



ONTOLOGY, MIND AND FREE WILL **A Workshop in Memory of E.J. Lowe (1950-2014)**

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The single day conference “Ontology, Mind and Free Will. A Workshop in Memory of E.J. Lowe (1950-2014)” took place at the Department of Humanities of the University of Macerata on March, 3rd 2014. It included as speakers Sophie Gibb (Durham University), Mario De Caro (Roma Tre University) and Michele Paolini Paoletti (University of Macerata). This event was thought by the organizers in order to honor the British philosopher Ethan Jonathan Lowe, who suddenly passed away last January with infinite regret of the scientific community. The discussion of some of his major research topics, such as mental causation, free will and essence, was therefore meant as the right homage to one of the most influential philosophers who animated and deepened the debate of the last thirty years.

Regarding the singular reviews of this report, Matteo Grasso took care of Sophie Gibb’s and Mario De Caro’s talks, while Mattia Sorgon reviewed Michele Paolini Paoletti’s.

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1 *Causal Closure Principles, Causal Sufficiency and Structuring Events*

Sophie Gibb (Durham University)

In her talk, Sophie Gibb discusses the current formulations of the causal closure principle, and questions the assumption of causal sufficiency that usually goes with its acceptance.

In Gibb's reconstruction the causal closure principle is based on the following argument:

1. Some mental events are causally relevant to physical effects.
2. All physical effects have sufficient physical causes.
3. There is no systematic causal-overdetermination.
4. Mental events (that are causally relevant in the physical domain) are identical with physical events.

As Gibb argues, in the contemporary mental causation debate there are at least ten different formulations of the causal closure principle, but many of these formulations are unsatisfactory, because either too strong or too weak. For instance, on one hand, formulations such as "All physical effects have sufficient physical causes" (Papineau, 1998, p. 375) are too weak because they do not explicitly mention non-physical causes. On the other hand, other formulations such as "Any cause of a physical event is itself a physical event—that is, no non-physical event can be a cause of a physical event" (Kim, 2005, p. 50) are too strong, because they exclude completely any role for non-physical causes.

According to Gibb, the formulations that accept the assumption that every physical effect has *sufficient* physical causes (Papineau, 1998) are problematic. In fact, the case of *double prevention* shows that this assumption is false. Gibb discusses the following example: in order to win a prize, a player named Fred throws a ball aiming to break a bottle. The bottle is protected by a barrier which prevents the ball to hit the bottle. However, the removal of the barrier is controlled by a switch, which is activated by Sally. Therefore, the pressing of the button by Sally prevents the barrier to prevent the breaking of the bottle caused by the hit of the ball thrown by Fred. The question raised by Gibb is therefore: is the pressing of the button (i.e. the double preventer) a *cause* of the breaking of the bottle?

According to Lewis' *counterfactual dependence theory of causation* (Lewis, 1973) double prevention is a form of causation. In our example, the pressing of the button (P) is a cause of the breaking of the bottle (B) because B counterfactually depends on P: P prevents a preventer of B and thus B counterfactually depends on P. However, accepting double prevention as a genuine form of causation is not unproblematic. It requires one to accept wide scale macro-causation at a distance and causation from absences, as claimed by Mumford and Anjum (2009). But to leave out completely double preventers from the causal story of the event would be to miss something crucial, because it is precisely because Sally pressed the button that Fred's ball broke the bottle.

Gibb embraces a different theory of causation, based on *powers ontology*. In this view, powers are dispositional properties, such as fragility or solubility, which are manifested only in specific circumstances. Powers are properties which are directed towards an end, and which dispose their possessor to be or act in a certain way, which is manifested in appropriate circumstances. According to the powers theory of causation double prevention is not causation,

and there is a fundamental difference between causing an event (such as in normal causation) and permitting an event to be caused (such as in the cases of double prevention). In this view, a double preventer does not *cause* the event that it prevents from being prevented, but it *permits* or allows the event to be caused. This role is objective because the fact that a further event is required to permit the relevant causal relation to take place is independent to our attitudes or our way of describing and explaining the process, therefore it is a completely different metaphysical account and not just a different explanatory approach. Sally's pressing of the button is not a cause but permits the breaking of the bottle by permitting a causal relation involving Fred's ball and the bottle to take place, by the removal of the barrier. This grounds the counterfactual dependence relation, because if Sally had not pressed the button not permitting Fred's ball to hit the bottle, then the bottle would not have broken.

