BRILL
RODOPI

GRAZER PHILOSOPHISCHE STUDIEN
95 (2018) 1-14

Grazer Philosophische Studien
brill.com/gps

Why Intrinsicness Should Be Defined in a Non-reductive Way

Vera Hoffmann-Kolss
Rutgers University
vera.hoffmannkolss@rutgers.edu

Abstract

Defining the distinction between intrinsic and extrinsic properties has turned out to be one of the most difficult and controversial tasks in contemporary metaphysics. It is generally assumed that a definition of intrinsicness should aim to avoid as many counterexamples as possible and reduce the notion to less controversial philosophical notions. In this paper, the author argues for a new methodological approach to defining intrinsicness. Rather than trying to cover as many intuitive examples as possible, a definition of intrinsicness should reflect the crucial features of our intuitive understanding of the notion, and one of these features is that the intrinsic/extrinsic distinction has to be characterized in a non-reductive way.

Keywords

intrinsic properties – extrinsic properties – natural properties – disjunctive properties – Langton and Lewis – reductive definition

1 Criteria of Intrinsicness

A property is intrinsic iff its instantiation by some individual depends only on what the individual itself is like, not on its environment. A property is extrinsic iff it is not intrinsic, that is, iff its instantiation by some individual depends, at least partially, on the individual's surroundings. In many cases, it is uncontroversial whether a property should be classified as intrinsic or as extrinsic according to this intuitive criterion. For instance, *being cubical* or *having a*

 | DOI 10.1163/18756735-000021

mass of 3 kg are typically classified as intrinsic properties, whereas *having children* or *being accompanied by a cube* are classified as extrinsic.

However, giving a definition of the intrinsic/extrinsic distinction has turned out to be one of the most controversial and difficult tasks in contemporary metaphysics. Usually, it seems to be taken for granted that an adequate definition of intrinsicness should meet the following three requirements:

(1) *Intuitive adequacy*: A definition of intrinsicness should yield the same results as our intuitive understanding of the notion, that is, classify a property as intrinsic iff it is intuitively classified as intrinsic (and as extrinsic iff it is intuitively classified as extrinsic).
(2) *Reductiveness*: A definition of intrinsicness should reduce the notion of intrinsicness to other notions and not implicitly rely on the intrinsic/extrinsic distinction itself.
(3) *Conceptual adequacy*: A definition of intrinsicness should not draw on philosophical notions which are no better understood than the intrinsic/extrinsic distinction itself.

It is controversial, however, whether any of the definitions of intrinsicness proposed so far can meet all three conditions at the same time. In a recent paper, Marshall even argues that it is not possible to give an intuitively adequate reductive definition of intrinsicness in terms of broadly logical notions at all (see Marshall 2009). In this paper, I argue for a new methodological approach to defining intrinsicness. This approach follows from two considerations: first, the intuitive criterion of intrinsicness typically taken as the starting point for more formal philosophical analyses is non-reductive. The second consideration is that satisfying all three conditions at the same time is not a sufficient condition for the adequacy of an analysis of intrinsicness. In particular, if a definition meets condition (1), that is, gets all the intuitive cases right, this does not imply that it provides an adequate account of intrinsicness. An analysis of intrinsicness should rather take the central features of our intuitive characterization of intrinsicness into account. If, as I argue, non-reductiveness is one of these crucial features, this suggests that an analysis of intrinsicness should be non-reductive.

This paper has the following structure: I begin by discussing the definition of intrinsicness proposed by Langton and Lewis, since the debate on this prominent approach illustrates why extant definitions encounter problems when trying to meet conditions (2) and (3) at the same time (Section 2). Then, I discuss the intuitive criterion of intrinsicness underlying the more formal approaches and argue that it cannot meet conditions (2) and (3) at the same time either (Section 3). Finally, I argue that a philosophical approach to defining intrinsicness should not primarily aim at covering all intuitive examples, but rather reflect the central characteristics of our intuitive understanding of notion, and that, therefore, trying to provide a non-reductive analysis is the more promising approach (Section 4).

