



UNIVERSITY OF LEEDS

This is a repository copy of *Libertarianism as a Naturalistic Position*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/85635/>

Version: Accepted Version

---

**Book Section:**

Steward, HC orcid.org/0000-0003-1654-577X (2016) *Libertarianism as a Naturalistic Position*. In: Timpe, K and Speak, D, (eds.) *Free Will and Theism: Connections, Contingencies and Concerns*. Oxford University Press , Oxford . ISBN 9780198743958

<https://doi.org/10.1093/acprof:oso/9780198743958.003.0010>

---

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

## **Libertarianism as a Naturalistic Position**

Helen Steward

There is a rather thinly-veiled suspicion amongst some compatibilists that libertarians are able to embrace their claims about the nature of the human will only in virtue of a general readiness to suppose that human beings occupy a very special place within the order of nature. This readiness, they imagine, is borne of an assumption that many of those compatibilists eschew – the assumption that the universe is theistic and that an omniscient and benevolent god has provided for human beings to be specially positioned within it.

Though the world might conceivably be indeterministic, these compatibilists believe, there is no scientifically acceptable ground for supposing that the indeterminism involved might be of such a kind as to provide for anything like freedom of the will – and they are therefore wary and mistrustful of the libertarian's willingness to accept that the will itself might be the locus (at least on some occasions) of an indeterministic form of operation. To accept this, without taking oneself to have other grounds for embracing the idea that the powers of human beings need not be rooted in ordinary sorts of physics and metaphysics, seems to them wildly unmotivated; it is therefore inferred that probably, their libertarian opponents do believe themselves to have such other grounds. But I am both a libertarian and an atheist. In this paper, therefore, I want to try to defend libertarianism against the charge that it flies in the face of what we know or are justified in believing about the order of nature – and indeed, try

to make out the beginnings of a case for the view that libertarianism should, on the contrary, be regarded as the position of choice for those who take their science seriously.

Libertarianism is generally explained in introductory volumes as a multiply conjunctive doctrine – and I propose to consider some possible forms of objection to its naturalistic credentials in an order suggested by this conjunctive form. The first of its two main conjuncts is incompatibilism, which alleges incompatibility between determinism and something that for now, in deference to the tradition, I will simply call ‘free will’. I do not intend, in this paper, to examine the arguments for incompatibilism, nor the various critiques to which they have been subject<sup>1</sup>; I want rather to focus here on a particular feature of the incompatibilist’s claim, viz. that it is a claim about whether free will is incompatible with determinism, where free will is thought of as a property possessed only (at any rate in its earthly manifestations) by human beings. This represents, in my view, the traditional incompatibilist’s seminal error, and is the main obstacle to the construction of a plausible naturalistic version of libertarianism, as I shall shortly explain.

The second main conjunct of the libertarian position is itself conjunctive. It is generally represented as a belief about what response should be adopted to the incompatibilism expressed by the first main conjunct; the libertarian reacts to the incompatibility she discerns

---

<sup>1</sup> I do so in considerably more detail in Steward 2012.

between free will and determinism, it is said, by asserting that (i) we do indeed have free will and (ii) that (therefore) determinism must be false. Some worries about whether or not a libertarian position can properly respect naturalism unsurprisingly centre on whether (ii) can be safely upheld; I shall turn shortly to consider what some of those worries might be. But another kind of worry about this second main conjunct is really a worry not so much about (ii) itself - for many critics of libertarianism are perfectly ready to accept that determinism is false, shown to be so by our best physics - as about the implied methodology of the libertarian. As that doctrine is standardly presented, the libertarian derives her commitment to indeterminism simply from her belief in human free will together with her argument, or arguments, for incompatibilism. Methodologically speaking, therefore, it can look as if she is inclined to privilege a prioristic argumentation and whatever it is that is thought to ground her belief in free will ('intuition'? introspective deliverance? religious conviction?) over the findings of science. No matter for the libertarian if it should turn out that our best science supports a deterministic view of the Universe. Our best science must give way before the joint verdict of philosophy and some specific variety of gut feeling.<sup>2</sup> But science, it may be

---

<sup>2</sup> For a brief selection from the very many remarks which suggest that the libertarian's belief in free will is based on a feeling derived from introspective experience, see, e.g., Schrödinger 1967 who asserts that determinism 'is deemed to contradict Free Will as warranted by direct introspection' (86); Searle 1984, who asks his readers to 'reflect very carefully on the character of the experiences you have as you engage in normal, everyday human actions' and

pointed out, has given us many reasons to distrust our ‘intuitions’ and the so-called deliverances of experience.<sup>3</sup> Why then here, in the case of free will, should the libertarian be permitted to parade hers before us, alleging that in the light of those intuitions, together with certain incompatibilist arguments, we are justified in taking a certain position on what many take to be a purely scientific question – the question whether or not determinism is true? Even those who accept the power of the intuitions favouring our possession of free will or moral responsibility are often disinclined to think that these intuitions should have any weight when it comes to empirical matters – and therefore the incompatibilist’s arguments themselves are brought into question, on the grounds (roughly) that it ought not to be possible to show by a

