

Why be an Eleatic Stranger?

Per Algander (811012-1418)

Handledare: Johannes Persson

Kurs: FTE 704:2

Contents

1	Introduction	2
2	What is the Eleatic Principle?	2
3	Comments on the principle's formulation	7
4	Justification	8
4.1	The epistemic approach	8
4.2	The Eleatic Principle as an analytic truth	15
4.3	Towards a justification of the Eleatic Principle	22
5	Conclusion	23
6	References	25

1 Introduction

In the last two decades something called “the Eleatic Principle” has been quite frequent in philosophical literature. A wide range of philosophers have appealed to this principle when arguing for various theses but the principle itself has received comparatively little attention. Especially questions regarding the principle’s justification are often ignored or only mentioned in passing. The aim of this paper is to remedy this situation somewhat by focusing on how it could be justified.

In section 2 I give an overview of the various ways in which the principle has been used to clarify just what we are dealing with here. In section 3 I attempt to give some structure to this use by distinguishing three ways in which the principle can be formulated and offer some comments on the principle’s scope. This serves to set the stage for section 4 which addresses first an epistemic approach to justification (section 4.1) and then an analytic approach (section 4.2).

Even though I consider myself a proponent of the principle I will not attempt to justify it, that is beyond my present powers. What I argue for is something weaker: *if* you want to justify the Eleatic Principle then you should take the analytic approach.

2 What is the Eleatic Principle?

The Eleatic Principle originates from a passage in Plato’s *Sophist* where the Eleatic Stranger suggests that “the mark of being” is

power. In contemporary philosophy, the principle was coined by Graham Oddie (1982) in his reconstruction and criticism of an argument of Armstrong's (1978).

The argument Oddie wishes to criticize is one to the effect that causally idle entities, entities that do not "do" anything, are not to be admitted into any respectable ontology. Armstrong's idea is that causal power is what distinguishes the real from the unreal. Entities that lack causal power should therefore, by appeal to the Eleatic Principle, not be included in an ontology. Examples of such entities are numbers, uninstantiated properties, possible worlds etc.

The crucial premise from Oddie's point of view in this argument is the Eleatic Principle. Oddie argues that a reasonable formulation of the principle is hard to come by and that even on the most plausible interpretation the principle won't be strong enough to exclude all entities it is intended to.

Oddie's main criticism is that if the "doing" that is required of entities is causal then this would question the causal relation itself. "The causal tie" isn't itself involved in any causing, which means that Armstrong would have to exclude it.

To get around such "annoying counterexamples" Armstrong suggests the following formulation of the principle:

Everything that exists makes a difference to the causal powers of something. (Armstrong 1997, p.41)

This principle is supposed to motivate the exclusion of things that are "outside" the space-time system. As Armstrong however notices, this formulation isn't enough for that: a "transcendent Deity",

for example, surely has causal power but is nevertheless outside of space-time. Though this might be the case, Armstrong's target here is uninstantiated universals and one could remedy the situation by simply lessening the principle's scope.

Talk of "existence" is notoriously difficult. When asserting something about things and existence one easily finds oneself committed to things that don't exist. This is of import since Armstrong is in just this position with his formulation of the Eleatic Principle. He says what holds for all things that exist but, to paraphrase Oddie, what of those that don't? Some philosophers (*viz.* Meinong) have of course not been bothered by this but most of us find such an implication untenable. The problem is of course not insurmountable. Armstrong could modify his formulation so that it merely stated something about all things and thus not implying anything about non-existent ones. This could however be taken in two ways: contingently or necessary. If it is contingent that everything has causal power then this might be just a happy coincidence saying nothing about the nature of things. But if it necessary then we are asserting something stronger and perhaps closer to Plato's original formulation. On this reading, it is in the nature of things to have causal power. This view is also held by contemporary philosophers. For example, in *Identity, Cause, and Mind* (ch.10), Sydney Shoemaker says the following:

what makes a property the property it is, what determines its identity, is its potential for contributing to the causal powers of the things that have it. (p.212)

What Shoemaker does is that he narrows down the principle's scope to properties and that he specifies what it is they have to make a difference to; the particulars that possess them. The major difference is that while Armstrong speaks of existence, Shoemaker speaks of identity but as we saw above, this difference is not as fundamental as one might first think. Shoemaker's motives are also slightly different. What he is concerned with is to deny that every *predicate* pick out a separate *property* and to give an account of when they do.

