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Joshua Hoffman and Gary S. Rosenkrantz

Excerpt

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## Introduction

This essay is an exploration of the ontological landscape of ordinary discourse and thought. Most philosophers would concede that there is an ordinary, commonsense, or “folk” conceptual scheme, and that this scheme has certain ontological presuppositions. Foremost among these is the idea that there are enduring things, or individual substances, continuants such as people, rocks, flowers, and houses. Other kinds of entities which common sense appears to recognize are events, places, times, properties, and collections, as well as surfaces, edges, shadows, and holes. Any ontologist must begin as a point of reference with a consideration of this folk or commonsense ontology, even if in the end he revises it in some way. At least since the time of Aristotle, philosophers have tried to organize and relate entities of the kinds which belong to the commonsense ontology, kinds which Aristotle called *categories*.

One of our primary aims is to analyze the ordinary or commonsense concept of an individual substance, and the other is to characterize the possible extension of this concept. These analytical enterprises do not involve any commitment to the existence of an individual substance so conceived. Our analysis of substance will be carried out in terms of a broad theory of ontological categories which covers both commonsense categories of the sort just referred to and categories of a more theoretical sort, which are scientific, mathematical, or philosophical in origin.

The main idea behind our analysis of substance is a venerable one: it is that a substance has a kind of *independence* which no other sort of entity enjoys. Many philosophers, including some of the greatest, such as Aristotle, Descartes, and Spinoza, have tried to characterize substance in terms of some sort of independence criterion, but the consensus is that none of them has provided an adequate account of the requisite notion of independence. Our novel analysis of substance in terms of independence incorporates the insight of Aristotle that the independence of substance is to be understood in terms of the relation of the category of Substance to the

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other categories, and the insight of Descartes and Spinoza that a substance is in some way independent of any other substance.

Because our analysis of substance is partly in terms of the relation of the category of Substance to other ontological categories, we find it necessary to explore in some depth not only the nature of substances, but also the natures of entities belonging to these other categories. In particular, we investigate the natures of concrete entities such as times, places, events, tropes or concrete “properties,” collections, privations, and limits and abstract entities such as properties, relations, propositions, and sets.

In Chapter 1, we begin by informally characterizing the ordinary or commonsense concept of substance and distinguishing it from other commonsense ontological categories. Next, we explain the difference between the analytical project which we undertake and the project of determining whether a substance actually exists. This is followed by a defense of our analytical project against objections of the sort put forward by anti-metaphysicians of various stripes, including radical empiricists and positivists. The next section develops a framework for a scheme of ontological categories to be employed in our analysis of substance. We provide an informal presentation of this framework and scheme as well as a more formal account. Our scheme of ontological categories embodies a hierarchy of levels of generality among such categories related as genera and species and singles out the particular level in the hierarchy at which reside Substance and other, peer categories, such as Time, Place, Event, and Property. Finally, we characterize the intuitive notion of a substance through a formal enumeration of the salient metaphysical features of a substance, and we also enumerate the salient features specific to various possible species of substance. These salient features serve as the data to which, *prima facie*, any analysis of the intuitive notion of substance must be adequate.

Chapter 2 surveys several historically prominent accounts of substance in order to reveal the shortcomings of these accounts and to glean from this survey whatever insights it may provide. We begin with two Aristotelean accounts. According to the first, a substance is that which can persist through change. The second Aristotelean account of substance is found in the *Categories*, and maintains that a substance is that which is neither “said of” a subject nor “in” a subject. The latter is often thought to be an account of substance in terms of independence, but we shall argue that it is not such an account. Next, we critically assess various substratum and inherence theories of substance, including theories which either identify a

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substance with a “bare particular” or claim that a bare particular is a constituent of a substance. Finally, we argue that Descartes’s criterion of substance in terms of independence is inadequate.

