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Revisiting the mind-brain reductionisms: *Contra* dualism and eliminativism

Revisitando os reducionismos mente-cérebro: Contra *o dualismo e o eliminacionismo*

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Abstract: In this paper, I should like to argue against both eliminative materialism and substance/property dualism, aiming more specifically at the reductionist arguments offered by the Churchlands' and Swinburne's versions thereof, insofar as they undermine moral beliefs qua first-personish accounts dismissed as folk psychology by the former, as the latter regards them as supervening on natural events extendedly, that is, necessarily both ways of the biconditional linking mental and physical substances (for every A-substance x there is a B-substance y, such that necessarily if y exists x exists).

Keywords: Dualism. Eliminativism. Moral Beliefs. Naturalism. Normativity. Reductionism.

Resumo: Este artigo procura argumentar contra o eliminacionismo e o dualismo de substância ou de propriedade, visando mais especificamente os argumentos reducionistas oferecidos pelo casal Churchland e por versões de dualismo propostas por Swinburne, na medida em que põem em causa as crenças morais enquanto relatos de primeira pessoa, desconsiderados como psicologia popular pelos primeiros e como supervenientes pelo segundo (como eventos naturais que se estendem necessariamente, em ambos os sentidos do bicondicional ligando substâncias mentais e físicas: para toda substância-A x existe uma substância-B y, de modo que necessariamente se y existe, x existe).

Palavras-chave: Dualismo. Eliminacionismo. Crenças Morais. Naturalismo. Normatividade. Reducionismo.

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1

It is well known that the neuroscientific turn in philosophy of mind and language has targeted major versions of Cartesian dualism, opposing dichotomies of soul and body, brain and mind, reason and emotion. In effect, since the 1950s and 60s, research in neuroscience had already shaken apparently insurmountable problems in various models of substance dualism, property dualism, and of several others that have emerged in the following decades, with alternative proposals to patterns of behavior conditioning (behaviorism), theories of identity (between mind and brain), the physical states of the brain (physicalism) and their causal roles and functions in a complex economy of internal states, mediating sensory data inputs and behavioral outputs (functionalism). Paul Churchland was associated with the connectionist movement in cognitive science in California, in the early 1980s – also known as PDP, Parallel Distributed Processing. According to connectionism, the mind is analogous to a computational system formed of networks of simple processing units, modeled on neurons, so as to offer a sub-symbolic alternative to formal symbols' models, such as Fodor's "language of thought." Patricia Churchland would thus speak of connectionism as a descriptive, materialist critique of functionalism, as the former pursues the central empirical hypothesis that cognition itself must be regarded as a species of computation:

> The computer metaphor is prominent, for a number of reasons . One is that a fairly clear sense can be given to the notion of levels of description in the case of computers. The machine can be considered to have three basic levels of description: the semantic level , the syntactic level , and the level of the mechanism... The underlying basis for this hypothesis is the idea that reasoning is the model for cognitive information processing generally. This means that cognition is largely symbol manipulation and that the important relations in cognitive information processing are thus the logical relations between the symbols. Now, modern logic has provided immense resources for understanding reasoning in terms of logical systems: deductive logic, inductive logic, modal logic, decision-theoretic logic, and so on (CHURCHLAND, 1986, p. 350f.).

Paul and Patricia Churchland's eliminative materialism emerged, in effect, as an alternative to behaviorists, structuralists, type-identity and reductionist materialists who believe that minds are in some way real, albeit not thinking substances, and should be explained by science, but without eliminating folk psychology or normativist accounts that evoke psychological states. By folk psychology, the Churchlands mean

> that rough-hewn set of concepts, generalizations, and rules of thumb we all standardly use in explaining and predicting human behavior. Folk psychology is commonsense psychology – the psychological lore in virtue of which we explain behavior as the outcome of beliefs, desires, perceptions, expectations, goals, sensations, and so forth. It is a theory whose generalizations connect mental states to other mental states, to perceptions, and to actions. These homey generalizations are what provide the characterization of the mental states and processes referred to; they are what delimit the 'facts' of mental life and define the explananda. Folk psychology is 'intuitive psychology,' and it shapes our conceptions of ourselves (CHURCHLAND, 1986, p. 302).

My contention here is that many neuroscientists and philosophers of mind nowadays who embrace physicalism are motivated by their correlated refusal of substance and property dualisms without necessarily succumbing to determinism or to a reductionist account of naturalism – as independently shown by both Antonio Damasio and Jesse Prinz. Hence, the Churchlands' eliminativist program tends to be reductionist, even though they can make use of folk concepts in the very process of eliminating them (CHURCHLAND, 1986, p. 336). In contratst, both Damasio and Prinz resort to a bodily theory of emotions that takes into account what neurophenomenologists call an embodied conception of the self or embodied mind, which, moreover, entails social cognition as such. Commonsense psychology and folk concepts generated by ordinary language use and our everyday resort to beliefs, desires, and propositional attitudes turn out to be integrated with the very conception of selfhood and subjectivity. As Prinz put it,

> In its most basic form, this [folk psychology] is embodied in our tendency to attribute mental states to other creatures and to explain their behavior on the basis of those attributions. The tendency is quite robust. We attribute mentality to all kinds of things, from people to animals and from teddy bears to microorganisms (PRINZ, 2002, p. 224).

Prinz goes on to remark that interestingly we don't ascribe beliefs or propositional attitudes to chairs and inanimate things, although humans can assign them to animals and things resembling human persons, even as we gather empirical evidence against folk psychology in chimps and nonhuman animals. The reason is very simple: facial expressions can produce emotional experience, which points to emotional contagion and intersubjective interaction between first- and third-person standpoints in the expression of feelings in humans' communicating with each other. According to Prinz,

> Seeing others as experiencers just is imagining things from their perspective. Simulation is the fundamental form of attribution. Further refinements take place after this. For example, we come to recognize that others' perspectives can be unlike ours, we realize that others can harbor beliefs that we know to be false, and we come to master propositional-attitude talk. Readers can consult the literature on mental simulation for reasonable accounts of these transitions (PRINZ, 2002, p. 226).