The important conclusion of this analysis is that, according to this account, causes are not always sufficient for their effects. In this example, all the events that are causes of the breaking of the bottle are not collectively *sufficient* for the breaking of the bottle, because even given that all of these causes exist, the breaking of the bottle does not follow necessarily. The double preventer (the pressing of the button) must also exist for the effect to take place, but it is not a cause. Therefore, according to Gibb, Papineau (1998)'s formulation of the causal closure principle as "Every physical effect has sufficient physical causes" is misconceived, because not every physical effect has sufficient physical causes. Nonetheless, even if not a cause, Sally's pressing of the button should appear in the explanation of why Fred's ball broke the bottle, because it plays the essential role of an event that permits the cause to bring about its effect, and it has the same importance as the role of the cause itself.

The fact that physical events not always have sufficient physical causes has deep implications on the matter of mental causation as well. The traditional question about the psychophysical nexus which links mental states with physical (brain) states rests on the assumption that a physical effect, say an action, is the result of two different chains of events: a chain of mental states and a chain of physical states. Recently, reductionist accounts are focusing on the empirical inquiry of the neurological events that bring to action, denying any irreducible existence of mental states because causally inert or epiphenomenal. However, according to Gibb, an explanation of a movement which focuses exclusively on the chain of neurological events would be incomplete. This description would specify the complete set of causes of the movement, but the crucial role of a mental state allowing the movement to take place would be left out. This enabling role is completely invisible to science, which studies only the causal relationship among physical events. An empirical investigation will not reveal any role for non-physical events, therefore for the scientist would be reasonable to conclude that a complete account of the movement can be given purely in neurological terms. However, for Gibb this conclusion is mistaken because it is a non-physical event (the mental event) that permits the neurological chain of events to produce the action. This account would be therefore compatible with Libet's theory of *free won't* (Lewis, 1973), according to which the neurological event (the *readiness potential*) precedes the decision to move, but the mental event permits the final motor outcome, by preventing a further mental event from preventing this causal relation (Gibb, 2013).

As we have seen, for Gibb the traditional model of causation fails because physical events do not have sufficient physical causes, as shown in the case of double prevention. Hence, the formulation of the causal closure principle as "Every physical effect has a sufficient physical cause", according to Gibb, should be reformulated. Gibb's proposal is in line with Lowe (2000)'s formulation of the principle, stated as follows: "Every physical event contains

only other physical events in its transitive causal closure” (where “transitive causal closure” means the set of events which includes the immediate causes of the event, the immediate causes of those causes and so on). According to Gibb, this version of the causal closure principle allows to overcome the apparent incompatibility between psychophysical causation and non-overdetermination. This result is reached combining a powers theory of causation with the claim that mental events serve as double preventers (only enabling physical events to be caused). Moreover, this account explains why the causal role of mental events is invisible to science, contrary to the claims of the counterfactual theory of causation.

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2 Positive Views of Free Will: Conceptual vs. Metaphysical Formulations

Mario De Caro (Roma Tre University)

In his talk, Mario De Caro contrasts the approach to the problem of free will typical of scientific naturalism with a variety of “duality views”, according to which the existence of free will is compatible with the scientific worldview.

The problem of human freedom is one of the oldests in philosophy. As De Caro claims, the contemporary debate is still characterized by many opposite replies to the question “Can we solve the problem of free will?”. On one hand there is who claims that we surely can solve it, because it is obvious that we have free will (libertarians). On the other hand, there are scholars who claim that the problem is already solved, because it is obvious that free will is just an illusion (illusionists).

