

Ontological Manichaeism Now

Axel Arturo Barceló Aspeitia

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abarcelo@filosoficas.unam.mx

I. Introduction

Before he reached his mature metaphysical view of being as gradual in the *Republic* ([Allen 1961](#)), Plato claims that neither can negative facts explain positive facts, nor vice versa (*Phaedo* 103b) (this is very likely a corollary of *his principle of opposites* according to which if *A* and *B* are of opposite ontological categories, *A* cannot explain *B* ([González-Varela and Barceló 2023](#))). Yet, it seems obvious that we explain positive facts by appealing to negative facts and vice versa, all the time. We say things like "Pat must be sick, because she would not have missed the party otherwise", "The Plant died because we forgot to water it", "The suitcase was so large, it did not fit in the trunk", etc. So this seems like a strange and obviously wrong take on the limits of metaphysical explanation. Yet here I will defend that this counter-intuitive metaphysical thesis has been unjustly dismissed and will argue that, instead, it is a plausible metaphysical principle.

My defense of this metaphysical principle can also be seen as part of a larger defense of an under-explored metaphysical hypothesis, *Ontological Manichaeism*, according to which positive and negative facts, if both belong in our ontology, are separate realms of being with no interaction whatsoever. When debating the ontological status of negative facts it is usually assumed that our ontology is unproblematically constituted by positive facts and that if negative facts are to be granted ontological citizenship it must be because of their indispensability in accounting for the existence and behavior of positive facts. This means that the question of the

ontological status of negative facts relies heavily on the answer to the broader question whether it is possible to explain a positive fact by a negative one or viceversa ([Hommen 2018](#)). This means that those who believe that there are no negative facts must be even more interested in the question of why we have the strong intuition and many prima-facie examples of negative facts being involved in metaphysical explanations, for if, like me, they want to defend a negative answer to this fundamental question, they also need to explain away these intuitions, as I will try to do here.

My defense will proceed in three stages. In the first one I will offer a couple of motivating reasons as to why we must at least entertain the possibility that negative and positive facts are metaphysically isolated in such a way that only negative facts can be involved in the metaphysical, causal and formal explanation of negative facts and vice versa. Then, I will offer two arguments, one positive, one negative, in favor of this claim. On the positive one, I will argue that negative facts cannot be relevant to positive facts (and vice versa), and thus cannot feature in their metaphysical explanation. On the negative one, I will take alleged examples of explanations that seem to be counter-examples to my general hypothesis) and try to deflect them.

A preliminary caveat: As I have already mentioned, many people think that there are no negative facts, and for most metaphysicians, even if they exist, they are not fundamental and thus cannot metaphysically explain positive facts. I do not want to get in these arguments, yet a couple of clarifying remarks are in order. First of all, I assume, as it is traditionally assumed within the neo-Aristotelian framework, that metaphysical explanation is not just the explanation of the non-fundamental by the fundamental, but also the explanation of some non-fundamental facts by other more fundamental, but not necessarily completely fundamental, facts. Thus, even

if there are no fundamental negative facts, these can still be featured in the metaphysical explanation of other less fundamental facts.

Also, in order to better understand what exactly the hypothesis entails, it is important to spend a few lines on giving criteria of what constitutes a negative fact. Since my argument, specially on its second, negative, part will depend essentially on unmasking as negative facts that might seem, at first, as positive, and vice versa. It is important to make sure that I am not making ad-hoc classifications, but instead following well understood criteria that are at less controversial as possible.