Shoemaker thinks that predicates such as “being fifty miles south of a burning barn” do not, intuitively, name genuine properties. Moreover, he thinks that our intuitions regarding what are genuine properties are closely related to those regarding change. For an object to change something must happen *to it*. *It* must lose or acquire some property. It is furthermore clear that it is the barn, not everything fifty miles south of it, that undergoes a change when the fire is extinguished. The predicate in question cannot therefore pick out a property. Now we can see where the Eleatic Principle enters: it is what “makes it clear” that it's the barn that changes, not all the other things. It is because the haystack (which I assume is fifty miles south of the barn) still has whatever causal powers it had before the fire was put out that it hasn't changed, hasn't lost or acquired any properties.

A view similar to Shoemaker's is John Heil's take on the Eleatic Principle. Heil reads it as saying that properties are “pure powers”. So far he seems to be in line with Shoemaker since we are

reading it as a criterion of identity. The difference is that while on Shoemaker's view properties are made up of powers (properties are second order relative to powers) Heil sees them as perfectly on a par. According to Heil "the thesis [that properties are pure powers] is that intrinsic properties of concrete objects are distinguished by distinctive contributions they make to powers or dispositionalities of their possessors" (Heil 2003, p.76). This, he thinks, leads one to formulate the following "principle of property identity":

(PI) Necessarily, if A and B are properties, $A = B$ just in case A and B make the same contribution to the causal powers of their (actual or possible) possessors (ibid. p.77).

I must confess that I find it hard to make sense of this principle, taken literally. For what Heil says is that two entities, property A and B , are the same entity ($A = B$) iff certain conditions are fulfilled. But two entities are never the same entity. Two *predicates* may refer to or name the same *property*. It seems to me also to be this Heil has in mind, if we consider that properties are "distinguished by", that is that they make themselves known by (or some similar), their causal power. What Heil would be after if this is correct is not identity but individuation. His principle should, I think, be reformulated to read:

Necessarily, if A and B are predicates, $A = B$ just in case the referent of A and the referent of B make the same contribution to the causal powers of their (actual or possible) possessors.

On this view powers are not something possessed by objects *in addition* to whatever properties they might possess but the very same thing.

3 Comments on the principle's formulation

As we have seen, the Eleatic Principle can be used for a variety of purposes. Armstrong uses it as a criterion of *existence*, as a rule for when an entity is to be allowed into an ontology. On this view, the principle is a relative of Ockhams razor, though the author's ambition is to provide a sharper tool than Ockham. Shoemaker on the other hand uses it as a criterion of *identity*. Here the principle takes the form of an explicit thesis that properties are to be identified with whatever causal powers they bestow to their possessors. This thesis is also connected, as we saw in the case of Heil, to a reading of the Eleatic Principle as a criterion of *individuation*. On this reading the principle would say that two predicates name the same property if and only if the properties have the same causes and effects.

On all these readings it is clear that the principle is an attempt to put constraints on ontology. To be more specific, that causality puts constraints on ontology.

We can also notice that, even though the principle is intended to rule out some ontological entities, its scope is still an open question. Both Shoemaker and Heil restricts it to properties and Armstrong does restrict his *use* of the principle, even though as it stands his formulation is more general. Critics of the principle have however largely ignored this and focused on the wide formulation given by

Armstrong. Mark Colyvan (1998), for example, criticizes the principle mostly for banning mathematical entities and argues that we need to allow these in our ontology. This might very well be the case but even so this does not address the question whether the Eleatic Principle might not be true given some narrower scope. There does not seem to be any good reason, *prima facie*, for the view that if the principle is true then it has to be true of everything.

In the following I will assume that the principle is about properties and leave any questions about “abstract entities” in general untouched. It is worth emphasizing that this lessening of scope does not make the principle any less interesting. How we are to count properties is not a trivial matter without repercussions since it is instrumental for questions about resemblance, identity and change.

4 Justification

Looking at the literature, there are mainly two ways in which various authors have tried to justify the Eleatic Principle. The first is that it should be accepted for epistemic reasons. The other that it is in fact an analytic truth.

