

# FREE WILL AND FREE RIDES

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SUMMARY: 1. *The problems of free will.* 2. *A taxonomy of free will theories.* 3. *Scientific isolationism.*

## 1. THE PROBLEMS OF FREE WILL

THE intuition of free will is a basic component of the ordinary conceptual framework from which philosophical analysis begins. However, if the intuition of free will is one of the most deeply rooted in the ordinary framework, it is also one of the most abstract, complex and even obscure. Thus, one of philosophy's main tasks is to clarify this intuition, in order to understand its precise content, implications, and very possibility.

Traditionally, philosophers used to discuss the free will issue only by analysing and refining the ordinary framework. That happened both in the Antiquity, when the Stoics tried to reconcile human freedom with natural necessity, and in the Middle Age, when the problem was that of combining human free will with some of God's properties – i.e. his perfect foreknowledge and his capacity to predetermine (to “predestinate”) our lives. While the theological problem is still discussed,<sup>1</sup> in the last centuries many philosophers have thought that the most urgent menace on free will came from the deterministic laws of nature, seen (pace Hume), as producing “universal natural necessity”.<sup>2</sup> More recently, the concrete possibility of physical indeterminism implied by quantum mechanics added another important strand to the discussion. Still now, the problem of free will can be seen as an example – arguably, the most relevant one – of the challenging tension between the ordinary image and the scientific image of the world.

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<sup>1</sup> L. T. ZAGZEBSKI, *Foreknowledge and Free Will*, *Stanford Encyclopedia of Philosophy*, 2017. <https://plato.stanford.edu/entries/free-will-foreknowledge/>.

<sup>2</sup> I. KANT, *Critique of Pure Reason*, Macmillan, London 1787 [1965], p. 469. It is worth noticing that the truth of determinism would not imply that human actions are *necessary*, but only that they are *necessitated* (they would not be actualized in all possible worlds, after all): on this, see R. AUDI, *Moral Responsibility, Freedom and Compulsion*, «American Philosophical Quarterly», 19 (1974), pp. 25-39.

In general, this tension appears structural. Nevertheless, it is intellectually vital to try to relax it, by means of a constant – even if, perhaps, inconclusive – negotiation between the two images. (In any case, the idea of a constant negotiation seems to me much less unsatisfactory than the alternatives: a rampant scientism that belittles the ordinary image of the world and an irrationalist conception that denies the ontological relevance of science).<sup>3</sup> The problem of free will is no exception to this intrinsic tension, as it is easily confirmed by a quick look at the views in the market. Philosophers who prioritize the ordinary image maintain that our freedom is undeniable (as one of the most influential writes, “we are certainly all condemned to believe in freedom – and, in fact, condemned to believe that we know that we are free”).<sup>4</sup> On the opposite side, many philosophers who privilege the scientific image argue that the intuition of freedom is an illusion, although, perhaps, a useful one (in this spirit, one of these philosophers recently wrote, “Humanity is fortunately deceived on the free will issue, and this seems to be a condition of civilized morality and personal value”).<sup>5</sup> Finally, some authors defend a very pessimistic view about the possibility of harmonizing the ordinary image and the scientific image with regard to the free will issue:

It seems that the attempt to locate human agents in nature either fails in a manner that reflects a limitation on what science can tell us about ourselves, or else it succeeds at the expenses of undermining our cherished notion that we are free and autonomous agents.<sup>6</sup>

Considering that this issue generates such contrasting views, it is not surprising that the same definition of free will is debated. Until recently, for example, there was consent at least on the idea that free will required two conditions: i) the *self-control* of the agent, and ii) the *availability* to her of *alternative courses of actions* (which is known as “alternative possibilities condition”).<sup>7</sup> Now such consent is vanished. The reason is the objective difficulty of reconciling these

<sup>3</sup> For an alternative view, called “Liberal naturalism”, see M. DE CARO, D. MACARTHUR, *Naturalism in Question*, Harvard University Press, Cambridge (MA) 2004, M. DE CARO, D. MACARTHUR, *Naturalism and Normativity*, Columbia University Press, New York 2010, and M. DE CARO, D. MACARTHUR, *Liberal Naturalism*, Harvard University Press, Cambridge (MA) forthcoming.

