# Free will? What's that?

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### Abstract

The question of whether we have free will is a longstanding philosophical debate that has led to divided fronts and interpretations. The first ambiguity arises due to a misconception about the relation between causal determinism, as formulated in classical physics, and the notion of free will, which, once clarified, undermines not only compatibilism but also naïve formulations of libertarianism. We show that either one maintains a material monistic physical causal determinism and must give up free will, or one must give up determinism and embrace metaphysical ontologies. Moreover, with the advent of modern neuroscientific investigations, the questions surrounding our freedom of choice have received renewed attention but, so far, lead to several inconclusive findings. In fact, the issue is far from settled and no resolution is in sight. We contend that an exclusively third-person approach that abstracts from the deeper complexities of the human psychological nature and resists a first-person inquiry has led to a much too simplistic and superficial understanding of the problem and is affected by fallacious inferences and unwarranted conclusions. Meanwhile, an introspective approach easily reveals that our identity can't be reduced to a single personality whose choice-making is determined by a unique agency and volition. Our nature is much more complex than that. Therefore, every analysis involving propositions about free will requires more careful articulation. One cannot meaningfully answer the question of free will if it is not clear (1) what determinism is in physical sciences, (2) who is supposed to be free from what and (3) what will is. Here, we show that the question regarding free will isn't meaningful in the first place unless cleared from conceptual conflations and that it is unlikely it will ever be answered by a binary 'yes' or 'no' statement.

## Introduction

There are different conceptions of free will. However, central to all of them is the notion of choice. Having free will means that an agent has self-determining and choice-directed control over their actions. It means that one can choose one thing rather than another and that, when one makes a choice, one could have done otherwise. The sourcehood–that is, the source of an agent's action–is the pivotal point that splits the fronts. The freedom to do otherwise, referring to different sourcehood accounts, with its implications for moral responsibility, divided philosophers into essentially two fronts: the compatibilists (or "soft determinists") and incompatibilists (or "libertarians").

Compatibilism argues that causal determinism does not logically exclude moral responsibility and free action if it is not constrained by external factors and depends only on our own wants. It asserts that one has the freedom to do otherwise if one prefers and wills an action on the basis of motivations, reasons and desires. If these motivations, desires and reasons were different, then one would have chosen otherwise. This, however, also implies that to act differently, one must be able to will differently.

On the other hand, libertarians argue that causal determinism and free will are not compatible. Free choice requires a free agent rather than motivation as the determinant factor. Contentious is the sourcehood, and its role in moral responsibility. It is the source of one's action that matters and how it is was brought about, not moral responsibility and the ability to do otherwise. Acting on our desires–even against a strong desire–implies having a will, an intention that can come in even if one has the desire to do otherwise. We know how we can act against our own desire. But then, the question is: Who is the agent that is acting on the desire?

An ambiguity arises: the distinction between the agent, or person, and the "source" indicated by a subtle distinction between self and selfhood. The compatibilist account for sourcehood relies on a concept of a reason-responsive agent or a strongest-motive or desire-driven action. Furthermore, what appears to be decisive is our discrimination of how far we are guided by external and/or internal constraints in which the agent is identified.

However, the libertarian account of sourcehood claims that at least some factor must be causally independent of both external and internal constraints. Motives, desires and reasons are not necessary for freedom. "Non-causal libertarians" posit that freedom of choice isn't casually determined by anything other than our own volition because it is inherent in us and is what defines us. Meanwhile, the "event-causal agent" and "agent-causal libertarian" both maintain that an agent-based action must bring about the choice. But while the former still sees the action as wholly reducible to events and its related mental states, the latter sees self-determination as a nondeterministic process.[1] In other words, the incompatibilist's agent-causal account of free will is not reducible to mental causation and phenomena involving the agent alone, such as motives, desires, reasons, etc. The polarity between a casually ordered world and an undetermined choice-making agent is inherent and not just apparent.

We will argue that this philosophical dichotomy has its roots in an insufficient conceptual clarity that arises due to the implicit (though usually undeclared) attempt to refrain from metaphysics. Common to both philosophical positions is the attempt to specify conceptual categories such as "sourcehood", "will" and "freedom" without allowing themselves for metaphysical speculations. By doing so, both contending positions continue to scratch the surface, leaving the impression that something fundamental is still missing.

In fact, those motivated by philosophical and/or metaphysical arguments, based on dualistic or idealistic theoretical frameworks, or because of one's own spiritual experience or religious belief system, etc., maintain that free will is not an illusion but real. The biblical narrative of Adam and Eve, who chose to eat the forbidden fruit, is the most eminent symbolic representation in Western culture of the belief in humans' free will. It is a millennia-old, deep-rooted religious belief that clashed with the materialistic determinism brought to life by the same Western culture in the Age of Enlightenment. This created a sort of 'philosophical short-circuit' that scientists, philosophers and theologians are still struggling to come to terms with today.