Other philosophers have tried to identify a substance with a set or collection of nonsubstances. For our purposes, there are two senses in which one might *identify* an *F* with a *G*. In the first sense, the claim is that the concept of being an *F* is synonymous with the concept of being a *G*. This can be called a *meaning identification*. In a second sense, the claim is only that it is metaphysically necessary that something is an *F* if and only if it is a *G*, where something’s being a *G* explicates what it is for something to be an *F*. Here there is no implication that the concepts of being an *F* and being a *G* are synonymous. This can be called a *philosophical analysis*. Those who identify a substance with a set or collection of nonsubstances are claiming either that being a substance is synonymous with being such a set or collection, or else that being a substance is analyzable in terms of being a set or collection of this sort. If either of these claims is correct, then logically necessary and sufficient conditions for substancehood can be stated in terms of sets or collections of nonsubstances. In Chapter 3, we criticize any attempt to identify a substance with a set or collection of nonsubstances, nonsubstances such as abstract properties, events, sense-data, or concrete “properties” (tropes). We argue that there are three main reasons why these identifications fail to provide logically necessary or sufficient conditions for being a substance: a categorial confusion of the abstract and the concrete, a lack of unity of qualities, and excessive essentialism.

In Chapter 4 we construct an analysis of the ordinary concept of a substance in terms of independence, and defend the adequacy of this criterion of substancehood by arguing that while a substance satisfies our criterion, no entity of any other peer category does so. We also offer a second, simplified analysis of the ordinary concept of a substance, one which is available on the assumption that a simple substance is possible. The adequacy of this second analysis is also defended, and the two analyses are compared in detail as to their relative advantages and disadvantages.

The subject of Chapter 5 is the possible extension of the category of Substance. One of the main issues discussed is the intelligibility of the concept of an immaterial substance or soul, and another is the intelligibility of the notion of causal interaction between souls and bodies. Many philosophers have argued that there are criteria of intelligibility which are satisfied by bodies but not by souls. In response to their attacks

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on the concept of a soul, we offer relative consistency arguments which show that given what these philosophers require for intelligibility, souls are no worse off than bodies. This sort of answer is also given in reply to some of the arguments against the possibility of causal interaction between souls and bodies. Other such arguments are answered in a number of different ways. The overall conclusion of this chapter is that the arguments in the literature critical of the intelligibility of souls and of interaction between souls and bodies are not persuasive.

Our book closes with two appendixes which further explore important metaphysical concepts which play a prominent role in our discussions. Appendix 1 offers an analysis of the distinction between concrete and abstract entities. This distinction is employed in the informal presentation of our hierarchy of categories in Chapter 1, and in any subsequent decision to classify a given entity as either concrete or abstract. The same *formal* framework for a scheme of ontological categories which is utilized in our account of substance is also used to analyze the concrete–abstract distinction.

In defending our account of substance, and in the accompanying examination of other ontological categories at the same level of generality, we argue in favor of the Aristotelean view that sizeless point-positions and instants are not parts of spatial and temporal continua. Some philosophers have an opposing view and claim that the modern mathematical analysis of dense continua supports their position. In Appendix 2, we will argue that these philosophers are mistaken in thinking that the modern mathematical analysis of continuity lends credence to their claim that point-positions and instants are parts of spatial and temporal continua.

The overall conclusion of our study is that the ordinary concept of substance, understood as possibly instantiated by both bodies and souls, is both intelligible and subject to enlightening philosophical analysis in terms of metaphysical independence. Our account of substance, together with its supporting arguments, not only clarifies the nature of a substance, but also the natures of entities belonging to other peer ontological categories central to commonsensical or theoretical conceptual schemes, and the relationships between a substance and entities belonging to these other categories.

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## 1

## *Substance and other categories*

First philosophy, according to the traditional schedule, is analytic ontology, examining the traits necessary to whatever is, in this or any possible world. Its cardinal problem is that of substance and attribute.

D. C. Williams *Principles of Empirical Realism* 74 (1966)

[Categories are] . . . the different kinds of notions corresponding to the definite forms of existence . . . an enumeration of all things capable of being named, the most extensive classes into which things could be distributed.