4.1 The epistemic approach

A number of proponents of the principle think that it should be accepted for epistemic reasons.¹ Armstrong, for example, says that “the argument for the Principle seems to be epistemic and even

¹ See for example Perrett (2004). Colyvan, though a critic, sees this as the only way of justifying the principle.

pragmatic” (Armstrong 1997, p.42). What would be the point, Armstrong asks, of postulating a thing if “[o]ur whole experience, including all our thinking, would go on in exactly the same way whether or not the entity existed” (ibid.)?

Shoemaker quotes similar reasons for adopting his formulation of the principle. It is only by identifying properties with their causal role that we can explain “how properties are capable of engaging our knowledge, and our language, in the way they do” (Shoemaker 1984, p.214). If we don’t, then it is possible that a thing possesses a whole range of properties that do not make themselves known to us under any circumstances and thus the idea of accounting for resemblance between objects in terms of shared properties goes out the window. For even if two objects *seem* to share some property (that is, they have the same causal display) they might share no properties at all if they are identified with something logically independent of causal power.

Both these considerations are epistemic in nature. Armstrong asks, a bit rhetorically, what reason one could possibly have for postulating entities that do not make a difference *to us*. If we make the plausible assumption that all interaction is causal then these entities will have no way of interacting with either our thinking or our experience, which puts us in a hopeless epistemic situation regarding these entities. Shoemaker on the other hand argues that if we don’t identify properties with causal power then we will not be able to justify some things we take ourselves to know, like resemblance for instance. Two objects that have the same causal display, that

is, they seem to us to share the same property, could be entirely different properties for all we know if their identity is determined by something independent of causal power.

Both these lines of thought can be challenged in the same way though. What both Armstrong and Shoemaker seems to be presupposing is a causal theory of knowledge. On both their views, all knowledge is dependant on a causal relation holding between the knower and some object. The way to challenge their arguments for the Eleatic Principle is to challenge this theory of knowledge by pointing out that it is quite plausible that there are instances of knowledge that is not dependant on causality in this way. As a reply to Armstrong one could say that what matters when it comes to postulating entities is not causal effectiveness but explanatory power. Whether the entities that have the greatest explanatory power will *also* be causally effective, it might be argued, is an open question. This can also be used to challenge Shoemaker's argument. We can grant that two similar things might share no properties at all, but the best explanation of the fact that they are similar is that they share some set of properties. In a similar vein one could argue that properties could have different causal powers at different times but that the simplest hypothesis that fits the facts is that they don't. The point is that our postulation of entities can be guided by the best explanation rather than causal power and it is not evident that this will have the disastrous consequences Shoemaker thinks it will have.

This way of replying to the epistemic approach is of course by

appealing to “inference to the best explanation”. According to this thesis, it is a valid form of inference to infer the truth of a hypothesis from the fact that it would be the best explanation of some set of evidence. Relevant factors when comparing possible explanations are for example parsimony, plausibility and similar considerations.²

One could deny that we are ever allowed to infer the best explanation, but this is not a very plausible view and I won’t consider it further. A more sensible reply is to follow Nancy Cartwright and make a distinction between causal and theoretical explanation. Cartwright urges us to “not illicitly attribute to theoretical explanation features that apply only to causal explanation” (Cartwright 1983, p.75). One such “illicit attribute”, Cartwright claims, is ontological commitment. In giving a causal explanation of a phenomena we are committed to, among other things, the existence of those entities which figure in the explanation. In giving a theoretical explanation however, we are merely “putting the phenomena in a theoretical framework” and are therefore not committed to various existence-claims.

What this shows is that a defender of the principle need not endorse the less plausible view that all good explanations are causal ones or that we can never infer the best explanation. However, even if this theoretical-causal distinction can be defended the principle is not out in the clear, or so I think. To see this I need to say a few things about the notion of “ontological commitment” and commitments in general.

² See Harman (1965) for the classical formulation of this form of inference.

