

Naturalism and Libertarian Agency

By [Stewart Goetz](#) | Posted: Thu. June 22, 2006



Introduction

David Papineau introduces his book, *Philosophical Naturalism*, with the observation that though the term "philosophical naturalism" ("naturalism", for short) is a familiar one nowadays, there is no universal consensus about its meaning.^[1] Papineau believes that naturalism is a commitment to the completeness of physics, where physics is complete in the sense that a purely physical specification of the world, plus physical laws, will always suffice to explain what happens. The concepts of physics, however, change over time. What categories, therefore, will qualify as "physical" in the ultimate or final physics? We cannot, says Papineau, presently answer this question with any certitude. At best, we can specify one category which will *not* qualify, and that is the category of the psychological which involves propositional attitudes (e.g., beliefs, desires) that represent things as being a certain way (intentionality).^[2]

When I say that a complete physics excludes psychology, and that psychological antecedents are therefore never needed to explain physical effects, the emphasis here is on "needed". I am quite happy to allow that psychological categories *can* be used to explain physical effects, as when I tell you that my arm rose because I wanted to lift it. My claim is only that in all such cases an alternative specification of a sufficient antecedent, which does not mention psychological categories, will also be available.^[3]

David Armstrong is another philosopher who addresses the issue of naturalism.^[4] According to him, naturalism is "the doctrine that reality consists of nothing but a single all-embracing spatio-temporal system."^[5] Contemporary materialism is a form of naturalism and maintains that the single all-embracing spatio-temporal system contains nothing but the entities recognized by physics. Irreducible purpose or teleology has no place in this (or any other) spatio-temporal system as an explanatory principle because it entails the characteristic of irreducible intentionality, and irreducible intentionality implies the falsity of naturalism. Thus, Armstrong says, "I suppose that if the principles involved [in analyzing the single, all-embracing spatio-temporal system which is reality] were completely different from the current principles of physics, in particular if they involved appeal to mental entities, such as purposes, we might then count the analysis as a falsification of Naturalism."^[6]

If we take our lead from Papineau and Armstrong, naturalists are those who maintain that the ultimate

explanation of things will not include psychological (intentional, mental) categories and, therefore, will exclude teleology. What, then, is the ontological status of the psychological according to naturalism? Is it not even real? "Hard" naturalists not only deny its relevance for ultimate explanation, but also its reality.^[7] "Soft" naturalists, while denying the psychological's ultimate explanatory relevance, try to preserve its reality. Such naturalists often invoke the concept of supervenience and maintain that the psychological supervenes on the physical. Thus, David Chalmers argues for naturalism and maintains that while "experience is superfluous in the *explanation* of behavior,"^[8] the fundamental theory of the world will include psychophysical supervenience laws which tell us how experience arises from physical processes.^[9] John Heil, who is also a naturalist, says the following about naturalism: "Naturalism in the philosophy of mind is the view that mental characteristics are determined by or *supervene* on features of agents comprehended by the natural sciences."^[10]

A common thread running through all conceptions of naturalism, then, is that the fundamental explanation of any event is non-psychological in nature. Naturalism, therefore, ultimately implies the falsity of teleological explanation. Because naturalism excludes teleology, it also excludes libertarian freedom or agency. According to libertarianism, a choice is an undetermined mental action which is explained teleologically in terms of a purpose or goal of its agent. A teleological explanation of a choice, because it makes reference to the concept of a goal, end, or purpose derived from the representational content provided by a propositional attitude, is believed by the naturalist to be either eliminable for, reducible to, or dependent upon a fundamental non-teleological explanation of that event.

In addition to rejecting the reality of libertarian freedom, naturalists also deny substance dualism (dualism, for short), which is the view that there is a non-physical soul or mind which has irreducible psychological properties.^[11] Given the naturalist's rejection of both libertarianism and dualism, an interesting and important question is whether the truth of the former implies the truth of the latter. If it does, it would not be surprising to find that naturalists reject libertarianism because they reject dualism.

The course of my argument in this paper is as follows. In Section I, I set forth a non-causal account of libertarian agency in which a choice is an essentially uncaused mental action explained by a *telos* or purpose of its agent, and I make clear why such an account is an intuitively plausible conception of free mental action. Surprisingly, but for no good reason, a non-causal account of human freedom is normally rejected by libertarians themselves. Therefore, in Section II I defend my non-causal agency theory against the criticisms of other libertarians as a way of highlighting the centrality of teleological explanation for libertarianism. Section III consists of an explanation of why naturalists believe that teleological explanation of choice implies the truth of dualism and a discussion of the alleged problem of causal interaction which they assert is a decisive reason for rejecting dualism. I claim that dualism is no worse off than any soft naturalist's view of the mind when it comes to explaining the relationship between the psychological and the physical. Thus, if naturalism implies the falsity of dualism and libertarianism entails dualism, if we have libertarian freedom, which one prominent soft naturalist concedes we certainly seem to have,^[12] naturalism is false.^[13] Finally, in Section IV I briefly examine an emergentist alternative to the view that libertarianism implies dualism, and explain why it is inadequate.

I

A desideratum which any libertarian theory must satisfy is that of being able to explain how it is that mental actions such as choices differ ontologically from mental non-actions or mere happenings. One way to account for this is in terms of the extrinsic relationship of causal ancestry: mental actions differ from mental non-actions in terms of their different causal histories. This is the approach taken by libertarians who espouse agent-causation. A more intuitively satisfying view is to say that mental actions differ intrinsically from mental non-actions. Because a choice is a mental action, how can it be intrinsically active? In the following way: Most generally, a mental *power* is an ontologically irreducible property which is exhibited by an entity. Corresponding to a mental power is the *exercising* of that power which is an event. Exercising a mental power is *acting*, and mental action is essentially *uncaused*. One kind of mental power an agent possesses is the mental power to choose. When an agent exercises it, he chooses. Thus, (i) a choice is the exercising by an agent of his mental power to choose, where (ii) the exercising of the power to choose is essentially an uncaused event.

Consider (i). Carl Ginet has recently defended an account of mental action which maintains that any mental act differs intrinsically from passive mental events. According to him, a mental act's intrinsic active nature consists in its having an 'actish phenomenal quality'. This actish phenomenal quality lacks the complex structure of a causal relation and, by itself, is enough to make a mental event a mental action.^[14] I believe it is a mistake, however, to characterize the intrinsic active nature of a mental action as a phenomenal quality.^[15] Such a characterization suggests that a mental act has a distinctive *quale* or feel about it which makes it intrinsically active and distinguishes it from a passive mental event. The exercising of the power to choose, however, like any mental act, has no intrinsic feel or *quale* about it. Thus, while I may feel tired after exercising my power to think, which I do when I think for a long time about the issue of free will, this active thinking itself has no intrinsic *quale* any more than choosing does. The active nature of a mental event consists solely in its being the exercising of a mental power.^[16]

If a mental action is an event which is the exercising of a power, what is a mental non-action or mere happening? It is what I will call the *actualization* of a mental *liability*. Like a mental power, a mental liability is an ontologically irreducible property which is exhibited by a subject. When a subject's mental liability is actualized, a *caused* event occurs with respect to which he is a patient. One mental liability a subject has is the liability to believe. When his liability to believe is actualized, he believes a proposition and he is a patient with respect to believing that proposition.

In summary, there are two types of mental properties, namely, powers and liabilities. These two kinds of properties are inherently different from each other and each is an ultimate category in our ontology. Corresponding to these two kinds of mental properties are two kinds of events, namely, the exercising of a mental power (an action) and the actualization of a mental liability (a passion). Like the properties themselves, these two kinds of events are inherently different from each other such that any exercising of a mental power is intrinsically distinguished from any actualization of a mental liability.

Support for (ii) is conceptual in nature. An event which is efficiently caused is produced by that cause and

as such is an occurrence with respect to which its subject is essentially passive. An event is being made to occur to the subject and it (the subject) is not active with respect to that event. Because an exercise of mental power is active in nature, it is not produced and, thus, cannot be caused.

The intrinsically active and uncaused nature of choosing (ontology) is confirmed by the epistemology of action. In commenting on causal theories of action, Harry Frankfurt makes the following point about an agent's knowledge of his action:

They [causal theories] are therefore committed to supposing that a person who knows he is in the midst of performing an action cannot have derived this knowledge from any awareness of what is currently happening but that he must have derived it instead from his understanding of how what is happening was caused to happen by certain earlier conditions. . . . This is what makes causal theories implausible. They direct attention exclusively away from the events whose natures are at issue, and away from the times at which they occur.[\[17\]](#)

Frankfurt's remarks suggest the following point about mental action such as choice: It is an epistemological feature of an agent who knows that he is making a choice that he knows this while he is choosing. Given this fact, it is natural to think that the agent knows that he is choosing by being aware of the choice which he is making. However, if he knows in this way that he is choosing, it seems to follow that choosing is intrinsically different from a mere happening or passive event and that he is aware of this difference. On a causal theory of action, however, an agent who knows that he is choosing cannot possess this knowledge in virtue of his awareness of the choice itself. This is because on a causal theory of action a choice is not intrinsically different from a mere happening. In themselves, the two are indistinguishable. Therefore, an agent can know that he is choosing only by being aware of causal differences which distinguish the two events.