For Prinz, Damasio, Searle and those who embrace such a pragmatic view of propositional attitudes, the use of personal pronouns ("I," "you," "she," "we," representing a grammatical person within a sentence, regardless of any sharp distinction between syntax and semantics) refer to a rather fictional conception of the self, following the Humean empiricist critique of the Cartesian Cogito. Such an embodied view of mind and self is, therefore, thoroughly based on empirical findings, at the same time that it must take into account intersubjective components and phenomenal accounts (including the very idea of narrative in first-person accounts). As Zahavi and Gallagher put it so well,

> It should be obvious that my bodily self-apprehension and the way I live my body can be influenced by my social interaction, and by the way my body is perceived and apprehended by others – just think of categories like gender and race. But perhaps even more basically, social interaction is as such an embodied practice (GALLAGHER and ZAHAVI, 2008, p. 148)

What can be dubbed a neurophenomenological deficit in analytic accounts of naturalism points precisely to this neglected aspect of most accounts of selfhood that fail to deal with its own phenomenal outlooks in the natural attitude or in lifeworldly dealings, prior to any theoretical reflection, for instance, in facial recognition, bodily moves or gestures, which presuppose social interaction prior to any self-conscious perception. After all, it is not so much a solipsistic question, as it has been posed by many analytic philosophers as "the problem of other minds" (as if a Cogito went from the inner, thinking self towards its outer double, outside its body, as it were, in dualistic terminology, "How do I find an access to the other") but it is rather because of bodily interactions of empathy, emotions, feeling, communication, and language that consciousness itself emerges and makes sociality meaningful. On Damasio's interpretation, social emotions help establish a correlation between practical reason and emotion, combining the awareness notion of decision-making and planning at different time scales, creating possibilities of interaction with the environment and the selection of courses of action, with all

processes and steps interconnected. Damasio manages thus to articulate the social, intersubjective, and neurobiological processes that explain the evolution of the human brain and the emergence of consciousness, the "I," memory, language, subjectivity and their representations and creative constructions and carriers of meaning. According to Damasio,

> Both basic homeostasis (which is nonconsciously guided) and sociocultural homeostasis (which is created and guided by reflective conscious minds) operate as curators of biological value. Basic and sociocultural varieties of homeostasis are separated by billions of years of evolution, and yet they promote the same goal – the survival of living organisms – albeit in different ecological niches. That goal is broadened, in the case of sociocultural homeostasis, to encompass the deliberate seeking of well-being. It goes without saying that the way in which human brains manage life requires both varieties of homeostasis in continuous interaction. But while the basic variety of homeostasis is an established inheritance, provided by everyone's genome, the sociocultural variety is a somewhat fragile work in progress, responsible for much of human drama, folly, and hope. The interaction between these two kinds of homeostasis is not confined to each individual. There is growing evidence that, over multiple generations, cultural developments lead to changes in the genome (DAMASIO, 2010, p. 31).

Damasio's integrated views of emotions and feelings not as "intruders in the bastion of reason" but enmeshed in its networks, for worse and for better, are revealing: "The strategies of human reason probably did not develop, in either evolution or any single individual, without the guiding force of the mechanisms of biological regulation, of which emotion and feeling are notable expressions" (DAMASIO, 2005, p. xii). Accordingly, empathy is to be regarded as a highly flexible, context-dependent response to these networks, ultimately leading to cooperation and the evolution of social norms, especially fairness norms. Damasio evokes the process of a sociocultural homeostasis so as to refer to the social and cultural imbalances allowing for the detection of an imbalance at a high level of a conscious brain-mind in the stratosphere and not in subcortical level. Both Damasio and Prinz succeed thus in integrating decisive elements of both neurobiological and sociocultural evolutionary processes so as to account for important, distinctive features such as working memory, which is a faculty associated with the frontal lobe and turns out to be more advanced in our species, as Prinz aptly pointed out, as "bigger frontal lobes may have made us better simulators, and hence capable of acquiring a folk psychology"(PRINZ, 2002, p. 227).

2

Let me offer now, by way of contrast, a few comments on Richard Swinburne's seminal contributions to the philosophy of mind and language, and to the philosophy of neuroscience in his latest work *Mind, Brain, and Free Will*, more particularly on his recasting of the mind-brain problem, his critique of physicalism, and his defense of a variant of substance/property dualism. Swinburne's major guiding thesis comes down to asserting that physical, material events and conscious, mind events (such as beliefs, desires, thoughts, and sensations) are not identical, so that "the mental world" cannot be deemed "fully deterministic" (SWINBURNE, 2013, p. 202). This is diametrically opposed to the Churchlands' reductionist monist account of moral behavior we just surveyed above. Swinburne's defense of dualism actually dates back to his 1986 monograph on *The Evolution of the Soul*, where the eliminativist criticism of folk psychology is dismissed as "an absurd view," since we do have beliefs about how things are in the world, even if many of these beliefs turn out to be inconsistent or misleading:

> We are aware of our thoughts as we experience them, and beliefs... are not just events postulated to explain public behaviour, but ones to which the subject has privileged access. The absurd conclusion follows from two premisses – one plausible but contestable neurophysiological claim that brain sententialism is false, and the other one identity theory (that any mental events are identical with physical events). If we reject identity theory, as I have given plenty of other reason to do in the text, we are not saddled with the absurd conclusion whatever neurophysiology might discover. And if the brain processes underlying logical thought do not exhibit sentential structure while thought processes do often exhibit sentential structure, that seems to provide a yet further reason for rejecting identity theory (SWINBURNE, 1997, p. 321).

I would like to revisit here some of the features of this classical problem which resists any clear-cut solution, in light of Swinburne's recasting of substance and property dualisms. Hence, I am assuming that the brain-mind problem is analogous to the nature-nurture pickle, in the sense of a predicament like a chicken-egg question, not so much to sort out which one comes first but which conditioning is more basic and takes primacy over the other. Even though it could seem trivial to realize that there are no mental events without brain processes, just like neurobiological evolution (nature) would intuitively seem to be prior to social, cultural evolution (nurture), the fact that human cultural and civilizational processes have transformed nature throughout the centuries

and millennia just attest to the difficulties involved in the brain-mind pickle (PRINZ, 2002). In a US idiomatic expression, if you are in a pickle, then you are in a difficult position, or have a problem to which no easy answer can be found –so that happens to be case with the brain-mind problem, following a neuroscientific turn in the recasting of the body-soul problem.