2 Langton and Lewis's Account and the Problem of Disjunctive Properties

The definition of the intrinsic/extrinsic distinction proposed by Langton and Lewis relies on the intuition that the instantiation or non-instantiation of an intrinsic property by some individual *x* does not have any implications for the existence of any individuals other than *x*. This intuition is captured by the notion that some properties are independent of accompaniment. Suppose that an individual is accompanied iff it coexists with a contingent individual completely distinct from itself and lonely iff it is not accompanied. Then a property *P* is independent of accompaniment iff *P* can be instantiated by lonely as well as by accompanied individuals, and the same holds for ~*P* (see Langton and Lewis 1998, 333). The property of *being cubical*, for instance, is independent of accompaniment, since it can be instantiated by lonely as well as by accompanied individuals and the same holds for its negation. The property of *having children*, by contrast, is not independent of accompaniment, since it cannot be instantiated by lonely individuals.

However, even though these examples might suggest that independence of accompaniment is a defining feature of intrinsicness, the class of intrinsic properties cannot simply be equated with the class of properties which are independent of accompaniment. The reason is that certain disjunctive properties, for instance, the property of *being non-cubical and lonely or else cubical and accompanied* (i.e. (*non-cubical* & *lonely*) ∨ (*cubical* & *accompanied*)), call it '*F*', are intuitively extrinsic, but independent of accompaniment. If *x* is accompanied, *x* may have or lack *F*, depending on whether or not *x* is cubical, and an analogous consideration holds if *x* is lonely. Langton and Lewis are aware of this problem and suggest that the notion of independence of accompaniment should be applied to non-disjunctive properties only, while all other properties are classified as intrinsic iff they supervene on non-disjunctive properties which are independent of accompaniment (see Langton and Lewis 1998, 335–337). Given that *being cubical* is arguably non-disjunctive, but independent of accompaniment, *F* would then correctly be classified as extrinsic, since it fails to supervene on *being cubical* – there are possible individuals *x* and *y* that are both cubical, but if x is accompanied, while y is lonely, x instantiates F, whereas y instantiates $\sim F$.

This approach has come under attack, since it is not clear whether the distinction between disjunctive and non-disjunctive properties can be defined in a satisfactory way. Obviously, a property cannot simply be defined as disjunctive iff it is logically equivalent to some property having disjunctive form, since that would imply that every property is disjunctive (since every property P is logically equivalent to some property of the form $(P \& \sim Q) \vee (P \& Q)$). Therefore, Langton and Lewis define a property as disjunctive iff it is not a natural property and can be expressed as a disjunction of natural properties, or of properties which are much more natural than itself (see Langton and Lewis 1998, 335–336).

However, this definition does not provide an uncontroversial criterion of the distinction between disjunctive and non-disjunctive properties. Marshall and Parsons give the following counterexample: the intuitively extrinsic property of *being such that there is a cube* is independent of accompaniment. Thus, to show that it is correctly classified as extrinsic by Langton and Lewis's criterion, one would have to argue that it is disjunctive. However, even though *being such that there is a cube* can be expressed as a disjunctive property, that is, the property of *being either a cube or accompanied by a cube*, *being accompanied by a cube* does not seem to be more natural than the property of *being such that there is a cube* itself. Hence, *being such that there is a cube* does not qualify as a disjunctive property. Given that it is independent of accompaniment, it is therefore misclassified as intrinsic (see Marshall and Parsons 2001, 349–350).

Whether or not Marshall and Parsons provide a conclusive argument to the effect that *being such that there is a cube* is non-disjunctive is controversial (see e.g. Langton and Lewis 2001). However, the fact that there is a debate on whether or not this property should be regarded as disjunctive is already sufficient for showing that Langton and Lewis's account is not capable of defining intrinsicness in terms of less controversial notions and, hence, fails to satisfy condition (3), that is, the condition of conceptual adequacy. Since this condition enjoys wide acceptance, many authors agree that Langton and Lewis's account does not provide a satisfactory philosophical analysis of the intrinsic/extrinsic distinction (see, e.g., Yablo 1999, 480–481; Weatherson 2001, 367–368; Witmer, Butchard, and Trogdon 2005, 328–331).

In the subsequent section, I argue that the problems encountered by Langton and Lewis's account are not specific to their approach, but point to a general feature of our intuitive criterion of intrinsicness. In order to classify properties having the form of F as extrinsic according to this intuitive criterion, one needs to either draw on certain assumptions about which other properties are intrinsic, hence violating condition (2), or presuppose the controversial distinction between disjunctive and non-disjunctive properties, on pain of violating condition (3).