---

adds, ‘You will sense the possibility of alternative courses of action built into these experiences . . . that we could be doing something else right here and now, that is, all other conditions remaining the same. This, I submit, is the source of our own unshakable conviction of our own free will’ (95); and Wegner 2002, who supposes that the source of the belief in free will is what he regards as the illusory but powerful ‘experience of conscious will’ (3).

<sup>3</sup> One might mention, for example, the research which seems to have shown that we are frequently mistaken in the accounts we are inclined to give of our own motivations (see, e.g., Nisbett and Wilson 1977); of the nature of the content of our own sensory perceptions (see, e.g., Dennett 1991 and Schwitzgebel 2008); or of the reasons for which we hold our most firmly entrenched beliefs (see, e.g., Kunda 1990 on motivated reasoning).

priori means that determinism is false.<sup>4</sup> For compatibilism is obviously the easier position to make square with whatever should turn out to be the scientific truth about determinism.

In what follows, I want to try to show that the objections to libertarianism which I have outlined above can be met. But in order to meet them, I believe, we must formulate libertarianism in non-traditional ways and offer new, distinctive styles of argument for its claims. I shall argue here that at least three things are absolutely necessary if libertarianism is to be properly formulated as a plausible naturalistic position. The first thing that needs to happen is that animals should enter the picture – for we humans are animals, and any plausible metaphysical account of our freedoms needs to root itself in a plausible metaphysical account of the agency of animals. If animals are missing from the libertarian story, suspicions that the libertarian embraces an objectionable form of human exceptionalism are quite likely to be warranted. Second, an appreciation of how physics has evolved in recent years will be required. Many philosophers operate contentedly with what amounts to an understanding of physics garnered from ‘A’ Level, twelfth grade, or their international equivalents, whose Newtonian simplifications are simply not up to the job of understanding the position of biological entities within the physical universe. The physics we

---

<sup>4</sup> Some of Fischer’s arguments for the position he calls ‘semi-compatibilism’ (Fischer 1994 and 2006; Fischer and Ravizza 1998) take this form; our belief in moral responsibility, Fischer argues, ought not to be falsifiable by the ‘men in white coats’ whom he imagines might one day prove that determinism is true.

need is the theory of open systems – that is to say, systems which continuously interact with their environment and whose ‘borders’ are permeable both to energy and to mass. It has been traditional for those seeking to understand what science has to tell us about the question of determinism to look to quantum mechanics for potential refutations, and there is quite a lot of literature concerned with the question whether quantum level indeterminacy could somehow get magnified in such a way as to give rise to the possibility of free will ‘at the macro level’.<sup>5</sup> But this, I shall argue, is the wrong place to look for scientific refutations of determinism which might bear on the free will problem. The right place to look is to the area now known as biophysics, and in particular to the Second Law of Thermodynamics (which tells us that the entropy (state of disorderedness) of an isolated system never decreases), and the account of the physics of biological objects which it suggests. And third, we need a better appreciation of the nature of the ‘intuitions’ about free will on the basis of which the libertarian is sometimes accused of operating so unguardedly. It is, I shall argue, utterly unacceptable to treat all the convictions which we might bring to a debate in advance as equally dispensable in the light of scientific findings. There are some beliefs in the light of whose denial we cannot so much as make sense of the idea of a scientific finding, nor indeed of anything at all. The belief in free will, properly understood, I shall argue, like other foundational beliefs, such as belief in the mind-independent external world, and belief in

---

<sup>5</sup> See in particular Kane 1998.

other minds, is one of these – and it should not be discarded as a valueless ‘intuition’, at the potential mercy of the progress of science.