Swinburne starts from the basic assumption that mental events (consisting in the instantiation of mental properties – sensations, thoughts, purposes, desires, and beliefs) are distinct from physical events (such as brain events), although in causal interaction with them. As expected, ontology is the starting point for his mapping of concepts and theoretical framework:

> the whole history of the world can be told with our familiar system of categories: substances, properties, and times. I understand by a substance a particular concrete object: my desk, that person, the photon (particle of light) emitted from this light source which landed on this screen, and so on. Substances may have other substances as parts. My desk has its drawers as parts of it; and it can exist (it is logically possible) independently of all other things of its kind (i.e. all other substances) apart from its parts; and those parts have very many electrons, protons, neutrons, etc. as their parts. Substances exist all-at-once. Whenever they exist, they exist totally (SWINBURNE, 2013, p. 4).

These lines might prompt many of us to draw comparisons to Edmund Husserl's parts-whole formal ontology, namely, the recasting of Leibniz's monadology as an alternative third way to avoid both Descartes's substance dualism and Spinoza's holistic monism. Moreover, I think that one might even spot a neurophenomenological deficit in both normative and naturalist theories that fail to account, respectively, for neural correlates in first-personish reconstructions of social action (as in most critical-theoretical approaches of second and third generations of the so-called Frankfurt School to social psychology) or in naturalist theories of sociality that fail to take into account the irreducibility of semantics to syntax and the former's pertaining to phenomenal consciousness of aboutness and what's-it-likeness (as in the Churchlands' eliminative materialist research program). Although I won't pursue this point here, we may think of Habermas's critical, normative reconstruction of subjectivity as he conceives of cognitive- and moral-psychological development as a rationalization of the structures of consciousness, as the conventional perspective can be replaced by the postconventional perspective, for instance, when adolescents consciously grow and reflect upon their own justifications of moral, normative

principles (HABERMAS, 1979). In the final analysis, it is quite understandable that neuroscientists overall and neuropsychologists in particular would refer to physical or natural ontology as they deal with real, natural beings, their properties and events that can be described and explained as physical phenomena – without any resort to supernatural or metaphysical discourse. For physicalists, materialists, and naturalists it suffices to take ontology as the real, phenomenal realm of beings, entities, phenomena, and events as they appear, come into being or exist, necessarily, possibly or contingently, very much as traditionally and broadly conceived, as the study of what there is in the sense of real, objective existence. Naturalists like John Searle have shown, however, that epistemic and ontological takes on objectivity and subjectivity are not as straightforward for philosophers, say, when contrasting events or phenomena studied by so-called "hard sciences" with the social reality or institutions that are examined by social scientists, precisely because of the irreducibility of the phenomenal, self-conscious perspective of the first person who experiences pain, feels cold or exchanges goods with other human beings in their social dealings (SEARLE, 1984, 1995). Searle's oft-evoked Chinese room thought-experiment helps explain the impossibility of physicalist accounts of feelings, sentiments, and emotions without resorting also to first-personal accounts that presuppose interpretation and meaning (hence, semantics, as opposed to syntax), when we test our concepts by imagining what it would be like if such and such were the case, and realize that computation by itself cannot be equated with thinking. In this sense, it can be argued that the social, intersubjective dimension of human selfhood, in its correlated capabilities of conscious reflexivity and autonomy, are the best way to account for the limits that humans impose on the reduction of the performance of certain tasks to their functions or algorithmic efficiency, as in the pursuit of a good life and human flourishing, not only to ourselves (self-fulfilling lives) but also to others (sociability). It has been my working hypothesis that by calling into question whether social, cultural conditioning can be actually undermined by neurobiological conditioning alone, it remains to be seen how positive social feedback drives people to interact on social media and, the other way around, whether use of social media ends up changing the way positive social feedback is actually processed by the brain. Since most social thinkers tend to identify sociality with intersubjectivity (for instance, the fact that shared beliefs or social norms are common to individuals belonging to the same social group or set of individuals), one may think of social institutions (broadly conceived so as to include not only the state, governmental, political, economic,

and legal structures, but also the family, civil society, organizations, associations, and social grouping of all sorts) very much by analogy with the way one learns how to function in a natural language (sharing a grammar, phonetics etc), usually without paying much attention to it (esp. mother tongue for native speakers, as analogous to the way one has been socialized into being Amish in Amish country). Recent evolutionary research on human sociality and the social brain render solipsistic accounts untenable, both in naturalistic and substantialist terms.

3

At any rate, according to Swinburne, mental events consist in the instantiations of properties in the immaterial substance, which has been traditionally termed soul, *anima*, as the seat *par excellence* of reflexivity, interiority, and self-consciousness. Accordingly, humans and nonhuman animals alike (esp. "higher" animals) are said to consist of two parts, the essential part (the soul) and a contingent part (their body). Since Aristotle, we think of humans as peculiarly distinct vis à vis other nonhuman animals – nowadays, esp. higher animals – because of the former's ability to speak and reason (*logon echon*) logically and morally, hence the very conception of free will has been an integrated system of beliefs and desires, taken together with the reflective capacity to judge, assuming that memory and perception were found among other animals. But we must unpack how these categories of substances, properties, and times concur to pick out mental events and brain processes. According to Swinburne, "an event as either some substance (or substances, or event or events) having a certain property (more formally, the instantiation of a property in some substance or substances, or event or events) at a certain time, or the coming into existence or the ceasing to exist of some substance at some time" (SWINBURNE, 2013, p. 6). Once we agree that substances, properties, and events are basic constituents of the world and once we give in to his principle of credulity – i.e., "what seems to us to be the case probably is the case, absent any counter-evidence" (SWINBURNE, 2013, p. 42f) –, Swinburne proceeds to persuade us that the soul *qua* substance is, after all, the essential part of our being insofar as it can exercise causal power over the body, and more importantly, free from deterministic causes in such a way as to render us morally responsible for what we do. It seems quite problematic to assume that by confining ontology to existence (as opposed to, say, being and modes of being), Swinburne would succeed in avoiding Platonic realism and its correlated semantics, according to which all nouns do refer to existent entities (in a

