Introduction

Gabriele Galluzzo and Michael J. Loux

All but one of the chapters in this volume had their origin in a conference on the problem of universals in contemporary analytic philosophy held at the Scuola Normale Superiore in Pisa, Italy in July 2010. The conference was part of a larger project under the direction of Francesco Del Punta on the problem of universals across the whole history of philosophy. The aim of the conference was to give a broad overview of the contemporary debate on universals, and to indicate the issues that promise to be crucial to future metaphysical investigation.

It is difficult to provide an entirely uncontroversial characterization of what exactly the problem of universals is. This is due to the undeniable fact that the problem intersects with a large number of philosophical areas, ranging from metaphysics to semantics and also including philosophy of mathematics and epistemology. In the history of philosophy the problem has occasionally been described in semantic terms as the question as to whether or not the general terms of natural language refer to and so introduce peculiar kinds of entities, universals, somehow distinct from the familiar particular objects of our everyday experience. Sometimes, philosophers in the past have also looked at the problem of universals as an eminently epistemic issue, mainly concerned with the nature of our concepts: do general concepts represent general or universal entities or do they simply represent particular entities in a general way? This volume is characterized by a distinctively *metaphysical* approach to the problem of universals. Contributors to the volume share the common assumption that the problem of universals is primarily a metaphysical and ontological issue, mainly concerned with how many categories of things we should introduce into our ontology: is the furniture of the world confined exclusively to particular entities? Or do we need to include in the catalogue of things that there are universals as well, i.e. entities that are shared or at least shareable by many particulars? To take this approach does not mean to deny that the problem

of universals may be significantly linked with a number of central areas in semantics and epistemology. However, semantic and epistemic issues are here regarded as interesting consequences of a fundamentally metaphysical problem.

As the chapters indicate, this volume covers a broad range of topics on the nature and existence of universals and their relation to the particulars that exhibit them. Given the vastness of the contemporary debate on universals and the many ramifications of the problem itself, it would have been impossible to aim at absolute exhaustiveness and completeness. Nonetheless, we have tried to select those topics that have significantly shaped and continue to shape our understanding of one of the most enduring themes in the history of philosophy. In line with the spirit of the original conference we have also wished to present different philosophical traditions and orientations concerning the problem of universals. Our aim in doing so was to show that the traditional division between realists and nominalists conceals a wide variety of philosophical views, often difficult to accommodate within the traditional schemes. Realism and nominalism are in many respects divided fields, more so actually than philosophers are often prepared to acknowledge. The recognition of this and related facts has led some contributors to challenge and call into question the traditional categories we are used to employing in conceptualizing and phrasing disputes on universals. Finally, although our focus has mainly been on the problem of universals as such more than on some of its possible implications for neighboring areas in metaphysics, we have also included in the volume vivid examples of how the problem overlaps with a series of different but related metaphysical questions, such as the metaphysical foundation of natural laws and the controversial issue of the nature of states of affairs. Although the single contributions argue for a number of positive philosophical positions, they also give a flavor of the debate and so introduce the different options on the philosophical market. In the rest of this introduction, we wish to give a sense of the contents and articulation of the volume.

One topic that played a major role in the conference was the contrast between broadly Aristotelian and broadly Platonistic approaches to universals. Roughly, the contrast is that between theories that make universals in some sense immanent in the spatiotemporal world and those that construe universals as in some sense transcendent. The contrast is in many ways well known and traditional, but it has in recent years come to be entirely rethought and redesigned in light of new and more fine-grained conceptual categories.

One way this contrast gets fleshed out is in terms of the contrast between what have been called constituent and relational approaches to ontological issues. Both are attempts to deal with the character or qualitative nature of familiar concrete particulars; and both tell us that those particulars derive their character from entities – properties, attributes, natures – that have their own character non-derivatively. Constituent theories tell us that those underived sources of character are something like parts, components, or (as it is usually put) constituents of the particulars whose character they underwrite. So familiar particulars have a more fundamental, metaphysical structure than their commonsense mereological structure, and in virtue of that structure, they have the various forms of character they do. Relational approaches, by contrast, deny that the underived sources of character inhabit the spatiotemporal world. Nonetheless, familiar spatiotemporal particulars can enter into non-mereological relations or ties with those sources of character (they instantiate, exemplify, or exhibit them); and in virtue of doing so, those particulars have the different forms of character we associate with them.

In his chapter ('An Exercise in Constituent Ontology'), Michael J. Loux lays out this contrast and points out that in recent discussions of ontological issues the relational approach has been dominant. That dominance, he suggests, is rooted in the assumption that the constituent approach with its talk of constituents and ontological structure involves a kind of category mistake, the mistake of thinking that concrete particulars can have abstract entities (things like properties or attributes) as parts or ingredients. Loux argues that no compelling case against the constituent approach can be derived from this assumption, and he goes onto lay out the general contours of the constituent approach. He takes the traditional bundle theory (where familiar particulars are bundles of fully determinate first-order properties) as the entry point for constituent theorizing and points to four sets of difficulties for the theory, arguing that we can take alternative versions of the constituent approach to result from attempts to deal with those difficulties. Contending that no recent constituent theories are successful here, Loux points to Aristotle's hylemorphic theory as a constituent account that is successful in dealing with the four sets of difficulties.