### **Libertarianism and animals**

As just outlined, libertarianism entails incompatibilism – which is usually characterised as the belief that determinism is incompatible with free will. But what is ‘free will’? And which beings may sensibly be supposed to have it? One can, of course, characterise free will in such a way that it would be silly – or at least, controversial - to suppose that it could be the possession of any non-human animal – and indeed, free will often is thus characterised. Some definitions speak of free will, for instance, as the possession of ‘rational agents’<sup>6</sup> – and of course there are many who would deny to animals that title. Others incorporate reference to ‘choices’ or ‘decisions’, perhaps even to ‘deliberation’, and again, it might reasonably be doubted whether any of these concepts has clear application to any non-human animal. I do not in fact share these doubts – but I think it would be unfortunate if animals were excluded from consideration in the free will debate simply because it had been assumed that they lacked certain capacities essential to the definition of ‘free will’. For my own view is that we do not need to settle these difficult issues about whether concepts like rationality and choice are applicable outside the human domain in order to see that non-human animals are relevant

---

<sup>6</sup> See, e.g., O’Connor 2013.



to the issues surrounding the truth, or otherwise, of determinism. We do not need to settle them, because the thing which is most basically and interestingly in potential conflict with determinism, it seems to me, is not choice, or decision, or decision based upon deliberation, or upon reason. The thing which is most basically in potential conflict with determinism is agency itself, a power which, I venture to assert, all animals above a certain minimal level of complexity certainly possess. I call this view Agency Incompatibilism.<sup>7</sup> What do I mean by agency? Agency is the power to act, a power which can be possessed only by certain sorts of being. Tables and chairs, for instance, cannot act – though they can certainly be involved in interactions. Amongst inanimate entities, there are, of course, things which might look like better candidates for agency than chairs and tables – things such as the sea, for instance, or corrosive acids, things which are themselves in motion, and/or which we conceptualise as initiators of movement and change in the bodies with which they come into contact. But even if these entities are agents in one admissible sense of that word<sup>8</sup>, they do not truly act, in the sense in which I am interested; for nothing is ever up to them – it is not up to the sea (or to

---

<sup>7</sup> Steward 2012.

<sup>8</sup> Since it may be conceded that the concept of an agent has different senses, the insistence of those, such as Alvarez and Hyman 1998, that there are many inanimate agents in nature can be regarded as perfectly compatible with my insistence that there is an important concept of agency such that only animate beings (and things conceived of as crucially like them – deities, angels, androids, etc...) possess it.

the water it contains) whether to crash on the rocks, not up to the acid whether to dissolve the metal on which it has been poured. Such things are simply participants in scenarios whose unfolding is either determined by physical or chemical laws, or by a combination of such laws with what may notionally be regarded as the contribution of chance.<sup>9</sup> But some entities are such that they spontaneously initiate changes in the world which we unhesitatingly ascribe to those very entities, so that they are regarded as providing both the initial source of impetus and continuing guidance and direction for the processes thereby initiated – and so far as these entities are concerned, we regard the resultant processes as their doing. What happens during these processes, and perhaps also in consequence of them, is (we say) up to them at the time of action, in at least some respects.

Philosophers in recent years have tended to suppose that when a result is ascribed to an agent in this special way, it is the fact that the result is causally brought about by specifically mental states of the agent – for example, prior desires or intentions - which makes it right to say that the result was ‘up to’ the agent. But I argued extensively that this is not in fact the case,<sup>10</sup> as can be seen by the many instances in which it appears tremendously difficult to find an unambiguously mental precursor to something which is, however, unambiguously an

---

<sup>9</sup> Only notionally. For chance is merely the absence of determination and is not itself any kind of positive force – so of course strictly and literally, it makes no ‘contribution’.

<sup>10</sup> Steward 2012.

action. Sub-intentional actions (for example, stroking one's chin while thinking, twirling the end of a piece of hair, fiddling with one's jewellery, etc...) are interesting examples of this phenomenon – cases in which we do things actively (twirl our hair, stroke our chins) without having chosen or decided or wanted to do so, without having had reason to do so, and certainly without having deliberated about whether to engage in the activity in advance. And in the case of animals, I should argue that we know more certainly that they are, in the special active way, sources of the voluntary movements of their own bodies, than that they are beings which make conscious choices and decisions, exercise rationality or deliberate. Perhaps they do also possess some or all of these further properties – but that is a separate question, in my view. The crucial point is that none of these further properties can be sensibly attributed to anything which is not conceptualised as an agent in the first place – something which has the capacity to move and control its own body in various ways, as we say, 'at will'. Of course, in most cases it will be clear that such movements are undertaken with some end in view and hence on the basis of such things as perceptions and desires, which might indeed then be regarded as the mental causes of the movements in question.<sup>11</sup> But mental causation is in my view not essential to agency, even if it is the norm.<sup>12</sup> Possession of distinctively agential

---

<sup>11</sup> Or at least may be so regarded, provided care is taken with the implications of this claim – see Steward 1997 for reflections on the dangers inherent in supposing that states are causes.

<sup>12</sup> Unless, of course, agency is regarded as itself an instance of mental causation, by definition, as it were.

powers is a basic condition of mental attribution – not something which can itself be analysed in terms of mentality.