transcendent realm of forms), or other variants of general metaphysical or ontology that might undermine his contention that substances have properties, as opposed to one single substance (monism). Hence, when Swinburne arguably points out that "philosophers and scientists have made claims about what is 'possible' in this area, such as 'it is not possible for a person to exist without a body' or 'necessarily all mental events supervene on physical events'" to add that "whether that is true depends on what is meant by 'possible' and 'necessarily'," he seems to be committed to a particular semantic-ontological framework (SWINBURNE, 2013, p. 4ff). Thus, in order to account for the soul's interaction on the body and material things, Swinburne strategically adopts the following extended notion of supervenience: "A-substances supervene on B-substances iff necessarily for every A-substance x there is a B-substance y, such that necessarily if y exists x exists" (SWINBURNE, 2013, p. 21). While supervenience *per se* simply means that properties of type A are supervenient on properties of type B if and only if two objects cannot differ with respect to their A-properties without also differing in their B-properties, its hardest version extends the notion so as to comprise all properties (mental and physical) in a correlated implication, as Swinburne contends. Precisely because of his ontological commitments, Swinburne strongly argues against any "restriction of the mental to the sensory" (SWINBURNE, 2013, p. 98), citing David Chalmers's property dualism (akin to his own version of event dualism), according to which there are "both physical and non-physical features of the world. The falsity of logical supervenience implies that experience is fundamentally different in kind from any physical feature" (CHALMERS, 1996, p. 124). One of the reasons why Swinburne's case for dualism seem to fail to deliver the normative grounds promised by his otherwise highly original and critical account of property dualism is, perhaps, to be found in its lack of commitment to what Chalmers dubbed "the hard problem of consciousness" (CHALMERS, 1995). As R.D. Ellis put so well, "the main point of the hard problem is that, even if we could discover the 'neural correlates of consciousness,' we still would not have answered the 'harder' question: Why do those physical events exhibit the property of consciousness, whereas other physical events do not?" (GIORDANO and GORDIJN, 2010, p. 66). Even though these remarks seem to address the naturalist horn of the dilemma, the second horn turns out to render problematic the very meaning of normativity caught between the subjectivism of first-personal accounts and the absolutism of third-person accounts (esp. absolute principles and divine command theories as in the Euthyphro dilemma). Precisely because objective moral values do not appear to be part of the natural order, critics like

Terence Horgan and Mark Timmons have convincingly argued that we should keep in mind that one can be an irrealist about a given body of discourse (e.g., moral discourse, or mental discourse) without being an eliminativist –"someone who regards the discourse as defective, and needing replacement or elimination"(HORGAN & TIMMONS, 1993, p. 266). Horgan goes on to suggest that a reasonable, broad option is "preservative irrealism, which would treat higher-order discourse as quite legitimate and perhaps indispensable, while also repudiating its apparent ontological commitments. Instrumentalism, of course, is one form of preservative irrealism; instrumentalist views typically attribute utility to the given body of discourse, but deny that it expresses genuine truths" (HORGAN, 1991, p. 318). This has been particularly useful in race, gender, and ethnic studies. Thus, the Rawlsian distinction between concepts and conceptions (to oppose his own particular conception of justice as fairness to competing concepts of justice, such as folk concepts of a sense of justice and theoretical accounts, as "the concept is the meaning of a term, while a particular conception includes as well the principles required to apply it")[1] has recently been evoked by Joshua Glasgow's *A Theory of Race* (2009), which sought to recast the normative grounds of the semantic-ontological problem of race, by propounding Racial Reconstructionism as a third-way substitutionism between the Anti-Realism of eliminativist conceptions of race (i.e., that we should eliminate race-thinking entirely, as espoused by Appiah, Blum, Corlett, Zack) and the Realism of anti-eliminativists who advocate some form of Racial Conservationism (Du Bois, Outlaw, Sundstrom, Taylor)[2]. After all, according to Glasgow, "the race debate is about whether to eliminate or conserve contemporary, public, folk racial discourse." In order to make sense of folk concepts of race, however, specialists in racial theory tend to rely on what historical experts mean by "race" (Glasgow, 2009, p. 42). In order to avoid normative and empirical gaps between the thick semantics of scientific, biological accounts and the thin conceptions of social constructionists, Glasgow resorts to a Rawlsian reflective equilibrium that seeks to strike a normative balance between our theoretical, categorical, and possible case intuitions to warrant modifications in our theories (for example, when evident mixed-race identities push us to eliminate the one-drop rule), and vice-versa, as our policies and practices are affected by our theoretical conceptions. The guiding intuition is that:

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1 J. Rawls, *Political Liberalism*. Expanded edition. New York: Columbia University Press, 2005, p. 14, n. 15. Rawls remarks that he borrowed this distinction from H.L.A. Hart's *The Concept of Law*.

2 Joshua Glasgow, *A Theory of Race*. New York: Routledge, 2009.

P1. Empirical sciences (esp. biology and anthropology) show that the concept of race is wrong or misleading.
P2. There is racism (in Brazil, in the US and elsewhere).
N1. Racism is morally wrong.

Glasgow proceeds then to propose a highly original Folk Empirical Theory, so as to deal with the semantic indeterminacy of race and provide the normative grounds of any political activism for those who publicly denounce racism and racist policies. Even if one grants that it is not a matter of simply replacing one term with another, say, politically correct, in order to denounce racial slurs and various forms of racism, there remains the semantic-ontological problem of the social interactions and use of language in intersubjective, everyday practices, dealings, and communication – what has been identified, since Husserl and Schutz, with the lifeworld (*Lebenswelt*) and practical interplays of the familiar and the strange (*Heimwelt* and *Fremdwelt*) in a phenomenology of sociality, thoroughly cultural and historical (STEINBOCK, 1996, 198). It seems that a crucial social, phenomenological deficit betrays thus the normative gap between Glasgow's articulation of ontology and semantics – to my mind, a frequent blind spot in many analytic accounts. Whether racial terms purport to refer to natural or social kinds, so that the ontological is said to be prior to the normative, whether the semantic is manifest prior to the ontological and our task mainly consists in establishing normativity and finding an adequate ontological and semantic framework, so as to eliminate biological pretensions and semantic distortions, we still have to face the social reality of racism. It seems, instead, that racism must be tackled from the three fronts at once: ontological, intersubjective, and semantic-linguistic.