The difficulty arises also because of a lack of a careful reflection on who is supposed to be free and from what. Are we talking of our consciousness, our minds or our bodies being free from the physical laws or from something else of a more psychological nature? Or are we talking about the freedom of a spiritual or even unphysical entity like a soul or a transcendent identity or whatever metaphysical subject is supposed to be free from the laws of physics? Or is free will about the privilege to indulge in the desires and instincts of our ego and still half-animal nature? Can we tell if our consciousness and/or mind are free from whatever if we don't really know what consciousness and mind are in the first place?

And, after all, what is 'will'? The agency of a mental volition that clings to the inclinations of the egoistic personality and appetites of the body or of some metaphysically and/or philosophically more noble entity? Is there also a subconscious and subliminal will that leads us into action? Are the subconscious and subliminal free? When we talk about our freedom, are we pointing only to our conscious subjectivity, or is there more than that subject, that 'I' and 'me' that could enter the equation? Who or what is this subject that is supposed to be free?

Moreover, is there only one possible answer to the question of whether we have free will, namely, 'yes' or 'no'? Or could reality turn out to be somewhat more creative and original than human's binary black or white thinking?

We are going to argue that relying only on the raw data while ignoring the deeper nature of our psychological mental, emotional and physical dimensions can lead to a gross misreading of the facts and to unwarranted conclusions. But we will not argue from a strictly metaphysical position. We will embrace a spiritual conception of sourcehood that, nevertheless, does not abstract from the neurophysiological layer of existence and the insights of modern physics.

To clarify these points, the paper is structured as follows.

[1] For example, quantum physics without hidden variables is considered a non-deterministic theory.

In the first section, we recapitulate the notion of causal determinism according to a classical Newtonian-Laplacian standpoint. This will make clear how a compatibilist view that would like to save free will and that, at the same time, advocates for a physicalist conception of consciousness as an epiphenomenon of brain states inside a causal deterministic paradigm is logically incoherent. But we will also question a libertarian viewpoint that argues from metaphysically agnostic premises. Either one sticks to determinism and must give up free will, or one must give up determinism, obtaining the 'free will bonus', but not without paying the price of accepting an ontology that transcends material monism.

The second section is a short reminder of the Libet-styled experiments and their significance.

The third section will deal with the question of how far we are free from our natural urges, instincts and drives and in what sense this relates to the philosophical problem of self-determination.

The fourth section is dedicated to the sourcehood question–that is, whether the nature of the agent standing behind our (supposedly free or unfree) will is that individuality we identify with our 'personality' having a specific 'character'.

The fifth section discusses the notion of 'will' itself and if it could be reduced to a single volitional concept or if it has multiple facets that can't be conflated into one entity.

Finally, a discussion and some conclusive notes will follow, viewing Libet's insights from a different perspective. This will lead us to argue in favor of a mild version of metaphysical libertarianism which, however, admits to strong limitations to our free will determined by external and internal physical and psychological constraints.

# I. Causal determinism and the compatibilist free will fallacy

According to a compatibilist viewpoint, free will and determinism are not logically mutually exclusive. The question, however, is: What exactly does 'determinism' mean?

The notion of determinism that (classical Newtonian, non-quantum) physical sciences imply is that of "causal determinism", namely, that which posits that every physical event is completely determined by a preceding cause. It has its cultural roots in the Galilean and Newtonian reductionist worldview that mathematized the world in terms of particles having definite positions and momenta in space and time and which dynamical evolution could, at least in principle, always be calculated with infinite precision from the past into the future. It is a reductionist and deterministic worldview further strengthened by Pierre Simon Laplace, who famously voiced: "*We may regard the present state of the universe as the effect of its past and the cause of its future. An intellect which at a certain moment would know all forces that set Nature in motion, and all positions of all items of which Nature is composed, if this intellect were also vast enough to submit these data to analysis, it would embrace in a single formula the movements of the greatest bodies of the universe and those of the tiniest atom; for such an intellect nothing would be uncertain and the future just like the past would be present before its eyes."* (Laplace, 1814)

This is the "Laplace's demon" thought experiment. It became, and still is, the (undeclared and implicit) assumption of modern materialism and all the sciences as an articulation of strict causal determinism and reductionism.

In physics, this causal determinism is equivalent to stating that the dynamical evolution of a physical system is described by a set of differential equations having a unique solution, once the initial state and its boundary conditions are given. That means that, once specific initial and boundary conditions are determined, the temporal change of a physical system will evolve along one and only one possible path in its state-space. For instance, once the precise position and momentum of a body–say, an object falling in a gravitational potential, and the forces acting upon it–are known (i.e., predetermined) in the present moment, its dynamical evolution–that is, its future trajectory in space, time and momenta (phase-space)–is also uniquely determined. Another way to restate this determinism is that every time we reset the body to the same initial conditions, it will inevitably follow the same path over and over again. Every phenomenon taking place in the present moment follows uniquely from what was in the past. Tertium non datur. In this sense, one can hardly speak of the 'free will' of a falling body. There isn't anything that could determine a 'choice' or a 'freedom to do otherwise'.

This physical determinism is the paradigmatic example of what we intend by a causal determinism and has been applied with extreme success in classical physics for about three centuries now. Even if

this mechanistic worldview is questionable due to the findings in quantum physics, it has nevertheless been quite successfully applied and has therefore been expanded to all sciences.