3 Intuitive Accounts of Intrinsicness and the Problem of Disjunctive Properties

Intuitive accounts of the intrinsic/extrinsic distinction are remarkably uniform. Consider the following characterizations:

> The intrinsic properties of something depend only on that thing; whereas the extrinsic properties of something may depend, wholly or partly, on something else.[1]

> Intuitively, a property is intrinsic just in case a thing's having it … depends only on what that thing is like …, and not on what any wholly distinct object … is like.[2]

> An intrinsic property is a property that is *internal* in the sense that whether an object has it depends entirely upon what the object is like *in itself*.[3]

> *You* know what an intrinsic property is: it's a property that a thing has (or lacks) regardless of what may be going on outside of itself.[4]

> Intuitively, an intrinsic property is a property that characterizes something as it is in itself. What intrinsic properties something has in no way depends on what other things exist … or how it is related to them.[5]

Accordingly, the defining feature of the intrinsic/extrinsic distinction is a dependence claim: an intrinsic property is one whose instantiation by some individual entirely depends on what the individual itself is like, not on its environment. Slightly more formally put, a property P is classified as intrinsic according to this intuitive criterion iff for all individuals x, whether or not x has P, depends only on what x is like and not on the environment of x. Since a

1 Lewis 1983, 197.

2 Vallentyne 1997, 209.

3 Francescotti 1999, 590, Francescotti's emphasis.

4 Yablo 1999, 479, Yablo's emphasis.

5 Skow 2007, 111.

property is extrinsic iff it is not intrinsic, a property P is extrinsic iff there is an individual x, such that whether or not x has P depends not only on what x is like, but also on the environment of x.

As pointed out above, there is little controversy that F, the disjunctive property of *being either non-cubical and lonely or else cubical and accompanied*, should intuitively be classified as extrinsic. However, the claim that F is extrinsic cannot be accepted as a brute intuitive fact. The debate on the intrinsic/extrinsic distinction presupposes that the intuitive characterization of intrinsicness provides a systematic criterion which is applicable to any arbitrary property. Thus, whenever we classify a property as intrinsic or as extrinsic according to our intuitive criterion, we have to be able to provide systematic reasons for this move. Accordingly, the crucial question is how the claim that F is extrinsic can be justified on the basis of the intuitive criterion, that is, why we are entitled to claim that there is an individual x, such that the instantiation of F by x depends not only on what x is like, but also on the environment of x.

The feature of the environment which is potentially relevant to whether or not some individual has F is the existence (or non-existence) of other contingent individuals. Thus, if F is to be classified as an extrinsic property, there must be some individual x, such that the instantiation of F by x depends not only on what x is like, but also on whether x coexists with other contingent individuals, that is, on whether x is accompanied in Langton and Lewis's sense. The intuitive argument to the effect that the instantiation of F by some individual x does indeed depend on whether or not x exists with other contingent individuals seems to run as follows: suppose that x is a cubical object. Then, it follows directly from the logical structure of F that x can instantiate F only if x coexists with some other contingent individual. Otherwise, x would be both cubical and lonely and could not instantiate F. Thus, if x is cubical, then whether or not x instantiates F depends on whether x coexists with other contingent individuals, and F should be classified as extrinsic. (In fact, it can be shown by an analogous argument that if x is not cubical, then whether or not x instantiates F also depends on whether x coexists with other contingent individuals.)

It should be noted, however, that this line of reasoning crucially relies on explicit assumptions about the shape x. If we do not make any such assumptions, there seems to be no reasonable interpretation of the intuitive notion of dependence, according to which the instantiation of F by x depends on x's coexistence with other individuals. This is because if the instantiation of F by x is to depend on the existence of other individuals in any intuitive sense, at least one of the following two conditions should be satisfied: (i) if x coexists with some other contingent individual, this has some – logical, conceptual, metaphysical or physical – implications for whether x has F, (ii) if x does not coexist with any other contingent individual, this has some – logical, conceptual, metaphysical or physical – implications for whether x has F. But given that F is logically equivalent to the property of *being cubical iff accompanied*, neither condition (i), nor condition (ii) are satisfied. The assumption that x is accompanied in itself does not have any logical, conceptual, metaphysical or physical implications for whether x has F – unless we make further assumptions about the shape of x. Thus, condition (i) is not fulfilled, and an analogous consideration shows that condition (ii) is not satisfied either. (Denby makes a similar point when he argues that there are extrinsic properties whose instantiation does not impose any constraints on what the external world is like (see Denby 2010, 773), and this is, of course, the reason why properties having the logical structure of F are independent of accompaniment.)