According to Frankfurt, a causal account of action implies that the agent's attention must be directed away from the mental action which he is performing in order for him to know that he is acting. Thus, a causal theory is unable to account for a significant epistemological feature of mental action. However, while Frankfurt has directed our attention to an important epistemological feature of mental action, he unnecessarily obscures his point by suggesting that the problem with a causal theory of action stems from what it implies about the temporal distance separating a mental action from its cause. Thus, Frankfurt not only maintains that a causal theory entails that an agent who knows that he is choosing must derive his knowledge from an awareness of what causes his choice, but also he maintains that the cause is a certain *earlier* event. Because it is, the agent who knows that he is choosing must be directing his attention away from the *time* at which he is choosing.

If the problem with a causal theory of action pointed out by Frankfurt were essentially linked with this temporal issue, the causal theorist would have a rather obvious response. He could simply stipulate that the cause which distinguishes his choice from a passive event happens simultaneously with the choice.[\[18\]](#) Because the cause occurs simultaneously with the choice, there is no epistemological problem of the kind noted by Frankfurt. It is true that the agent who knows that he is choosing must look

to a causal antecedent, but the causal antecedent is, in virtue of its simultaneity with its effect, known immediately by the agent.

The epistemological problem with a causal theory of action pointed out by Frankfurt is not essentially linked with temporal considerations. Rather, it arises in light of the fact that agents who know that they are performing mental actions possess this knowledge by being aware of the actions themselves, without reference to any cause of them. In the case of a choice, the exercising of the power to choose by the agent is essentially uncaused and intrinsically active and the agent knows that he is choosing by simply being aware of the choice (the exercising of the power to choose) itself.

If agents are directly aware of choosing and choices are essentially uncaused events, it seems to follow that agents are directly aware of the lack of causation of their choices. But is this plausible? Some critics of libertarianism maintain that it is thoroughly implausible “because undetermined choice (as opposed to our lack of recognition of causes for our choices) is not introspectible at all.”^[19] We cannot introspect indeterminacy because we cannot “observe the lack of causes.”^[20]

If an agent had to conduct a search for the lack of causes, it would be implausible to maintain that he is aware that his choice is uncaused because he is aware of the lack of any causes which produce his choice. It would always be the case that he might have overlooked a cause which is actually there. It does not follow from this point, however, that an agent can at best only fail to observe the presence of any causes. It is a *conceptual truth* that a choice is uncaused because a choice is the exercising of the power to choose and exercisings of mental powers are essentially uncaused. Thus, because an agent can be directly aware of exercising his power to choose, he knows that his choice is uncaused because this is entailed by the nature of what it is to be a choice.

If a choice is uncaused, what explains its occurrence? Because a choice is a mental *action*, the most plausible and intuitively satisfying answer is that a choice, like any action, is explained in terms of a reason, where a reason is a goal, end, or purpose for which an agent chooses. The concept of acting for a reason is correctly captured or expressed with the “in order to” locution. Thus, we say that Kathryn chose to be an exchange student in Germany in order to learn to speak the German language. To explain a choice by a reason is to explain it teleologically, not causally.

An agent’s reason for choosing is grounded in the representative, semantic contents of certain of his psychological attitudes. These psychological attitudes are his desires and beliefs. For example, when Kathryn chose to be an exchange student in Germany, she had a desire to learn the German language and believed that spending several months living with a family in Germany and attending Hochschule would achieve the goal of learning German. The desire that she learn German provided her with her purpose or goal expressed by “in order to learn German” which explained her choice to be an exchange student. Thus, the semantic content of Kathryn’s desire was not identical with her reason for choosing, but provided the basis for the reason for her choice. Similarly, the event of her coming to have or the event or state of her continuing to have the relevant desire did not cause her to make her choice, as is typically maintained by causal theorists.^[21]

II

I have developed an account of libertarian freedom (free will) where indeterministic choices are uncaused events which are adequately explained in terms of teleology alone. Not all libertarians have endorsed such a non-causal account. Indeed, most have been reluctant to do so.[\[22\]](#) In this section, I will set forth and respond to five libertarians who have claimed that teleological explanation of choice must be supplemented by causal explanation.

To begin, consider Richard Taylor's criticism of non-causal libertarianism. According to Taylor, "[o]nly the slightest consideration will show that this simple denial of determinism has not the slightest plausibility."[\[23\]](#) Why not? Because, while non-causal libertarianism avoids picturing an agent as a puppet, it does so

by substituting something even less like a human being; for the conception that now emerges is not that of a free person, but of an erratic and jerking phantom, without rhyme or reason at all. . . . There will never be any point in asking why [choices] occur, or in seeking any explanation of them, for under the conditions assumed there is no explanation. They just happen, from no causes at all.[\[24\]](#)

From the fact that a choice is uncaused, however, it does not follow that it has no explanation. To conclude this is to identify causation with explanation. Contrary to what Taylor's argument assumes, causation is only one kind of explanation. Causation stands to explanation as species to genus. Teleology is another form of explanation. Moreover, Taylor's rejection of non-causal libertarianism is puzzling because he recognizes that "[i]n the case of an action that is both free and rational, it must be such that the agent who performed it did so for some reason, but this reason cannot have been the cause of it."[\[25\]](#)

Next, consider Robert Kane's view of free will. He asserts that in formulating their accounts of free will, libertarians should not appeal to special kinds of entities or causes (substances, properties, relations, events, states, etc.) which are not needed by non-libertarian accounts of free will.

The only difference allowed between libertarian and nonlibertarian accounts is the difference one might expect--that some of the events or processes involved in libertarian free agency will be indeterminate or undetermined events or processes. But these undetermined events or processes will not otherwise be of categories or ontological kinds that do not also play roles in nonlibertarian accounts of free agency . . . --the difference being that in nonlibertarian theories, these events or processes need not be undetermined. Such differences as there are between libertarian and nonlibertarian theories should flow from this difference alone, and the task will be to make sense of a libertarian freedom satisfying the plurality conditions, given this difference.[\[26\]](#)

The plurality conditions to which Kane refers in the last-quoted sentence consist of an agent's having reasons for alternative courses of action; there being no compulsion or coercion of the choice which is

made by him for the relevant reasons; and his having control over that choice in the sense that *he* makes it for those reasons.[\[27\]](#)

It is clear that the non-causal account of free will I have developed in which a choice is an uncaused exercising of the power to choose does not introduce or appeal to categories or kinds of entities beyond those mentioned by Kane. An uncaused choice is an exercising (an *event*) of a power (a *property*) which is causally undetermined. Moreover, my account of free will satisfies the plurality conditions set forth by Kane. Nevertheless, he criticizes the libertarian position which maintains that only reasons-explanations can be given of choices because

it stands in the way of understanding the place of free will in the natural order in which causal explanations of deterministic or probabilistic kinds hold sway. Causal explanations cannot be the whole story of free will, but they must be part of the story if free will is to have a place in the natural order. And since deterministic causal explanations are ruled out for undetermined free willings, it is important to ask how explanations of them in terms of reasons are related to probabilistic or nondeterministic causal explanations.[\[28\]](#)

Kane asserts that the choice which is made by an agent must be probabilistically and, thereby, indeterministically caused by the reasons for making that choice,[\[29\]](#) where both the choice[\[30\]](#) and the reasons[\[31\]](#) for which it is made have corresponding neural connections or brain-wave patterns. But what do indeterministic, probabilistic causes explain about the making of a choice that is not teleologically accounted for by the reasons for making it?[\[32\]](#) Kane's view seems to be that causation involving an agent's reasons is required as a link to explain why the choice is "the *agent's* doing rather than a mere happening".[\[33\]](#) Three responses are in order.

First, if Kane is claiming that causation is required to make the choice an action, he is simply mistaken. As I explained in setting forth my account of the nature of choice in the previous section, the view that a choice is intrinsically active is most plausible in light of both libertarian and epistemological considerations about action.

Second, if Kane is claiming that causation is necessary to account for why a choice is *mine*, as opposed to some other agent's, he is again mistaken. As I also asserted in Section I, the view that a choice is an exercising of the mental power to choose, and that a mental power is an ultimate and irreducible property of an agent, is plausible in its own right. In addition, it is supported by the view that the essences of physical particles are constituted, at least in part, by (1) their causal powers to attract and repel other particles with similar powers and (2) their liability to be moved. Moreover, one would want to know from Kane what makes the reasons which, on his view, probabilistically cause my choice, *my* reasons as opposed to some other agent's. If Kane claims that these reasons just are my reasons (a view which seems as eminently plausible as that about choice which he rejects), then it is incumbent upon him to explain why it is that the reasons which probabilistically cause a choice can just be an agent's, but the choice made for those reasons cannot. Some property of an agent must essentially characterize it, and there is no better candidate for such a property than the power to choose (though the power to choose

need not be the only such property).

Finally, I believe it is plausible to maintain that probabilistic causation is not a form of *explanation* at all. It is no more than a *description* of how often an event of a particular kind occurs in light of its explanation. Kane, himself, seems to realize this. Thus, he states that “while the probabilistic explanation tells us which outcome is more likely to occur, it does not tell us why one occurs rather than the other *in the particular case*; and this is true whether the outcome that occurs in the particular case is more probable or less probable.” [34] Kane also acknowledges that there is a teleological explanation of a particular choice. [35] Thus, what is more or less probable is whether a particular choice will be made by an agent for a relevant reason in light of his past record of having or not having made choices of the same kind in similar situations.