If we apply the same deterministic principle to brain activity, we can similarly characterize a 'neural determinism'. Once the physical state of a neural network is predetermined, its present physical state (the neurons' connections, their synaptic strengths, their action potentials, the chemical reaction rate determining the neurotransmitters' signaling efficiency, etc.) will evolve by a chain of causes and effects, always and inevitably into a unique future state. According to this philosophical deterministic view, the present physical state of the brain has already determined its future brain-state. In this view, every mental state is a brain-state. There is no conceptual and ontological distinction between the two.

This perspective that adheres to a strict physicalist worldview can't reconcile physical determinism with free will, not even in principle. This is because, from the purely materialistic perspective, only physical processes have a causal power, including all action deriving from brain activity which feels volitional but isn't. Maintaining the Laplacian view of a deterministic and reductionist physicalism, everything could, in principle, be derived from mechanical unconscious material particles, forces, and fields acting in a given space-time background which, as in a gigantic blind clockwork, determine everything in the universe. At the bottom, everything is a complicated foam of particles ruled by differential equations. Thus, every thought, emotion and–most importantly for the present context–every choice we make is also the result of the present brain-state, which, in turn, was predetermined by its past brain-state. We don't really make choices; every choice we make is an illusion predetermined by neuronal activity, perhaps already before we felt the desire to choose. This mechanical determinism leaves no room for free will. What we call "free will"' is only an illusion.

Note that in this context, it doesn't help to replace the sourcehood with a personal pronoun or a possessive determiner supposedly doing the determining without external constraints, meaning without being conditioned by external forces or agents. Saying, "If no external constraints are conditioning **my** choices, the fact that ***I*** (meaning the brain) can act on **my** desires, or that ***I*** make a choice between turning left or right, or the fact that vanilla over chocolate is ***my*** preference, is what makes **my** choice free because it's **me** determining something", only betrays a form of (mostly unconscious) dualism in disguise. Ascribing any ontological value to a feeling of selfhood having any autonomy, as if there is some internal 'spirit' or 'ghost' in the brain intervening in the causal chain determining the brain's state-history, implicitly contradicts the deterministic materialist monistic ontology from which the compatibilist started. From a causal deterministic and physicalist standpoint, the sense of agency and selfhood is a neural epiphenomenon, not a guarantee, let alone proof of freedom of agency. And this neural epiphenomenon is as "free" as any other mechanistic deterministic physical phenomenon. Deterministic physical laws don't make choices. Consequently, a deterministic brain can't either. The factor that leads to a determination is the physical state of the brain in a specific moment, not any supposed internal agent inside of it. This sense of selfhood only describes in our everyday language the workings of a deterministic brain without free will. If we posit that we are nothing other than a machine, we can be "free" only as a machine can be. Whether that machine labels itself with "I" or "me" or its actions with "my" and "mine" doesn't change anything.

Moreover, the idea of an unconstrained subject making a free choice, almost resembling a sort of a brain-in-vat scenario, contradicts the reality on the ground. The brain is such a complex physical system and so deeply intertwined (mostly subconsciously), with all its sensory and mental apparatuses with the environment, that it is highly unlikely that any choice we make is completely independent of external factors and conditions. But, also assuming that to be possible, the point is that those preferences and choices and the sense of selfhood making an independent choice are, in the causal deterministic Newtonian-Laplacian clockwork neuronal universe, nothing other than the action resulting from a brain state ***uniquely*** predetermined by its past brain state.

The emphasis on uniqueness is mandatory. If the neural network's physical state is determined in the present, it will uniquely evolve from present state A to future state B along a unique path in state-space. There can be no point in time when it could autonomously branch off from this predetermined path–that is, there could not exist any instant in between where an alternative state-space trajectory could be enacted. Any 'change of mind' which makes us choose one thing rather than another is the result of a change of brain-state causally predetermined by its previous state. My present desires are the expression of the present state of a physical system, my present beliefs are a present encoding in my neural pathway, and my actions following from it are a dynamic result of a causal deterministic relation with these. As

the forces acting on a set of colliding billiard balls uniquely determine their dynamics, so do the electrochemical reactions in a neural network. There is no reason to believe that there could be any kind of autonomy in the latter case if there isn't any in the former. Otherwise, we are not talking about a deterministic brain, per definition.

In this deterministic worldview, our acting against our own desires, wills and preferences is also preprogrammed into the neural tissue a priori; it is not something subject to the choice of any agent. The act of having a desire, and the desire to overcome one's own desire, are just neurological states predetermined by a previous neurological state. Thus, saying that we would have chosen otherwise had our motivations, desires and reasons been different is not a litmus test for free agency. In this deterministic naturalism, the different motivations, desires and reasons are only the expression of a variety of outcomes that emerge from different initial conditions of the physical system and that are imposed on our conscious experience. Once a specific motivation, desire and reason colors our mind, our action is determined by the brain-state at the instant when these present themselves. No 'agent' is making any choice.