At first sight, making explicit assumptions about the shape of x seems unproblematic. After all, the intuitive criterion of the intrinsic/extrinsic distinction requires only that the instantiation of an extrinsic property by some individual x be *at least partially* dependent on x's surroundings, not that it be *completely* dependent on x's surroundings. F is intuitively classified as extrinsic because its instantiation by some individual x partially depends on what x itself is like, that is, on whether or not x is cubical, and partially on whether or not x coexists with other individuals. In some cases, the conclusion that a property P is extrinsic because its instantiation by some individual x partially depends on the environment of x relies on the presupposition that x has some property Q. Therefore, it might seem that the following is a sufficient condition for P's being extrinsic:

(*) There is an individual x and a property Q, such that if x instantiates Q, then whether or not x has P depends on whether x coexists with other individuals.

If P is equated with F, while Q is equated with *being cubical*, then P and Q satisfy this principle (and the same holds if P is equated with F, while Q is equated with *not being cubical*). This is in accordance with the claim that F should be regarded as extrinsic. The problem is, however, that (*) will also be satisfied if P is equated with *being cubical*, while Q is equated with F. To see this, suppose that x instantiates F. Then, the assumption that x is accompanied implies that x is cubical. Otherwise, x would be non-cubical and accompanied and could not instantiate F. Thus, if x instantiates F, then whether or not x is cubical depends on whether x coexists with other contingent individuals. Accordingly, if (*) were considered a sufficient condition for a property's being extrinsic, properties such as *being cubical*, which are usually classified as intrinsic, would come out extrinsic as well. Therefore, arguments supposed to show that a property is classified as extrinsic cannot rely on (*).

Nonetheless, the argument to the effect that F has to be classified as extrinsic according to our intuitive criterion seems to rely on a principle like (*). It draws on the observation that *if* x is cubical, then x's instantiation of F depends on the existence of other individuals. The problem is that there seems to be an analogous argument showing that *being cubical* is extrinsic on the grounds that there is an individual x, such that *if* x has F, then whether or not x is cubical depends on the existence of other individuals. From an intuitive point of view, this latter argument is artificial and far-fetched. However, the two arguments are structurally exactly alike. Thus, there must be some additional reason for accepting (*) as a sufficient condition for extrinsicness if Q is equated with *being cubical*, but rejecting (*) as a sufficient condition for extrinsicness if Q is equated with F.

(*) is supposed to capture the idea that in some cases, we have to make certain assumptions about what x itself is like in order to evaluate whether the instantiation of P by x depends on the existence of other individuals. The reason why (*) is acceptable as a sufficient condition for extrinsicness if Q is equated with *being cubical* is that assuming that x is cubical amounts to making an assumption about what x itself is like. The assumption that x has F, however, is not an assumption about what x itself is like. Thus, we have to rule out cases where the assumption that x has Q is not an assumption about what x itself is like. However, the properties describing what x itself is like are precisely the intrinsic properties of x. The crucial difference between the two cases, hence, seems to be that as long as Q is equated with some intrinsic property, (*) yields a sufficient condition for P's being extrinsic, whereas if Q may be equated with some arbitrary extrinsic property, (*) does not provide a sufficient condition for P's extrinsicness. However, this means that the argument to the effect that F is intuitively classified as extrinsic critically depends on the assumption that *being cubical* is an intrinsic property.

Thus, first appearances to the contrary, the intuitive criterion of the intrinsic/extrinsic distinction does not provide a reductive analysis of the notion. In order to classify F as extrinsic according to this criterion, one has to presuppose that *being cubical* is an intrinsic property. However, the classification of *being cubical* as intrinsic in turn presupposes that F is extrinsic. Otherwise, Q could be equated with F, (*) would be satisfied, and *being cubical* would be misclassified as extrinsic.

One might object that one need not require Q to be intrinsic in order to prevent Q from being equated with F (or properties having the same structure as F). The other obvious difference between *being cubical* and F is that the former is non-disjunctive, whereas the latter is disjunctive. Thus, instead of requiring that Q be intrinsic, one might also require that Q be non-disjunctive. But then, the problem of defining intrinsicness is postponed to the problem of having to account for the distinction between disjunctive and non-disjunctive properties, and the intuitive account encounters the same difficulty as Langton and Lewis's definition. Therefore, if we try to avoid violation of condition (2), condition (3) will be violated instead: we will have to draw on a distinction which is no better understood than the intrinsic/extrinsic distinction itself.

