Steven Horst
Laws, Mind, and Free Will.
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In *Laws, Mind, and Free Will* Horst argues that a careful consideration of laws of nature, as found in our best texts, reveals that laws are characterizations of causal capacities, much as Nancy Cartwright argues, and that laws of nature are 'encountered within the cognitive task of modeling features of the world' (61). Laws of nature are conceived in a non-empiricist, more pragmatically-oriented approach than in Cartwright's neo-empiricism, for they are no longer thought of as universally quantified statements, (with or without ceteris paribus clauses) regarding the kinematics of objects but are instead thought to be about the dynamics of objects, not their actual behavior. Further, laws are claims abstracted from idealized models of the world, not the world itself and these models designed for distinct aspects of reality may utilize conflicting idealizations. Having established that laws of nature are abstractions from models and are intended to express the partial causal contribution of forces, Horst then argues that laws of nature are the same in kind both in physics and psychology, such that it is no criticism of psychology as a science that it fails to find universally true or 'strict' laws.

With his account of laws of nature in hand Horst then turns to free will and determinism. He argues that his account of laws of nature offers no reason to think that the laws of nature will be deterministic and this fact offers us some reason to think that determinism is not in fact true, thus leaving space for Libertarian free will. The 'Davidsonian problematic', i.e. that mental events are subject to physical law and hence are token identical with physical events - falters for misunderstanding the nature of laws of nature. Although he is not explicit in his ontology, Horst appears to reject token event monism. Horst is a committed nondeterminist but is also an event dualist (126). Davidson assumes that causal relations require some exceptionless law to subsume cause and effect and Horst is correct to note this weakness in Davidson's argument for token monism. If causal relations can exist between events that are not related by exceptionless law then Davidson cannot claim that mental events are physical, for he would have no reason to think they must be subsumed by physical law.

But apart from this well-known and sensible objection to Davidson's argument this is a very confused and disappointing book. Horst takes on targets that are barely life-like straw men. He makes claims about what is commonly thought or argued yet can't seem to find a reference to anyone who does indeed argue the point (97). He introduces undefined concepts at key points of discussion (119) and he blusters and protests when an argument is required. He seems to have done little serious research into the metaphysical debates he thinks his philosophy of science can solve and he appears to have no use or knowledge of others who have written on models and scientific explanation. Morrison and Morgan's (eds.) *Models as Mediators* (Cambridge 1999) and Newton DaCosta and Steven French's *Science and Partial Truth* (Oxford 2003), found no place in his

bibliography. He touts the view that he does philosophy of mind from the perspective of philosophy of science. But in the end, the retreat to epistemology requires that he stay quiet over ontological matters; all he can do is remind us that current science offers nothing conclusive—but he just can't do it—so he attempts to take sides in the empirical debate in favor of indeterminism…to make space for free will.

Horst wishes to defend psychology as a legitimate science despite it lacking exceptionless laws, by arguing that all sciences lack laws of that kind. But why we should pander to the standards of the other sciences in the first place, isn't really addressed and the idea that exceptionless laws of nature are required of a legitimate science was attacked a long, long time ago, most memorably in Fodor's paper 'Special Sciences' (*Synthese,* Vol. 28,1974) Horst has nothing new to add to this debate and appears to be arguing against philosophers long dead. He quoted no one saying that psychology was not legitimate due to its laws. Horst's second target is equally antiquarian. He claims, without quoting anyone saying so, that it is commonly argued that if something is governed by a law of nature then that thing is determined and he sets out to refute the claim by showing that laws of nature, as abstractions from models, are not deterministic. But the *possibility* of nondeterministic or indeterministic laws of nature has been around since quantum mechanics, and long before any talk of models became fashionable, so Horst couldn't quote anyone making the outrageous argument he wishes to refute. Horst doesn't seem to realize that the mere possibility of indeterministic laws is enough to refute the argument, and instead he tries to support the claim that we actually have indeterministic laws. But Horst doesn't take quantum mechanics to be a good reason to be an indeterminist (102). Instead his reasoning is unfamiliar, betraying his epistemological approach. He writes: 'What implications does this have for determinism and free will? Most directly, two theories that are apt but inconsistent cannot be combined to produce deterministic results. Indeed, in some cases they produce contradictory results. And thus our present scientific theories do not combine to imply a deterministic world' (118). This shouldn't be a surprise, for most, if not all theories are acknowledged to be incomplete! So this is no help for the debate over whether determinism *is* true or not, for now the question must be asked, are there deterministic laws derived from deterministic models of the world constituted by deterministic idealizations? Horst insists that we have little reason to think the world is deterministic despite the existence of such models and laws among scientific theories. There was precious little in Horst's discussion of his tacked-on case studies that highlighted the probabilistic features of these models. A law can be deterministic if we can deduce statements about the behavior of the object from statements about the initial conditions and law, *within the idealized model or otherwise.* But having changed the referent of 'laws of nature' from an ontological feature to an epistemic one, Horst no longer is engaged with the debate everyone else is worried about. What we're worried about is that there is some form of *inevitability* in the sequence of events due to the laws. Horst never argues that such a conception of a law is impossible but he blusters that if you thought there were such laws you would be making an unfair appeal to the future state of science, or worse, to some *noumenal* reality (132-5).

Horst's discussion of libertarian free will is equally disappointing and confused. He momentarily recognizes that refuting determinism is not sufficient to show that we have free will, for an nondetermined choice may be a choice made from mere luck, and thus no one's free or responsible choice. Horst recognizes the problem and magnificently ignores it, offering us no reason for confidence in his claim that once we have disposed of determinism we have made room for free will. He writes: 'the causal account of laws provides space for free will. Laws make no claims beyond their own limited domains. And because free will of the relevant sort, namely Libertarian free will, is by definition anomic, the laws…can say nothing about it' (119).

When faced with the well-known objection to nonphysicalist theories of nature, that all physical events have sufficient physical causes and that the postulation of any further causes would be superfluous, Horst replies, 'No'. We have no reason to believe that every physical event has a sufficient physical cause despite, as David Papineau points out, the failure of sciences like vitalist biology to provide examples of nonphysical causes. Horst is at his most pompous when ignoring the arguments of others, writing condescendingly, 'I applaud Papineau's intellectual honesty' (130) but he ingenuously offers no reply to Papineau's inductive argument that the causal closure of the physical is reasonable to believe since no science invoking a nonphysical force has had any empirical success. Facing the complete lack of evidence for his view, Horst pouts and remarks that there *might* be such a science, since one only has inductive evidence against the claim (130), and he remarks that the failure of vitalist biology doesn't *imply* the failure of a nonphysical psychology (as if Papineau's historical inductive argument had been reborn as a deductive one for the pleasure of Horst's refutation).

The moral of this review? Don't bring an epistemic penknife to an ontological gunfight. If you wish to defend an event-dualist, non-determinist ontology of the mind to preserve alternate possible choices, then offer arguments for the existence of these things and be diligent in your replies to the literature. Merely pointing out that our current, *incomplete* laws don't *entail* determinism will bring no insight whatsoever to the debate, since that's where the debate begins.

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