The sense of autonomy is, again, a feeling or belief reflecting a mental state–that is, a brain-state–but has no causal power other than that which a thermostat has in regulating the temperature of an environment. Here, the source of an agent's action is the brain itself, and if the brain is deterministic, its dynamic evolution in state-space is also deterministic, meaning without free will. The brain does not choose, prefer or will anything; it is just an automaton that executes a program–no more and no less than a clockwork chooses, prefers or wills itself to tick.

Note also that, at least in this classical physical Laplacian deterministic context, it doesn't help to point out the complexity of the phenomenon which, supposedly, makes it 'indeterministic'. This is because if every single, neuron, molecule, atom and particle is set back into a specific state, the evolution of the whole system will always be the same, however complex or non-linear the system might be. Unpredictability has nothing to do with free choices, wills or wonts. The Brownian motion of a particle in a gas is unpredictable, but nobody would ascribe to it any sort of will, let alone a free will. Complexity alone eventually leads to unpredictability in the sense that we can only frame predictions based on Bayesian probabilities. It is an epistemic limitation. But this does not render a deterministic system indeterministic.[2] You can make a clockwork as complex as you wish, but it will always remain a deterministic automaton.

By the same token, conflating unpredictability with freedom of agency is an unwarranted logical move as well. The only truly indeterministic physical phenomena known to date are, perhaps, those of quantum physics. But indeterminism alone does not allow us to frame a theory involving any form of free volition. How and why should a random process become a directional force allowing us to make choices? A purely indeterministic process is, per definition, not determined by anything, not even by a will. Libertarians won't find themselves in a better position than compatibilists, only by switching sides from a causal deterministic to an indeterministic ontology. Invoking quantum effects in the brain does not add much clarity as to why this supposedly guarantees free will. In a certain sense, it is not even clear what it means that a process is 'truly' non-deterministic other than assuming a mysterious 'acausal' process of becoming where an event is actualized without a preceding cause. And also the notion of autonomy itself remains vague. What would it mean to be free? What is something that has free will? Can we understand what free will is without a comparison to an example of perfect free will?

Paradoxes can be dissolved only by embracing a metaphysical framework positing consciousness, volition, will, sourcehood and agency as fundamental primitives and determinants standing beyond a physical deterministic causation. A metaphysical conception of reality, sourcehood and agency in which consciousness, volition and will do not need reasons to make a choice or a physical substrate as a determining factor. This is not a physical causal determinism but a non-causal metaphysical determinism of an undetermined determinant. The idea of a will willing differently is inherently a metaphysical conception irreconcilable with a mechanistic universe. This is because the latter is the brainchild of the Enlightenment where any notion of 'will' has been expunged from the outset as a working hypothesis. In this view, everything can be boiled down to a physical phenomenology where the notions of 'will', 'freedom' and 'subjectivity' have no meaning to begin with or, at best, are considered mere

[2] That's also why in complex theory one speaks of "deterministic chaos", but refrains from specifying it as an indeterministic process.

epiphenomena arising in a mechanistic universe without will, freedom and subjectivity. It is then no wonder that a philosophy of mind refusing to give up this naturalistic approach that denied the existence of any will in nature now finds itself in a deadlock when, at the same time, it tries to reintroduce free will for humans as a real mental faculty through the backdoor. On the other hand, the agent-causal libertarian who claims for the existence of an agent-based action, cannot longer hide behind an agnostic position invoking quantum effects or no better defined 'undetermined choice-making agents'.

Therefore, either we embrace a strictly physicalist causal determinism and must necessarily give up the notion of free will or, if we would like to save free will, we must give up a material monistic ontology and embrace metaphysics. We can't have it both ways.

# II. Libet's legacy

The issue whether and how far the belief that we are free volitional agents able to make autonomous choices is tenable, acquired a completely new dimension with modern neuroscientific tools of investigations, from brain scanning technologies such as fMRI or modern electrophysiological monitoring methods such EEG, etc. The pioneer in this field was the American neuropsychologist Benjamin Libet, who performed a couple of famous experiment conducted in the 1970s and 1980s, and which became the starting point of further research with brain diagnostic tools until nowadays.

Libet first showed how a simple touch on a finger becomes a conscious sensorial experience only after a relatively long delay of about a couple tenths of a second (Benjamin & al., 1979). His more notorious findings came from experiments where he asked subject to freely decide when to flex a finger (or press a button or flex their wrist) and report the moment at which they were consciously aware of the decision (Libet, 1982), (Libet & al, 1983). The brain activity was recorded by an EEG that measured the signal and the time at which the mounting motor cortex activity occurred, the so-called 'readiness potential' (RP - from the German 'Bereitschaftspotential'). At the same time, an electromyograph measured the electric potential generated by muscle cells. The subjects could use, as a timing device, an oscilloscope with a dot quickly circulating like the hands on a clock. The time lag between the moment of the first brain activity observed at the EEG and the time of the decision to act–the felt 'urge' to move–indicated by the subjects observing the dot's position on the oscilloscope amounts to a considerable 200-350 msec delay. This seems to indicate that, contrary to what we tend to believe from everyday experience, the awareness of our decision-making does not coincide with the brain's activity — that is, by the RP initial motor cortex buildup.