Many properties can be classified according to our intuitive criterion of intrinsicness without having to rely on any hidden assumptions about which other properties are intrinsic or extrinsic. *Having children*, for instance, is an extrinsic property because whether or not x has this property crucially depends on the existence of other contingent individuals: if x has children, then x must coexist with other individuals, no matter what x itself is like. And analogous reasoning holds for many other classical examples of extrinsic properties, such as *being accompanied by a cube* or *being alone in the room*.

However, F is but one example of a property whose categorization presupposes that certain other properties are classified as intrinsic. Consider, for instance, properties of the form *being such that there is at most one G*, where G is an intrinsic property. Assuming that x is accompanied (or lonely) does not have any implications for whether or not x instantiates such a property – unless one makes additional assumptions about whether or not x has the intrinsic property G. Further examples are properties of the form *being such that there is a G* (that is, properties having the same form as the property of *being such that there is a cube* discussed at the end of Section 2) and properties of the form *being either G or H and accompanied* (i.e. $G \vee (H \mathbin{\&} \textit{accompanied})$), where G and H are both intrinsic properties. Thus, even though the non-reductiveness of the intuitive criterion of intrinsicness does not always reveal itself when the criterion is applied to some property, there is a whole class of properties whose categorization crucially depends on which other properties are classified as intrinsic.

4 Towards a New Methodology of Defining Intrinsicness

According to the argument of the previous section, the intuitive analysis of the intrinsic/extrinsic distinction is not able to reduce the notion of intrinsicness to less controversial notions. This is due to the fact that in some cases, our intuitive characterization is implicitly circular. In order to classify certain properties as extrinsic, we implicitly draw on some prior intuitive grasp of which properties describe individuals with respect to what they are like themselves, that is, which properties are intrinsic. I will now argue that this has rather far-reaching consequences for the methodology that should be employed when developing an analysis of the intrinsic/extrinsic distinction.

At the beginning of the paper, I pointed out that definitions of intrinsicness are typically required to satisfy three conditions: (1) intuitive adequacy, (2) reductiveness and (3) conceptual adequacy. So far, the focus of my argument has been on the latter two conditions: I have shown that our intuitive characterization of intrinsicness cannot be reductive and conceptually adequate at the same time. I will now argue that even if a definition satisfied all three conditions, including condition (1), this would not imply that is provides a satisfactory account of intrinsicness.

The debate on the intrinsic/extrinsic distinction usually employs a methodology structurally akin to the method of hypothesis testing in the empirical sciences: an analysis is proposed which is supposed to capture all the intuitions and theoretical restrictions that are relevant at a certain point of the debate. Such an analysis is typically reductive and provides necessary and sufficient conditions which a property has to fulfil in order to qualify as intrinsic (or as extrinsic). The analysis is then tested by applying it to a number of more or less pertinent examples. If counterexamples are found, the analysis is either discarded or modified, and the whole process is re-iterated, possibly *ad infinitum*.

This methodology, which is in accordance with conditions (1) to (3), can be found in various fields in contemporary analytic philosophy – just think of the discussion of Gettier-style cases in epistemology, the debate on how to define physicalism in the philosophy of mind or the discussion on the various accounts of causation that have been proposed over the past decades. With respect to the latter, however, this methodology has come under attack: in a recent paper, Glymour et al. point out that when trying to find an adequate analysis of causation, putting forward more and more complicated analyses and revising them in the light of more and more complicated counterexamples is not a promising approach. An adequate theory of causation should rather highlight theoretically important features of the notion and provide reliable indicators that help discover causal relations (see Glymour et al. 2010).

One of the reasons that Glymour et al. give for rejecting the standard approach is that testing a definition of causation in view of intuitive examples does not yield stable results, because many of the examples used as test cases are intuitively controversial (see Glymour et al. 2010, 186–187).[6] A similar

6 According to Glymour et al., another reason why the standard approach to defining causation fails is that the method of hypothesis testing faces the problem of induction: there are

consideration holds for the intrinsic/extrinsic distinction as well. There are quite a few properties that are considered clear examples of intrinsic properties by some, but examples of extrinsic properties by others. (For a related worry, see also McQueen and van Woudenberg forthcoming.) For instance, while it seems to be widely agreed that *being a cube*, *being a sphere* and *being a rock* are intrinsic properties, Sider argues that such properties are border-sensitive: a cubical portion of matter seamlessly embedded in a sphere of which it is a proper part does not have the property of *being a cube*. (It has cubical shape, but does not qualify as a cube.) If it were extracted from the sphere, however, it would acquire the property of *being a cube*, and analogous considerations hold for properties such as *being a sphere* and *being a rock*. Accordingly, whether or not an individual instantiates one of these properties depends on whether it is seamlessly embedded in another individual, and it follows that such properties should be classified as extrinsic (Sider 2001, 358; see also Skow 2007).