There are two ways to interpret the notion of commitment; a strong and a weak interpretation.³ To be committed to some act ϕ is to be required to ϕ . In the context of ontological commitment this amounts to the view that if we are ontologically committed to x then we are required to include x in our ontology. According to the weak interpretation, if we are not required to ϕ then this does not entail that we are not *allowed* to ϕ . An example of such a commitment could be a situation in a game of chess. If one of your pawns threatens my king then I am required to move my king. But this does not entail that I am only allowed to move my king if it is threatened. Contrast this with the strong interpretation which denies this and holds instead that if we are not required to ϕ then this *does* entail that we are not allowed to ϕ . An example of this would be certain act-consequentialist theories in ethics. According to these theories an agent is morally required to perform that act among the alternatives which will have the best consequences. On this view, if we are not required to ϕ then this will be because there is some other act which has better consequences and hence we will not be allowed to ϕ .

To see the problem with this defence of the principle, let's assume a weak interpretation of ontological commitment. First, since this defence of the principle admits that non-causal explanations have a degree of utility even though they carry no ontological commitment it also makes talk of "existence" a bit redundant. The Eleatic Principle gives us the means to separate fact from fiction, but what are

³ I owe this observation to Johannes Persson (in conversation).

we to do with this information if fictitious “things” are still useful in the sense that they can advance our knowledge? Second, the point of systematic ontology, I take it, is to account for certain phenomena (resemblance, identity over time and change just to name a few) and to provide a basis for further theorizing. But to give an ontological account of resemblance, say, is to explain resemblance.⁴ There now seems to be a tension between the epistemic approach and the Eleatic Principle: the principle excludes certain entities from an ontology but this defence admits that these entities could, at least in principle, be useful to it. It is compatible with a weak interpretation of ontological commitment that theoretical entities could find their way into an ontology by filling an “explanatory gap”.

The problem here is that on a weak interpretation of ontological commitment there are ways in which entities lacking causal power can find their way into an ontology, something the principle doesn’t allow. The Eleatic Principle is simply incompatible with a weak interpretation. We should therefore consider whether the principle fares any better under a strong interpretation.

On a strong interpretation of ontological commitment these objections lose their force. One can deal with the second objection by simply saying that, even though theoretical entities might be useful to an ontology, we are nevertheless not allowed to use them. For the point of saying that we are committed to this and not that (assuming a strong interpretation) is just to say what we have to work

⁴ Though it need not be a complete explanation. It is plausible to hold, I think, that an ontological account explains an aspect of resemblance but that there might be more to say about the matter.

with when giving ontological accounts. Moving on to the first objection we can now say that the point of existence-talk is just this “stage-setting” feature of causal explanations.

To make the epistemic approach to justifying the Eleatic Principle work we have to make the strong interpretation of ontological commitment. This merely raises a further issue however. The Eleatic Principle is supposed to regulate ontology but it now seems as if it is an idle principle. For as we have just seen, this attempt to justify the principle appeals to another regulating principle which says that ontology is regulated by causal explanations *only*. The Eleatic Principle has been replaced, instead of justified, by a strong interpretation of ontological commitment. Furthermore, what does all the regulating work is those disciplines which gives these explanations, most commonly held to be the empirical sciences, and the principle is merely an assertion of that this is as it should be. This is indeed a very interesting thesis which we have an argument for here. If the theoretical-causal distinction can be defended *and* we are only ontologically committed (in a strong sense) to entities figuring in causal ones then it will be true that empirical science regulates ontology. But nothing is gained by bringing in the Eleatic Principle when evaluating this argument. I will not attempt to evaluate this argument since whether or not it is successful, it has little bearing on any *interesting* version of the Eleatic Principle.

That this attempt to justify the Eleatic Principle deflates rather than justifies it indicates that we are on the wrong track here. This can be brought out in another way: the epistemic approach does

not support Shoemaker's thesis that properties are identified with causal power. It credits all properties with causal power but for Shoemaker's identity claim to follow the specific powers of some property P have to be necessary to that property, something which just doesn't follow. For this thesis to follow we would have to hold that whatever causal laws that hold do so by necessity. On this view, P couldn't be governed by other laws than the actual ones and hence its causal role will be essential to it in the way Shoemaker claims it is. Shoemaker is well aware of this point but offers an additional argument for the view that properties have their causal role by necessity. This argument is however *not* epistemic, and this is telling. Shoemaker's argument is that what is possible is constrained by what could happen in the actual world. On Shoemaker's view, it is possible that he is a plumber since there is a story to tell about how he could end up a plumber. But it is not possible for properties to be governed by other laws than they in fact are since causal laws are immutable on Shoemaker's view. What this shows is that epistemic considerations do not exhaust Shoemaker's defence of the principle for here we have a conceptual argument where he uses a certain analysis of modality. We should therefore leave this attempt behind and look at the alternative approach.