<sup>4</sup> P. VAN INWAGEN, *An Essay on Free Will*, Oxford University Press, Oxford 1998, p. 172; see also P. VAN INWAGEN, *Thinking about Free Will*, Oxford University Press, Oxford 2017.

<sup>5</sup> S. SMILANSKY, *From Nature to Illusion*, «Proceedings of the Aristotelian Society», 101 (2001), p. 88.

<sup>6</sup> J. EARMAN, *Determinism in the Physical Science*, in M.H. SALMON, J. EARMAN, C. GLYMOUR, J. LENNOX, P. MACHAMER, J. MCGUIRE, J. NORTON, W. SALMON, K. SCHAFFNER (eds.), *Introduction to the Philosophy of Science*, Prentice Hall, Englewood Cliffs 1992, p. 262.

<sup>7</sup> For the connection between self-control and free will, see A. MELE, *Self-Deception Unmasked*, Princeton University Press, Princeton 2001.

two conditions – which conceptual analysis distills from the ordinary image – with the scientific image of the world. In this light, some scholars have begun to challenge the relevance of the alternative possibilities condition. It is very controversial, however, whether giving up this condition does justice to our intuition of freedom.<sup>8</sup>

At any rate, one can say that disagreement is almost ubiquitous in the discussion about free will. A partial list of hotly debated questions can easily give an idea of this predicament:

- What is the content of the idea of free will and is this idea internally consistent?<sup>9</sup>
- Does the idea of the freedom of the *will* make sense at all?<sup>10</sup>
- Is free will compatible with causal determinism and/or indeterminism?<sup>11</sup>
- Is there an essential connection between free will and moral responsibility?<sup>12</sup>
- Does free will have a structural relation with social and political freedom?<sup>13</sup>
- Do we actually enjoy free will and, if so, in what occasions?<sup>14</sup>
- Could we ever give up the idea that we have free will?<sup>15</sup>

This list shows that, in discussing the so-called free will issue, one actually deals with a cluster of different problems. The first five problems of the list

<sup>8</sup> D. DENNETT, *The Elbow Room*, MIT Press, Cambridge (MA) 1984.

<sup>9</sup> P. VAN INWAGEN, *The Mystery of Metaphysical Freedom*, in P. VAN INWAGEN, D. ZIMMERMAN (eds.), *Metaphysics: The Big Questions*, Blackwell, Oxford 1983; P. VAN INWAGEN, *Thinking about Free Will*, cit.; G. STRAWSON, *Freedom and Belief*, Oxford University Press, Oxford 1986.

<sup>10</sup> R. CHISHOLM, *Human Freedom and the Self*, The Lindley Lecture, Department of Philosophy, University of Kansas, Lawrence 1964; H. FRANKFURT, *Freedom of the Will and the Concept of a Person*, «Journal of Philosophy», 68 (1971), pp. 5-20; T. O'CONNOR, *Persons and Causes*, Oxford University Press, Oxford 2000; R. CLARKE, *Libertarian Accounts of Free Will*, Oxford University Press, Oxford 2003. According to G. Strawson: «Free will' is the conventional name of a topic that is best discussed without reference to the will», G. STRAWSON, *Free Will*, in E. CRAIG (ed.), *The Shorter Routledge Encyclopaedia of Philosophy*, Routledge, London 2005, p. 286.

<sup>11</sup> See M. DE CARO, *Il libero arbitrio. Un'introduzione*, Laterza, Roma-Bari 2004, chs. 2 and 3.

<sup>12</sup> P. F. STRAWSON, *Freedom and Resentment*, «Proceedings of the British Academy», 48 (1962), pp. 1-25; J. M. FISCHER, M. RAVIZZA, *Perspectives on Moral Responsibility*, Cornell University Press, Ithaca 1993.

