is never confused with ontology. In a phenomenological context, the remarkable correlation between neurobiological events and certain contents of consciousness must itself be approached phenomenologically. Indeed, if one sticks to the phenomenological stance throughout, it is obvious that this correlation is primary and manifestly given, whereas its possible interpretations in terms of one-directional causality are secondary to the procedure of constitution of a neurobiological region of objectivity. The neuro-phenomenological correlation is then seen and described as an internal feature of the whole of what shows itself, with its combination of directly lived experiences and indirectly objectified structures. It is understood phenomenologically as a joint manifestation of the propriocepted own-body and the exterocepted object-body (Leib and Körper in Husserl), by due analogy with the concomitance of the felt decision to move an arm and the empirical observation of this move (Merleau-Ponty, 1945). To sum up, from a phenomenological standpoint, the neuro-phenomenological correlation is plainly perceived as an extension of the lived sense of embodiment, not as a sign that some naturalistic one-directional "fundamental dependence" of consciousness on the bodily brain is taking place.

This brings us to a more general remark about the status of the discipline of neurophenomenology. According to a minimal version of it, the role of neurophenomenology is only to contribute to the findings of a hegemonic objective neuroscience, by increasing the intensity of the connections of neuroscientific data with verbal reports of experience, and by taking advantage of the reports for clarifying the function of various objective biological processes. This can be called a naturalistic reading and use of neurophenomenology. Another, mild version of neurophenomenology would consist in adopting a sort of uncommitted, quasi-Spinozistic standpoint, thus placing the phenomenological description and the neurobiological processes on the same footing, and dispassionately establishing "mutual constraints" between them. This is a tacitly neutral monistic view of neurophenomenology. From several sentences of his book (e.g., p. xviii), it looks like Thompson's approach of neurophenomenology is predominantly "mild," or "neutral," with a few undertones of the "minimal," or "naturalistic" version. But there is also a third construal of neurophenomenology, which one may call a full-fledged phenomenological approach of neurophenomenology, or a "radical" variety of neurophenomenological thinking. I am convinced that Francisco Varela was metaphysically or existentially committed to this latter variety of the discipline he founded, even though he pursued his daily neuroscientific research as if he had adopted its mild or minimal reading for all practical purposes. Indeed, according to Varela (1996, p. 334; 1999, p. 187), "lived experience is where we start from and where we all must link back to, like a guiding thread." It is only from this recognition that first-person and third-person approaches are not two completely different species of knowledge, but rather two modes of orienting within one and the same lived experience, that the motivation to elaborate what Varela called a "methodological remedy" for the hard problem of the physical origin of consciousness arises. Indeed, only at this point does one realize that the very belief according to which a theory or a set of conceptual elements can solve the problem of the origin of phenomenal consciousness is misleading, since this belief is tantamount to overlooking the fact that even theories or concepts are features of conscious experience. As soon as the latter fact has been payed due attention, the so-called "hardness" of the hard problem boils down to the difficulty of changing our conception of science in order to let it encompass its lived source, beyond its objects and achievements. Unlike the original one, this alternative hardness can easily be softened (i) by serious training to the phenomenological reduction and exploration of experience; (ii) by the completely renewed and broadened conception of science which is likely to be favored in the wake of such training.

Would adoption of this radical view of neurophenomenology have changed something in Thompson's thorough exploration of uncharted regions of consciousness? It seems to me that this move would indeed have amplified the available range of interpretations of the altered states of consciousness which are documented in the book. Until now, we have listed three such interpretations of altered states of consciousness: two objectivistrealist and one non-committal (mild) phenomenological interpretation. According to the objectivist-realist approaches, these states refer to wordly or other-worldly objective processes. They refer either to an alteration of the brain's biochemical balance, thus giving rise to hallucinations, or to a backstage supernatural (but "real") world which discloses itself to (say) dying people. According to the non-committal phenomenological approach, instead, these states are relevant by themselves, as transformative experiences for those who live through them. This latter approach, cogently described by Evan Thompson, and which I have advocated for some time, represents a decisive step beyond the sterile conflict of naturalism and super-naturalism. It shows that despite their superficial disagreement, both positions share the same crucial but disputable strategy: escaping one's own lived embodied situation and striving towards some (natural or super-natural) transcendent realm of being.