There is a well-know distinction between two factors that determine when a fact is positive or negative: what Kühl (2014, 2012) has deemed “sheer negativity/positivity” but which, for reasons that I hope become clear soon, I think is better to call “structural” negativity/positivity and and negative/neutral/positive valence. What Kühl calls “sheer positivity” is nothing but the having of some property (or relation) by a particular (or system of particulars), in contrast to not having such property (or relation), i.e., “sheer negativity”. Thus, my being Mexican is a structurally positive fact, while my not being Portuguese is a structurally negative one. Valence, in contrast, is a property of the properties, entities or relations themselves. Thus, being allowed to participate has a positive valence, while being forbidden from participating has a negative one. Being present is a positive property, while being absent is a negative one.¹ Most properties have neither a positive nor a negative valence, and thus are neutral. When a neutral

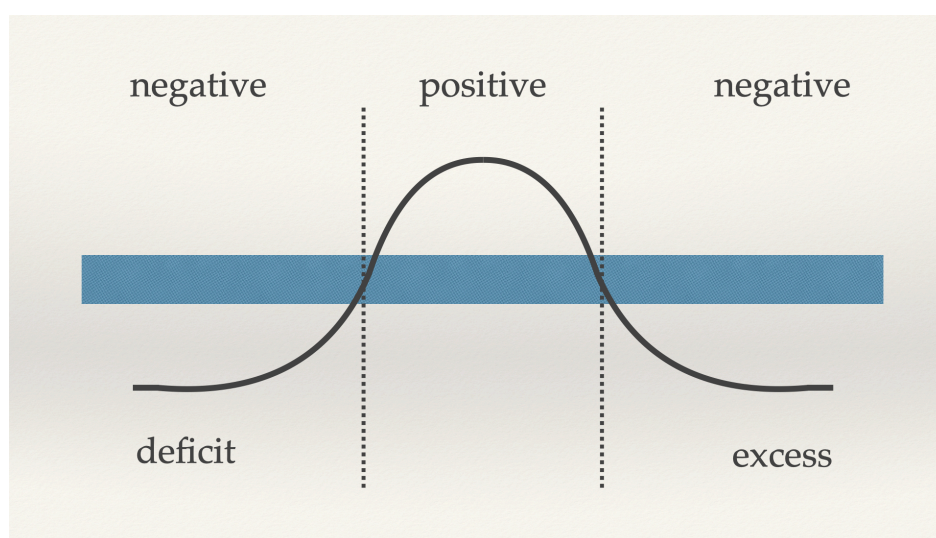
¹. It remains an open question whether valence can be reduced to structural positivity or negativity. So, for example, it could be argued that what makes permissions positive, for example, is that they are actually existential statements to the effect that they are true if *there is a relevant deontic possibility*. So for example, what makes true that I am allowed to participate in the Mexican presidential elections is that, among the possible world where I do not violate any Mexican law, there is one where I vote in the Mexican presidential elections. Prohibitions, in contrast, are true if the forbidden course of action is false in every deontic possible world. Some philosophers (like Kühl himself) doubt that valence is a genuine metaphysical property, and/or that together with structural positivity/negative they conform a unified metaphysical distinction between negative and positive facts.

property is involved, having such a property is a positive fact and to having it is a negative one. Thus, in those cases, the overall negative or positive status of the relevant fact depends exclusively on its structural positivity or negativity. However, when the property at hand is negative, the correlation is reversed: having a negative property results in a negative fact, while not having one results in a positive fact (because negative properties have positive presuppositions). Thus, for example, since availability has a positive valence and unavailability a negative one, being unavailable is negative while not being unavailable is positive.

This fully accounts for simple or so-called atomic facts. However, we need to extend these criteria to all facts of more complex structures. For facts that are composed or dependent on these basic facts, the way of extending these criteria is straightforward: a complex aggregate fact is positive if all of its components are positive, and negative otherwise. In a similar fashion, existential statements are positive if all their instances are positive, and negative otherwise. There is ample debate as to whether all universals are negative or not (Barceló 2015), but nothing I say here will bear on this debate.