When can a power be judged to be distinctively agential? In my view, the (roughly) correct answer to this question is that agential powers are such as to be essentially two-way powers, powers to  $\emptyset$  or not to  $\emptyset$ . One does not exercise an agential power in  $\emptyset$ -ing, on this view, unless there is at least some description of that  $\emptyset$ -ing (as a  $\psi$ -ing, say) such that even as one  $\psi$ s, it is true that one could have refrained from  $\psi$ -ing (where this means simply: could have not  $\psi$ -ed).<sup>13</sup> This is what is key to agency – this is the feature to which it owes much of its metaphysical importance and interest. And note that although the power to choose and the power to decide are both two-way powers, simpler powers of self-movement and self-change may also qualify. In moving voluntarily, I move in such a way that even as I move, and even if I could not have refrained from moving, I could, at any rate, have refrained from moving in

---

<sup>13</sup> Note: this is a significantly weaker claim than the claim that one does not exert an agential power in  $\emptyset$ -ing unless one could have done other than  $\emptyset$ ; and also significantly weaker than the claim that one does not exert an agential power in  $\emptyset$ -ing unless one could have refrained from  $\emptyset$ -ing. It allows, that is, for the possibility that an action of a certain type might take place in a certain circumstance such that in that circumstance there is no possibility than an action of that type not occur. The claim is only that if the action really is an action, then at least certain of its features must be left to be settled by the agent as the action occurs.

the very way I do, at the very speed, in the very direction, etc., in which I in fact go. I could have moved differently, or perhaps not moved at all. And this, of course, is the feature of agency which at least potentially brings it into conflict with the doctrine of determinism. For arguably, two-way powers are hard to make sense of under determinism. Moreover, one standard compatibilist way of attempting to accommodate them is blocked if agency does not necessarily involve prior desires, intentions, and the like. The standard compatibilist suggestion of which I am thinking is the idea that for an agent to have a two-way power, at  $t$ , to  $\phi$  or not to  $\phi$ , is for it to be the case that she will  $\phi$  if she wants/chooses/intends to do so – and equally, will refrain from  $\phi$ -ing if she does not want/choose/intend to do so. But if an agent can act without wanting, choosing or intending to do so (as in the sub-intentional case, and arguably in many cases of simple voluntary animal movement), this analysis is bound to offer an unsatisfactory account of the power in question.

Once incompatibilism is reconceived along the lines I suggest as a doctrine about the incompatibility not only of human voluntary choice and decision with determinism, but rather about the incompatibility of animal agency with determinism, it becomes immediately easier to see how it might be put on a more solidly naturalistic footing. If incompatibilism is a doctrine only about human beings and their distinctive powers, the incompatibilist is bound to be vulnerable to the charge of special pleading on behalf of humanity, special pleading which might need, potentially, to be underwritten by something like a theological perspective. But if

it is a doctrine, rather, about how we must think about causality and the evolution of reality over time in a world in which animals and their distinctive powers of self-direction are present, it immediately takes on a more hopefully naturalistic cast.

### **Libertarianism and physics**

Worries about the second main conjunct of libertarianism generally take one of two different forms. In its first form, the one I shall consider in this section, the worry is that in spite of the often-made claim that indeterminism is one of the presuppositions of modern physics, determinism remains the view which has the greater naturalistic respectability at what are conceived of as the ‘levels’ relevant to human action and choice.<sup>14</sup>

For what it is worth, it seems to me true, as many compatibilists have observed, that the mere truth of microphysical indeterminism provides little comfort, in and of itself, for the libertarian. Her implied claim is not normally merely that indeterminism is true, but more than this, that the occurrences in which she is especially interested – initiations of actions, the making of choices and decisions, etc. – do not follow with deterministic inevitability from what has gone before – and these are precisely not microscopic occurrences, but the sorts of relatively large events (e.g., at the very least, events describable in neural terms) where one

---

<sup>14</sup> See, for example, Honderich 1988, Weatherford 1991, and Loewer 1996.

might reasonably expect any indeterminacy occurring at the quantum level to be negligible. Moreover, these occurrences, even if it can be shown that they are indeterministic need not merely to be random – most libertarians suppose that they need, in addition, to be truly attributable to their agents in such a way that those agents might conceivably (were other circumstances conducive) be held morally responsible for them. Mere indeterminism at the level e.g. of quantum mechanics is evidently not enough. If the world remains pretty-much fully deterministic at levels higher than that of quantum phenomena, it is not indeterministic in the way required by the libertarian – and moreover, even if it does not, we need to be shown why the indeterminism which is embraced does not simply amount to the injection of sheer randomness into the causal chains that generate action. For randomness seems quite unable to provide us with anything that might enhance our capacities, or make it evident that we can truly possess the sorts of alternative possibilities that determinism might have seemed to deny to us.