Randolph Clarke is a third libertarian who maintains that a non-causal libertarianism cannot adequately account for free will (choice). According to him, free will is a certain kind of agent-control, where agent-control is fundamentally a matter of what does and does not causally produce a free act of will. [36] Clarke notes that it is possible to maintain that agent-control is a matter of the complete absence of causation of an action. Like most other libertarians, however, he thinks a non-causal libertarianism is inadequate [37] and causation in the form of agent-causation must be invoked to account for free will. As best as I can ascertain, Clarke’s reason for believing that a non-causal libertarianism is inadequate is an argument put forth by Donald Davidson that reasons-explanation must be understood as a form of causal explanation. Clarke maintains that no non-causal theory has met the challenge of this objection. [38] Therefore, in what follows, I will summarize and respond to Davidson’s argument.

According to Davidson, if reasons-explanation is not a form of causal explanation, then there is no way to account for the distinction between having a reason to choose and choosing *with* it, and having a reason to choose and choosing *because* of it. One may *justify* a choice by citing a reason one has even if in choosing one did not choose because of it, but one cannot *explain* a choice by citing a reason unless one chooses because of it. [39]

To illustrate this objection, consider an executioner named Smith. Smith is ordered to put to death a certain individual, Charles. Charles was caught in the act of, confessed to, and was convicted for murdering a woman who happened to be Smith’s wife. Smith has two reasons for putting Charles to death. On the one hand, he believes that it is his job and moral duty to put to death persons guilty of the heinous crime of murder. On the other hand, Smith desires to get revenge against Charles by killing him. Smith has more than one reason to kill Charles. Both reasons justify the act. After putting Charles to death, Smith tells a reporter that he chose to put Charles to death in order to carry out what he believed was his job and moral duty, and he did not choose to kill him in order to get revenge. According to Davidson, this can only mean that Smith’s having the one reason caused him to make the choice and his having the other reason did not.

On a teleological account of how reasons explain an action, Smith chose to put Charles to death in order to carry out what he believed was his job and moral duty and did not put Charles to death in order to get

revenge. In saying that Smith chose in order to do the former but did not choose in order to do the latter, it is the case that the former was an end for which he chose and the latter was not. The former's being an end for which Smith chose is no less objective than its being the case that one event was the cause of an effect and another was not.[\[40\]](#)

A fourth libertarian who maintains that teleological explanation alone is not adequate to explain libertarian choice is Timothy O'Connor.[\[41\]](#) He maintains that there must be causation to link the reason for making a choice with the choice, because he, too, thinks that teleological explanation alone cannot account for the distinction between having a reason and choosing with it and having a reason and choosing because of it. According to O'Connor, the requisite causation is agent-causal in form. He asserts that an agent has the causal capacity to cause the coming to be of an intention to act, where the coming to be of an intention is an event-part of a choice which is made for a reason. He claims that the causation by the agent of the coming to be of an intention has no cause and is "dependent upon the reason he has . . . for acting [choosing] in that way. . . . For the agent's free exercise of his causal capacity provides a necessary link between reason and action, without which the reason could not in any significant way explain the action."[\[42\]](#)

Contrary to what O'Connor believes, if there is a problem with explaining how a reason explains an uncaused choice, there is a problem with explaining how a reason can explain an agent's uncaused exercising of his power to cause the coming to be of an intention, where the exercising of this power depends upon the reason for the choice of which the coming to be of the intention is a part. Because there is no problem for the non-causal libertarian view which maintains that a reason alone can explain an uncaused choice, agent-causation is superfluous to an adequate account of freedom.

The last libertarian who contests a non-causal libertarianism of the kind I advocate is Ginet.[\[43\]](#) Like Clarke and O'Connor, Ginet believes that there must be some way to account for the distinction between having a reason and acting with it and having a reason and acting because of it. Ginet maintains that with a typical bodily action done for a reason, such as opening a window in order to let in fresh air, an agent *S* intends of that action that by it she will let in fresh air. The intention explains the action in virtue of its content referring directly to the action. In this example, the content of the intention is "by *this* opening of the window I will let in fresh air". Moreover, it is not required of the intention that it play a causal role in the opening of the window. It is possible for *S* not only to have a reason to open the window but also to have a reason for keeping the window closed (e.g., in order to stay warm). In this case, the agent acts *because* of the first reason and only *with* the second in virtue of the specified intention. The intention allegedly forges a link between the reason for which the action is done and the action itself. To illustrate Ginet's position, consider an example of his where *S* urgently needs her glasses which she has left in a person, *R*'s, room where *R* is now sleeping.

S has some desire to wake *R*, because she would then have *R*'s company, but also some desire not to wake *R*, because she knows that *R* needs the sleep. *S* decides to enter *R*'s room in order to get her glasses, knowing as she does so that her action will satisfy her desire to wake *R*. Could it nevertheless be true that *S* did not intend of her action that it wake *R*? . . .

It seems right to say that *S* did not intend to wake *R* if *S* was so disposed that, had it turned out that her entering the room did not wake *R*, *S* would not have felt that her plan had failed to be completely realized, and she must then either wake *R* in some other way or decide to abandon part of her plan. And *S*' being thus uncommitted to waking *R* is quite compatible with *S*'s expecting and desiring to wake *R*.[\[44\]](#)

Before evaluating Ginet's position, it is helpful to clarify how his libertarian account of freedom differs from my own. On my view, freedom pertains to an agent's choice, and while the concept of intention provides an explanatory connection between the choice and the chosen action, it provides no such connection between the reason and the choice itself because the concept of choosing for a reason is primitive in nature. Thus, *S* only intends the action of her getting the glasses for a reason because she first chooses to perform that action for that reason. Intention provides no explanatory link between reasons and the choices made for those reasons.

At this point, Ginet might argue that it is false to maintain that free agents only intend to perform those actions which they first choose to do. Free agents also intend their choices to act. They must intend those choices because their choices are teleologically explained by reasons and an intention is required to forge a link between those choices and their reasons, if the libertarian is to present an adequate account of the distinction between acting with a reason and acting because of it.

In response, one needs to ask 'How do free agents intend their choices?'. What *explains* such intentions? The reasons *R* for which the choices are made? But if *R* can explain these intentions directly without the need for something to forge an explanatory link between the two of them, why cannot *R* explain the choices directly without the need for intermediate intentions to link the choices with their reasons? Do further reasons *R'* explain the intentions? But if free agents intend their choices for *R'*, will they not need second-order intentions to link the first-order intentions with their reasons *R*? Here, a vicious regress seems unavoidable. The only way to avoid it is to say that free agents intend their choices for reasons *R'*, and that is the end of the matter. But if there is nothing problematic with saying this, there is no problem with saying that a free agent such as *S* chooses for reasons *R*, and that is the end of the matter. Thus, by maintaining that agents intend their choices, Ginet has not really explained the distinction between acting with a reason and acting because of it. Rather, he has merely relocated the place where the distinction needs to be accounted for.

Ginet might respond to this criticism of his view by maintaining that it is preferable to talk in terms of the act of adopting the intention to perform act *A*, instead of the act of choosing to *A*,[\[45\]](#) where the act of adopting the intention to *A* forges an explanatory link between *A* and the reason *R* for which *A* is done. Even if we concede to Ginet this preference, it can still be shown that intention cannot plausibly be used to account for the distinction between acting with a reason and acting because of it. This is because adopting an intention is itself an act and, as such, is explained by a reason. What forges an explanatory link between the adopting of an intention and the reason for which it is adopted? Is there some further intention which is adopted? If there is, then it will have to be adopted for a reason and an explanatory link will have to be forged between it and that reason. A vicious regress like that described in the previous

paragraph is avoidable only by saying that an intention can be adopted for a reason, without any explanatory between it and that reason being forged by a further intention. But if this is the case, then the explanatory connection between a reason and the act of adopting an intention is ultimately primitive, and intention cannot be used in the way Ginet suggests to distinguish between having a reason and acting with it and having a reason and acting because of it.[\[46\]](#)

III

Classically, libertarianism was held to be incompatible with naturalism because the former was indeterministic in nature while the latter was deterministic. The determinism espoused by those who can be called "classical naturalists" was causal in nature and was often expressed by saying that the causal laws of nature and the past together entail the occurrence of one course of events. Thus, causal determinism was, one might say, past-to-present in form. There is, however, a different kind of determinism which is currently popular among naturalists. According to contemporary, non-classical naturalists, even if classical past-to-present causal determinism is false and what is physical is ultimately indeterministic (as some understandings of quantum physics maintain) in nature, it is still possible and plausible to believe that determinism is true because it is reasonable to believe in the general ontological thesis that reality is a multilayered hierarchy which consists of levels of entities with their characteristic properties.[\[47\]](#) It is assumed by present-day naturalists that there is a lowest, fundamental, or bottom level of reality which consists of what micro-physics considers to be the most basic particles out of which everything is composed. On "top" of the lowest level are higher, intermediate level entities (e.g., chemical, biological) with their distinctive properties. Mental properties are properties of human beings (brains or central nervous systems) which are higher- (highest?) level, macro-entities.[\[48\]](#) There is a *dependency* relation between the lower-level, physical properties of micro-objects and the higher-level mental properties of human beings such that no human being can have its mental properties unless it has physical properties, and the lower-level physical properties *determine* the higher-level mental properties in the sense that nothing can be just like a given human being in all of its physical properties without its also being just like it as regards its mental properties. That is, physical indiscernibility entails psychological indiscernibility.[\[49\]](#) Contemporary bottom-to-top determinism is typically characterized by its naturalist proponents as the supervenience of the mental on the subvenient physical, and, thus, might be termed "supervenience determinism". In supervenience determinism, the supervenience of the mental on the physical is held to be *asymmetric* in character in the sense that the higher level mental properties are dependent upon and determined by the lower level physical properties, but the bottom level physical properties are not dependent upon and determined by the higher level mental properties.[\[50\]](#) In summary,

[a]ccording to some philosophers, mind-body supervenience gives us the right kind of physicalism: It respects the primacy of the physical by giving a clear sense to the idea that the physical determines the mental. Without the instantiations of appropriate physical properties, no mental property can be instantiated, and what particular mental properties are instantiated depends wholly on what physical properties happen to be instantiated.[\[51\]](#)

Thus, on what I will call the contemporary "supervenience naturalist's" view of the world (supervenience naturalist's endorse supervenience determinism), mental properties and events cannot "float free" of physical properties and events. Because one's physical life superveniently determines one's mental life, one's mental life is not autonomous from one's physical life.