4

To be granted, Swinburne carefully distinguish beliefs and intentions as continuing mental states that do not by themselves entail any physical events involving the believer or agent, as opposed to, say, desires and dispositions to do actions: "In that they exist over periods of time during which they are totally absent from my consciousness, they are clearly continuing mental states and not – like intentions in action – conscious events" (SWINBURNE, 2013, p. 83f). Now, physicalists like Damasio and Prinz have convincingly argued that reason, emotions, and decision-making processes can be articulated in terms of empirical and philosophical language, in that cognitive feelings and a reflective level are integrated with noncognitive features of emotions and preferences, particularly the so-called "primary emotions" and "gut reactions." For

one, Damasio has decisively contributed to ongoing interdisciplinary research in cognitive sciences, neurophilosophy, neurobiology of mind and behavior, particularly at the crossroads of emotions, decision-making, memory, communication, creativity, and consciousness as neurophysiological phenomena that call into question reductionist approaches. Indeed, the publication of his *Descartes' Error*, in 1994, started off a decisive turning point not only in neurology, psychiatry, neuroscience, and cognitive psychology, but also in the philosophy of mind and language, as it undertook a radical critique of Cartesian dualism, opposing dichotomies of soul and body, brain and mind, reason and emotion (DAMASIO, 1994). Since the 1950s and 60s, research in neuroscience had already shaken apparently insurmountable problems in various models of dualism and of several others that emerged in the following decades, with alternative proposals to patterns of behavior conditioning (behaviorism), theories of identity (between mind and brain), the physical states of the brain (physicalism) and their causal roles and functions in a complex economy of internal states, mediating sensory data inputs and behavioral outputs (functionalism), as well as the materialistic reductionisms that supposedly eliminate folk psychology and normative accounts that allude to psychological states (eliminative materialism). Damasio's work fostered thus a fruitful dialogue between neuroscientists and philosophers of mind, especially within neurophilosophy and cognitive sciences, as attest seminal works by Searle, Gazzaniga, and Prinz. Of particular concern is their recasting of the "social brain" problem, as Damasio and Prinz assume that the philosophical underpinnings of cognitive and moral decisions are at the center of discussions about human nature, in that self-conscious morality-*cum*-sociality evolves as one of the elements that distinguish humans from superior primates and other nonhuman animals. As early as the 1990s, independent work in neuroscience and cognitive sciences fostered a fruitful dialogue between neuroscientists and philosophers of mind, especially within moral neurophilosophy, as moral decisions occupy a central place in defining the human being, at the heart of decisions that define us in relation to cultural, social problem-solving, relationship issues, and personal and political choices that ultimately help us set the "self" in everyday relations to ouselves and to the others and within a particular milieu. Damasio established then the correlation between practical reason and emotion, combining the awareness notion of decision-making and planning at different time scales, creating possibilities of interaction with the environment and the selection of courses of action, with all processes and steps interconnected. Damasio manages thus to articulate the social, intersubjective, and neurobiological processes

that explain the evolution of the human brain and the emergence of consciousness, the "I" – as a first-personish self, a reflected-upon "me" and third-personish accounts of other selves –, memory, language, subjectivity, and their representations and creative constructions and carriers of meaning. According to Damasio,

> Both basic homeostasis (which is nonconsciously guided) and sociocultural homeostasis (which is created and guided by reflective conscious minds) operate as curators of biological value. Basic and sociocultural varieties of homeostasis are separated by millions of years of evolution, and yet they promote the same goal – the survival of living organisms – albeit in different ecological niches. That goal is broadened, in the case of sociocultural homeostasis, to encompass the deliberate seeking of well-being. It goes without saying that the way in which human brains manage life requires both varieties of homeostasis in continuous interaction. But while the basic variety of homeostasis is an established inheritance, provided by everyone's genome, the sociocultural variety is a somewhat fragile work in progress, responsible for much of human drama, folly, and hope. The interaction between these two kinds of homeostasis is not confined to each individual. There is growing evidence that, over multiple generations, cultural developments lead to changes in the genome (DAMASIO, 2010, p. 31).

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Indeed, since Gazzaniga (1985) formulated the problem for the first time in the 1980s, the "neural substrates" of social behavior and cognition have not yet been completely understood. Moreover, studies in humans and other primates have revealed different neural structures that play a decisive role in the construction of social behavior: the amygdala, the ventromedial frontal cortices and the right somatosensory cortex, among other structures, which seem to mediate perceptual representations of socially relevant stimuli. These studies made it possible to develop the Social Brain Hypothesis, according to which the restrictions on the size of the social group arise from the ability of information processing in the brain, especially among primates, so that the neocortex eventually play an important role in social evolution that leads us to present complex sociality. Thus the Dunbar number was first proposed in the 1990s by British anthropologist Robin Dunbar (1998), who found a correlation between primate brain size and average social group size. However, even such a proposal raises a number of interpretations on how this relationship is mediated. For Dewey, who influenced the normative-reconstructive approach of social thinkers like Rawls, Habermas, and Honneth, thought is necessarily symbolic and all symbolism is necessarily