“Category” *Oxford English Dictionary* (1971)

### I. STATEMENT AND DEFENSE OF OUR PROJECT

Metaphysics has often been revisionary, and less often descriptive. Descriptive metaphysics is content to describe the actual structure of our thought about the world, revisionary metaphysics is concerned to produce a better structure.

P. F. Strawson *Individuals* 9 (1959)

One of the main projects in this book is to conduct a conceptual investigation of the notion of an individual substance as ordinarily understood, paradigm instances of which seem to be particular material objects and persons. In one of its ordinary senses, the term ‘thing’ means individual substance. For example, the term ‘thing’ is being used in this sense in the following sentences:

‘Wisdom is not a thing, it is a quality of a thing’.

‘Surfaces and holes are not things, they are limits and absences of them, respectively’.

‘A chameleon’s turning color is not a thing, it is a change in one’.

Accordingly, it is impossible for a thing or an object in this ordinary sense either to *occur* (as an event does) or to be *exemplified* (as some properties are). To suppose otherwise is to commit what Ryle called a category mistake. This is the source of the apparent absurdity of saying, for example,

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that Socrates occurs or is exemplified by something. Likewise, it is a category mistake to identify a thing or substance with an absence, such as a hole, or a limit, such as a surface. A hole is an absence, and a surface is a limit, *of* a thing, and, hence, each of these is *not* a thing or individual substance. Nor is it possible for a material substance to be identified with a place: for one, a material substance can move, but a place cannot. Furthermore, it is impossible for an enduring individual substance to be identified with an interval of time, since the latter has times as parts, but the former cannot.

The great philosophers of the past, of course, were intensely interested in the concept of individual substance. Aristotle, for example, believed that individual substances were the basic or primary existents, as did Descartes, Spinoza, Leibniz, Locke, and Berkeley. Kant went so far as to maintain that human beings cannot conceive of a reality in which substances are absent. All of these thinkers (and many others) spent much time and effort trying to elucidate the concept of an individual substance.

While there is a large body of recent work devoted to the production (or destruction) of philosophical analyses of concepts such as knowledge and causation, the concept of substance has been neglected in comparison. Yet, the presupposition that there are substantial material objects and selves seems to be at the core of our commonsense or folk ontology, with the result that much current philosophical research also has this presupposition. In addition, it is not clear that empirical science has dispensed with the existence of substances (science still makes reference to particles), despite certain tendencies in that direction in the area of theoretical physics. Moreover, even if empirical science has rejected the existence of substances, it is questionable whether it has done so justifiably.

In any case, it should be observed that there being an ordinary *concept* of individual substance does not entail that there is an *instance* of this ordinary concept. This observation is implicit in the following passage in which Hans Reichenbach rejects the existence of material substance on the empirical ground that its existence is ruled out by the wave–particle duality of quantum mechanics.

It was a long way from Democritus' atoms to the duality of waves and corpuscles. The substance of the universe – in the physicist's sense . . . has turned out to be of a rather dubious nature, if compared with the solid particles in which both the philosopher and the scientist believed for some two thousand years. The conception of a corporeal substance, similar to the palpable substance shown by the bodies of our daily environment, has been recognized as an extrapolation from sensual experience. What appeared to the philosophy of rationalism as a requirement of reason – Kant called the

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concept of substance synthetic a priori – has been revealed as being the product of a conditioning through environment. The experiences offered by atomic phenomena make it necessary to abandon the idea of a corporeal substance and require a revision of the form of the description by means of which we portray physical reality. With the corporeal substance goes the two-valued character of language, and even the fundamentals of logic are shown to be the product of an adaptation to the simple environment into which human beings were born.<sup>1</sup>

Toward the end of this passage, Reichenbach argues for the conditional, that if there are empirical observations which disconfirm the existence of corporeal substance, then there also are (or can be) empirical observations which disconfirm fundamental logical truths. However, in our view, the contention that there can be empirical observations which disconfirm fundamental logical truths is deeply problematic. We conclude that if the aforementioned conditional affirmed by Reichenbach is correct, then it is highly questionable whether the empirical observations which Reichenbach takes to disconfirm the existence of corporeal substance really do disconfirm the existence of corporeal substance.