The implications of the bottom-to-top determinism of the mental by the physical in the supervenience naturalist's view of the world for free will has not been widely discussed.[\[52\]](#) Searle is one supervenience naturalist who has raised and addressed the relevant implications, and in what immediately follows I will summarize his discussion of them. His comments are especially helpful because they help to tease out the logical relationships between free will, dualism, and naturalism. What I ultimately hope to show in this section is that there is good reason to think that libertarianism implies the falsity of naturalism for a more basic reason than its incompatibility with determinism. This reason is that libertarianism implies dualism, and dualism implies the falsity of naturalism.

According to Searle, the libertarian is right about this much: belief in libertarian freedom is not the invention of philosophers.[\[53\]](#) On the contrary, it is something which all of us believe as ordinary people in everyday life.

[I]f there is any fact of experience that we are all familiar with, it's the simple fact that our own choices . . . seem to make a difference to our actual behaviour. . . . We know we could have done something else, because we chose one thing for certain reasons. But we were aware that there were also reasons for choosing something else, and indeed, we might have . . . chosen that something else. . . . Human freedom is just a fact of experience.[\[54\]](#)

Though it is obvious to us from our experience that we seem to have free will, Searle claims that modern science poses problems for its existence. It does so because of its bottom-up view of the world in which nature consists of particles and their relations with each other, and everything about the world can be accounted for in terms of these particles and their relations.

Why exactly is there no room for the freedom of the will on the contemporary scientific view? Our basic explanatory mechanisms in physics work from the bottom up. That is to say, we explain the behavior of surface features of a phenomenon such as the transparency of glass or the liquidity of water, in terms of the behaviour of microparticles such as molecules. And the relation of the mind to the brain is an example of such a relation. Mental features are caused by, and realised in neurophysiological phenomena[\[55\]](#)

Searle maintains that his account of the mind-brain relationship is a form of supervenience naturalism.

On the account that I have been proposing, mental states are supervenient on neurophysiological states in the following respect: Type-identical neurophysiological causes would have type-identical mentalistic effects. . . . On this characterization of the supervenience relation, the supervenience of the mental on the physical is marked by the fact that physical states are causally sufficient . . . for the corresponding mental states. . . .

[S]ameness of neurophysiology guarantees sameness of mentality . . . [56]

Given the supervenience naturalist's layered picture of the world and the place of the mental in it as a higher level macro-feature which is supervenient upon the lower level micro-features, Searle claims the following would have to be the case if we were to have free will:

In order for us to have radical [libertarian] freedom, it looks as if we would have to postulate that inside each of us [our physical bodies] was a *self* that was capable of interfering with the causal order of nature. That is, it looks as if we would have to contain some *entity* that was capable of making molecules swerve from their paths. I don't know if such a view is even intelligible, but it's certainly not consistent with what we know about how the world works from physics.[57]

As Searle describes matters, the problem for free will is that it requires that a dualist self or mind be able to causally affect the micro-physical world and such causal interaction is problematic, if not unintelligible. It is relevant to note at this juncture, however, that if such causal interaction is a problem for free will, it is not one which is distinctively generated by the thesis that the mental is superveniently determined by the physical. It is just an application of the classic objection to dualism in the context of supervenience naturalism. Therefore, before addressing the alleged problem of mental-to-physical causation for dualism, it is important to understand why it is that supervenience naturalists believe that libertarianism implies the truth of dualism. In order to acquire this understanding, it will be helpful to focus on the *explanatory* nature of the determinism in the supervenience relation itself.

As I indicated at the outset of this section, classically, the explanatory character of naturalism consisted of causal determinism. Supervenience naturalists, however, say little, if anything positive, about the explanatory nature of the determinism in the supervenience relation, except that it is deterministic. Indeed, they seem to know more about what the explanatory nature of the determinism is not than about what it is. To see that this is the case, consider Searle's view. In a spirit of continuity with the classical naturalist view, he maintains (see the penultimate quote) that physical states causally determine their supervening mental states. According to Searle, supervenience determinism is a form of causal determinism. He is careful to point out, however, that the causation in the supervenience relation is not event-event in kind. [58] This will strike many, if not most, as very puzzling or even incoherent, because causation seems to be essentially a relation involving *events* of objects or substances. For example, in terms of the ontology which I set forth in Section I, causation essentially involves the eventful exercising of a causal power by an agent which produces the eventful actualization of a liability in a patient.

Kim is another supervenience naturalist, and though he denies that determinism in the supervenience relation is a form of causal determinism of any kind (whether event or not-event),[59] he has little, if anything, to say in a positive vein about it. Heil summarizes the inability of supervenience naturalists such as Kim to say anything positive about the explanatory nature of the determinism in the supervenience relation in the following way:

Although modal notions constitute an important ingredient of the concept of supervenience, they do not exhaust that concept. . . . [W]e might inquire as to the remaining aspects. These include, first, a notion of dependence, according to which a property or characteristic in the supervenient family requires for its instantiation the instantiation of a property or characteristic in the subvenient family; and second, a notion of determination, according to which supervenient properties or characteristics are instantiated *in virtue of* or *because of* the instantiation of some subvenient property or characteristic. . . . Offered as an analysis of supervenience, these remarks would be excessively thin. We should want to know what dependence and determination amounted to, and how they bear on explanation. . . . This difficulty is . . . one about which I have nothing exciting or original to suggest. [60]

How about what the explanatory nature of determinism in the supervenience relation is not? For present purposes, it is crucial to note one thing which supervenience naturalists (in virtue of their *naturalism*) maintain it is not, and that is that it is not teleological in nature. Whatever the explanatory nature of the determinism in the supervenience relation is, supervenience naturalists are united in affirming that what explains a choice (provided a supervenience naturalist acknowledges the reality of a choice as a genuine mental event) is not a purpose or goal of an agent (a teleological explanation). The bottom-to-top layered picture of the world where the mental is a higher-level feature excludes future-to-present explanation of a choice in terms of a goal or purpose. Thus, while supervenience naturalism is incompatible with libertarianism because of the determinism present in the supervenience relation, at a more basic level it is incompatible with libertarianism because like all forms of naturalism [61] it denies any explanatory role for teleology.

Supervenience naturalists are committed to the thesis that there are no undetermined choices which are made by their agents for purposes. To clarify why they exclude teleological explanation, it is helpful to return to one of Searle's comments quoted earlier. As he analyses the issue of human freedom, if we were to concede the reality of libertarian choices made for purposes, then we would be committed to the view that mental events, rather than being dependent surface features of the world which are determined to occur by deep subvenient micro-physical characteristics, would themselves be independent deep features of the world. Searle believes (as do most, if not all, supervenience naturalists) that in order for a mental event such as a choice to occur and be explained teleologically, it would have to be an independent deep occurrence of the world, and this would imply that a *self* exists which is an independent deep entity that makes the choice for a purpose. And if this self exists and is able to choose for a purpose, then if it is to realize or accomplish its purpose for choosing, it will have to be able to causally affect what goes on at the micro-physical level of the world. In short, in order for libertarian freedom to be real, a teleological explanation must be the ultimate explanation of a choice. And in order for a teleological explanation to be the ultimate explanation of a choice, a substantial self (mind or soul) which makes a choice for a purpose must exist at the deepest level of reality and be able to causally interact with the ultimate or deep entities of the physical world. Stated in slightly different terms, if libertarianism is true, there is a form of explanation, namely, teleological, which is equally fundamental as the causal explanation operative at the micro-physical level of reality, and on those occasions when an

agent chooses for a reason, events at the micro-physical level of the world occur only because a soul causes them to occur in accomplishing its goals. Because goals or purposes must be grounded in the representational character of propositional attitudes (mental contents) of minds, if there is teleological explanation at the most basic level of reality, then it follows that minds with their representational contents exist at the most basic level of reality. Therefore, if choices are ultimately explained teleologically, the dependency of the mental on the physical is undermined. In order for us to have free will, dualism must be true. From the perspective of a supervenience naturalist such as Searle, if we accept the reality of free will, we fall into the “absurdity of supposing that there are two kinds of substances . . . in the world,” and “[w]e are reluctant to concede any of the commonsense facts that sound ‘Cartesian,’ because it seems that if we accept the facts, we will have to accept the whole of Cartesian metaphysics.”[\[62\]](#) Kim echoes Searle on this issue:

[T]o abandon the physical causal closure is to retrogress to the Cartesian picture that does not allow, even in principle, a complete and comprehensive physical theory of the physical world. On the Cartesian dualist model, any theory that gives full coverage of the physical would have to invoke nonphysical causal agents. This is something that no serious physicalist will find palatable.[\[63\]](#)

The thinking of the supervenience naturalist to this point can be summarized as follows: Free will is just a fact of experience, but free will requires the truth of dualism. There is, however, the problem of causal interaction between an immaterial soul and a micro-physical entity which implies the falsity of dualism. Given the falsity of dualism, libertarian is false. Thus, contrary to the way things seem, there is no free will.