The interpretation of Libet's experiment was and remains very controversial. In it, many see the proof that it is an unconscious brain activity that determines our volitional acts first and that becomes conscious only later. According to this interpretation, we first make a choice without being aware of it; only later does it enter into our awareness, and do we misinterpret it as our free choice. In other words: Free will is an illusion.

However, it turns out that things aren't that easy. Libet repeated his experiment in 1985 (Libet, 1985), with subjects instructed to consciously veto their own urge by a 'free won't' between the urge to move and the muscular movement onset. This showed that a RP does not necessarily lead to action but can still be interrupted up to about 50 msec before the muscle activation. Libet could thereby support the thesis that there is a time window of about 100–150 msec within which the conscious will can still prevent an action that has already been initiated at a neurological level. In this sense, *"the role of conscious will would be not to initiate a specific voluntary act but rather to select and control a volitional outcome"* (Libet, 1985).

Libet's findings were confirmed in an experiment in 1999 in a modified form (Haggard & Eimer, 1999). The RP of the left and right hemispheres was measured by asking subjects to make voluntary movements with the left or right index finger during each trial. In this case too, the activation of the motor cortex was, on average, before the reported time of the conscious decision to act. This seems to suggest that the RP cannot be identified with the commitment to act. Rather, it indicates the brain's preparedness to act, waiting for the conscious will approval or rejection. Maybe we have no free will, but everything indicates that we still have at least a free won't. However, Haggard and Eimer pointed out that the reported time of awareness varied considerably. In 25% of the cases, the subjects indicated that their time of awareness preceded the rise of the RP itself. The time at which we perceive and report our willingness to act is conditioned by a highly subjective perception that depends on our concentration

and attention, and that is difficult to pin down on a ticking clock (such as relying on the subject reporting the precise position of a quickly circulating luminous dot). This means that Libet-styled experiments are subjected to gross statistical errors that render its siginifcance questionable.

Later on, other experiments investigated whether the free won't vetoing action itself might be determined by an unconscious decision that escapes our conscious volition as well. Some (Kühn & Brass, 2009) contended this is indeed the case, while others confirmed Libet's standpoint (Schultze-Kraft & al., 2016), (Uithol & Schurger, 2016). The former investigation indicated that the veto decisions are also made unconsciously and are only subsequently perceived as free decisions, arguing against Libet's free won't interpretation. However, the experiment of Kühn and Brass referred to a different type of vetoing than Libet's one. In Libet's experiment, the vetoing act was endogenous–that is, it originated from within the subjects–while in Kühn's and Brass experiment, it was dictated by external stimuli (upon seeing an initial go-signal, the participant had to press the 'go' button but cancel their immediate intention if they saw a stop signal). This calls into question whether the two experiments effectively measured the same volitional phenomenon.

The question whether the RP truly signals an unconscious action beyond conscious control did, so far, not receive an an unambiguous answer. Moreover, the neurophysiological interpretation of the RP itself has been questioned (Schurger & al., 2021). It is not even clear if it reflects a real neural signal in the first place or, rather is determined by ongoing stochastic fluctuations in neural activity.

In hindsight Libet's experiments showed to be inconclusive. Given the several methodological issues and measurement uncertainties, and the ambiguous interpretations of what the measured signals really represent or indicate, one cannot infer from Libet's experiments any final verdict.

Yet, for several decades many presented Libet's original experiment as final proof of the absence of free will, and, not only neglected by a selective bias his findings on the possible existence of a free won't, but also ignoring all the interpretational difficulties pointed out by the findings thereafter. Libet's findings have routinely been misrepresented as indisputable evidence against free will, despite the opinion of Libet himself, who endorsed the opposite view. Why so many enthusiastically embraced such a flawed experiment, animated by an almost religious desire to stick to a strictly materialistic worldview and were so eager to prove to themselves that they have no free will would be an interesting subject for sociological research. To put it in the words of the British mathematician and philosopher Alfred North Whitehead: *"Scientists animated by the purpose of proving that they are purposeless constitute an interesting subject for study"* (Whitehead, 1971).

# III. Free from what?

But our argument will neither follow a purely philosophical reasoning nor rely on mere empirical data, but invites to complement these by an experiential understanding of the phenomenon under analysis.

One first obvious observation is that we are embodied beings and depend from physical and biological processes. Taking this purely physiological perspective the straightforward answer to the question whether we have free will is necessarily negative. We largely depend from an environment that must have the right temperature, atmosphere and resources that must meet our physical necessities of our bodily functions like blood pressure, the immune system, a properly functioning brain, heart, liver and several other organs. This dependency is a necessary requisite to survive and over which we have no or only limited control. Physiologically we are almost entirely dependent on these factors. We might have some limited control over some physiological functions with some form of concentration or meditative practice but we can't stop entirely our heartbeat, brain process and liver functions just by a willed concentrated effort. These are natural constraints and automatisms we are almost entirely subjected to without much freedom of choice.