social, therefore, the mind is always already social: there are sources of expertise outside the individual, insofar as we have to live from birth to death in a social world of people and artifacts, which is largely the result of what has been done and transmitted from previous human activities in concert – in cultural traditions, through linguistically and socially mediated contexts of meaning[3]. When this fact is ignored, experience is treated as if it were something that happens exclusively within the body and mind of a lonely individual or disembodied self. According to Dewey, experience does not occur in a vacuum, but it always presupposes an intersubjective externality to an individual, which gives rise to the very experience itself within a social world. Certainly, not all sociality can be reduced to brains, nor can their conceptualizations be socially determined. According to social epistemology, the emphasis on the primacy of emotions and the importance of common notions are not always equally crucial to characterize the formation of knowledge, agreement and disagreement between epistemic peers in decision-making groups. The social dimension that is being emphasized in discussions of social intellect, culminating with the notion of Machiavellian intelligence and its presence in the world of primates, is the individual's ability to interact successfully with the social groups in order to predict and manipulate human behavior, making and breaking promises, and so on. The energy requirements of such a complex situation are ultimately presented as responsible for the large size of the primate brain, so that some evolutionary anthropologists and researchers in related fields postulated the hypothesis of Machiavellian intelligence and the social brain hypothesis (DUNBAR, 1998, p. 183). Moreover, the concept of social brain is not reducible to the individual manifestations of a social world around us because the "brain architecture" reflects rather than forms its social organization, language and culture. It is against such a complex semantic context that can be investigated the processes of moral decision-making and ethical implications that materialize in everyday life and social media, as measured in neuroimaging experiments. Beyond the culturalist, rationalist and modular approaches to language, this research will thus help us figure out how language and cross-cultural identities (including gender, ethnic, social, political etc) function in social interactions comprising diverse fields such as pragmatics, neurolinguistics, and neurosemantics, and the fact that in order to function socially beliefs are inevitably called for (GAZZANIGA, 2005, p. 146).

[3] Cf. Peter Godfrey-Smith, *Complexity and the Function of Mind in Nature*. Cambridge University Press, 1998, p. 105.

So a first set of questions that addresses Swinburne's recasting of substance/property dualism can be thus formulated: since a phenomenological notion of an embodied mind or of a minded body does not entail an endorsement of some kind of Cartesian materialism, as if we were simply getting rid of the soul (or the mind, for that matter), how about embracing a more explicit phenomenology of mind? As Swinburne interestingly remarks in his own criticisms of misleading, reductionist interpretations of Libet's experiments:

> In other cases it does not seem to us that we are choosing without being caused to choose as we do, and so we should not believe that we are then making an uncaused choice. The phenomenology of deciding between rival possible actions, ones which are not determined by our mental states (our existing desires and beliefs with their relative strengths), is so different from the phenomenology of doing the everyday things we do intentionally, that we should expect the underlying brain processes to be similarly different (SWINBURNE, 2015, p. 201f.).

After all, an agent has free will, as Swinburne goes on to assert, "insofar as the agent acts intentionally without their intentions being fully determined by prior causes". Or as Swinburne put it, "having an intention in making" such and such is equivalent to 'having an intention which the subject believes causes him or her to make them' rather than – as ordinarily – 'having an intention which causes the subject to make them'." (SWINBURNE, 2015, p. 80f.). The irreducibility of first-personish accounts of beliefs and actions in response to phenomenological, normative challenges (esp. when dealing with intentionality, aboutness, and consciousness) that avoid trivial conceptions of normativity and naturalism might help us avoid the deterministic attempts to reduce the sense of normativity, say, as in Jennifer Hornsby's conception of Naive Naturalism, according to which in order to avoid both physicalist and Cartesian claims about the mind-body problem, we ought to return to common sense and folk psychology as they implicitly endorse normative and first-personish beliefs (HORNSBY, 1997, p. 214). In a nutshell, is it the case that supervenience of moral properties on non-moral properties must be analogous to supervenience of substances, as Swinburne extended Kim's conception so as to account for natural, physical phenomena without resorting to deterministic approaches such as the identity theory? That being the case, how does property or event dualism avoid the criticisms raised against functionalism? As Swinburne saw the problem, functionalists claim (to use his own terminology) "that what makes any property a property of a kind which [Swinburne has] called 'pure mental property' is that events with that property have a certain

function in a person's life of thought and behavior, and in particular tend to have certain kinds of causes and effects (in or outside the brain)" (SWINBURNE, 2015, p. 94). Granted, I can see that this strategy will be very helpful in keeping moral normativity separate from naturalism or physicalism. As Swinburne put it so bluntly, "Moral beliefs as such, I suggest, like all value beliefs and unlike other beliefs, motivate us. I could not believe that some action was really morally good to do (as opposed to being what other people call 'morally good') and yet not see myself as having a reason for doing it" (SWINBURNE, 2015, p. 178).

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Now, still relating to property supervenience and causation, we might raise the question of how to interpret the correlations between mental and neural phenomena discovered by brain science and psychology since their beginnings. Brain research suggests that there is a high degree of covariation between mental states and brain states. This view, however familiar, raises more questions than it tends to be aware of, and we may as well pick out just three of them, following Prinz (2002, p. 71ff; 2004a; 2012, p. 168f):

(1) If causal relations are at all possible in a transphysical context, how do they have to be conceived?
(2) How far are "passive" mental events causally dependent on brain processes?
(3) How far are "active" mental events causally relevant to brain events?

Whereas the first question is largely a challenge to philosophical analysis, the two other questions are a challenge, and an opportunity, for a coordinated effort of all contributing disciplines, including the neurosciences. Since Swinburne admits that instead of an event dualism, it could be that the public world (not merely our description of it) contains some other dualism (an 'aspect'-dualism, for example) which turns out to be just a different way of describing the same feature of the world as does 'event-dualism'. Now, could we stretch this to go so far as to say that perhaps event dualism allows for a perspectivism that avoids an ontological dualism, like in Kant's noumenal-phenomenal dualism understood as transcendental perspectives rather than ontological realms? Isn't the case that Kant himself also made room for agent causation, as opposed to inanimate events (e.g. the motion of billiard balls), allowing for the first-person account of autonomous, self-legislating selves that cannot be reducible to third-person, descriptive accounts precisely because of their peculiar practical faculty to initiate a series