It is now time to examine the alleged problem of causal interaction. To begin, it is appropriate to spend a few moments on the issue of the intuitive or initial plausibility of dualism. Is the soul, like the free will which implies its existence, just a fact of experience? It has seemed so to many, if not most, people. Among philosophers, Descartes noted in the Sixth Meditation that “as a matter of fact, when I consider the mind, that is to say, myself inasmuch as I am only a thinking thing, I cannot distinguish in myself any parts, but apprehend myself to be clearly one and entire”[\[64\]](#) In other words, on the basis of self-awareness, it seemed to Descartes that he was a substantial mind which lacked proper parts (a simple entity). That this ‘simple view’ of the self is not an aberration is recognized by several contemporary non-dualist philosophers of mind. For example, Nagel states that the self exhibits an “apparent unique simplicity and indivisibility,”[\[65\]](#) while David Braine captures the seeming simplicity of the self in the following words:

[T]here is no question of dividing an “I” . . . into parts. The “I” . . . presents itself as undivided and indivisible. . . . [W]hen we think of the “I” . . . as undivided and indivisible, we are *somehow* denying that, as such, it has parts at all rather than thinking of some special kind of integratedness of its parts.[\[66\]](#)

It is important to stress that these philosophers are noting the features of first-person self-awareness

which explain why it is that the ordinary person is a dualist. They are not foisting a philosophical invention on the ordinary mind. Thus, Searle notes that “when I lectured on the mind-body problem in India”, I “was assured by several members of my audience that my views must be mistaken, because they personally had existed in their earlier lives as frogs or elephants, etc. . . .”[\[67\]](#) Searle goes on to add that “given what I know about how the world works, I could not regard their views as serious candidates for truth.”[\[68\]](#)

As we have already seen, what Searle thinks he knows about how the world works is that it is a multi-layered hierarchy in which mental features are dependent upon and determined by micro-physical properties. In explicating the implications of his supervenience naturalism for free will, Searle claims that dualism is implausible because of the problem of mind-body causal interaction. In his estimation, mind-to-body causation is deeply mysterious, if not incoherent. Kim concurs with this point. According to him, there is “the sheer impossibility of coherently imagining the details of what might have to be the case if some nonphysical agency is going to affect the course of purely physical events.”[\[69\]](#) Acknowledging some nonphysical agency

would force us to accept a conception of the physical in which to give a causal account of, say, the motion of a physical particle, it is sometimes necessary to go outside the physical system and appeal to some nonphysical agency and invoke some irreducible psychophysical law. Many will find this just not credible.[\[70\]](#)

For, as many thinkers have pointed out, it simply does not seem credible that an immaterial substance, with no material characteristics and totally outside physical space, could causally influence, and be influenced by, the motions of material bodies that are strictly governed by physical law. Just try to imagine how something that isn't anywhere in physical space could alter in the slightest degree the trajectory of even a single material particle in motion. Its inability to explain the possibility of “mental causation,” how mentality can make a causal difference to the world, doomed Cartesian dualism. . . .

There has been a near consensus among philosophers that the concept of mind as a mental substance gives rise to too many difficulties and puzzles without compensating explanatory gains.[\[71\]](#)

The heart of Kim's argument is that dualism cannot be believed because it cannot *explain* how mental causation involving an immaterial substance which is not located in space is possible. One way for a dualist to respond to challenge would be to bring the soul into the same spatial system as its physical body. For example, a dualist might assert that the soul occupies a spatial point, presumably somewhere within the space occupied by its physical body,[\[72\]](#) and because it does it is able to causally interact with that body. It is doubtful, however, that this response by the dualist will satisfy the supervenience naturalist. Thus, Kim approvingly quotes Princess Elizabeth of Bohemia's response to Descartes that locating the soul at a spatial point will not make any clearer how an immaterial, thinking substance can causally interact with its physical body.[\[73\]](#) The problem for the dualist position according to the

supervenience naturalist is that no matter "where" the soul is located, whether in space or not in space, the dualist can only say that causal interaction between it and the physical world just happens. And this inability to say anything explanatorily informative about *how* causal interaction occurs is enough to undermine any initial plausibility the dualist view has (and, therefore, any initial plausibility libertarianism has).

As I have argued elsewhere, [74] the supervenience naturalist, in spite of all of his bluster about the problem of causal interaction for dualism, is no better off than the dualist when it comes to explaining how it is that the mental relates to the physical. Thus, Kim himself has stated, "the problem of mental causation [doesn't] go away when Cartesian mental substance [goes] away." [75] To make it evident that this is the case, it is helpful to recall the supervenience naturalist's inability to say anything positive about the explanatory nature of the determinism in the supervenience relation. What this inability consists of is an inability of the supervenience naturalist to *explain* how subvenient physical properties determine supervenient mental properties. Thus, Searle, after affirming his non-event causal interpretation of the determination in the supervenience relation, concedes that "[w]e do not know the detail of how brains cause consciousness. . . . [W]e do not know how the system of neuro-physiology/consciousness works . . ." [76] Though there is no knowledge of how brains non-event causally determine consciousness, Searle has no hesitation to affirm that they just do. Supervenience naturalists who reject any causal interpretation of the determinism in the supervenience relation are no more helpful in elucidating the explanatory character. As noted in the quotation earlier in this section, Heil admits that such supervenience naturalists do not provide an explanation of the deterministic connection between subvenient physical properties and supervenient mental properties. Chalmers, who is himself a supervenience naturalist, concurs: "It might be objected that [the supervenience framework] does not tell us what the connection is, or how a physical configuration gives rise to experience. But the search for such a connection is misguided. . . . [B]eyond a certain point, there is no asking 'how.'" [77] Given the supervenience naturalist's own inability to explain the nature of the determination in the supervenience relation, it is at least initially puzzling why he maintains that the dualist's inability to say anything informative about how a mind and a body causally determine events to occur in each other is a decisive reason for rejecting dualism. It would initially seem that if this inability cuts against one view, it cuts equally against the other.

In an effort to be charitable to the supervenience naturalist, one might think that his inability to elucidate the explanatory character of the determinism in the supervenience relation does not cut as strongly against his view because it is reasonable to believe that it is merely a temporary state of affairs, and that with the advance of science the supervenience determinist will come to have the requisite information to provide the desired elucidation. For example, Searle states that the mystery of how consciousness is related to neurophysiology is merely a function of our present "ignorance of how the brain works." [78] This claim, however, expresses a radically mistaken belief. Some comments from Searle himself will help clarify why this is the case.

As was pointed out earlier in this section, Searle argues for supervenience naturalism by claiming that

the model for understanding the relationship between the mind and the brain is found in the distinction in physics between micro- and macro-properties of systems. In physics, the global or surface features of objects are explained by the behavior of elements at the micro level. Searle's examples are solidity and liquidity. The solidity of the table on which I am writing is explained by the lattice structure of the molecules of which the table is composed. Similarly, the liquidity of water in the glass in front of me is explained by the nature of the interactions between H₂O molecules. Indeed, in the case of solidity and liquidity, it is appropriate to say that solidity and liquidity are identical with the relevant micro-structures.

Thus, to take the example of solidity, the table in front of me is solid in the ordinary sense that it is rigid, it resists pressure, it supports books, it is not easily penetrable by most other objects such as other tables, and so on. Such is the commonsense notion of solidity. And in a scientific vein one can define solidity as whatever micro-structure causes these gross observable features. So one can then say either that solidity just is the lattice structure of the system of molecules and that solidity so defined causes, for example, resistance to touch and pressure. Or one can say that solidity consists of such high level features as rigidity and resistance to touch and pressure and that it is caused by the behaviour of elements at the micro-level.[\[79\]](#)

When we say that solidity just *is* the lattice structure of the system of molecules, we are claiming that causal reductionism leads to property ontological reductionism wherein one property can be shown to consist of nothing but another property.[\[80\]](#) Such a reduction is possible because we are able to picture the relation between solidity and the lattice structure of molecules.[\[81\]](#) Thus, one object's solidity vis-a-vis another can be pictured as the inability of the latter to break apart the proper parts of the former which are held together by causal forces. What is important about this model of reductionism for our present purposes is that solidity and liquidity are features of whole objects which are composed of spatially related proper parts. One would expect, then, that if the mental-physical supervenience relation is a form of causal reductionism which is elucidated by the solidity-liquidity model, the mental could be ontologically reduced to the physical because it could be pictured in terms of the spatial extension of an object and the relations of its proper parts. Searle himself, however, recognizes that the mind does not seem to be a spatial object with extension:

We are not aware in conscious experience of . . . the dimensions of our conscious experience Although we experience objects and events as both spatially extended and of temporal duration, our consciousness itself is not experienced as spatial, though it is experienced as temporally extended.[\[82\]](#)

In light of the fact that the mind does not seem to be spatially extended, we are unable to picture the mind-brain relation in terms of the part-whole relation. Therefore, in the case of the mind-brain supervenience relation, causal reductionism does not lead to ontological reduction. It is important to stress, however, that the inability to picture the mind-brain relation in part-whole spatial terms is not simply a temporary difficulty which we may someday overcome. We cannot overcome it because of the

logical impossibility of explaining what does not seem to be made up of spatial parts in terms of such parts. Colin McGinn summarizes this impossibility in the following way:

It is precisely [spatially defined properties] that seem inherently incapable of resolving the mind-brain problem: we cannot link consciousness to the brain in virtue of spatial properties of the brain. . . . [C]onsciousness defies explanation in such terms. Consciousness does not seem made up out of smaller spatial processes Our faculties bias us towards understanding matter in motion, but it is precisely this kind of understanding that is inapplicable to the mind-body problem.[\[83\]](#)

In light of the conceptual barriers which prevent getting a property ontological reduction of the mental in terms of the physical, we are left in Searle's terms with a causal reduction of the mental to the physical, which is really no more than saying that the explanatory nature of the determinism in the supervenience relation will forever remain an inexplicable, brute fact. As Chalmers states, "there is an *explanatory gap* between the physical level and conscious experience. If this is right, the fact that consciousness accompanies a given physical process is a *further fact*, not explainable simply by telling the story about the physical facts. In a sense, the accompaniment must be taken as brute."[\[84\]](#)

In spite of acknowledging that the nature of the determinative relationship between the physical and the mental is in principle explicable on their own view, supervenience naturalists continue to maintain that dualism is not a viable philosophical position. The following are representative comments from Kim:

You want to raise your arm, and your arm goes up. Presumably, nerve impulses reaching appropriate muscles in your arm made those muscles contract, and that's how the arm went up. And these nerve signals presumably originated in the activation of certain neurons in your brain. What caused those neurons to fire? We now have a quite detailed understanding of the process that leads to the firing of a neuron, in terms of complex electrochemical processes involving ions in the fluid inside and outside a neuron, differences in voltage across cell membranes, and so forth. All in all we seem to have a pretty good picture of the processes at this microlevel on the basis of the known laws of physics, chemistry, and biology. If the immaterial mind is going to cause a neuron to emit a signal (or prevent it from doing so), it must somehow intervene in these electrochemical processes. But how could that happen? At the very interface between the mental and the physical where direct and unmediated mind-body interaction takes place, the nonphysical mind must somehow influence the state of some molecules, perhaps by electrically charging them or nudging them this way or that way. Is this really conceivable? Surely the working neuroscientist does not believe that to have a complete understanding of these complex processes she needs to include in her account the workings of immaterial souls and how they influence the molecular processes involved. . . . Even if the idea of a soul's influencing the motion of a molecule . . . were coherent, the postulation of such a causal agent would seem neither necessary nor helpful in understanding why and how our limbs move.[\[85\]](#)

In this passage, Kim once again questions the possibility that an immaterial mind might causally influence the physical world. For the sake of discussion only, he concedes that this is possible, but then adds that the inclusion of such a causal agent is neither necessary nor helpful to a neuroscientist who is trying to understand why, for example, your limb moves. According to Kim, the neuroscientist does not need to include reference to an immaterial soul to have a complete understanding of the molecular processes (their movements) involved in raising your arm.

Contrary to what Kim's comments suggest, it is intuitively plausible to think that the neuroscientist, like anyone else (i.e., *qua* ordinary human being), does need to include reference to your reason (purpose) for raising your arm and the fact that you, a soul, caused it to move (rise) in order to have a *complete* explanation of why it moved as it did. Knowing only the neural (physical) story is not enough for such an explanation.^[86] Kim is also mistaken in suggesting that the neuroscientist, *qua* scientist, is seeking a complete understanding of your arm's movement. What the neuroscientist seeks, *qua* scientist, is a knowledge of how micro-*physical* entities of various kinds relate *causally* to each other in virtue of their causal powers and liabilities. Thus, as Chalmers points out:

Basic particles . . . are largely characterized in terms of their propensity to interact with other particles. Their mass and charge is specified, to be sure, but all that a specification of mass ultimately comes to is a propensity to be accelerated in certain ways by forces, and so on. . . . Reference to the proton is fixed as the thing that causes interactions of a certain kind, that combines in certain ways with other entities, and so on^[87]

The limitation of the neuroscientist's investigation to causal relations among micro-physical entities has two important implications for dualism and free will. First, from the fact that the neuroscientist seeks to acquire knowledge about various micro-physical entities and their forces (exercised powers) to move other micro-physical entities in various ways, it does not follow that he is required to presuppose the non-existence of souls which also have the power to move those other micro-physical entities in those ways. If a scientist makes such an assumption, he is not making it *qua* scientist but *qua* naturalist.

Second, the propensities (liabilities) of micro-physical entities to be moved in certain ways about which the neuroscientist seeks to learn are inherently *conditional* in nature. What Chalmers describes as a propensity of a particle to be moved is a liability of it to be moved which is such that *if* it is actualized by an exercised power of another entity (whether physical or non-physical), it will be necessitated to move in a certain way. There is nothing, however, in the nature of that liability of that particle which requires that it be actualized in accordance with physical deterministic laws such that the physical world is closed to causal influence by non-physical entities. Hence, the actualization of that liability by a soul on an occasion when it makes an undetermined choice for a reason is not excluded by a scientific study of that liability. And it is precisely on those occasions when arm movements occur for purposes that a neuroscientist will reasonably believe that the originative micro-physical movements are traceable to the causal activity of a soul.

IV

Naturalists such as Searle and Kim believe that libertarian freedom implies the truth of dualism. Are they correct? Like them, I am inclined to think that it does, though it has been argued that it does not. In an effort to avoid dualism and yet not be a naturalist, some have tried to develop a *via media* in the form of property emergentism. On such a view, when appropriate basal conditions obtain, higher-level, irreducible mental properties of an agent emerge which take on lives of their own. Thus, an emergentist who is also a libertarian might maintain that the power to choose is an emergent property which emerges along with the emergent causal power to produce movements in basal objects such that when an agent exercises his emergent power to choose for a purpose, he also exercises his emergent causal power to produce events in or involving the relevant basal objects. O'Connor has described such an emergentist view in terms of supervenience. On his account, an emergent property *P* is an emergent causal property (power) of a mereologically complex object *O* iff:

- (1) *P* supervenes on properties of the parts of *O*;
- (2) *P* is not had by any of the object's parts;
- (3) *P* is distinct from any structural property of *O* (A property, *Q*, is structural iff proper parts of particulars having *Q* have some property or properties not identical with *Q*, and this state of affairs is, in part at least, constitutive of the state of affairs of the particular's having *Q*. In terms of Searle's ontological reducibility, solidity and liquidity are structural properties.); and
- (4) *P* has direct ('downward') determinative influence on the pattern of behavior involving *O*'s parts.[\[88\]](#)

As O'Connor notes, there are ways to avoid acknowledging the existence of emergent properties. For example, one might posit the presence of additional and hitherto undetected micro-properties which manifest themselves in highly complex systems of certain kinds by giving rise to *P* in such a way that *P* is constituted by them (thus, *P* is a structural and not an emergent property). O'Connor responds to this proposal by saying that "the only motivation one could have for postulating a (rather elusive) micro-property is a very strong methodological principle to the effect that one is to avoid emergentist hypotheses at all costs, which by my lights is not a reasonable one."[\[89\]](#)

Four points are relevant to keep in mind when evaluating the emergentist position. First, the emergentist view does not make any clearer than dualism how the mental and physical are related. For example, according to the emergentist, how a psychological property such as *P* emerges from the physical "will forever remain a mystery; we have no choice but to accept it as an unexplainable brute fact."[\[90\]](#) Moreover, once it has emerged, the direct downward determinative influence of *P* (see condition (4)) will be no more intelligible than the causal activity of a soul on a physical particle.

Second, in the spirit of O'Connor's emergentist response to the position that one can avoid emergentism by positing the existence of hitherto undetected micro-properties which are the structural components of the emergent property, it is plausible for the dualist to respond to the emergentist that the only motivation for postulating emergent properties is the very strong methodological principle that one is to avoid dualism at all costs.

Third, emergentism is incompatible with the conviction that teleological explanation is a deep form of explanation. That is, in so far as emergentism retains the dependency element of the supervenience thesis (see condition (1)), it is incompatible with the idea that purposes of agents are grounded in bedrock properties of bedrock entities of the world.

Finally, the emergentist view conflicts with, while the dualist position is supported by, the point made in Section III that the self seems to be simple in nature (i.e., the self seems to be an indivisible entity which is not comprised of proper parts). Our consciousness of ourselves is of entities which do not seem to be spatially extended in the sense of our having proper parts which occupy distinct regions of space. According to the emergentist, however, an object which exhibits an emergent property *P* is constituted by proper parts (see condition (2)) which, presumably, occupy distinct spatial regions. Hence, an emergentist account of free will cannot be easily reconciled with the experience of ourselves as simple entities.

V

As soft naturalists, supervenience naturalists often point out that their form of naturalism is preferable to hard naturalist views because it preserves the reality of consciousness. For example, Chalmers describes eliminativist views about consciousness “as being in conflict with the manifest facts.”^[91] Searle claims that hard naturalist views are false by *reductio ad absurdum* because they entail that our ordinary conscious mental life does not exist.^[92] He adds that proponents of one such view, namely, functionalism, do not need refutation but help,^[93] and asks “[H]ow did we get into this mess?”^[94] According to his own diagnosis, the reason why hard naturalists put forth such absurd views is that they “have a terror of falling into Cartesian dualism.”^[95] Nevertheless, Searle and other supervenience naturalists are like hard naturalists to the extent that they are willing to deny the reality of a central element of our conscious life: choice or free will. Of them, it is appropriate to ask, “How did they get into this mess?” As was seen in Section III, they get into this mess because they believe that free will implies dualism. Thus, someone like Searle endorses his supervenience naturalism because he, like the hard naturalists he chides, has a terror of falling into Cartesian dualism. I conclude, therefore, that in light of what naturalists themselves say it is plausible to believe that libertarian freedom is incompatible with the truth of naturalism because it implies the truth of dualism. Thus, if one is a libertarian, one cannot consistently be a naturalist.^[96]

^[1] David Papineau, *Philosophical Naturalism* (Oxford: Blackwell, 1993), p. 1.