In the light of this prognosis, it is utterly crucial to recognise that quantum mechanics is not the only part of physics that represents a challenge to the universal reign of determinism. What needs to be recognised is that there is simply no endorsement by physics even of determinism at macrophysical levels. The things which are said to be deterministic in physics are various sorts of closed systems – these, unfortunately, are the ones that populate the syllabi of A level (12<sup>th</sup> grade) physics and mathematics courses, and so which help spawn

many philosophical visions of the Universe as it is supposed to be said, by physicists, to exist.<sup>15</sup> These systems are such that knowing the state of the system (as expressed by the values of a range of variables) at a given time enables one to calculate the state of that same system at any other time – either future or past (again, as expressed by the values of those same variables). But all this is possible only under the assumption that the system is closed – i.e., roughly speaking, that nothing interferes, that there is no loss (or gain) to the system of energy and mass. The systems described are ideal and portions of reality are correctly described by the relevant deterministic laws only ceteris paribus.

When I make this point, occasionally, to philosophers, they are often inclined to say: ‘Well, yes – but the real-world interferences with these (otherwise) deterministic systems are themselves due to factors which have their own deterministic causes, so the whole system (original system plus interfering system) remains deterministic overall’. I cannot prove such philosophers wrong - it is notoriously difficult (perhaps impossible?) to prove the absence of

---

<sup>15</sup> A little knowledge is a dangerous thing. In case anyone should doubt the power of these elegant and appealing Newtonian laws to warp the mind, let me report anecdotally that I was once informed politely but with complete confidence by a PhD student of mine that the view for which I had recently argued in my paper ‘Fresh Starts’ could not possibly be correct since it contravened the principle of Conservation of Momentum. But of course that principle applies only to closed systems, not to any naturally occurring, unisolated portion of reality.



a deterministic cause in any given case. But I can point out that, in saying this, these philosophers go well beyond any conclusion which is sanctioned by physics – and merely state their own metaphysical predispositions, for which they are not entitled to claim any particular endorsement by science. Indeed, in so far as modern macroscopic physics can be said to imply any kind of verdict on the question whether determinism is true, it seems to me that the best-supported answer is in the negative.

The physics which seems to me to bear most interestingly on the question whether libertarianism might be formulable as a naturalistic position is the physics of non-equilibrium thermodynamics.<sup>16</sup> Non-equilibrium thermodynamics is the physics of non-equilibrium systems – that is to say, of systems such as animals! – which are constantly changing over time and are continuously exchanging energy and matter with their environments. It is not so much that this physics itself entails an indeterministic metaphysics (although as a matter of fact that does indeed seem to be how Prigogine interprets it). It is rather that the need for the whole subject of irreversible thermodynamics as a crucial branch of physics constitutes a huge step away from classical deterministic paradigms; and provides, it seems to me, a much better prospect of understanding how indeterminism at the macroscopic level might conceivably be accommodated by the developing physical sciences. Some sorts of entities,

---

<sup>16</sup> I have in mind particularly that developed by the Nobel Laureate Ilya Prigogine 1961, 1980, 1996; Prigogine and Nicolis 1977; and Prigogine and Stengers 1984.

this physics recognises, are essentially open systems, involved in relationships of exchange of energy and mass with their surroundings. And animals constitute a very interesting subset of the class of open systems. Their fate is not decided merely by their present state together with Newtonian-style laws of motion. Their fate (in detailed respects) is decided by the nature of the work which they must do in order to prevent the loss of energy and mass that the Second Law of Thermodynamics<sup>17</sup> would otherwise predict they must suffer. Their continuation as systems can be maintained only by their own efforts – they must eat in order to replenish the energy that they must spend in order to maintain themselves as systems, and the direction in which it will be on any given occasion most profitable to expend their effort may be a complex matter, an equation insoluble on an animal's present knowledge by any simple calculation, and constantly in need of updating in the light of changing environmental circumstances. There is no a priori reason to suppose that deterministic mechanisms must be the best evolutionary solution to the question how such a system might go about the business of deciding where, when, and how best to expend these efforts. Of course, there is no a priori reason either for supposing that such systems might not operate deterministically. The physics, in and of itself, seems to leave open both possibilities.

---

<sup>17</sup> The Second Law of Thermodynamics states that the entropy of an isolated system never decreases. Animals, of course, are not isolated systems – but the Second Law imposes on them the need to exploit environmental resources (and to work to obtain them) if they are to maintain themselves.