A further case raising problems for the intuitive characterization of intrinsicness are logically complex properties that are cointensional with intrinsic properties, for instance, *being cubical and such that the number 3 exists* (presupposing that the number 3 is a necessarily existing individual). While proponents of duplication based accounts of intrinsicness, most notably Langton and Lewis, have to assume that all properties that are cointensional with some intrinsic property are intrinsic, others think that properties such as *being cubical and such that the number 3 exists* are extrinsic, because they involve an individual (a number in this case) that is completely distinct from the individuals by which they are instantiated (see Francescotti 1999, 596).

If even some of the more popular examples of the intrinsic/extrinsic distinction create controversy, this casts doubt on the standard methodology of judging the adequacy of a proposed analysis by its ability to cope with possible counterexamples. And even if this problem could be avoided, there is a further reason why the adequacy of an analysis of the intrinsic/extrinsic distinction should not primarily depend on how many counterexamples it is able to avoid. To see this, suppose there is an omniscient being who knows all properties and assigns them to two mutually exclusive sets, A and B, by using some random process, for instance, by flipping a coin. Further suppose that, as a matter of

infinitely many possible test cases, and it is not possible to conclude at some point that a definition of causation has been sufficiently tested – the next case considered may just be a devastating counterexample (see Glymour et al. 2010, 186–187). I will set this argument aside, however, since the method of hypothesis testing is obviously considered a very powerful methodological tool in empirical research, despite the problem of induction, and it is not clear why this should not hold in the case of philosophical hypothesis testing.

fact, A contains exactly those properties that are intuitively classified as intrinsic, while B contains exactly those properties that are intuitively classified as extrinsic.

Now suppose we define a property as intrinsic iff it is a member of A and as extrinsic iff it is a member of B. Such a definition satisfies each of the conditions (1) to (3). Condition (1), intuitive adequacy, is trivially satisfied, since A contains exactly those properties that are intuitively classified as intrinsic, and B contains all other properties. Condition (2), reductiveness, is satisfied as well, since properties are assigned to A and B using a randomized procedure, not by implicitly applying the notions of intrinsicness and extrinsicness. Finally, condition (3) is satisfied, since the definition does not rely on notions that lack proper definitions themselves: the notion of a randomized procedure and the notion of an omniscient being seem to be perfectly well understood. (We might not know whether an omniscient being exists, but that does not imply that the notion is not sufficiently well understood.)

It should be obvious, however, that the proposed definition is highly unsatisfactory. It owes its adequacy to the outcome of a randomized procedure and does not say anything illuminating about how the intrinsic/extrinsic distinction is to be understood. Therefore, satisfying conditions (1) to (3) is not a sufficient condition for the adequacy of an account of intrinsicness.

If conditions (1) to (3) are not sufficient for the adequacy of an account of intrinsicness, they might still be necessary. However, the arguments given in this paper cast doubt on this claim as well. If, as argued in this section, it is often not even clear what the intuitive cases are that a definition of intrinsicness is supposed to cover, it does not seem to be a promising approach to require a definition of intrinsicness to get *all* the intuitive cases right. Thus, condition (1) should not be considered a necessary requirement a definition of intrinsicness is supposed to fulfil.

If intuitions about *single* cases are not a reliable guide to a definition of intrinsicness, but if an analysis of the intrinsic/extrinsic distinction should nonetheless capture our central intuitions about the notion, it follows that an analysis of the intrinsic/extrinsic distinction should capture the *general* features of our intuitive definition of intrinsicness. I have argued in the previous section that our intuitive definition of intrinsicness is either non-reductive or has to reduce intrinsicness to notions that are no better understood than the intrinsic/extrinsic distinction itself.[7] In view of the fact that reducing the intrinsic/extrinsic distinction to other notions does not seem to have been the route

7 Note that the argument given in Section 3 does not hinge upon a single example either, since I argue at the end of the section that there is *a whole class* of properties which cannot be

to success in the past decades, my proposal is that one should accept non-reductiveness as a central feature of our intuitive characterization of intrinsicness. But the natural way to capture this feature of the intuitive characterization of the intrinsic/extrinsic distinction in a formal analysis is to develop an analysis that is illuminating, but non-reductive itself. It follows that condition (2) should not be considered a necessary adequacy condition on a formal account of intrinsicness.