4.2 The Eleatic Principle as an analytic truth

As we saw in the previous section, the epistemic approach fails to support any interesting version of the principle. An alternative to

this approach has however been suggested by Stephen Mumford.⁵ Mumford thinks there are two ways one could justify the principle; the first being the epistemic approach just outlined and the other

to offer a developed theory of universals in which a necessary connection was postulated between properties and causal powers. Perhaps this could be developed to the point where non-abstract, intrinsic properties are viewed as *being* causal powers [...] this way of understanding properties [...] renders the causal criterion of property existence true analytically” (Mumford 1998, p.123, emphasis in original).⁶

The idea here is that what justifies the Eleatic Principle is some conceptual analysis of “property”, “causal power” and the like which will make it true in virtue of the meaning these concepts are assigned. We might say that Mumford “passes the justificatory buck” from the Eleatic Principle to a theory of properties.

Before taking a closer look at Mumford’s theory of properties we need to make the notion of a power a bit more clear. In the context of properties, powers are often identified with dispositions. A concrete object has a certain power if it is disposed to behave in a certain way under certain circumstances. Up until quite recently the dominant view has been that there is a distinction between so

⁵ A similar approach has been proposed by Fales (1990) and Heil (2003). I will however focus on Mumford’s suggestion.

⁶ Mumford’s “causal criterion of property existence” says that for every intrinsic, non-abstract property P there are circumstances C in which P has causal consequences. Mumford is thus here speaking of the Eleatic Principle as a criterion of existence in the same sense that Armstrong does, though he gives it a much narrower scope.

called categorical properties (like “red” and “triangle”) on the one hand and dispositions (like “fragile” and “soluble”) on the other. The idea has been that categorical properties make up a “base” on which dispositions then can be ascribed and that a disposition is distinct from its base. Dispositions have however been denied the various roles ascribed to properties and in general considered less real features of objects.⁷

Mumford rejects this classical view. First, he rejects the assumption that the categorical-dispositional distinction is among properties. There are categorical and dispositional *predicates* but properties “just are”. Second, he rejects the view (sometimes implicit in the classical view on dispositions) that dispositional predicates do not refer, that they deal merely in possibilities and function merely as “inference tickets”.⁸ What he suggests is that what dispositional predicates refer to are in fact a properties, they merely do it in a different way from their categorical relatives. The difference between categorical and dispositional predicates is not “in the object” but rather in the way it is presented or characterized. When we characterize an object using a dispositional predicate we are ascribing a property to that object, just like when we say what colour it has, but the property is defined *functionally*, by its causal role. It is therefore part of the meaning of a disposition ascription that the property referred to has some specific causal role. Categorical predicates on the other hand do not have this conceptual link with causality. Whatever causal role properties play under such de-

⁷ See for instance Prior, Pargetter and Jackson (1982).

⁸ Here he draws primarily on the works of C. B. Martin (1994) and Hugh Mellor (1974).

scriptions is an *a posteriori* matter. What this amounts to is that “properties are powers” in the sense that a dispositional and a categorical predicate are identical (they name the same property) iff the referents occupy the same causal role.

Before considering how the Eleatic Principle as a criterion of existence follows from this we need to pause and take a closer look at this identity between properties and powers. For at is has now been spelled out, that a categorical and a dispositional predicate are identical iff the referents occupy the same causal role, is just the Eleatic Principle as a criterion of individuation. This is as unsettling as it is interesting but I will postpone a discussion about what implications it has for Mumford’s attempted justification to the end of this section.

Mumford’s theory of properties excludes the possibility of causally ineffective properties. For suppose there were some property that lacked causal power. Then we could not characterize it dispositionally since dispositional characterizations are functional ones. A categorical one is still possible however since these only have causal power *a posteriori* and hence there would be a “deep” categorical-dispositional distinction among properties. Assuming Mumford’s theory of properties the supposition that there are causally ineffective properties must be false and hence the Eleatic Principle as a criterion of (property) existence, true.