In any case, since our project is to construct a philosophical analysis of the ordinary concept of an individual substance, and since there being such an analysis does not entail that there is an instance of this ordinary concept, the completion of our enterprise does not commit us to the actual existence of a substance, or, for that matter, to the existence of an entity of any particular ontological category. Instead, our project is an example of what D. C. Williams has called “analytic ontology.”

Concerned with what it means to be a thing or kind at all, [analytic ontology] is in some wise prior to and independent of the other great branch of metaphysics, speculative cosmology: what kinds of things are there, what stuff are they made of, how are they strung together?<sup>2</sup>

Williams’s distinction between analytic ontology and speculative cosmology seems to be the same as Brian Carr’s more recent distinction between *categorial description* and *categorial realism*.<sup>3</sup> According to Carr, there is a

relatively minimal metaphysical activity which can make claims to a legitimate and central place in philosophy, perhaps even *the* central place, and

1 *The Rise of Scientific Philosophy* (Berkeley: University of California Press, 1951), pp. 189–190.

2 *The Principles of Empirical Realism* (Springfield, Ill.: Charles C Thomas, 1966), p. 74.

3 Brian Carr, *Metaphysics: An Introduction* (Atlantic Highlands, N.J.: Humanities Press International, 1987), chap. 1.

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which has always been part of the wider activity of metaphysicians. Even if it is questionable whether the existence of God, the nature of the spatiotemporal universe, and the future of the human soul can be investigated and established by rational argument, the metaphysical activity which I want to identify and introduce falls under no such grave suspicions. And though it is a minimal activity within that wider contentious one, it is not itself unrewarding.

Metaphysics, in its minimal form, is the activity of categorical description. Its subject matter is the most fundamental aspects of the way we think and talk about reality, the most fundamental features of reality as it presents itself to us. We divide the world into horses and trains, people and mountains, battles and towns, and a whole complex structure of different kinds of things; our language is the repository of this enormously rich furnishing of the world. But we can discern within this richness some overall divisions, between things and their properties, for example, or between events and the times and places in which they happen, and it is with the overall pattern of our categorizing of elements of the world that metaphysics concerns itself with. The basic divisions which our thought and talk about reality entail are the quarry of categorical describers.<sup>4</sup>

On the other hand, a categorial realist is characterized by Carr as someone who takes the categories, which he seeks to describe, as marking real kinds to be found in the things which collectively make up reality.<sup>5</sup>

In our view Williams and Carr are correct to distinguish theories about what kinds of entities exist from accounts of what characteristics a given kind of entity must have. While it is likely that the former have ultimately to be based at least in part upon empirical evidence, accounts of the latter sort are *a priori*: their ultimate goal is the construction of philosophical analyses of the various categories of being. Our conceptual investigation focuses on the ontological category signified by the ordinary notion of an individual substance. We aim to provide an adequate philosophical analysis of this notion or category. In doing so, and in distinguishing substances from entities of other ontological categories, we shall elucidate those other categories as well.

*Prima facie*, the ontological category of Individual Substance is no less legitimate than any other ontological category, for instance, Property, Space, Time, Event, Collection, and so forth. In other words, the burden of proof is on one who regards Substance as suspect.<sup>6</sup> There are several senses in which this can be understood: the onus of proof rests on one who

4 Ibid., pp. 1–2.

5 Ibid., p. 6.

6 Likewise, anyone asserting the impossibility of times, places, events, or properties, etc., assumes the burden of proof.



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supposes either that the concept of substance is unintelligible, or that it is impossible for a substance to exist, or (even) that substances do not exist.<sup>7</sup>

The foregoing considerations suggest both that our project of illuminating the nature of substance by employing the current methods of philosophical analysis is of philosophical significance, and that work on such a project is overdue.