But the clarifying role of phenomenology is not bound to stop at this point. One can take further advantage of a truly radical phenomenological approach, and thereby endow the transformative experiences with additional significance. According to Merleau-Ponty (who partly agreed with Heidegger and Sartre on this point), phenomenology, in its mature state, becomes a new form of ontology: not a straightforward ontology of things facing an observer, however, but an "oblique ontology" of intertwining with what there is (Saint Aubert, 2006); not an ontology of manifest beings, but an ontology of self-manifesting being. As Merleau-Ponty writes, radical phenomenology does not yield a standard "exo-ontology," but rather an unexplored "endo-ontology" (1964, p. 279). Merleau-Ponty here unambiguously alludes to an ontology expressed from the innermost recesses of the process of being, rather than to an ontology of the external contemplation of beings. This being granted, some altered states of consciousness can be understood neither dismissively as illusions, nor neutrally as enthralling experiences, but positively as revealing a state of being which happens to be hidden by intellectual fabrications and by the impulse of intentional directedness. Let me clarify one point, at this stage, to avoid misunderstandings. Unlike in super-naturalism, there is no question here of reaching some remote domain of transcendent being, but only of self-disclosing an exquisitely proximate mode of being, which is permanently present but usually neglected: perhaps what Tibetan Dzogchen practitioners call "the nature of mind," which, in this non-dualist context, is likely to be simultaneously the (self-experienced) nature of being. Such an about-face concerning the interpretation of altered states of consciousness (in which "altered" becomes "fundamental," whereas "standard" becomes "overfabricated"), has been advocated, inter alia, by the philosopher and specialist of Indian thought Michel Hulin (1993).

Concluding Remarks: What It is Like to be Awake

A recurring theme in Thompson's book is briefly expressed in the following question: "What if waking experience were a kind of dream?" (p. 164). This disturbing doubt is substantiated by comparing the status of the ego in dreams and in waking states (p. 174): in both cases the ego is dynamically elaborated, and yet mistaken for a "real and solid" entity. But at least, when one dreams, the option of lucid dream is available. The lucid dreamer then becomes aware that she holds the position of the stage director in a puppet show, and that the dream-ego is just a puppet ego. It looks like this additional level of awareness is not available to us in waking life. But is this true? In the Indo-Tibetan cultural area, it is common wisdom that one can awake from the dream of life, just as much as from the dreams made during sleep. This is called *moksa* (liberation), or *nirvâna* (extinction, appeasement). An awakening like this one does not mean promoting the end of life or the end of the dynamically constructed ego, but rather, like in lucid dreaming, being no longer taken in by ego-like and substance-like appearances (p. 366).

Now, there are Western equivalents of this ultimate awakening. In recent times, they have been equated to the phenomenological "epoché" (suspension of judgment) and reduction. Indeed, practicing the phenomenological reduction means coming in such close contact with one's own experience, that one is no longer taken in by object-like appearances, and becomes aware of the acts of consciousness which underpin them. Furthermore, as Sartre (1936/2000) pointed out, the ego-like appearances themselves fall under the phenomenological reduction. But that's not all. Even before phenomenology, philosophers of the post-Kantian tradition advocated an increased lucidity which was tantamount to epistemological liberation. Hegel thus considered that the horizon of history is a step-by-step recognition that what we take as things in themselves are merely in-themselves-for-consciousness. Similarly, Nietzsche (1882/2001) insisted that what our naive knowledge and our metaphysics take as absolutes, are just projections of our ideals. The one who thus recognizes her own projections is called the "free mind" or the "liberated mind" by Nietzsche.

So, why is this sort of lucidity, or accomplished awakening, so unpopular in the West, despite its ability to dissolve at once a host of false enigma such as the hard problem of the objective origin of consciousness? The most convincing answer to this question has probably been given by Descartes (1641/1984, p. 15): we "dread being woken up, and go along with the pleasant illusion as long as (we) can." Even though the illusion of substantiality is not always pleasant, it remains captivating as a lure and incentive for research, until such time as research pursued under this kind of presupposition stumbles against self-produced insoluble enigma or paradoxes.

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