of events in nature? Indeed, for many physicalists, the physical is sufficient to generate the mental and that a further causal contribution (say, of something supernatural) is not called for. In the case of criticisms raised against Kantian-inspired conceptions of freedom, this amounts to either turning freedom into some entity (in an ontological realm, as over against nature) or into some subjective illusion. For Kant, it is of course neither, as freedom remains a regulative idea or a mental representation to regulate reasoning itself when dealing with moral issues, as the "I think" essentially involves activity on the part of the subject, as an expression of the subject's free activity or "spontaneity"[4]. Although the causal sufficiency of the physical cannot rule out a supernatural influence categorically, such an influence would be redundant. It would not be needed to explain the existence and functioning of the mind. All in all, one cannot speak of naturalist normativity or normative naturalism without a certain embarrassment. And yet, as over against traditional conceptions that regard naturalism as merely descriptive, as opposed to prescriptive accounts of normativity, it has become more and more common nowadays to challenge such a clear-cut division of labor, as naturalists like Millikan (MILLIKAN, 2005, p. 79-82) assign normative force to the biological concept of function and normativists like Korsgaard tend to assume that human psychology is naturally normative: "whatever confers a normative status on our actions – whatever makes them right or wrong – must also be what motivates us to do or avoid them accordingly, without any intervening mechanism" (KORSGAARD, 2010, p. 16). To be sure, both views could be regarded as simply recasting the externalist-internalist debate over the problems of teleology, intentionality, motivation and carrying out an action supposed to be moral. Once again, Damasio's integrated views of emotions and feelings not as "intruders in the bastion of reason" but enmeshed in its networks, for worse and for better, are revealing: "The strategies of human reason probably did not develop, in either evolution or any single individual, without the guiding force of the mechanisms of biological regulation, of which emotion and feeling are notable expressions" (DAMASIO, 2005, p. xii). Accordingly, empathy is a highly flexible, context-dependent response to these networks, ultimately leading to cooperation and the evolution of social norms, especially fairness norms. Damasio evokes thus the process of a sociocultural homeostasis so as to refer to the social and cultural imbalances allowing for the detection of an imbalance at a high level of a conscious brain-mind in the stratosphere and not in subcortical level. Damasio's takes on emotions and feelings within an integrated 4EA-view of cognition

[4] Immanuel Kant, *Kritik der reinen Vernunft* B 132.

(embodied, embedded, extended, enactive, and affective), very much like Prinz's, allow for a homeostatic understanding of the development of moral rules, laws, and justice systems (very much like an effect of a wide reflective equilibrium), as a response to the detection of imbalances caused by social behaviors that make endanger individuals and the group. The cultural devices created in response to the imbalance aim to restore the equilibria of individuals and the group. So people are capable of social cooperation and empathy, but they can be also callous, indifferent and socialized into schadenfreude (finding pleasure in others' pain) –the social, cognitive, and neural mechanisms underlying empathy and that may help to alleviate humanity's deepest tragedies and facilitate its greatest triumphs. So this intricate connection of the body to emotions is related to homeostasis, which can be rethought of as the machinery regulating life that also has to do with the development of culture. This development manifests the same goal as the form of homeostasis. It reacts to the detection of an imbalance in the process of life and seeks to correct it within the limits of human biology and the physical and social environment. The contribution of economic and political systems, as well as, for example, the development of medicine, are a response to functional problems that occur in the social space and require a correction in this space, so that will not undermine the regulation of vital individuals that constitute the group. We come thus full circle within a broad understanding of wide reflective equilibrium, in sociocultural homeostatic and social-ontological terms, allowing for intersubjective and linguistic interactions and co-constitution of meanings.

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Last but certainly not least, since Swinburne also pursued theology (1959-60), besides his undergraduate (1954-57) and graduate (1957-59) studies in philosophy at the University of Oxford, one wonders how his event dualism might respond to the ongoing science wars and evolution wars in the US, especially those opposing the scientific community and fundamentalist and conservative Christian theologians and believers. As we all know, this creationism-evolution debate is not a real problem in Catholic and moderate, liberal protestant theology (or progressive, reform Judaism for that matter). Now, within Swinburne's research program, the principles of credulity and testimony could be evoked to assess the belief, say, in the inerrancy of the Bible when dealing with creationism and miracles? Would they go so far as to follow Alvin Plantinga in holding that since belief in the theist, personal God is properly basic, then it would seem that belief in inerrancy would be, within the circumstances of

Christian faith, a properly basic belief as well? I am raising these questions, out of curiosity but also with a view to testing the coherence of Swinburne's dualism, as many issues relating to the composition of the Hebrew Bible and of the New Testament have led to conjectures and documentary hypotheses that rely on probability, for instance, that there is new evidence to assert, nowadays, that it is more likely (probable) that the Torah was composed much later than sooner (conservative traditional chronologies dated back to 1,200 BCE) and that much of the whole Hebrew Bible was written from the seventh through the 5th century BCE (according to many researchers, such as Israeli leading archaeologist Israel Finkelstein). So just like creationists who stick to a Young Earth hypothesis (between 6,000 and 10,000 years) to oppose the Big Bang (over 13.7 billion years, with the Earth's age estimated in about 4.5 billion years), conservatives and fundamentalists still refuse to accept scientific contributions (e.g., archaelogy and innovative methods for dating) in their own handling of Scriptures. Couldn't the principles of credulity and testimony, in this case, turn out to be quite misleading? After all, substance, property, and event dualisms could easily fall back into some subtle Manichean doctrine of supernatural powers intervening in the natural cosmos, just like property dualists could still hold that some of our mental states have immaterial properties, even though we ourselves cannot be solely identified with immaterial souls wholly distinct from our bodies and natural properties. There seems to be a subtle reduction at work whenever one refrains from seeking a natural explanation for some unknown phenomenon, such as the "mystery of consciousness," as what struck Swinburne as absurd in the Churchlands' eliminativist thrust could also be regarded as a refusal to allow for a cognitive phenomenology. In effect, that is precisely how Prinz has shown that any theory of consciousness must meet all seven desiderata: qualia, what makes mental states conscious or first-order consciousness availability, a cognitivist critique of global workspace theory, a view of function as more basic than high-level interpretation, the possibility of selfless experience, unity levels of consciousness with multivevel integration, phenomenal knowledge and a neurofunctional approach. Accordingly,

> a theory of consciousness should deliver an account of what qualia are and how to account for differences between qualitative states... On an adequate theory, qualitative character should be located in states that represent appearances, and those states have their character only when they are conscious... conscious states are located at an intermediate level of representation within hierarchically organized sensory systems, so that consciousness arises when and only when intermediate-level representations are modulated by attention (PRINZ, 2012, p. 223).