The only complex question is what to do with quantities and magnitudes. One might think that a simple way of solving the issue is arguing that having any amount of a gradable property must be considered structurally positive, while having no amount of something is structurally negative. Thus having any height at all is a positive fact, no matter how small the thing is. Furthermore, being humid or wet are both positives, while being dry is negative (since it is defined as containing no humidity at all. (Kennedy and McNally 2005) And while I agree that this is a very natural way of extending Kühl's proposal, it cannot account for all quantificational facts. For example, it does not account for comparative statements of magnitude, like being too wet or not wet enough. One might think (as Plato suggests in the *Teaethetus*) that if having some

property is a positive fact, its status cannot change to negative just by having *more* of that property, so that if something being heavy is a positive fact, for example, it being too heavy cannot be but positive as well, maybe even *too* positive! One might think that both having too much or not enough of a property must be considered structurally positive, since both require that the entities in question have some degree of the relevant property. However, I will argue that they are not, for they cannot be reduced to merely having the relevant degree of the gradual property at hand. So, for example, if a boat has a load capacity of 100 kilograms, this carves up the logic space regarding weight into two intervals, where weighting at most 100 kilograms lays within the boat's load capacity (and thus determines a positive property), while anything weighting above that limit becomes *too heavy* (a negative property).



This means that excess and deficit constitute another structural factor when determining the positive or negative status of interval facts, i.e. facts about where a gradual property is had within an interval defined by a standard. Excess and deficit function as structural negativity so that the excess or deficit of a neutral property is always negative. The basic idea here is that the complement of being within some interval is being outside it. Thus, for example, the complement of being less than five is being at least five and vice versa. In a similar fashion, the

compliment of being between two and five meters long is being less than two or more than five meters long. Intervals are neither positive nor negative in themselves. However, the relevant interval facts can be, depending on whether the interval corresponds to an excess or defect (in which case, the fact is negative) or not (in which case, it is positive) (Meier 2003). So, for example, even if being old is not a negative property in itself, being too old and being not old enough are both negative properties.

In summary, when determining whether a fact is negative or not, we must take in account two sorts of factors: first, the valence of the entities involved and second the fact's structure.

II. Motivation

An important motivation to think that the principle is not absurd is that, in general, the best known relations that underlie our most commonly accepted explanations such as logical consequence, causation, grounding, etc. all are understood as *transmitting* some property, as Plato himself had already recognized. Thus, logical consequence is customarily conceived as truth-transmission, just as grounding is seen as transmitting being, and causality as transmitting the obtaining of facts. In general, what explains why something X has some property P must be something else Y that is already P (and not not- P) and from which X obtains its being P by some form of transmission of P -ness. Thus, only obtaining facts can cause other facts to obtain, only existing entities can generate other entities, etc. In general, since an object X cannot receive its being P from Y unless Y itself is also P , it is impossible for something that is not P to explain why something is P through relations of this sort.

A second motivation is that, in general, trans-categorical relations have always been mysterious and thus, many philosophers have tried avoiding them. The fundamental contrast here is between non-mysterious intra-categorical relations like causal relations between material facts, or inferential relations between mental states, or logical relations between propositions, etc. and the mysterious relations that are supposed to cross across categories, like how Descartes postulated the pineal gland to bridge between the internal and external worlds, or the participation relation that is supposed to relate universal forms and particulars in Plato, etc. As a matter of fact, many of the most recalcitrant problems in philosophy are precisely problems about how it is possible for entities from one category to be related with entities of a different one. So, for example, the very challenging problem of mental content is none other but the problem of how it is possible for a mental state to be about a non-mental state of affairs or entity. In a similar sense, one of the basic problems of political philosophy is to make sense of the normative relation between individuals and collectivities. In philosophy of mathematics, the phenomenon of mathematical knowledge defies explanation precisely because it requires explaining how us, as concrete entities can get epistemic access to the behavior of abstract entities, while the problem of mathematical application is the analogue problem of explaining how the abstract facts of mathematics can have concrete applications in the physical world. In general, there is a recalcitrant explanatory gap between any two different ontological categories. Thus, it must not be surprising to find that the very possibility of interaction between positive and negative facts is also full of obscurities and paradoxes.