This also shows that on Mumford’s theory there cannot be any purely categorical properties (properties that cannot be characterized dispositionally). In fact, the theory predicts that every property

can be characterized dispositionally. For the theory to be plausible we therefore have to consider paradigmatic examples of categorical predicates and see whether there is any dispositional correlate.

There is however one argument that has been indicated by John Heil that operates on a more general level. Heil thinks that in a debate between categorical and dispositional properties the “advocate of the view that properties are powers can reasonably challenge an opponent to produce a clear example of a purely qualitative property. If such a property is detectable, then it would seem not to be purely qualitative after all. If it is not detectable, it will be tricky to recruit as an example” (Heil 2003, p.87). This argument is epistemic in nature and if we were to follow it up seriously we would end up where Armstrong did. The relevance of this argument in the present context is rather that it indicates that for every “purely categorical” property we seem to have a test for that property even though we might not have a conventionalized dispositional term.

What I think Heil is getting at is something which was indicated already by Nelson Goodman (1954) and which has later been developed by Mellor (1974 and 2000). What both these writers noticed was that an appeal to conditionals was a bad way of upholding the categorical-dispositional distinction. What is often thought to distinguish categorical from dispositional predicates is that the conditions for attributing the latter to objects takes the form of conditionals while this is not the case for categorical predicates. The standard example is that of fragility which is correctly attributed to a thing iff it would break if dropped. But as Goodman and Mellor

argues, the application of categorical predicates can also be stated in terms of conditionals. A thing has a certain colour for example iff it would reflect light (under favourable conditions) in such-and-such a way. Even geometrical shape, such as “triangular”, can be defined as “if the corners were counted (correctly) then the answer would be three” where “correctly” refers to the method of counting, not the result. The upshot here is that these are all functional characterizations of what was presumably purely categorical predicates which is just to say that they are dispositional in the sense that they can be characterized functionally. All we are lacking is a conventionalized term corresponding to this characterization but we can easily invent one, “triangelable” or some such. This dispositional predicate is intended to mean, if we follow Mellor’s proposal, “if the corners were counted correctly the answer would be three”.

A more paradigmatic example than “triangular” is hard to come by. “Mass” could be handled in a similar way and so on I think for just about every clear-cut example we can come up with. To find troublesome cases we need to turn to relations. One that poses some difficulties is spatial distance. The trouble is not so much that distance cannot be characterized functionally, but that functional characterizations of this relation has troublesome implications. For there is indeed a test for distance, we just measure it, and we could therefore characterize a distance d by “if [this] was measured (correctly), the answer would be...”. The problem is that we have then reduced this relation to a monadic property applying to the placeholder [this], absolute space perhaps. But this contradicts our as-

sumption that distance is a paradigmatic example of a relation.⁹

Recall however that Mumford restricts his version of the Eleatic Principle to intrinsic properties which would exclude relations altogether. This restriction is however starting to look a bit *ad-hoc* in the light of this objection and one does wonder why there should be this difference between intrinsic and extrinsic properties. Furthermore, if relations are not under the scope of the principle this might imply, as Armstrong (2005) argues, that properties do not have their causal power necessarily. Relations such as distance are common in scientific laws but if distance can not be characterized functionally, and therefore does not have its causal role by necessity. This means that the content of these laws would be a contingent matter which would imply that the properties governed by these laws have *their* causal power only contingently. This would be incompatible with Mumford's theory since he sets up a necessary relation between properties and their causal role, namely identity.

Let us then return to the issue raised previously. How bad is it for this approach that it assumes the Eleatic Principle as a criterion of individuation? It was hoped that Mumford's analytic approach would justify some, or perhaps even all, versions of the principle. But this is clearly not the case. What we have is an analytic route from a theory of properties to a criterion of existence but no support so far for the related criterion of individuation since this is integrated in Mumford's theory of properties. It seems to me that the proper response to this situation is to note that we are not given any reason

⁹ Another problem with this implication is that such notions of absolute space might be in conflict with current scientific theories. See Sider (2001).

to accept the criterion of individuation in the sense that Mumford does not point to some more fundamental consideration but that this is not something we can reasonably expect. Mumford's theory of properties as powers is at the bottom of a hierarchy of justification and there is nothing more fundamental to do the justificatory work. What we have to appeal to is rather the coherence of the theory, how successful it is compared to its rivals and so on. Justifying the principle as a criterion of individuation is therefore a highly complex matter, involving a commitment to a whole theory of properties.