<sup>13</sup> P. PETTIT, *A Theory of Freedom. From the Psychology to the Politics of Agency*, Oxford University Press, Oxford 2001.

<sup>14</sup> D. WEGNER, *The Illusion of Conscious Will*, MIT Press, Cambridge, MA 2002; A. MELE, *Free. Why Science Hasn't Disproved Free Will*, Oxford University Press, Oxford 2014.

<sup>15</sup> Recently, a number of authors have claimed that the belief in free will is illusory. The most serious claim of this kind come from philosophers, such as G. STRAWSON, *Freedom and Belief*, cit., S. SMILANSKY, *From Nature to Illusion*, cit., pp. 71-95, and especially D. PEREBOOM, *Living Without Free Will*, Cambridge University Press, Cambridge 2002, and D. PEREBOOM, *Free Will, Agency, and the Meaning of Life*, Oxford University Press, Oxford 2016. For some (weak) defences of this view on a purely scientific basis, see below.

seem intrinsically (or, at least, mostly) conceptual, whereas problems vi) and vii) seem also to have a distinct empirical dimension. This diversity suggests, therefore, that a division of labor between philosophy and science may be necessary – at least if one intends to approach the free will issue in all its facets.

However, many philosophers and scientists do not consider things this way, as we will see shortly.

## 2. A TAXONOMY OF FREE WILL THEORIES

Traditionally, the taxonomy of the theories of free will hinges on the basic distinction between *compatibilism* and *incompatibilism*. Compatibilist theories assert, and incompatibilist theories deny, the compatibility of free will with causal determinism. The incompatibilist family is, in turn, articulated in *libertarianism* (for which free will exists and can only be rooted in indeterminism) and *hard determinism* (for which, since determinism is true, there is no free will). However, for the issue that interests us here – what the respective contributions of philosophy and science in dealing with the free will issue are – it is useful to complement this classification with another, which was mentioned at the beginning of this article: the one that distinguishes between *scientific isolationism* (“Free will is a business of science alone”), *interactionism* (“Both science and philosophy have to deal with the free will issue”), and *philosophical isolationism* (“Free will is a business of philosophy alone”).

Most versions of *scientific isolationism* are forms of incompatibilism. This should be no surprise. Compatibilism on the contrary, is a highly sophisticated philosophical view that *requires* conceptual analysis in order to be developed; so, in general, it is not defended on a scientific basis alone. Then there are several forms of *interactionism*, according to which the free will problem can only be treated by a combination of philosophy and science. Most libertarian theories belong to this group, since in stating that we have free will, they argue that free will requires that certain indeterministic conditions are given. Therefore, whereas the dependence of free will on indeterminism can only be established by philosophical analysis, only scientific investigation can determine whether the required indeterministic conditions are real.<sup>16</sup> In addition, some versions of compatibilism belong to the interactionist group: these are sometimes called “supercompatibilist views” since they *require* determinism for free will to exist. Also in this case, there is work for both philosophy and science: the former has to show that free

<sup>16</sup> Different libertarian theories account differently for *when* and *where* the indeterministic phenomena on which freedom allegedly depends happen: see R. CLARKE, J. CAPES, *Incompatibilist (Non-deterministic) Theories of Free Will*, 2017, <https://plato.stanford.edu/entries/incompatibilism-theories/>.

will requires determinism, where the latter has to establish if determinism is true.<sup>17</sup>

Interactionism is, in my view, the most promising perspective in the free will debate. However, unsurprisingly, it is not easy to develop, due to the sheer difficulty of conjugating the results of conceptual analysis (which refine the notion of freedom proper of the ordinary image) with those of empirical research (which are encompassed in the scientific image).