Ordinary conceptions of ontological categories such as Substance, Time, Place, Event, Property, and Collection are either innate, as rationalistic philosophers such as Descartes and Kant maintain, or derived from (suggested by) certain relevant experiences, as empiricists hold. Indeed, the concept of individual substance seems to be at least as central to our conceptual scheme as any of these other concepts, and is probably more so.<sup>8</sup> Moreover, each concept gives rise to its own distinctive philosophical problems. True, there are problems about the nature of substance, and about the identity and individuation of substances, but there are other equally pressing problems about the nature, identity, and individuation of events, times, places, properties, et cetera. *Prima facie* there is no reason to think that these problems are intractable in the case of substance, or only in that case.

Nevertheless, there are philosophers who would contend that this project lacks philosophical interest. In this section, we answer these philosophers, and defend our claim that our project has philosophical significance. How would these philosophers support their contention about our project?

First, they might argue that the distinction between substance and non-substance is so scholastic (in a pejorative sense) that to seek an analysis of the notion of substance is philosophically pointless. In a somewhat similar vein, Pierre Bayle said of a related distinction between an *ens per se* and an *ens per accidens* that these expressions “are unintelligible phrases, a mere jargon of the Spanish logicians which have no meaning at all.”<sup>9</sup> Are attitudes of this kind justified when directed upon the distinction between substance and nonsubstance? It seems not. Since the relevant notion of substancehood is a part of our ordinary conceptual scheme, the term

7 While we do not argue that substances exist, we believe that common sense supports such a view. Hence, the denial of their existence assumes the burden of proof. We will, however, dispute the claim that either the concept of substance is unintelligible or it is impossible for a substance to exist.

8 This point is suggested in remarks made by Bertrand Russell in *The Problems of Philosophy* (Oxford: Oxford University Press, 1943), chap. 9.

9 See note A in the article, “Gorlaeus, David,” in Bayle’s *General Dictionary, Historical and Critical*.

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'substance' cannot simply be dismissed in this way as a piece of senseless philosophical jargon or an unintelligible relic of an outmoded scholastic philosophy.

To this it might be replied that the ordinary notion of substance is obscure or confused and impossible to clarify, and hence that there is no intelligible ordinary concept of substance. However, such an argument cannot support the contention that our project is philosophically pointless. This is because if we are successful in providing an adequate analysis of the ordinary concept of substance, then the fact that there *is* such an analysis answers the charge that this notion of substance is obscure or confused and unclarifiable.

Some comments are also in order about the point of view according to which it is impossible that there be substances.<sup>10</sup> From that perspective, material objects and persons are convenient myths or can be eliminated in favor of logical constructions upon instantaneous entities, for example, temporal stages or impressions. But even if such a view is correct, it does not follow that our project lacks philosophical significance. If what is impossible according to this view is the instantiation of an intelligible concept, namely, substance, then the discovery of an analysis of that concept would have philosophical significance. In particular, such an analysis would enhance our understanding of what it is that is impossible. Thus, this sort of skeptical view about substance seems to be in a position which parallels that of a certain kind of epistemological skeptic. For example, an extreme epistemological skeptic might assert that it is impossible for anyone to possess knowledge, but he would not find the concept of knowledge unintelligible. Such a skeptic ought to regard the project of analyzing the concept of knowledge as a philosophically worthwhile one.

Another way to justify a dismissive attitude toward our project is to appeal to the criteria of cognitive significance employed by radical empiricists and logical positivists.

One such argument is the following:

- (1i) The term 'substance' is meaningful only if someone is directly aware of a substance.
  - (1ii) No one is directly aware of a substance.
- 
- (1iii) The term 'substance' is meaningless.

<sup>10</sup> Here, and subsequently, when we employ modal terms such as 'impossible', 'necessary', and 'possible', we are using them in the sense of *metaphysical* impossibility, necessity, and possibility.