According to De Caro, both libertarianism and illusionism are unsatisfying because they avoid the real challenge, which should be to give a satisfying account of free will in a naturalistic framework. In fact, in order to be satisfying, a conception of free will should account for both the scientific and the agential views of the world.

A first attempt to reconcile the normative dimension with a naturalistic view is *scientific naturalism*. The main tenets of this positions are that the world consists of nothing but the entities to which successful scientific explanations commit us, that scientific inquiry is our only genuine source of knowledge, and that all other forms of understanding should be reducible to it. However, scientific naturalism faces a big issue, the so-called *placement problem*, the problem of how to locate the normative, intentional, modal, phenomenological, moral and abstract entities in the scientific world. Reductive and eliminative approaches to free will surely fail in providing a satisfactory reply to the placement problem, therefore another option is needed.

According to De Caro, a valuable alternative to scientific naturalism is *liberal naturalism*, according to which there are some real non-supernatural features of reality that cannot be accounted for by natural science, there are forms of understanding that are neither reducible to the empirical forms of knowing nor supernatural, and that philosophy is not (always) continuous with natural science.

However, liberal naturalism is committed to the existence of a *duality*, which should be nonetheless compatible with the scientific worldview. As De Caro recalls, Dana Nelkin has proposed three duality views in her paper from 2000 entitled *Two standpoints and the belief in freedom: the two-worlds view* (embraced by Kant), the two-aspects view (Spinoza, Davidson), and the two-standpoints view (Strawson, Nagel, Korsgaard). The *two-worlds view* claims that our scientific and agential beliefs about free will are non-contradictory because our belief that we are free is a belief about our noumenal selves, while our belief that our actions are determined is a belief about our phenomenal selves. However, according to De Caro this view is too liberal, since it tends to be strongly anti-realistic about natural sciences.

The *two-aspects view* claims that our beliefs and our scientific knowledge on free will are about the same object, but one is about ourselves and our actions considered in one aspect or under one description, while the other is about ourselves and our actions considered in a different aspect or under different descriptions. However, according to De Caro, Davidson's two-aspects view faces a big problem: epiphenomenalism. In fact, this position is not liberal enough since it tries to force freedom in the nomological-causal network to which it doesn't belong.

Finally, the *two-standpoints view* claims that there is nothing problematic in believing that we are free even if determined, because each of our beliefs is held from different standpoints. Although reason commits us to contradictory beliefs, there need not be any irrationality as a result, as long as each belief is held from a distinct standpoint. According to De Caro this view is problematic because it begins with a contradiction and tries to sterilize it.

For De Caro, a fourth more promising duality view is the *intelligibility view*. Contrary to the other views, this perspective does not commit us to believe that we live in two different worlds, as agents and as natural entities (as in the two-worlds views), that freedom and determination are two different descriptions of the same reality (as in the two-aspects views), or that we can rationally hold contradictory beliefs (as in the two-standpoints views). For the intelligibility view reality is intelligible for us from two different perspectives: on one hand the scientific perspective, which uses causal-nomological concepts, and on the other hand the agential perspective, which uses normative concepts. This view has been endorsed by Putnam, Korsgaard, McDowell, White, and Bilgrami. Intelligibility views claim that two conditions are crucial to ascribe freedom to an agent: she must be able to respond adequately to normative reasons, and she must have some local causal powers not reducible to nomological causation, but not supernatural either. This view is different from the traditional

agent causation views, since it is not in contradiction with the scientific view of the world. In fact, intelligibility views require only a form of *conceptual pluralism*, that we already accept in many cases. For instance, De Caro says, we accept that common sense tables exist, that they are not reducible to their physical counterpart made of subatomic particles and basically empty space, and that they cannot be eliminated without losing something important for our practices. The same goes for human beings who are at the same time agents and natural entities. For this conception we attribute responsibility looking at the *relevant* cause of an action, therefore it denies that there is only *singular causation*, embracing a pluralistic view of causation. But, contrary to emergentism and other theories of mental causation, this position avoids the danger of epiphenomenalism, admitting at most cases of overdetermination.