Besides scientific isolationism and interactionism, there is philosophical isolationism. This comes in three versions. Two respectively try to prove a priori – i.e. through pure conceptual analysis – the correctness of libertarianism (see, for example, the Kantian tradition) and compatibilism (see, for example, the Humean tradition). The third is a skeptical view, according to which the concept of free will is contradictory and, therefore, there cannot be any free agent. All these views – however different in their specifics – deal with the free will problem in a way that leaves no room for any real empirical contribution.

In the rest of this article I will concentrate my analysis on scientific isolationism both because this view has arguably become, or is on the verge of becoming, the most common among non-philosophers and because, in my opinion, intellectually it is very insidious, in virtue of the prestige of many of its advocates.

### 3. SCIENTIFIC ISOLATIONISM

According to the scientific isolationist view, the free will problem is intrinsically empirical. Thus, *if* it can be solved, it can be solved by the empirical sciences alone (for example, by the neurosciences and/or by evolutionary psychology). In this light, from a strictly theoretical point of view, the problem of free will does not differ – except for its generality – from the problem of understanding what schizophrenia or autism are, and which agents are affected by them.

Many advocates of the scientific isolationist approach have a skeptic attitude about free will. As noted by Daniel Dennett, today such attitude is shared:

such heavyweight scientists as the neuroscientists Wolf Singer and Chris Frith, the psychologists Steven Pinker and Paul Bloom, the physicists Stephen Hawking and Albert Einstein, and the evolutionary biologists Jerry Coyne and (when he's not thinking carefully) Richard Dawkins.<sup>18</sup>

Paul Bloom for example writes:

<sup>17</sup> In general, determinism is a global thesis, about all events of all times. However, for people specifically interested in the free will issue, a *local* determinism that concerned the human world would be enough to give rise to the dreams of the compatibilists and to the nightmares of their opponents.

<sup>18</sup> D. DENNETT, *Reflections of FREE WILL. A Review by Daniel C. Dennett*, 2014, <https://www.samharris.org/blog/item/reflections-on-free-will>.

Most scientists and philosophers agree that [free will] is an illusion. Our actions are in fact literally predestined, determined by the laws of physics, the state of the universe, long before we were born, and, perhaps, by random events at the quantum level. We chose none of this, and so free will does not exist.<sup>19</sup>

In my view, the main cause of this form of skepticism is a strong, and very unfortunate, anti-philosophical attitude that has become common in the last years, in both academia and the general media. Think, for example, of the most famous living cosmologist, Stephen Hawking, who has frequently expressed in a straightforward way the idea that philosophy is dead. Analogously, another world-famous physicist, Freeman Dyson, offered a sort of manifesto of this strong anti-philosophical attitude, in a review published in 2012 in the *New York Review of Book*. Referring to the 20<sup>th</sup> and 21<sup>st</sup> century philosophers, he states that:

compared with the giants of the past, they are a sorry bunch of dwarfs. They are thinking deep thoughts and giving scholarly lectures to academic audiences, but hardly anybody in the world outside is listening. They are historically insignificant. At some time toward the end of the nineteenth century, philosophers faded from public life. Like the snark in Lewis Carroll's poem, they suddenly and silently vanished. So far as the general public was concerned, philosophers became invisible.<sup>20</sup>

It may come as a surprise to the recently appointed bunch of dwarfs that Dyson plainly ignores that during the 20<sup>th</sup> century there *have* been a few philosophers who actually had a strong influence on the public opinion, and so should be counted as giants, according to Dyson's definitions (here one can think of Bertrand Russell, Henry Bergson, Jean-Paul Sartre, Ludwig Wittgenstein, Martin Heidegger, Jürgen Habermas, Jacques Derrida, and John Rawls). In any case, if one only focuses at the last couple of decades, Dyson has a point, since it is undeniable that most recently philosophy has lost a good part of its intellectual credentials, above all in the United States, but more and more also elsewhere. Nowadays, a very little handful of philosophers still have audience in the non-academic world, and they do not belong to the youngest generation. If one takes a controversial, but still indicative, list of the 50 most famous living philosophers published in the website "The Best Schools",<sup>21</sup> one actually notices that, with very few exceptions (Habermas, Butler, Singer, Nussbaum, West, Dennett and, of course, the unstoppable Žižek), they are not known outside academic circles.