But the question of free will is usually meant to imply not a freedom from physiological processes rather from psychological constraints when a choice can be made among alternative possibilities. Acting freely means, first of all, to be an agent that is in a condition to make a deliberate choice between alternatives without external psychological forces determining that choice, such as mental, psychological, cultural, religious forms of conditionings, etc. It is questionable if we can really disengage from these external psychological factors. We might believe so, but deep down, at the subconscious level, our education, fears of judgement, greed, desire for wealth, prestige, religious or

ideological conditionings might well determine our choices without us being aware of it. And, even assuming that we have a control over these external psychological constraints, the question remains how far we can be considered free from internal psychological constraints–that is, from what we call our 'personality' and 'character'? And who or what is that 'agent' making the choice?

Taking a first-person perspective it becomes an almost self-evident fact that we, as humans, are subjected to instincts and more or less uncontrollable urges. The instinct of survival, craving for food, sex, and sleep, selfish impulses, emotional states of anger, wrath, and violence, etc., are something humans can control somewhat better than non-human primates, though we are far from having a complete mastery over these primal instincts. How much control do we have over the instinctive desire to enjoy the pleasure of food when we are on a diet? How many times must someone try to quit smoking by not giving into the desire to reach for a cigarette until the urge begins to fade? Anyone out there who can honestly say having never been dominated by some impulsive and unreflective behavior that led to some inconsiderate action that one had to regret later? We have only to look back at our past choices to realize how often we were moved by inner psychological mental and emotional forces that lured us into making a choice based on reflexive and uncritical attitudes. It is clear that we are partially dominated by our more or less inner subconscious instincts and drives, to which we often fall prey and that we do not always find the will and psychological force to resist.

Furthermore, the freedom of our will depends also from the intensity of that will. Some impulsions might be so strong that we might not find the necessary 'will-force' to overcome it. Between complete freedom and and complete lack of freedom different 'degrees of freedom' exist (pun intended). Nobody can be truly said to be completely free until they have perfect and complete control over their primal urges and impulses.

Of course, one might question if it the ideal to control and become master of one's own natural and primordial desires and instincts should be considered desirable in the first place. But who acts like a puppet under the influence of pain and pleasure, desire and passion, happiness and grief, attachment and disgust, hardly can be considered to be free. Because, regardless of the desirability of these mutable waves of life, the question is if we are able to veto it or not? If we are not then the bondage to our natural inclinations defines also our measure of free will. In principle we can free ourselves by learning to detach from this mental, emotional and physical identifications–that is, to learn by means of some psychological or spiritual practice and discipline–to stay back and observe first, and then choose to sanction, or not, these impulses. In-between these two poles, on the one side that of the total subjection to our natural instinctiveness and, on the other side that of a release from it, life finds itself in many intermediary stages of development and degrees of detachment from a binding and mechanistic to a free existence. In fact, evolution has endowed especially the human being with a potential to change or modify its own habits and tendencies and, by resorting to an inner psychological force we call 'will', to refrain from responding always automatically to each nervous impulsion; something one does not observe in other living creatures.

Henri Bergson once noted that if all our actions would be the result of purely mechanical laws determined only by pre-existing conditions, we would behave automatically in all circumstances without effort, hesitations, and resistances (Bergson, 1907). But our life, which is permanently characterized by strife, struggle, and doubts, does not feel like that at all. Yet we believe to be able to make choices, be creative, and change our life, even though it often requires sacrifice and hard work. While animals are mostly unconsciously driven externally by the pressure of the environment and internally by their instincts, habits, and automatic behaviors, we, as humans, can mold the external environment and can replace in some measure these internal behaviors with new ones, even though this might necessitate some time and a conscious effort against these preexisting habits and automatisms. Life might also force us to learn discipline and control in order to acquire self-mastery over this mechanical psychology and acquire at least a partial independence from the bonds of inner forces that are compelling us. Then we discover that these things can be changed or, at least, our bondage can be loosened. The identification with this instinctive and mechanical nature in us isn't absolute and we can observe, sanction and govern it to a certain degree. In this sense, according to Bergson, man is free.

Nevertheless, humans are creatures largely under the spell of still half-automatic inner psychological forces as well and far from a real freedom of willed action, thought and feeling. From modern psychology it is now well known that most of our thoughts and choices are the result of subconscious impulses we are not aware of. If we live our emotional instinctually dominated prevalently by a

subconscious and nervous individuality or, at best, a half-conscious mentality, we are still chained to a mechanistic and impulsive life with a lesser degree of freedom.

In this sense, we might say that the question whether we can make deliberate and independent choices cannot be settled with a simple 'yes' or 'no' answer. We must address the question first in what measure we are free form our natural impulses, tendencies, habits, inclinations, urges and drives and, if not, if we are able, at least in principle, to free ourselves from it? An insect has less freedom, if any, because it is a life form subjected to a complete, or almost complete, mechanical dependence from its natural and primal instincts, while humans might have a higher degree of free will because, if they desire to refrain from following automatically their own impulses, they can. However, we are not really good at doing this, either, and therefore we can't really state that we are completely free, as much too often, 'the spirit is willing, but the flesh is weak.' Perhaps a future, more evolved species that transcends homo sapiens might conquer this complete freedom from its mental tendencies, emotional restlessness and bodily appetites and could be said to possess free will. In this sense we might conjecture that our will is not completely free but, nevertheless, may be rendered free.