^[2] Ibid, pp. 30f.

^[3] Ibid., p. 31, f.n. 26. The emphasis is Papineau’s.

^[4] D. M. Armstrong, “Naturalism, Materialism and First Philosophy,” *Philosophia* 8 (1978): 261-276.

[5] Ibid., p. 261.

[6] Ibid., p. 262.

[7] Eliminativists in the philosophy of mind are hard naturalists.

[8] David Chalmers, *The Conscious Mind: In Search of a Fundamental Theory* (Oxford: Oxford University Press, 1996), pp. 158-159.

[9] Ibid., pp. 124-129.

[10] John Heil, *The Nature of True Minds* (Cambridge: Cambridge University Press, 1992), pp. 4-5. The emphasis is Heil's.

[11] "Naturalism is suspicious of Cartesian dualism: The mind's place is in, not adjunct to, nature." Ibid., p. 11. Cf. Papineau, *Philosophical Naturalism*, pp. 1, 27; and Chalmers, *The Conscious Mind*, pp. 124-125.

[12] John Searle, *Minds, Brains and Science* (Cambridge, MA: Harvard University Press, 1984), Chapter Six.

[13] If we let "N" symbolize "Naturalism", "Psy" symbolize "Psychological", "Spsy" symbolize "Supervenience of Psychological", "D" symbolize "Dualism", and "C" symbolize "Choice", the argument of Section III is as follows: (1) $N \supset (\sim \text{Psy} \vee \text{Spsy})$ (i.e., naturalism implies either hard naturalism or soft naturalism), (2) $(\sim \text{Psy} \vee \text{Spsy}) \supset \sim D$, (3) $\sim D \supset \sim C$. The libertarian asserts C and, therefore, $\sim N$.

[14] Carl Ginet, *On Action* (Cambridge: Cambridge University Press, 1990), pp. 13f.

[15] It is appropriate to point out that libertarians are not the only ones who discuss the issue of choice in terms of feeling. Non-libertarians do also. For example, Richard Double (*Metaphilosophy and Free Will* [Oxford: Oxford University Press, 1996], p. 42) asks about the reality of libertarian choice in the following terms: "How much evidential weight should we accord to our 'feelings' that we can choose otherwise than we do . . . ? . . . And how certain is it that we actually feel the way we say we do when we claim that our introspective awareness shows that we *feel* that we are able to choose otherwise . . . ?" The emphasis is Double's.

[16] Wilfrid Sellars ("Philosophy and the Scientific Image of Man," in *Metaphysics*, ed. by Ronald C. Hoy and L. Nathan Oaklander [Belmont, CA:Wadsworth Publishing Company, 1991], p. 509) has pointed out "the mistake of supposing that in self-awareness conceptual thinking presents itself to us in a qualitative guise." Jaegwon Kim (*Philosophy of Mind* [Boulder, CO:Westview Press, 1996, p. 14] says the following about intentional or 'contentful' states of mind: "Do these mental states have a phenomenal, qualitative aspect? We do not normally associate a specific feel with beliefs, another specific feel with desires, and so on." See also pp. 158f. Finally, Zeno Vendler (*Res Cogitans* [Ithaca: Cornell University Press, 1972], p. 156) comments as follows: "For an asthmatic patient the feeling of his breathing is likely to be

unpleasant or even painful; his opinion, on the other hand, if it is an opinion, that he is breathing, or that he is breathing painfully, is neither unpleasant nor painful. Moreover, whereas those feelings are felt in the chest and the throat of the patient, his thought that he is breathing, or that he is in pain, is not felt in any part of the body. Thoughts, in fact, are not 'felt' or 'experienced' at all."

[17] Harry Frankfurt, "The Problem of Action," *American Philosophical Quarterly* 15 (1978):157. Frankfurt makes this epistemological point with respect to bodily actions but it is equally, if not more, relevant for mental actions.

[18] Myles Brand (*Intending and Acting* [Cambridge, MA: MIT Press, 1984], pp. 17-23) and Irving Thalberg ("Do Our Intentions Cause Our Intentional Actions?," *American Philosophical Quarterly* 21 [1984]:249-260) are examples of causal theorists who do this.

[19] Double, *Metaphilosophy and Free Will*, p. 58.

[20] Ibid.

[21] "It is the *contents* of beliefs and desires (and not that she has the beliefs and desires) which serve as an agent's reasons for acting, while it is by being the content of *beliefs* and *desires* that these contents manage to serve as an agent's reasons." Geoffrey Sayre-McCord, "Explanations and Reasons," *Philosophical Perspectives* 3 (1989):140. The emphases are Sayre-McCord's. He does not, however, endorse an indeterministic, non-causal account of choice.

[22] Thomas Nagel, a non-libertarian, says the following about a free action: "A free action should not be determined by antecedent conditions, and should be fully explained only intentionally, in terms of justifying reasons and purposes." (*The View from Nowhere* [Oxford: Oxford University Press, 1986], p. 115. Robert Kane, who is a libertarian, goes further and maintains that "many libertarians (and their critics) have [actually] held that incompatibilist free choices or actions cannot be given causal explanations of any kinds, . . ." (*The Significance of Free Will* [Oxford: Oxford University Press, 1996], p. 174.) Neither Nagel nor Kane gives the names of any such libertarians, and I think for good reason: most libertarians have not defended a non-causal understanding of free will. Instead, they have believed that it is necessary to include causation in an adequate account of free will because (I think) they have wrongly been persuaded that a non-causal account is flawed. Kane, himself, is such a causal libertarian.

[23] Richard Taylor, *Metaphysics*, third edition (Englewood Cliffs, NJ: Prentice-Hall, 1983), p. 45.

[24] Ibid., p. 45.

[25] Ibid., p. 48. Taylor defends the reality of teleological explanation and its irreducibility to causal explanation in his *Action and Purpose* (New Jersey: Humanities Press, 1980), especially Chapter 10.

[26] Ibid., p. 116.

[27] Ibid., pp. 107-111.

[28] Ibid., p. 174.

[29] Ibid., pp. 136, 139, 194.

[30] Ibid., pp. 140, 146.

[31] Ibid., pp. 136, 139, 194.

[32] I have doubts about the reality of probabilistic causation (see the third of the following responses to Kane), but for the purpose of this objection I will concede its reality.

[33] Ibid., p. 141. The emphasis is Kane's. I say Kane's view on this issue "seems" to be what I have stated because nowhere, as best as I can ascertain, does he explicitly explain, as opposed to merely claim, why a non-causal view of choice is inadequate.

[34] Ibid., pp. 176-177.

[35] Ibid., p. 136. "There is . . . a teleological element involved in choosing for reasons."

[36] Randolph Clarke, "On the Possibility of Rational Free Action," *Philosophical Studies* 88 (1997):45.

[37] Ibid., p. 55, endnote 16.

[38] Randolph Clarke, "Agent Causation and Event Causation in the Production of Free Action," *Philosophical Topics* 24 (1996):36.

[39] Donald Davidson, *Essays on Actions and Events* (Oxford: Oxford University Press, 1980), pp. 9, 11, 32, and 87.

[40] For a further discussion of this issue, see my "Libertarian Choice," *Faith and Philosophy* 14 (1997):199ff.

[41] Timothy O'Connor, "Agent Causation," in *Agents, Causes, & Events*, ed. by Timothy O'Connor (New York: Oxford University Press, 1995), pp. 173-200.

[42] Ibid., p. 191.

[43] Ginet, *On Action*, Chapter 6.

[44] Ibid., pp. 145-146.

[45] In written correspondence, Ginet has expressed his preference to talk in terms of the act of adopting an intention.

[46] In further written correspondence, Ginet has conceded that the description 'We have an intention formed for a reason, period' is perhaps correct.

[47] Cf. Kim, *Philosophy of Mind*, pp. 9-13, 221ff.

[48] “First of all, the phenomenon of consciousness arises on the macroscopic level. That is, it is only highly organized physical systems which exhibit mentality.” Joseph Levine, “Materialism and Qualia: The Explanatory Gap,” *Pacific Philosophical Quarterly* 64 (1983):358.

[49] *Ibid.*, p. 10.

[50] Strictly speaking, it should be noted that supervenience itself is not an asymmetrical relation, but a nonsymmetrical, covariance relation which must be supplemented by a naturalistic affirmation of or commitment to the ontological priority of the physical in order to achieve the desired asymmetry. See Kim, *Ibid.*, pp. 10-11; Stewart Goetz, “Dualism, Causation, and Supervenience,” *Faith and Philosophy* 11 (1994):92-108; and Heil, *The Nature of True Minds*, pp. 98-102. For the sake of discussion, however, I treat supervenience as if it were itself an asymmetrical relation.

[51] Kim, *Philosophy of Mind*, p. 149.

[52] “There is a different sort of determinism associated with naturalism that, while very much alive today, has not found its way into discussions of human freedom. It is a sort of determinism according to which the microphysical world determines the distribution of the higher level properties of material beings, adumbrated in various popular supervenience theses.” J. A. Cover and John O’Leary-Hawthorne, “Free Agency and Materialism,” in *Faith, Freedom, and Rationality*, ed. by Jeff Jordan and Daniel Howard-Snyder (Lanham, MD: Rowman & Littlefield, 1996), p. 47.