<sup>19</sup> P. BLOOM, *Free Will Does Not Exist. So What?*, *The Chronicle of Higher Education*, 2012, <http://www.chronicle.com/article/Paul-Bloom-Free-Will-Does-Not/131170>.

<sup>20</sup> F. DYSON, *What Can You Really Know?*, «New York Review of Books», November 8, 2012, Review of Tim Holt's *Why Does the World Exist? An Existential Detective Story*.

<sup>21</sup> <https://thebestschools.org/features/most-influential-living-philosophers/>

Philosophers themselves share part of the responsibility for the present delegitimation of their discipline. On the one side, sometimes continental thinkers have their voices still listened by the general public, but often at the price of an undesirable lowering of the standards of rigor. On the other side, very frequently analytic philosophers, locked in their ivory tower, keep discussing of very esoteric issues (such as the ontological status of impossibilia, the  $n^{\text{th}}$  version of the Frankfurt cases, or the thesis that subatomic particles may have consciousness), and manifest a total incapacity (or lack of will) to connect with the external world – and not only with the world outside academia, but also with the rest of the academic community!

However, besides the faults of its practitioners, the contemporary misfortune of philosophy can also be attributed to another cause – and a more important one, in my view. Taken in its best expressions, contemporary philosophy is difficult, much more difficult than in the past, and one has to study it very patiently, and not just when one intends to contribute to the advancement of the discipline, but also when one simply wants to understand what is going on in that field. Whoever tries to discuss philosophical issues, but is not adequately prepared, will unavoidably say things that at the eyes of well-trained philosophers will look shallow, irrelevant, embarrassingly naïve or plainly wrong.

This may appear a trivial statement, but unfortunately in these days it is far from being generally acknowledged. In fact, many scholars, especially old and glorious natural scientists – i.e. Dyson's giants – treat philosophy as a relic of the past, a discipline devoted to hair-splitting analyses, useless distinctions, and infinite caveats. As a consequence, Dyson's giants try to philosophize without any specific training, only on the basis of their common sense, high IQ, self-confidence, and, in the best cases, with the help of few amateurish quasi-philosophical readings.

This attitude, unsurprisingly, is hopelessly naïve. One cannot seriously talk, or even understand, philosophy without having studied it more than one can talk topology, Phoenician history or microbiology without having spent enough time and energy on the relevant textbooks. This obvious remark notwithstanding, a very dismissive view of philosophy is increasingly spreading, and its very doubtful results are under our eyes.<sup>22</sup>

I am not claiming, of course, that contemporary science raises a lot of legitimate and important epistemological, metaphysical, methodological, and ethical questions. In this regard, one can think of questions such as “What is a biological species?”, “Can quantum mechanics be given a deterministic in-

<sup>22</sup> There are, of course, some exceptions to that, i.e. scientists that patiently study the relevant philosophical literature before trying to answer philosophical questions: Lee Smolin, Patrick Haggard, Martha Farah, Carlo Rovelli, Vittorio Gallese and Amartya Sen are some examples of this virtuous attitude.

terpretation?”, “What is the epistemological value of string theory?”, “Is time an objective feature of the universe?”, “How should one study mental qualitative phenomena”, or “Should we put moral limits to genetic engineering?”. These are all important questions, which cannot be ignored: some of them are mostly of a philosophical interest; others are also very relevant for science itself. However, addressing these questions presuppose an adequate scientific and philosophical background, otherwise the results are unavoidably going to be laughable.