# IV. Who is supposed to be free?

Thus, it is our relation with our inner nervous emotional, mental and physical seeking and striving for pleasure, happiness, survival, safety, protection, etc. that moves us from the inside out directing our choices and determining our sense agency. But who or what is the agent?

We tend to equal our personality, identity and our ‘true being’ with these modes of our inner nature itself. This more or less egoistic entity attached to desires and other acting and reacting emotional and bodily impulses, is what we call ‘my personality.’ But that personality is not an instant creation in the here and now but the result of a long history of experiences of the past. It is determined by heredity, culture, the environment, the past actions and circumstances, past trauma, education, incidents, etc. Conceiving our present choice as something being independent from our past might well be yet another illusion.

But that ‘personality’, that ‘subject’ can change as well. Someone enslaved by the impulsions of psychological, emotional, cultural or even unnatural physiological conditions determined by a past history (e.g. drug addiction) can, nevertheless, choose to become another personality if he/she finds a sufficient ‘will-force’ and withdraws his/her automatic sanction to these dependencies.

The fact that this possibility exists to begin with should shed some doubt if the real agent that determines by its will this choice could be identified so straightforwardly with the present personality defined by nature's impulsions. If the agent in us is only defined by our past history and our natural passions and desires–that is, what we call ‘my nature’ or ‘my character’–where does that ‘will-force’ which allows for self-mastery and conversion of the half-conscient mind, senses and emotions, come from? If only that emotional and instinctive personality would be what we are, the willing agency that accomplishes such a passage from subjection to mastery would be impossible. It is clear that the ‘subject’, ‘agent’ or ‘real individuality’ we believe to be free (or not free) can't be that superficial entity blindly driven by the currents of nature. The willing agent, this inner being or ‘true self’ that can change a character with all its past imprints and present propensities must be something deeper than that surface personality and must be driven by a more conscious intelligent will that can see beyond desire, emotion, and an animal intuition of pleasure, passion, suffering etc. There must be something beyond it, a ‘will within’ which changes this surface personality. To identify our true center of action in the instinctive mental, emotional and physical individuality is itself an instinctive thought that only betrays how we still don't know ourselves.

# V. What is will?

The seemingly simple question “Do we have free will?” implicitly and too simplistically assumes that we know what will is supposed to be. But, here again, few provocative questions clarify the unaware lack of clarity contained in this inquiry.

In fact, what is will? Are we talking about the ‘will’ of the intellect that carefully ponders pros and cons before making a choice and taking an action? Or the ‘will’ of a mind that is riding on a swirl of emotions and wishes? Is it about the ‘will’ of an intelligence, or the instinctive and blind will of our

desires and impulsions? Or are we talking about the 'will' of our bodily instincts driven by the half-blind nervous compulsions rising from a sub- or inconscient nature?

If the question of free will is not cleared up by these distinctions and everything is semantically conflated, then confusion and unwarranted conclusions are assured or, else, empiric observations will appear as conflicting and mysteriously incompatible.

The point is that there is no such thing as a single and undifferentiated human will because our psychology, identity and consciousness is not a single and undifferentiated block but a multilayered identity. We are not only mental beings but also emotional and physical living organisms, largely guided by unconscious, subconscious and subliminal forces we are not aware of or that we only dimly end vaguely intuit and eventually even not admit. Consequently, there is not one will but many willing or unwilling personalities in us at once, and that usually do not at all work in unison. Quite the opposite, in most cases they clash and compete against each other.

In general we could describe 'will' as a 'motive power applying itself to a work and result.' Will is an 'inner psychological force resulting in a conscious action.' But, however we define it, this will can manifest in different forms, qualities and on different planes of our psychological existence alternatively or even competitively at the same time. There is a will in form of bodily desires, the will in form of demands and preferences of the intellectual mind, or the will in form of egoistic passions, emotions and selfish cravings. Usually, what we mean by 'will' is a propensity and preference of the mind which, however, has no clue where from that propensity and preference came from. Only a little bit of introspection makes it clear that all these 'wills' are the result of a mechanical action of natural forces of life. A honest first-person inquiry reveals that these psychological forces and motive powers do not come from us, but emerge *in* us. In most cases the intellect behaves as a servant and instrument for these mechanical tendencies, not as a determining power which makes a conscious deliberate and free choice, even though it is not even dimly aware of the forces that stood behind its apparently free choice. What we call 'will' is not, or only rarely, a single and unidirectional focused volition, but the sum of incoherent and even conflicting thoughts, desires, appetites and mostly self-repeating fears or automatic preconceptions.

In other words when we investigate the issue of free will the choice of words is not a detail. The word 'will' has a multidimensional psychological significance and a plural semantic meaning we cannot reduce to a singularity. We cannot ignore our multilayered nature which is driven consciously or subconsciously by claims., desires, preferences, thoughts and fancies and which determine what we call a 'free choice'. Denying this means denying what we are identifying ourselves in an individuality that is only an ideal fantasy, a fiction.

# VI. Discussion

Not distinguishing an 'instinctive will' from the 'agent-will' leads to conceptual conflations that also clouds the debate in the philosophy of mind. Once we see things from this first-person perspective also the perennial question whether we have free will appears in a different light–that is, it reveals itself as an ill posed question from the outset.