Most approaches to defining intrinsicness aim to satisfy conditions (1) to (3).[8] According to the argument given in this paper, however, this accounts for at least part of the difficulties that arise when we try to find an adequate account of intrinsicness. The consequence of the argument, hence, is that one should explore an alternative route to defining intrinsicness. Rather than eliminating as many counterexamples as possible, a definition of intrinsicness should aim to reflect the relevant features of our intuitive account of intrinsicness. A more detailed discussion of what such an account of intrinsicness will have to look like will have to be postponed to a different occasion. However, the conclusion of the present argument is that aiming to provide a non-reductive analysis of intrinsicness is the more promising approach.

Acknowledgements

My work on this paper was supported by a Research Fellowship from the Deutsche Forschungsgemeinschaft (grant number HO 5206/2–1).

References

Denby, David A. 2006. “The Distinction between Intrinsic and Extrinsic Properties.” *Mind* 115(457), 1–17.

Denby, David A. 2010. “Intrinsic and Extrinsic Properties: a Reply to Hoffmann-Kolss.” *Mind* 119(475), 773–782.

Francescotti, Robert M. 1999. “How to Define Intrinsic Properties.” *Noûs* 33(4), 590–609.

adequately covered by our intuitive criterion of intrinsicness without making any additional assumption about which other properties are intrinsic.

8 Notable exceptions are the non-reductive definitions proposed by Weatherson and by Denby (see Weatherson 2001, 373; Denby 2006, 10–11). Whether or not these accounts are fully adequate is currently an open question (for an objection to Weatherson’s account, see Lewis 2001, 396; for a discussion of Denby’s account, see Hoffmann-Kolss 2010; Denby 2010).

Glymour, Clark, David Danks, Bruce Glymour, Frederick Eberhardt, Joseph Ramsey, Richard Scheines, Peter Spirtes, Choh Man Teng, and Jiji Zhang 2010. "Actual Causation: A Stone Soup Essay." *Synthese* 175, 169–192.

Hoffmann-Kolss, Vera 2010. "Denby on the Distinction between Intrinsic and Extrinsic Properties." *Mind* 119(475), 763–772.

Langton, Rae, and David Lewis 1998. "Defining "Intrinsic"." *Philosophy and Phenomenological Research* 58(2), 333–345.

Langton, Rae, and David Lewis 2001. "Marshall and Parsons on "Intrinsic"." *Philosophy and Phenomenological Research* 63(2), 353–355.

Lewis, David 1983. "Extrinsic Properties." *Philosophical Studies* 44, 197–200.

Lewis, David 2001. "Redefining "Intrinsic"." *Philosophy and Phenomenological Research* 63(2), 381–398.

Marshall, Dan 2009. "Can "Intrinsic" Be Defined Using Only Broadly Logical Notions?" *Philosophy and Phenomenological Research* 78(3), 646–672.

Marshall, Dan, and Josh Parsons 2001. "Langton and Lewis on "Intrinsic"." *Philosophy and Phenomenological Research* 63(2), 347–351.

McQueen, Kelvin J., and René van Woudenberg 2016. "Tests for Intrinsicness Tested." *Philosophical Studies* 173(11), 2935–2950.

Sider, Theodore 2001. "Maximality and Intrinsic Properties." *Philosophy and Phenomenological Research* 63(2), 357–364.

Skow, Bradford 2007. "Are Shapes Intrinsic?" *Philosophical Studies* 133(1), 111–130.

Vallentyne, Peter 1997. "Intrinsic Properties Defined." *Philosophical Studies* 88(2), 209–219.

Weatherson, Brian 2001. "Intrinsic Properties and Combinatorial Principles." *Philosophy and Phenomenological Research* 63(2), 365–380.

Witmer, D. Gene, William Butchard, and Kelly Trogdon 2005. "Intrinsicality without Naturalness." *Philosophy and Phenomenological Research* 70(2), 326–350.

Yablo, Stephen 1999. "Intrinsicness." *Philosophical Topics* 26(1–2), 479–505.