The conclusion of these premises is obvious. Today many leading scientists (especially in their later years) try to answer questions like the ones mentioned above – which are philosophical in nature – without being able to manage the tools that would be necessary to perform that task properly. Earlier I mentioned Hawking’s obituary about philosophy – a very unfortunate statement indeed, since his own books often discuss of philosophical issues (in naïve ways). As noted by Tim Crane, for example the ambitious book *The Grand Design*, written by Hawking together with Leonard Mlodinow:

contains a large amount of argument in defence of its own metaphysics (i.e. its theory of reality) and its philosophy of science. [The point of the book is] that the discipline of academic philosophy is dead because it “has not kept up with modern developments in science, particularly physics”. Unfortunately, much of the book’s own philosophical argument is of a very low standard, and shows a striking lack of reflection on the complexities of what is being claimed.<sup>23</sup>

The lack of philosophical preparation can explain why most of Dyson’s giants hurry to endorse the radical attitude mentioned above, according to which philosophical problems are pseudo-problems that merely refer to illusory phenomena. Of course, some of these phenomena may really be illusions: but in order to draw such a radical conclusion, one needs adequate argumentations that unfortunately our giants are not able to offer.

The above-mentioned gigantic Freeman Dyson offers an enlightening example of this simplistic illusionary approach to philosophy. In a video of 2011, Dyson explains how he thinks that the free will problem should be solved:

There is a certain kind of freedom that atoms have to jump around and they seem to choose entirely on their own without any input from the outside. So in a certain sense atoms have free will. That is, to my mind, probably connected with the fact that we have free will... It could be that [when we make a choice] we are actually using the freedom that quantum mechanics allows.<sup>24</sup>

<sup>23</sup> T. CRANE, *Philosophy, Science and the Value of Understanding*, 2015, [http://www.tim-crane.com/uploads/2/5/2/4/25243881/philosophy\\_science\\_and\\_understanding.pdf](http://www.tim-crane.com/uploads/2/5/2/4/25243881/philosophy_science_and_understanding.pdf).

<sup>24</sup> F. DYSON, *Could Atomic Science Explain Free Will*, 2011, <https://www.youtube.com/watch?v=-BEom5RbeuM>.



In this passage Dyson suggests the simplest solution to the venerable problem of free will – a problem “upon whose desperate and unconquerable theories so many fine heads have been turned and cracked”, as Laurence Sterne wisely put it in his *Tristram Shandy*. Too bad that, as it is well known, frequently simplicity comes to the price of sloppiness – or naiveté altogether.

As said earlier, this argument is wrong for several reasons, which are instructive to consider. First, it may be that determinism frustrates freedom. However, even if it does, this is not “obvious” at all (a proof of that, if attainable, would surely require remarkable intellectual sophistication, since it should prove the falsity of compatibilism – the most accredited positive view about free will). Furthermore, one should be very suspicious of bold statements such as that science has *proved* the truth of indeterminism (and so, indirectly, the existence of free will): in general, epistemology and history of science should indeed make us suspicious of claims concerning the alleged correctness of an empirical theory. But besides the obvious fact that no empirical theory can definitely be proven correct, there are some very respected interpretations of quantum mechanics (such as the Many-worlds and the Bohmian interpretations) that *are* deterministic in character.<sup>25</sup>

Moreover, it is very reasonable to think that, in any case, the indeterminism of the subatomic world would not suffice, in itself, to infer the existence of free will. In the first place, it is very controversial whether subatomic indeterminism has significant repercussions at the macroscopic level. It is true that Roger Penrose famously maintained that the mind has peculiar properties (including free will), since it can perform non-computable operations (allegedly, in virtue of the systems of microtubules that sustain large-scale quantum-coherent activity).<sup>26</sup> It is also true that Owen Flanagan reported, “There is work nowadays in chaos and complexity theories and in self-organizing dynamical systems theory that suggests that the human nervous system operates, at least sometimes, in ontologically indeterministic ways”.<sup>27</sup>

Nevertheless, the majority view seems to be that the workings of the cerebral mechanisms are deterministic or at most “quasi-deterministic” (in a sense, close enough to ideal determinism that, in discussing the free will issue, one can ignore the “quasi” prefix). On this basis some even claim that the same

<sup>25</sup> J. ISMAEL, *Quantum Mechanics*, *Stanford Encyclopedia of Philosophy*, 2015. <https://plato.stanford.edu/entries/qm/>.