In conclusion, De Caro claims that the manifest image and the scientific image are in relation of global supervenience with each other, therefore a duality view is required to account for these two deeply linked dimensions. Given that, compatibilism is the best option for free will, because it takes seriously both our intuition about freedom and the scientific description of the world. Finally, by appealing to conceptual and causal pluralism, the double-intelligibility view succeeds in reconciling the manifest and the scientific image, acknowledging at the same time that both these images rule in their respective dominions.

3 *Grounding Modal Truths on Essences*

Michele Paolini Paoletti (University of Macerata)

Paolini Paoletti starts his talk illustrating in details the topic of *genuine mere possibilities*, according to which something could have been the case even though it is not, at least actually, the case. Following this claim, statements like:

- (1) Obama could have been an engineer.
- (2) Persons might have not been mammals.
- (3) Unicorns could have existed.

turn out to be true. Deepening the analysis, the author then shows how (1), (2) and (3) can be declined in three different categories: *singular/general mere possibilities*, *positive/negative mere possibilities*, and *existential/non-existential mere possibilities*. Under this view (1) expresses a singular, positive, and non-existential mere possibility; (2) expresses a general, negative, and non-existential mere possibility; while (3) expresses a general, positive, and existential mere possibility. Furthermore, three different positions can be individuated within this framework:

- *necessitarianism*, for which there are no mere possibilities;
- *extreme possibilism*, for which it is legitimate to construct mere possibilities out of everything;
- *moderate possibilism*; for which there are mere possibilities, but some restrictions should be imposed on their construction.

The aim of Paolini Paoletti's talk is to explore the *essentialist solutions* to the problem of mere possibilities. These particular versions of moderate possibilism, according to the author, should indeed be able to ground the truths of statements such as (1), (2), and (3) imposing

on mere possibilities some restrictions based on the essences of objects. Focusing mainly on statements of the sort of (1), expressing hence singular, positive, and non-existential mere possibilities, the author provides thus an analysis of the *modal view* and the *definitional view* of essences.

The first solution considered, the *modal view* of essences, claims that essences should be characterized as properties that objects necessarily instantiate through a possible-world framework. This proposal is constituted by two distinct theses:

(1p.w.) There is a possible world (that is different from the actual world) in which Obama exists and he is an engineer.

(ex.mod.ess.) For every property, for every entity, that property is essential to that entity iff it is necessary that that entity exists, *only if* it has that property, i.e., iff, in every possible world, that entity exists, *only if* it has that property.

The first thesis gives the proper interpretation of (1) in terms of possible worlds, the second one defines essences as properties necessarily instantiated by an object and able to restrict the set of circumstances through which the same object can undergo in different possible worlds. Once satisfied these two theses, different variants of this view can be provided ranging over three parameters: (a) the amount of entities that have essential properties (all/some but not all/none), (b) the amount of properties that are essential to entities (all/some but not all/none), and (c) what kind of properties are essential to entities. Additional specifications can be stated distinguishing among the *partial*, *complete*, and *general essence* of something: the first one is a subset of an entity's essential properties, the second one is the set of an entity's essential properties, while the latter one is an essential property that an object shares with other objects. Particularly important is the definition of the *individual essence* of something:

(ex.mod.ind.ess.) For every property, for every entity, that property is an individual essence of that entity iff it is necessary that that entity exists *iff* it has that property, i.e., iff, in every possible world, that entity exists *iff* it has that property.

that is the property which uniquely characterizes an entity. Given such analysis, the *modal view* of essences is thus able to conceive the mere possibility expressed by (1) as:

(1p.w.a.) There is a possible world in which Obama's individual essence is instantiated (so that Obama exists) and Obama is an engineer (or, equivalently, Obama's individual essence is coinstantiated with the property of being an engineer).