These two arguments do not give us indefeasible reasons to reject the possibility of negative/positive grounding relations, but are enough to warrant the claim that it is a hypothesis worth exploring.

III. Argument from Connexive Relevance

In classical logic, most basic inferential rules go either from positive premises to a positive conclusion – like *modus ponens*, *simplification*, *addition*, *conjunction*, etc. – or from negative premises (i.e., from premises that contain at least one negative premise) to a negative conclusion – like *Modus Tollens* or *De Morgan*.² Yet, there are a few others that allow us to get positive conclusions from negative premises: *disjunctive syllogism*, *ex falso quod libet* aka *the paradox of implication*, *reductio ad absurdum*, *addition*, etc. Interestingly enough, except for the rules governing double-negation, these rules are all rejected in connexive, relevance, paraconsistent and/or intuitionistic logics. This means that despite their broad acceptance as part of logical orthodoxy, many consider them counter-intuitive. Consequently, if we restricted ourselves to logical rules that are acceptable in classical, intuitionistic, connexive, paraconsistent and relevance logic, then no inference that makes essential use of at least one negative premise with a positive conclusion, or vice versa, would be valid.

Thus, we can borrow from connexive logic to generate a metaphysical argument for the claim that metaphysical explanations that appeal to negative facts to explain positive facts, or vice versa, fail because negative facts lack the proper relevance necessary to explain positive facts, and vice versa.

Of course, in their justification for rejecting these rules, neither connexive, relevantists nor intuitionists mention anything like the Platonic principle that we cannot get something positive out of something negative (or vice versa). However, there is widespread agreement that

². By "negative" premises or conclusion, I mean propositions whose logical form is necessarily expressed in formulas with explicit negations. I will not get into the very interesting discussion of whether there are other negative operators besides negation. For example, there are good logical reasons to consider implications (and good linguistic reasons to consider conditionals) as negative. (Nicolás-Francisco 2021).

one of the underlying issues, if not **the** underlying issue that makes these rules problematic is *negation* and in particular how negative propositions are logically related to the propositions they are negations of (Estrada-González 2020, Priest 1999, [Restall 1999](#)).

Now, we can build an argument for ontological Manichaeism out of the connexive arguments against classical logic: Broadly construed, connexivists claim that for an inference to be logically valid, premises must be relevant to the obtaining of the conclusion. Presumably, this restriction can be extended to metaphysical explanations: in good explanations, the explanans must be relevant to the explanation. Thus, if connexivists are right that inferences of these forms violate this restriction for inference, explanations of these forms would also violate the analogous restriction for explanation. Therefore, negative facts cannot play an essential role in explaining positive facts and vice versa.

It is true that the connexivist claim is not that no inference of these forms can be valid, but only that not every inference of these forms is. My claim, in contrast, is universal: I claim that no explanation of these forms can be acceptable. Thus, it seems that I cannot derive my universal claim from their existential ones. However, notice that by rejecting the universality of these rules, connexivists are committed to accepting that if there is any connexively valid inferences with the form of a non-universally valid rule like, say, disjunctive syllogism, then such inferences cannot derive their validity from their having that particular logical form. This means that, if an inference with the form of a disjunctive syllogism is valid, it has to be because of some other logical reason, different from it being a disjunctive syllogism (or having any other not connexively valid logical form), but because of some other logical reason in which the negative premise is not essential to the positive conclusion.

Let me illustrate this idea with a simple example. Imagine you go with a friend for ice cream and she gets a cone of chocolate. You ask her why and she responds that she always gets vanilla or chocolate, but this time they had ran out of vanilla. For the classical logician, the explanation is flawless and does explain why your friend got a chocolate ice cream. However, for the connexivist, the explanation does not actually reveal why she got chocolate. That there was no vanilla ice cream left is irrelevant to this. It might be relevant to why she did not get vanilla, but not to why she did get chocolate. The traditional connexivist argument states that since vanilla is not even mentioned in the conclusion that your friend got chocolate, nothing about vanilla could be relevant to this conclusion.