<sup>26</sup> R. PENROSE, *Emperors New Mind*, Oxford University Press, Oxford 1989.

<sup>27</sup> O. FLANAGAN, *The Problem of the Soul. Two Visions of Mind and How to Reconcile Them*, Basic Books, New York 2002, p. 121. However, more prudently, Flanagan also adds that the indeterminism of the brain processes, instead of being ontologically based, may indeed depend on our cognitive limitations.

idea that our conscious will is in charge of our acting is illusory.<sup>28</sup> Moreover, the deterministic thesis is frequently conjunct with two other very common claims: that causal relations hold between events and that actions are events. From this conjunction, many infer that deterministic, or quasi-deterministic, laws back the causation of actions.<sup>29</sup> Summarizing: if determinism really represents a menace for free will, then we still have any reason to keep worrying, notwithstanding Freeman Dyson convictions.

Something more, however, has to be said this regard. As a matter of fact, a *purely conceptual* argument shows that, even if we were able to ascertain (as convincingly as possible) that indeterminism is relevant in the production of actions, our freedom would still be far from be proven. The idea is that in case our actions were generated in a purely indeterministic way, they would happen at random (or stochastically); and, as David Hume already noticed, randomness is the opposite of freedom – or, at least, of the freedom we care about (nobody would seriously think that a randomly generated action may be “free”! Let action may be “free”!). Let us look at this argument more closely, then.

If an action *a* is performed by the agent *A* without being deterministically caused, then in the causal chain of events that precedes the performance of *a*, there has to be at least one moment *t*, in which no specific future course of action is necessitated (i.e., it is not *determined* which of these courses of action will be actualized). So, at *t*, besides *a*, some other course of action had to be physically realizable—that is to say, that if, after the action is performed, time went backward to *t*, a different course of action might originate from exactly the same circumstances; or, to put it differently, if in another possible world *W\**, identical to our world until *t*, the action were performed by *A\** – *A*'s Doppelgänger –, that action could be different from the one performed by *A*. But this means that, in those circumstances, nothing and nobody could make any difference in producing the course of action that ends in the performance of *a* *instead of* the other potential actions. This means that *A* was not able to *control* the actual production of the action *a*; and without control by the agents, there are no free actions, but only mere accidents. Thus we have seen that indeterminism – far from automatically generating freedom – *by itself* only produces randomness.

The obvious moral of this story is that the scientific giants shouldn't ignore the philosophical dwarfs – at least when they deal with philosophical

<sup>28</sup> B. LIBET, *Do We Have Free Will?*, «Journal of Consciousness Studies», 6 (2002), pp. 47-57, argue in this sense by yielding experimental evidence; but see A. MELE, *Why Science Hasn't Disproved Free Will*, cit.

<sup>29</sup> This view is famously advocated by Davidson: D. DAVIDSON, *Mental Events*, reprinted in *Essays on Actions and Events*, Oxford University Press, Oxford 1970, pp. 207-227.

problems. There are no free rides in dealing with the free will problem – not even for the greatest scientists. In tackling with this issue science *has* to ride together with philosophy.

*ABSTRACT: The most common taxonomy of free will theories of free will hinges on the distinction between compatibilism and incompatibilism, which respectively assert and deny the compatibility of free will with causal determinism. This is a useful distinction, but it does not throw light on a fundamental aspect of the debate, regarding how the different views conceive of the role that philosophy and science should play in tackling with the free will issue. In this perspective, another taxonomy will be presented and three families of theories will be distinguished: scientific isolationism (“Free will is a business of science alone”), interactionism (“Both science and philosophy have to deal with the free will issue”), and philosophical isolationism (“Free will is a business of philosophy alone”). In conclusion, it will be argued that interactionism is the right approach.*

**KEYWORDS:** *Free will, science and philosophy, scientific isolationism.*