Paolini Paoletti clearly highlights how this first solution would face two orders of problems: the concerns related to the nature of possible worlds and their ontology and the worries about the exact individuation of essential properties. Regarding the first objections, the author shows how the definitions of what a possible world is meant to be, which kind of relations bind essential properties, objects and worlds together and how the conceivability of possible worlds is determined are far from being conclusive. Moreover, referring mainly to Kripke (1980), he underlines how (1) and (1p.w.a.) seem to have different meanings: while (1) focuses on what could happen to the object in the actual world, (1p.w.a.) expresses what happens to the object in some possible world different from the actual. Concerning the second kind of problems Paolini Paoletti quotes directly Fine (1994a,b; 1995a,b), pointing out how given (ex.mod.ess) and (ex.mod.ind.ess.) too many properties turn out to be essential to an entity.

This unpleasant consequence would entail that, incidentally, even existence turns out to be an essential property. Trying to elude the problem referring exclusively to intrinsic properties (Cowling, 2013) would not undermine the objection: intrinsic properties are indeed often determined in modal terms. The author concludes thus his analysis of the *modal view* claiming that modal facts themselves, assumed to ground an object's essences, need to be grounded by something which this view seems not able to provide.

Paolini Paoletti considers then the second solution to the problem of mere possibilities, the *definitional view* of essences. This second version of moderate possibilism, claimed among others by Lowe (1994, 2006, 2008, 2012, 2013) and Fine (1994a,b; 1995a,b), conceives the essence of an entity in terms of "*what* that entity is" and assumes that it can be discovered by providing a "real definition" of that entity. Basing on these principles, this view defines hence metaphysical possibility and necessity as:

(met.poss.) it is metaphysically possible that some entity *e* is P iff being P is not excluded by *e*'s essence (i.e., it is not the case that, if *e* is what it is, then it is not P);

(met.imp.) it is metaphysically impossible that some entity *e* is P iff being P is excluded by *e*'s essence (i.e., it is the case that, if *e* is what it is, then it is not P);

(met.mere poss.) it is metaphysically merely possible that some entity *e* is P iff *e* is not P, but being P is not excluded by *e*'s essence (i.e., it is not the case that, if *e* is what it is, then it is not P);

(met.nec.) it is metaphysically necessary that some entity *e* is P iff being non-P is excluded by *e*'s essence (i.e., it is the case that, if *e* is what it is, then it is P).

providing in the end the following interpretation of (1)

(1ess.) Obama's essence does not exclude his being an engineer, even though Obama is not an engineer (i.e., it is merely metaphysically possible that Obama is an engineer).

The author deepens then the analysis of the *definitional* alternative highlighting the particular view held by Lowe (2012). According to Lowe, being metaphysically necessary for an entity is only a necessary condition for its belonging to that entity's essence, but not a necessary and sufficient condition. In order to clearly distinguish between the necessary and essential characteristics of a thing thus we have to refine our *definitional view*, complementing further claims which discriminate between essences and entities:

- (j1) every entity has an essence (serious essentialism);
- (j2) yet, essences are not entities;
- (j3) the essence of an entity is revealed by its real definition;
- (j4) the metaphysical possibility/necessity of something for an entity is grounded on that entity's essence;
- (j5) there are metaphysically necessary features of an entity that are not part of its essence and they are grounded on that entity's essence and on some other entity's/ies' essence(s).

Following these last points provided by Lowe, Paolini Paoletti concludes his talk addressing two different questions: "are essences entities?" and "are there individual essences?". Regarding the first question, he clearly argues, in opposition of Lowe's view, in favor of the

idea that essences are entities. Indeed, the author claims, if we admit that essences are conjunctive properties (or conjunctions of properties), then we can directly admit that they are infinite entities and infinite essences of entities without falling in any kind of foundational infinite regress. Finally, concerning the latter question, the author rehearses Lowe's reflections about individual essence and the *individuator property* in order to claim that, given an object's general essence, it is possible to conclude the truth of statements of the sorts of (1). In this regards, it is possible to maintain at the same time the notion of existence itself and existence in some other possible situation as irreducible features of a thing; features that *cannot* be reduced to an object's individual essence.

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