To actually explain why your friend got a cone of chocolate ice cream, one has to skip the irrelevant disjunctive syllogism to see why she always gets vanilla or chocolate. Maybe she likes them both very much and, if this is so, this positive fact would be what actually explains the positive fact that she got chocolate now: she got a chocolate ice cream because she likes chocolate ice cream.

The disjunctive syllogism seems relevant because it brings up an important contrast between vanilla and chocolate: one was available but the other was not. Thus it is not that vanilla was unavailable and, therefore, she did not get it, that is relevant; what is actually relevant is that chocolate was available. Thus, no negative fact, like the unavailability of vanilla, is involved in the explanation of the positive fact that your friend got a chocolate ice cream cone. In general, as we shall see later, many times, when negative facts seem to be relevant in the explanation of a positive fact (or vice versa), it is because they contrast with an opposite positive fact that is the one that is actually relevant. In the previous example, the unavailability of vanilla ice cream

seems relevant because it points towards the availability of chocolate ice cream, but it is the later one that is actually relevant.

Of course, one can always say that the unavailability of vanilla is relevant to explain why your friend got chocolate instead of vanilla, but this is a completely different *explanandum*. Most importantly, this later is no longer a purely positive fact because it involves the negative fact that she did not get vanilla. Thus it has a positive component, that she got vanilla, which has a positive explanation – she likes it and it was available – and a negative component, i.e., that she did not get vanilla, which has a negative explanation: that it was unavailable. Either case, we get neither positive facts explained by negative facts nor vice versa.

Finally, one might want to argue that the negative fact that vanilla was unavailable is an indispensable element in the actual explanation of why our friend ordered chocolate, because if vanilla had been available, it remains possible that your friend had not ordered chocolate, but vanilla. In other words, it might be argued that the actual and complete explanation of a fact must *necessitate* such fact, i.e., that it cannot be possible that the explanans be true, but the explanandum not. In this case, it is possible for the explanans to be true, i.e., that chocolate be available and your friend like it, and yet the explanans be false, i.e., that she would have ordered a different flavor, like vanilla – if it was also available and she also liked it. However, as I have argued elsewhere (Barceló 2015), there are good reasons to reject the hypothesis that explanation, even metaphysical explanation, requires necessitation, for it misses the important fact that the question explanation must address is why has something actually happened or is actually the case and thus any factors that might be relevant only to what did not actually happen cannot be but irrelevant (Barceló 2015). In the example at hand, the availability of vanilla may

be relevant to explain why your friend ordered vanilla in those non-actual possible worlds where she did, but still irrelevant to why she chose chocolate in this, the actual world, where she did.

IV. Apparent counter-examples

There seem to be many cases where we seem to intuitively explain positive facts by appealing to negative ones or vice versa, such as:

- 1. Causal explanations:** María stayed because she could not leave. / María did not stay, because she could leave.
- 2. Analytic explanations:** That John is not married explains that John is single / That John is married explains that John is not single.
- 3. Existential explanations:** The flaws in *Ishtar* explain its imperfection / The lack of flaws in *La Gioconda* explain its perfection.
- 4. Distributive explanations:** I missed the guy in the gorilla suit, because I was concentrated on the basketball / I cannot come to your party, because I will be at the beach.
- 5. Explanations by excess or defect:** The load was so heavy, it sank the boat. / That the rod is exactly 6 feet long explains why it was neither less than 6 feet long nor more than 6 feet long. (Adapted from Zangwill 2011: 552) / I could not throw away the food. It was too good (Adapted from Meier 2003)
- 6. Confusions:** I mistook Elisabeth for Carmen (negative) because they are very similar (positive).