The picture of the human nature we presented may suggest a rather mechanistic conception of consciousness, life and mind. If we are only puppets of our passions, desires, intellectual preferences and physical impulses, one might conclude that this leaves no space for anything that could be identified as free will. But this is, again, and extrapolation that jumps to conclusions based on yet another unaware and unwarranted premise: that all these waves of our mental, emotional and physical nature represent all what we are. Because there is in us something that, indeed, we could call a 'primary will' or 'true will' that can override our natural still half-animal tendencies, and change our personality and character. Still we can make an effort to escape, at least to some degree, a strict determinism of nature and refrain from behaving like automatons.

The question is what remains left of our individuality if we would become fully aware of all these 'waves', 'forces' and inner as outer influences that condition us and, instead of following blindly its directives, would step back from it before making any choice? Would we then act out of free will?

We guess that the physicalist and determinist that does not believe in free will, would only restate a naturalist viewpoint that first of all would question if such a purely detached psychological state is desirable and healthy to begin with, and, secondly, would claim that also this would only correlate with

a special cerebral configuration like any other, resulting in yet another illusion of free will. While, the dualist, or idealist, or the mystic could commit to the contrary interpretation and argue that our outer superficial personality is only a mask and a travesty of a 'true individuality', or 'true self' or 'soul' hidden behind the veil of the flickering thoughts, a surface play of emotions and sensations and which, once it is allowed to come to the front, can replace the sensational and emotional will with an inner volition that we could consider having freedom of choice.

However it is, we are not going to develop further these viewpoints here other than pointing out that the image of the human psychology outlined above, seemingly enslaved by the waves of an outer physical and inner psychological nature, is not in contrast with free will. If we clarify whose freedom is enacted by what kind of will, then there remains ample space for a metaphysical ontology where free will is not an illusion but a lost power and resource we have unlearnt or have still to discover in us during the evolutionary process. This would also throw a bridge between a strictly deterministic conception of our being and a too spiritualistic idea of our individuality.

Thus, we see that what appears to the mind as an exclusive binary and inescapable dichotomy only because it is oblivious of the complexity of the whole being, this integral view finds a resolution that can reconcile these polarities naturally. The materialist was partially right in contending that we are determined by physical laws, while the spiritualist was also partially right in affirming the contrary. Or, in other words, both were partially wrong. Once we do not limit our ideas to exclusively monistic or dualistic ontologies but realize the complexity of our being in all its planes and parts and understand who is supposed to be free from what, by rising our seeing to an integral view and knowledge which realizes the richness of our being in all its facets and on all planes of consciousness, only then we can formulate a consistent answer to the question of free will.

# VII. Conclusion

The aim of the present paper was twofold.

First, we showed how causal determinism as conceived of in classical physics and from a neuroscientific perspective is incompatible with notions of free will. Either one maintains a deterministic material monism and must break from any form of free agency, or one embraces a metaphysical form of libertarianism in which will acquires an ontological dimension reminiscent of Schopenhauer's "World as Will".

Second, we evidenced how, in this sort of philosophical enquiry, we can't abstract from the complexity of the human psyche. Experiencing our psychological depths from a first-person perspective, complemented by the modern findings of modern neurophysiology, can lead us to a more coherent picture.

Leaving aside the aforementioned technical difficulties that affect the Libet-styled experiments–that is, also assuming that the RP faithfully represents a neurological signal and that the subject's evaluation of the temporally offset instant of the perceived urge to act is reported accurately, it still remains far from clear what these measurements really reveal about free will.

The standard interpretation of the determinist and incompatibilist is that to consider the RP as the signal of an unconscious decision making that precedes the subject's conscious awareness by few hundreds of milliseconds and, thereby, supposedly provides evidence for the lack of free will. However, this conclusion relies on a coarse-grained model of the human psyche. It ignores the above-described multilayered psychological complexity of the compenetrating and mutually inter-dependent mental, emotional and physical individualities that define a human being, and is based on the more or less implicit and unaware assumption that only our ordinary waking state is conscious defining any other non-metacognitive state as 'unconscious'.

Whereas, if the plurality of these planes and parts of our being are taken into account, these experiments acquire a new significance. The RP does not represent an unconscious choice rather it is the first instinctive impulse thrown up by our primordial mental, emotional and physical individuality over which we have no, or only scarce, control and the delayed report of the volitional act represents the choice's timing. The RP is the impulsion of a part of our individuality that impels another part of us to act accordingly but still hasn't triggered it. In other words, the RP represents the question not the answer. This would be in line with the 'free won't' experiments where the subject can veto the RP.

However it is, this is only to say that the interpretation of the empiric neurological data are strongly dependent from the kind of psychological model and ontology of consciousness we work with. Whatever data and however precise they are, we almost certainly will be driven to unwarranted inferences and fallacies if we work with a too simplistic conception of ourselves. A lack of semantic clarity that conflates without distinction different levels of psychological selfhood, further adds to the confusion. We must become aware and take into account that what impacts the analysis and interpretation of neuroscientific data in consciousness studies is the fact that humans still don't know themselves.

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