[53] A hard naturalist who claims that libertarianism is an invention of philosophers is Daniel Dennett. See his *Elbow Room: The Varieties of Free Will Worth Wanting* (Cambridge, MA: MIT Press, 1984). His approach to dealing with difficult metaphysical issues in the philosophy of mind is just to deny that any reasonable person believes what creates the problem, which in this case is libertarian free will.

[54] Searle, *Minds, Brains and Science*, pp. 87-88.

[55] *Ibid.*, p. 93.

[56] John Searle, *The Rediscovery of the Mind* (Cambridge, MA: MIT Press, 1992), pp. 124-125.

[57] Searle, *Minds, Brains and Science*, p. 92. The emphases are mine. Searle recognizes the implications of supervenience naturalism for free will while others do not notice it or ignore it. For example, Kim (*Philosophy of Mind*, p. 12.) states that “very few of us would think that there can be mental events . . . that float free . . . of physical processes.” Yet, he is aware that supervenience naturalism seems to imply that the mental is epiphenomenal and that “Few philosophers have been self-professed epiphenomenalists.” *Ibid.*, p. 129. But why are so many philosophers reluctant to endorse epiphenomenalism? The most plausible answer is precisely that at least on some occasions (i.e., when we choose) the mental does seem to float free from the physical and determines what happens in it.

[58] John Searle, "The Mystery of Consciousness," *The New York Review of Books*, November 2, 1995, p. 60: "Look around you at the objects in your vicinity and think of the causal explanation of the fact that the table exerts pressure on the rug. This is explained by the force of gravity, but gravity is not an event. Or think of the solidity of the table. It is explained causally by the behavior of the molecules of which the table is composed. But the solidity of the table is not an extra event, it is just a feature of the table. Such examples of non-event causation give us appropriate models for understanding the relation between my present state of consciousness and the underlying neurobiological processes that cause it."

Contrary to what Searle asserts, (the force of) gravity is a continuous event (or a continuous series of events). Moreover, as I will have need to point out again in a moment, not only is the solidity of the table not an extra event, but also it is not an extra feature of the table. It is *identical* with the structure of the molecules which comprise the table.

[59] Kim, *ibid.*, pp. 149-150. See also his "Mental Causation in Searle's Biological Naturalism," *Philosophy and Phenomenological Research* 55 (1995):194.

[60] Cf. Heil, *The Nature of True Mind*, p. 102. The emphases are Heil's.

[61] Thus, while classical naturalism was incompatible with libertarianism because of its deterministic nature, it was more fundamentally incompatible with libertarianism because of its exclusion of teleological explanation. J. P. Moreland recognizes naturalism's exclusion of teleology in his forthcoming "Naturalism and Libertarian Agency," in *Philosophy and Theology*.

[62] Searle, *The Rediscovery of the Mind*, p. 13.

[63] Kim, *Philosophy of Mind*, pp. 232-233. See also "The Myth of Nonreductive Materialism," *Proceedings and Addresses of the American Philosophical Association* 63 (1989):47: "Is the abandonment of the causal closure of the physical domain an option for the materialist? I think not: to reject the closure principle is to embrace irreducible nonphysical causes of physical phenomena. It would be a retrogression to Cartesian interactionist dualism, something that is definitive of the *denial* of materialism." The emphasis is Kim's.

[64] *The Philosophical Works of Descartes*, vol. I, trans. and ed. by Elizabeth S. Haldane and G. R. T. Ross, (Cambridge: Cambridge University Press, 1967), p. 196.

[65] Nagel, *The View from Nowhere*, p. 43. Cf. Derek Parfit, *Reasons and Persons* (Oxford: Clarendon Press, 1987), Part Three.

[66] David Braine, *The Human Person* (Notre Dame, IN: University of Notre Dame Press, 1992), p. 315.

[67] Searle, *The Rediscovery of the Mind*, p. 91.

[68] *Ibid.*

[69] Jaegwon Kim, "Epiphenomenal and Supervenient Causation," in *Midwest Studies in Philosophy*, volume ix, edited by Peter A. French, Theodore E. Uehling, Jr. and Howard Wettstein (Minneapolis: University of Minnesota Press, 1984), p. 266.

[70] Ibid.

[71] Kim, *Philosophy of Mind*, p. 4.

[72] For a discussion of this alternative, see Philip L. Quinn's, "Tiny Selves: Chisholm on the Simplicity of the Soul," in *The Philosophy of Roderick M. Chisholm*, ed. Lewis Edwin Hahn (La Salle, IL: Open Court, 1997), pp. 55-71.

[73] Kim, *Philosophy of Mind*, p. 131.

[74] Goetz, "Dualism, Causation, and Supervenience," pp. 99-105.

[75] Kim, *Philosophy of Mind*, p. 4.

[76] Searle, *The Rediscovery of the Mind*, pp. 89-102.

[77] Chalmers, *The Conscious Mind*, p. 170.

[78] Searle, *The Rediscovery of the Mind*, p. 102.

[79] Searle, *Minds, Brains and Science*, pp. 21-22.

[80] Searle, *The Rediscovery of the Mind*, pp. 113, 115.

[81] Ibid., p. 102.

[82] Ibid., pp. 105, 127. Levine ("Materialism and Qualia: The Explanatory Gap") argues that the mind/body problem is resistant to explanation in terms of magnitudes and mechanisms. While 'Heat is molecular motion' is intelligible because heat can be explained as motions of molecular extended parts of an object which can causally produce motions in parts of other objects, 'Pain is the firing of C-fibers' is unintelligible because pain is a simple *quale* which cannot be explained in terms of an organized system of parts.

[83] Colin McGinn, *The Problem of Consciousness* (Oxford: Basil Blackwell, 1991), pp. 11-12, and 18, footnote 21. Chalmers points out the irrelevance of Searle's solidity-liquidity model for understanding how consciousness is related to the physical: "It seems clear that this is a false analogy, however. Given all the microphysical facts about a particular batch of H₂O, it is logically impossible that those facts could hold without liquidity being instantiated. . . . The microphysical features do not *cause* liquidity; they *constitute* it. This is entirely different from what is going on in the case of consciousness, so the analogy fails. Consciousness is ontologically novel in a much more significant way than liquidity." *The Conscious Mind*, p. 130. The emphases are Chalmers'.

Galen Strawson (*Mental Reality* [Cambridge, MA: MIT Press, 1994]) recognizes the bruteness or “That’s just how things are” (pp. 83-84) nature of the mind-brain or experience-non-experience relation, and says that he would “ban the word ‘supervenience.’ It has seemed to promise much, . . . but it has been of no real use at all.” “Replies to Noam Chomsky, Pierre Jacob, Michael Smith, and Paul Snowdon,” *Philosophy and Phenomenological Research* 58 (1998):481, f.n. 49. He espouses, however, a materialist’s faith that some future physics about which we are presently ignorant will provide an account or theoretical understanding of how experience (what-it’s-likeness) is realized in the brain (*Mental Reality*, pp. 81, 84-93). Given the simplicity (lack of part-whole structure) of experience, it is impossible to understand how any future physics will be able to do what Strawson hopes it will do. Why not accept dualism? Because it “faces well-known problems” (Ibid., p. 43). Not surprisingly, Strawson denies the reality of libertarian free will. See his *Freedom and Belief* (Oxford: Clarendon Press, 1986).

[84] Chalmers, *The Conscious Mind*, p. 107. The emphases are Chalmer’s.

[85] Kim, *Philosophy of Mind*, pp. 131-132.

[86] One is reminded, here, of the famous passage from Plato’s *Phaedo* 98c-99a, where Socrates criticizes Anaxagoras for claiming that mind causes all things and then adducing only physical causes: “It seemed to me that he was just about as inconsistent as if someone were to say, The cause of everything that Socrates does is mind--and then, in trying to account for my several actions, said first that the reason why I am lying here now is that my body is composed of bones and sinews, and that the bones are rigid and separated at the joints, but the sinews are capable of contraction and relaxation, and form an envelope for the bones with the help of the flesh and skin, the latter holding all together, and since the bones move freely in their joints the sinews by relaxing and contracting enable me somehow to bend my limbs, and that is the cause of my sitting here in a bent position. Or again, if he tried to account in the same way for my conversing with you, adducing causes such as sound and air and hearing and a thousand others, and never troubled to mention the real reasons, which are that since Athens has thought it better to condemn me, therefore I for my art have thought it better to sit here, and more right to stay and submit to whatever penalty she orders. Because, by dog, I fancy that these sinews and bones would have been in the neighborhood of Megara or Boeotia long ago--impelled by a conviction of what is best!--if I did not think that it was more right and honorable to submit to whatever penalty my country orders rather than take to my heels and run away.”

[87] Chalmers, *The Conscious Mind*, p. 153.

[88] Timothy O’Connor, “Emergent Properties,” *American Philosophical Quarterly* 31 (1994):93-96.

[89] Ibid., p. 99.

[90] Kim, *Philosophy of Mind*, p. 229.

[91] Chalmers, *The Conscious Mind*, p. 164.

[92] Searle, *The Rediscovery of the Mind*, p. 8.

[93] *Ibid.*, p. 9.

[94] John Searle, "Consciousness, Explanatory Inversion, and Cognitive Science," *Behavioral and Brain Sciences* 13 (1990):585.

[95] *Ibid.*, p. 13.

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