Finally, consider the following joke:

Theaetetus: One million dollars won't make you rich.

Socrates: It will, if it is the ninth or tenth one.

This joke illustrates Plato's principle of contraries and is actually very close to the example Socrates actually uses in the *Theaetetus* (but without the extra-complication that comes from using a vague predicate like "rich"). The paradox is that something that is not large (one million dollars) seems to explain something being large (being rich). This suggests another apparent sort of counterexamples:

7. **Explanations by the opposite magnitude:** The bill reached a majority (a positive event of large size) because of the votes of Peter and Mary (just two votes, thus, an event of small size). Very few votes (negative) made the difference in giving Jacobins the majority in congress (positive).

But if we look one by one to these cases, we can see that no violation of ontological Manichaeism actually takes place in any of them:

1. In causal explanation what is explained is why something happened and causes and effects are always either both positive events, states or actions, or both absences (of events, states or actions) and thus we must be careful to identify exactly which facts, positive or negative, are carrying the explanatory burden. In our example, for example, staying is not an action but an inaction and thus a negative fact. This makes the alleged counter-example not a genuine one, because in it an impossibility (the absence of a state) that explains an inaction (the absence of an action). There is a broad literature on whether negative facts can be involved in the causal explanation of positive facts, and I have little

of substance to add, so I will defer to the literature here (Zangwill 2011, Molnar 2000, etc.).

2. Being single *seems* to be positive, but it is negative and the analysis in (3) precisely reveals its negative nature, i.e., it is precisely because being single is nothing but being not married that it is a negative property.³ The basic idea here is that if it is necessary to appeal to negative properties to define a property, this tells us that the property is actually negative, and vice versa. As David Himmen has argued,
“Which properties are to be called negative, rather than positive, depends on the inferential relations these properties bear to other properties; relations which are mirrored by—and accessible through analysis of—the distinctive patterns of logico-semantic entailment of their linguistic designators.” (Himmen 2018: 104)
3. Analogously for (4), flaws are actually negative features of a work of art, therefore being flawless might seem negative but is actually the contrary, i.e., positive, because the absence of flaws is nothing but perfection.
4. Here, even though the explicit explanandum is positive, an important element in the explanation is the background negative fact that the basketball is different from the gorilla, and that the party will not be at the beach. In this sense, the actual explanations would be “I missed the guy in the gorilla suit (negative), because I was concentrated elsewhere (also negative)” and “I cannot come to your party (negative), because I will be out of town (also negative)”, both of which are negative-negative.
5. Here again, we are wrong in taking facts like the load being too heavy as positive, because what makes a load being too heavy, i.e., heavy enough to explain why the boat

³. The reason why, between ‘married’ and ‘single’, it is the former that is positive and not the latter depends on the fact that being married entails certain rights and obligations that are not

sank, is that the weight is not within (exceeds) the boat's capacity. This excess is a negative fact. In general, as I have claimed above, excesses and deficits are both negative facts, either because they are too much (in the former case) or too little (in the later case). This rule, however, seems to break down in Meier's alleged counter-example, where, given that being good is a quintessential positive property (for food, at least), being too good seems to be a positive property (while not being good enough seems like a negative one). That is what one would expect, to make sense of Meier's example, where being too good (a positive property) explains why the food could not be thrown away (which is also a positive fact, since it involves the structural negation of a negative property). However, in my account, the excess of a positive property is a negative property and thus the food being too good must be deemed a negative property.