4.3 Towards a justification of the Eleatic Principle

The conclusion to be drawn from the discussion of these two ways of justifying the principle is that neither succeeds. The epistemic approach fails in two ways. First, taking this approach makes the principle superfluous. Since the justification rests on a claim about how causal explanations stand to ontology, namely as regulating ontology, there is no warrant for introducing some further regulating principle. Second, this approach only supports, and can only be expected to support, the thesis that all properties have some causal power. It leaves the Eleatic Principle as a criterion of identity and as a criterion of individuation out in the cold. The analytic approach also fails. Not because there isn't an analytic route from the theory of properties as powers to the Eleatic Principle but because this theory of properties, at least as formulated by Mumford, is problematic. Relations are a serious problem and it seems as if this kind of theory faces the following dilemma: if all properties are powers then

some paradigmatic examples of relations cannot be accommodated. This is the first horn of the dilemma. If not all properties are powers however, then if Armstrong is right the causal power of a property will be a contingent matter, contradicting the theory. This is the second horn.

The analytic approach has one major advantage over the epistemic one however. If we take the analytic approach we at least successfully address the issue at hand whereas if we take the epistemic approach we don't, even though the principle as a criterion of individuation is integrated into the analytic approach. There is little hope of justifying this criterion of individuation heirarchially because it is a part of a fundamental theory. To justify this we need to develop the theory, make it coherent and so forth and in doing so we will also address the principle as a criterion of existence.

5 Conclusion

From what has been said I draw two conclusions. First, the analytic approach to justifying the Eleatic Principle is better than the epistemic one. Taking the epistemic route will rob the principle of its relevance while the analytic approach preserves it. Second, the Eleatic Principle as a criterion of individuation is a part of the theory that properties are powers. There is therefore a difference between the principle as a criterion of existence and as a criterion of individuation when it comes to justification. Justifying it as a criterion of individuation will not be done by appealing to something more fundamental since it is at the bottom already. Justifying the

principle as a criterion of existence does not have this feature and we should expect a justification of it to be in terms of more fundamental considerations.

References

- Armstrong, D. M.: 1978, *Universals and Scientific Realism, vol 1 & 2*, Cambridge: C.U.P.
- Armstrong, D. M.: 1997, *A World of States of Affairs*, Cambridge: C.U.P.
- Armstrong, D. M.: 2005, Four disputes about properties, *Synthese* **144**(3), 309–320.
- Cartwright, N.: 1983, *How the Laws of Physics Lie*, Oxford: Clarendon Press.
- Colyvan, M.: 1998, Can the eleatic principle be justified?, *Canadian journal of philosophy* **28**, 313–36.
- Fales, E.: 1990, *Causation and Universals*, London and New York: Routledge.
- Goodman, N.: 1954, *Fact, Fiction, and Forecast*, 4th edn, Cambridge and London: Harvard University Press.
- Harman, G.: 1965, The inference to the best explanation, *The Philosophical Review* **74**(1), 88–95.
- Heil, J.: 2003, *From an Ontological Point of View*, Oxford: Clarendon Press.
- Martin, C. B.: 1994, Dispositions and conditionals, *Philosophical quarterly* **44**, 1–8.
- Mellor, D. H.: 1974, In defence of dispositions, *Philosophical review* **83**, 157–81.
- Mellor, D. H.: 2000, The semantics and ontology of dispositions, *Mind* **109**, 757–80.
- Mumford, S.: 1998, *Dispositions*, Oxford: Clarendon Press.
- Oddie, G.: 1982, Armstrong on the eleatic principle and abstract entities, *Philosophical studies* **41**, 285–95.
- Perrett, R. W.: 2004, The momentariness of simples, *Philosophy* **79**, 435–445.
- Prior, E., Pargetter, R. and Jackson, F.: 1982, Three theses about dispositions, *American Philosophical Quarterly* **19**, 251–7.
- Shoemaker, S.: 1984, *Identity, Cause, and Mind: Philosophical Essays*, London: Routledge.
- Sider, T.: 2001, *Four-Dimensionalism*, Oxford: Clarendon Press.