Note that I do not suggest, then, that the physics of dissipative structures is enough to show that it is not determined by antecedent factors how animal entities will move and change in their environments. But it is enough to show that the determinist may not allege without a good deal of further argument that macroscopic physics in any way supports a deterministic view. My own view is that universal determinism (and indeed its denial) are metaphysical positions — and that physics alone is most unlikely ever to settle the issue. Believing in universal determinism on the basis of believing in universal physical determinism requires, for a start, that one take a position on the not insignificant question whether the evolution of reality over time depends only on the evolution of physical reality – and hence on the question whether there is any irreducibly downward causation. But the view that downward causation is impossible is a metaphysical view, not something to which physicists are inescapably committed by physics itself. In short, to assume that macroscopic physics is deterministic is simply to beg the question unpardonably against the indeterminist. The Newtonian science of pendulums and projectiles is simply not adequate for understanding our own place in the Universe; and a range of other more relevant-seeming physical theories might seem to suggest that there is, if anything, a presumption in favour of the view that the physical universe is indeterministic.

The worry that indeterminism simply introduces randomness into the Universe, and that randomness is no better – and might even be worse – for freedom than universal determinism, is a more serious worry for the libertarian, and requires far more work to allay it than I am able to undertake during the course of a short article like this. I do believe, however, that there is a credible and respectable response to the worry. The answer, as many agent causationists have already argued, lies with rejecting the metaphysics of causation which gives rise to the ‘determined or random’ dichotomy – a metaphysics in which events are thought of as produced by vast conjunctions of prior circumstances which either necessitate what follows (which is therefore then ‘determined’) or which are related only probabilistically to what follows (which is therefore then ‘random’, to at least some degree). What must be recognised if we are ever to escape this dichotomy is that it is not circumstances which produce events – but the things, bodies, substances and particles which are placed within them. It is entities, not facts, that are the true producers in our world.<sup>18</sup> Some of these producers may of course indeed be such that there is no possibility of their producing more than one result, given the circumstances in which they are placed on a given occasion. But it is possible and natural to think that other producers – in particular, the higher

---

<sup>18</sup> This need not prevent the recognition that facts are worthy relata of relationships of causal relevance, causal mattering, etc. What is crucial is to distinguish causal production from causal mattering and not to get two entirely different types of relationship with entirely different types of relata mixed up. See Steward 1997, chs. 5-7; and Steward 2011.

animals – have multiple futures at their command. Reasons, preferences, and the like will narrow down, but not reduce to one, the options that are available to such producers as these – and hence the outcomes that result from their activities are not determined. But neither are they random, in the sense that troubles us when we worry about indeterminism. For even when nothing in particular dictates that an animal will take one specific course of action over another, the actual course taken will still have been up to the animal, and will consist, because it is indeed a course of action, of a route through the world which it has dictated by means of an exercise of active power (though one which it may not necessarily have chosen or decided upon). I have attempted to develop the needed metaphysics of causation elsewhere;<sup>19</sup> in effect, it constitutes a plea for a return to a less Humean and more Aristotelian way of thinking about causation in which substances and their powers resume a central role, and events and circumstances are displaced from their currently central position in the ontology of causation.

Someone might worry, though, that even if it cannot be asserted that physics positively favours the view that the universe is deterministic at macroscopic levels, it surely cannot be ruled out, either. And in conjunction with the admission of this possibility, the claim that agency itself (rather than some allegedly ‘free’ and human-specific variant of it) is incompatible with determinism, has a consequence that might be thought unpalatable. It

---

<sup>19</sup> Steward 2012.

would seem to follow from this claim (i.e., from Agency Incompatibilism), that if determinism were to turn out to be true, we would thereby have discovered that there was no such thing as agency at all. Indeed, that would follow – and so if it were to turn out that we were one day offered a serious scientific case that the world is deterministic, I would immediately concede that Agency Incompatibilism is mistaken, and apologise for any confusion caused. But it does not follow that it would be right to reject Agency Incompatibilism now. For I am as committed (indeed, probably more committed) to the view that the world is indeterministic as I am to the view that determinism and agency are incompatible. I therefore do not regard determinism and indeterminism as equal contenders in a battle to which purely empirical science holds the key. I regard them, on the contrary, as deeply unequal contenders in a battle to which general metaphysical reflection of a distinctively philosophical sort holds the key – and on the basis of that general metaphysical reflection, I would be completely astounded if physics ever came up with the said scientific evidence (although of course anything is possible). Determinism is, on my view, not a respectable scientific possibility, but a philosophers' mirage, a position about as likely to be true as the possibility that I am a brain in a vat. And in that context, the accusation that Agency Incompatibilism dangerously opens us up to the possibility that agency simply does not exist, has about as much power as the accusation that someone who thinks that truths about chairs and tables imply the existence of the external world dangerously opens us up to the possibility that chairs and tables do not exist (in view of the possibility that the external

world might turn out to be non-existent). The Berkeleian move to idealism merely to protect the existence of everyday objects against the latter possibility is widely thought to be a philosophical mistake.<sup>20</sup> The rejection of our common-sense conception of agency as a power by means of which we settle at the time of action at least some of what then occurs would, on my view, be a similar over-reaction to the bare possibility that determinism might turn out to be true. Until such time as we have good reason to think that the universe really is deterministic, we should hang on to that common-sense conception.