My response is that Meier's example does not actually entail a genuine excess (it is doubtful whether it even makes sense to talk of an excess of goodness!) There is no actual comparison to any standard of goodness above which it no longer makes sense to throw away food involved. Instead, the "too" adverb functions here as a mere intensifier, a booster adverb similar to "very". It expresses that the degree of the relevant property exceeds some contextually determined expected threshold relevant to the entities in the domain of application (Kennedy & McNally 2005). This is informative, but has little explanatory value in accounting for why the fruit was not thrown away. In other words, what explains why the fruits were not thrown away was that the fruit were still good, not that they were *too* good. If the fruit had been good, even if not too good, it would most likely still would not have been thrown away. In contrast, if the load had been heavy, but not too heavy, it might not have sunk the boat. That is why there is genuine excess in the

boat example, but not in the fruit one. Since weight is a neutral gradable property, the load being too heavy is a negative fact, and it explains the boat sinking (a negative property).

6. The same line of reasoning might apply to (7) as well. One might want to argue that Elisabeth and Carmen are very similar is a negative fact because it denies the existence of a noticeable difference between them. This difference is what is relevant for distinguishing between them and thus we have here two analogous negative facts, one explaining the other. However, as I have claimed in my response to the alleged counterexamples in 5, differences are negative in valence. Thus that there is a noticeable difference between, say, Elisabeth and Carmen, is a negative fact even if it is an existential fact. Therefore, that Elisabeth and Carmen are very similar, if we identify it with the fact that there is no noticeable difference between them would be the negation of a negative fact and therefore would be a positive fact, leaving (7) as still a plausible counter-example of Plato's principle of ontological Manichaeism.

However, this would definitely be the wrong conclusion to draw. Instead, I claim that confusions like these are *also* explanations by excess and therefore fall under the same explanation detailed above. What explains why I mistook Elisabeth for Carmen was that the difference was not big enough to be noticed (or, too small to be noticed). That there was no noticeable difference must not be conceived as a negative existential, but as a predication of insufficiency. In other words, the difference (negative valence) between Elisabeth and Carmen was too small (structural negation of a negative property) is what explains my mistaking one for the other. Thus, we have a negative explanans and a negative explanandum. No counter-example here.

7. Regarding cases of apparent explanations by opposite magnitudes, even if we grant Plato his assumption that large has a positive valence, while small has a negative one, it is still possible to explain away examples like these. All that is required is to distinguish between two sorts of facts: facts of *existence* and facts of *magnitude*. That there is a difference between two facts or objects is a fact of existence; in contrast, whether something is large or small is a fact of magnitude. Facts of existence are positive if the existing entity is neutral or positive in valence. Facts of magnitude can be negative or positive depending on the valence of the relevant property and object involved. Thus the hole in the ozone layer being large is a negative fact, while having a large group of friends is positive. Now, that *A* is larger than *B* is a fact of existence, not of magnitude, since it essentially says that there is a surplus in *A* in relation to *B*, but does not say whether it is large or not, and thus is not a fact of magnitude.

That *A* being larger than *B* is not a fact of magnitude must have been obvious from the fact that it neither necessitates, nor is necessitated by either *A* or *B* being large (or small, for that matter). In other words, *A* and *B* can be both large and still *A* larger than *B*; they can be both small, and yet *A* can still be larger than *B*; *A* can be large and *B* small, and thus *A* would be larger than *B*. The only possibility that it excludes is that *A* be small and *B* large. Thus, since the fact that *A* is larger than *B* does not necessitate that *A* is large, that *A* is larger than *B* is not a fact of ‘largeness’ and therefore there is no violation to the Platonic principle that opposites cannot explain opposites in this fact being explained by a small difference as in (6). In other words, what explains that the bill reached a majority is that the votes in its favor were more than those against it, i.e., that there were more votes in its favor than against it. This is clearly a fact of existence. That Peter and Mary

voted in its favor is also a (conjunctive) fact of existence, and thus, there must not be anything strange in one explaining the other.

In summary, when we pay closer attention to these apparent explanations, we can see that they are actually not so, because they are either based on misjudgments regarding whether a fact is positive or negative or the facts that are really doing the explanatory work are not those in the apparent explanation but others close by of the correct polarity. Thus, negative facts and positive facts are completely isolated from each other: negative facts cannot account for positive facts nor vice versa.

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