Therefore, a mitigated conception of social constructionism succeeds in avoiding the various versions of dualism and still allowing for a normative reconstruction of the so-called social brain hypothesis, so that phenomenal consciousness and first-personish accounts, including beliefs, desires, intentions, and propositional attitudes, cannot be ultimately eliminated by physicalism. By focusing on the relation between naturalism and normativity, one might avoid the reduction of either to the other, by stressing the inevitability of bringing in the two other poles of the semantic correlation whenever dealing with ontology, language, and intersubjectivity. As Prinz's takes on transformation naturalism and concept empiricism allow for an interesting rapprochement between social epistemology and critical-theorical accounts of social evolution, his hybrid view of both *naturism* (i.e., reducing the nature-nurture pickle to the former's standpoint) and *nurturism* (conversely reducing it to the latter) not only successfully avoids the extremes and reductionisms of (cognitivist) rationalism and (noncognitivist) culturalism – such as eliminative materialism and postmodernism –, but turns out to offer a more defensible account of social epistemic features and "social pathologies" than most analytical, social epistemologists (e.g. Goldman, Parfit) and critical theorists (Habermas, Honneth) have achieved thus far. I have argued that Damasio, Prinz, and Searle, among others, have succeeded in showing that the social brain rather than the solipsist mind is what must ultimately account for a scientifically informed theory of consciousness, as mental representations of a given stimulus located at an intermediate level of processing become conscious through attention. The semantic-ontological correlation comes thus full circle vis à vis its networking with language and subjectivity. As Prinz felicitously put it in his neoempiricist, reconstructive theory of emotions: "Moral psychology entails facts about moral ontology, and a sentimental psychology can entail a subjectivist ontology" (PRINZ, 2004b, p. 8). After all, the descriptive and experimental dimensions of most experiments fail to provide for such a moral justification, insofar as causality or causation cannot be taken for granted or satisfy ought-like normative claims –since not every correlation turns out to be causal.

References

CHALMERS, David. Facing up to the hard problem of consciousness. *Journal of Consciousness Studies,* 2 (1995), p. 200-219.

_____. *The Conscious Mind*, Oxford University Press, 1996.

CHURCHLAND, Patricia S. *Neurophilosophy*: Toward A Unified Science of the Mind-Brain. Bradford Books. Cambridge, MA: MIT Press. 1986.

CHURCHLAND, Paul M. *Matter and Consciousness*. Cambridge, MA: Bradford Books, MIT Press, 1984.

_____. *The Engine of Reason, The Seat of the Soul*: A Philosophical Journey into the Brain. Cambridge: MIT Press, 1994.

DAMASIO, Antonio. *The feeling of what happens*: Body and emotion in the making of consciousness. New York: Harcourt Brace, 1999.

_____. *Looking for Spinoza*: Joy, sorrow and the feeling brain. New York: Harcourt, Inc., 2003.

_____. (1994). *Descartes' Error*: Emotion, reason, and the human brain. New York: Penguin, 2005.

_____. *Self Comes to Mind*: Constructing the conscious brain. New York: Pantheon Books, 2010.

DUNBAR, Robin I. M. The Social Brain Hypothesis. *Evolutionary Anthropology: Issues, News, and Reviews,* 6, 5 (1998), p. 178-190.

GAZZANIGA, Michael. *The social brain*. New York: Basic Books, 1985.

_____. *The Ethical Brain*. New York: Dana Press, 2005.

GIORDANO, James; GORDIJN, Bert (Eds.). *Scientific and Philosophical Perspectives in Neuroethics*. Cambridge University Press, 2010.

GLASGOW, Joshua. *A Theory of Race*. New York: Routledge, 2009.

GODFREY-SMITH, Peter. *Complexity and the Function of Mind in Nature*. Cambridge University Press, 1998.

HABERMAS, Jürgen. *Communication and the Evolution of Society*. Trans. T. McCarthy. Boston: Beacon, 1979.

HORGAN, Terence. "Metaphysical Realism and Psychologistic Semantics," *Erkenntnis*, 34, 3 (1991), p. 297-322.

HORGAN, Terry; TIMMONS, Mark. "Metaphysical Naturalism, Semantic Normativity, and Meta-Semantic Irrealism". *Philosophical Issues* 4/18: *Naturalism and Normativity*, (1993), p. 180-204.

HORNSBY, Jennifer. *Simple Mindedness: In Defense of Naive Naturalism in the Philosophy of Mind*. Cambridge, MAS: Harvard University Press, 1997.

KANT, Immanuel. (1781). *Kritik der reinen Vernunft*. Frankfurt: Surhkamp, 1987.

KORSGAARD, Christine M. "Reflections on the Evolution of Morality". *The Amherst Lecture in Philosophy* [Amherst College Press], 5 (2010), p. 1-29.

MILLIKAN, Ruth G. *Language:* A Biological Model. Oxford University Press, 2005.

PRINZ, Jesse. *Furnishing the Mind:* Concepts and Their Perceptual Basis. MIT Press, 2002.

_____. *Gut Reactions: A Perceptual Theory of Emotion*. Oxford U Press, 2004a.

_____. *The Emotional Construction of Morals*. Oxford University Press, 2004b.

_____. *The Conscious Brain*. Oxford University Press, 2012.

SEARLE, John. Can Computers Think? In: *Minds, Brains and Science. Reith Lectures*. Cambridge, Mass.: Harvard University Press, 1984.

_____. *The Construction of Social Reality*. New York: Free Press, 1995.

SWINBURNE, Richard. (1986). *The Evolution of the Soul.* 2nd revised edition. Oxford University Press, 1997.

_____. *Mind, Brain, and Free Will*. Oxford University Press, 2013.

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