### **Libertarianism and methodology**

The final kind of worry I wish to consider in this paper also relates to the second main conjunct of libertarianism. It is, as I mentioned earlier, a methodological anxiety about the libertarian's presumed mode of philosophising, rather than a concern about the content of the conjunct itself. The libertarian is frequently portrayed by certain sorts of opponents (often hard determinists, or others who deny the existence of free will) as a philosopher who has got carried away by her own introspective deliverances. It seems to her as though she is able to do this or that, to choose, to be in charge of her own destiny! But it is carefully and obligingly (dare I say, even patronisingly?) pointed out that appearances may be deceptive! Has it

---

<sup>20</sup> I do not mean to suggest that Berkeley himself had no other motivations for idealism – though I think this was certainly one of the.

occurred to her that perhaps we only seem to choose freely? Perhaps the phenomenology of free agency is only that – phenomenology. There are many other cases, after all, in which our dogged avowals of certainty about this or that have had to give way before the progress of various kinds of science. We are constantly wrong about our motivations, about the content of our perceptions, about what it is that we believe, and why. Why should we not also be wrong about whether or not we have free will? And even supposing we were not wrong about this, a gut conviction would surely be a flimsy basis on which to attempt to topple a theory which surely must await the final verdict of scientists for its confirmation or disproof.

I think it is essential for the libertarian to be clear at this point that her evidence for agency is not primarily ‘introspective’. It is based at least as much on what she is inclined to think on the basis of third-person observation, as on first-personal interrogations of her own experience; indeed, it is not essentially first-personal evidence at all. It is a philosophical observation about how human beings (in general) tend to think of the reality they confront and the types of entity contained within it. The view that there are persons (and other animal beings) who have the power to settle whether things will go one way or another seems to me to be part of what might be called ‘common sense metaphysics’, as basic to our conception of reality as the idea that that reality is mind-independent, and contains beings that, like ourselves, are conscious possessors of experience and thinkers of thoughts. Those who urge the findings of science against our introspectively formed opinions and brute ‘intuitions’ tend



not to include such basic tenets as the existence of the external world as part of the content of the untrustworthy opinions and intuitions on which science may eventually come to cast doubt. Why not? One reason is surely that the very science which has threatened so many of our 'intuitive' beliefs with hard empirical data would itself be threatened were we to begin to doubt such things as the existence of mind-independent reality and other minds. It is plausible that there can be no threat from science to beliefs which are as much part of the very foundation of that particular part of human knowledge as they are the foundation of our lives in general – and hence, even if those beliefs are not provable, as I am inclined to think we must concede they are not, it is peculiarly useless to doubt them.

The questioning of the basic idea that there are agents in the world such that certain results in the world are up to those agents seems to me just as fruitless as the questioning of these other beliefs is often said to be. In some ways, indeed, the belief in 'free will', as I prefer to understand it, and have argued that it should be understood, just is a (slightly less contentious) version of the belief that there are other minds – for it must be less contentious, surely, that there are agents, than that it is that there are agents who think and feel. The belief in agency can be argued to be a fundamental principle, without presupposing which we cannot so much as make sense of the source of the ideas which are said to have challenged it – that is, of scientific enquiry itself. For scientific enquiry is of course a variety of enquiry in

general, and enquiry is in its turn, a variety of agency – the intentional prosecution by an agent of some investigation or other, designed to discover the truth on some matter.

In essence then, my proposal is that the libertarian, while she may need to concede that she cannot prove that there are agents with the power to settle certain matters, should endeavour to argue that this belief is not up for reassessment as the result of possible future science. It is too basic for that. Of course, that belief (in agency) alone is not itself sufficient to win the day for libertarianism – the argument for incompatibilism which forms the basis for the first conjunct of the libertarian claim is required in addition, to generate the conclusion that determinism must be false if agency is to be real. And this argument will be strongly resisted by compatibilists, of course. But the point is that the claim from which the libertarian begins ought not to be regarded as just a sort of funny feeling that, having done one thing, she could nevertheless have done another. Her argument should be rooted in her delineation of a fundamental feature of a metaphysics she believes we all share and will never be able to relinquish on the basis of science, since that would entail relinquishing the conceptual framework that makes sense of science itself (that is, a framework containing persons investigating by means of thought-guided actions, a mind-independent world). Of course, it is deeply contentious to allege that this metaphysics requires indeterminism – that is the burden of all the argumentation required to establish the first claim of the libertarian conjunction – incompatibilism – and I have said nothing at all of those arguments here. What I have

attempted to insist upon is merely that the (Aristotelian) phainomenon which is the basis of the second conjunct of libertarianism ought not to be regarded as merely a flimsy ‘intuitive’ conviction or a questionable deliverance of experience. It is much, much more important and fundamental than that. It can be thought of as a feature of a conceptual framework that is just as basic to our interpretation of others as it is to our self-understanding, and whose connections to the phenomenal character of choices and actions is only a small part of its essence. It is a bit of cognitive structure which is utterly fundamental to the thinking of human beings.

In this paper, then, I have attempted to argue that there is a version of libertarianism which has a good claim to be regarded as a respectable naturalistic position. The version in question involves no special pleading for humanity, since it takes a position not merely concerning the requirements for human free will, but rather on the requirements for animal agency, more broadly construed; it can be argued to be consonant with our best physics; and it cannot be dismissed as a position which is based, methodologically, on a mere ‘feeling’ or ‘experience’ which there is no reason to trust. Thus understood, libertarianism is a position which atheists,

no less than theists, ought to feel utterly comfortable embracing. There is nothing whatever about it which implies or depends upon the existence of God.<sup>21</sup>

## References

- Alvarez, Maria and John Hyman. 1998. 'Agents and their Actions.' *Philosophy* 73: 219-45.
- Dennett, Daniel. 1991. *Consciousness Explained*. London: Penguin.
- Fischer, John Martin. 1994. *The Metaphysics of Free Will*. Oxford: Blackwell.
- Fischer, John Martin. 2006. *My Way: Essays on Moral Responsibility*. Oxford: Oxford University Press.
- Fischer, John Martin and Mark Ravizza. 1998. *Responsibility and Control: A Theory of Moral Responsibility*. Cambridge: Cambridge University Press.
- Honderich, Ted. 1988. *Mind and Brain: A Theory of Determinism, Vol. 1*. Oxford: Oxford University Press.
- Kane, Robert. 1998. *The Significance of Free Will*. Oxford: Oxford University Press.
- Kunda, Ziva. 1990. 'The Case for Motivated Reasoning.' *Psychological Bulletin* 108: 480-98.
- Loewer, Barry. 1996. 'Freedom from Physics: Quantum Mechanics and Free Will.' *Philosophical Topics* 24: 91-112.

---

<sup>21</sup> I am grateful to William M. Altenburg, Jr., for pointing out to me the importance of irreversible thermodynamics to my indeterministic view of animal agency and for alerting me to the work of Prigogine.

- Nisbett, R. and Wilson, T. 1977. 'Telling More than We Can Know: Verbal Reports on Mental Processes.' *Psychological Review* 84: 231-59.
- O'Connor, Timothy. 2013. 'Free Will.' *The Stanford Encyclopedia of Philosophy*: <<http://plato.stanford.edu/archives/spr2013/entries/freewill/>>.
- Prigogine, Ilya. 1961. *Introduction to Thermodynamics of Irreversible Processes*, 2<sup>nd</sup> ed. New York: Interscience.
- Prigogine, I, and Nicolis, G. 1977. *Self-Organization in Non-Equilibrium Systems*. London: Wiley.
- Prigogine, Ilya. 1980. *From Being to Becoming*. New York: W.H. Freeman.
- Prigogine, I and Stengers, I. 1984. *Order out of Chaos*. London: Heinemann.
- Prigogine, Ilya. 1996. *The End of Certainty*. New York: the Free Press.
- Schrödinger, Erwin. 1967. *What is Life?* Cambridge: Cambridge University Press.
- Schwitzgebel, Eric. 2008. 'The Unreliability of Naive Introspection.' *Philosophical Review* 117: 245-73.
- Searle, John. 1984. *Minds, Brains and Science*. Cambridge, MA: Harvard University Press.
- Steward, Helen. 1997. *The Ontology of Mind: Events, Processes and States*. Oxford: Oxford University Press.
- Steward, Helen. 2008. 'Fresh Starts.' *Proceedings of the Aristotelian Society* 108: 197-217.

Steward, Helen. 2011. 'Perception and the Ontology of Causation.' In *Perception, Causation and Objectivity*. eds. Johannes Roessler, Hemdat Lerman, and Naomi Eilan. Oxford: Oxford University Press: 139-60.

Steward, Helen. 2012. *A Metaphysics for Freedom*. Oxford: Oxford University Press.

Weatherford, Roy. 1991. *The Implications of Determinism*. London: Routledge.

Wegner, Daniel. 2002. *The Illusion of Conscious Will*. Cambridge, MA: MIT Press.