In 'Against Ontological Structure' Peter van Inwagen agrees with the Aristotelian that we have no option but to endorse an ontology of universals, but he rejects the constituent theorist's account of the relation between universals and the familiar particulars that exhibit them. He takes universals to fall under a general category he calls "relation." The category includes propositions (O-adic relations), properties (monadic

relations), and what are more commonly or properly called relations (dyadic, triadic, and more generally, n-adic members of the category). As he sees it, all the items in this general category are assertibles, things that can be asserted or said. Propositions are saturated assertibles: they can be said or asserted full stop; whereas properties and what are properly called relations are unsaturated assertibles: they are things that are asserted of or said of other things or n-tuples of other things. As van Inwagen sees it, assertibles, whether saturated or unsaturated, are nonphysical, non-spatial abstract entities; and while he concedes that properties and relations can enter into non-mereological relations or ties to the individuals that exhibit them, he denies, contra Loux, that they can, in any sense, be parts, ingredients, or components of concrete particulars. Indeed, he tells us that he simply does not understand what constituent theorists are saying when they speak of constituents, complexes, and ontological structure. Such talk, he insists, is meaningless.

In his contribution ('In Defense of Substantial Universals'), E. J. Lowe agrees with van Inwagen in rejecting the constituent approach; but unlike van Inwagen, who wants to endorse a Platonistic theory, Lowe construes himself as endorsing a broadly Aristotelian theory. He sees Aristotle as presenting two quite different ontological schemes. On the one hand, there is the hylemorphic theory of the *Physics* and the *Metaphysics*. That theory, Lowe concedes, is a constituent theory. He finds its talk of informed matter mystifying, and he insists that the theory fails to show how the hylemorphic complexes Aristotle wants to call substances constitute genuinely unified objects. But while rejecting the hylemorphic approach, Lowe points to Chapter 2 of the *Categories* as the source of a non-constituent theory whose broad outlines he wants to endorse. There, Aristotle presents what Lowe calls a four-category ontology. As he sees it, Aristotle distinguishes between two categories of universal – substance kinds and attributes – and two categories of individual – individual substances and their modes. Lowe goes on to defend Aristotle's distinction between substance kinds and attributes against those metaphysicians who want to lump all first-order universals together. He argues that we need substance kinds as a distinct category of universals if we are to deal with pressing metaphysical problems about individuation, instantiation, and the nature of laws.

Like Lowe, Gabriele Galluzzo ('A kind farewell to Platonism') wants to defend a distinction between substance kinds and other universals instantiated by individual substances – what Galluzzo calls properties. He sees the idea that there is a distinction here as independent of the contrast between constituent and relational theories, but he agrees with Lowe that

the distinction fits most comfortably in an Aristotelian context. It is a distinction between two irreducibly different categories of first-order universal – what-universals and how-universals. Substance kinds are responsible for individual substances being *what* they are; whereas what Galluzzo calls properties underlie substances being *how* they are. The former are sortal universals: they mark out their members as countably distinct from each other and from things of other kinds, and they provide criteria of identity for the individuals falling under them.

Galluzzo concedes that for each substance kind, there is a cluster of properties that serves to explain phenomena idiosyncratic to the kind; he even concedes that such properties may be *de re* necessary to the individuals belonging to the kind; but he resists any attempt to reduce the kind to a conjunction of these properties. As he sees it, the kind is prior to the associated properties: it is because the individuals are members of the substance kind that they exhibit the associated properties and not vice versa. There remains the question of just which universals are genuine substance kinds; and while Galluzzo is himself sympathetic to a broadly Aristotelian account where the fully determinate biological kinds under which familiar living beings fall are taken to exhaust the basic or fundamental substance kinds, he insists that the framework of substances kinds is a flexible scheme that is amendable to a variety of metaphysical theories.

Another topic that played a major role in the conference from which this volume originated is trope theory, the constituent theory presented by D. C. Williams in the 1950s and since defended by an increasingly large number of metaphysicians. Trope theorists tell us that the underived sources of character are as individual or particular as the familiar particulars whose character they underwrite. They call these sources of character tropes, and they tell us that ordinary objects are bundles of tropes, and what we call universals, sets of resembling tropes. Over time, trope theories have progressively become more attractive and popular than austere nominalism, i.e. the view that there are no properties (whether tropes or universal properties) but only particular concrete objects. This is so because trope theories may appear to combine the advantages of both realism and nominalism: like realists, trope theories admit of the existence of properties; like nominalists, they provide a one-category ontology, being tropes as particular as the objects whose character they underwrite.

In 'Is trope theory a divided house?' Robert Garcia argues that there are two quite different things that have gone by the title "trope." Some theorists have construed tropes as characteristics or properties, and others have taken them to be propertied or charactered individuals. The former are things like

the redness of a certain dress and the courage of Socrates; whereas the latter are maximally thinly charactered individuals like that red individual or that courageous individual. Garcia calls the former modifier tropes and the latter module tropes. He argues that we get two fundamentally different ontological theories from these two notions; and he tells us that both theories have their problems. If we construct a trope theory employing the notion of a module trope, we meet with serious difficulties in our attempts to identify universals with sets of tropes. On the other hand, if we construct a theory of tropes employing the concept of a modifier trope, we meet with difficulties in our attempts to construe familiar objects as bundles of tropes.

In 'Universals in a world of particulars' John Heil uses D.C. Williams' original version of trope theory as the jumping-off point for the construction of a quite different theory of character. Heil understands Williams' tropes as what Garcia calls module tropes. As he sees it, Williams had particular or individual properties in mind; but while Heil thinks that the idea of a particular property can play a role in our account of familiar objects, he wants to dissociate that idea from other themes at work in Williams' technical notion of a trope. In particular, he rejects Williams' bundle theoretic account of ordinary objects. He proposes instead that we apply the idea of a particular or individual property within the context of a substance/attribute ontology. He wants to deny that we can provide a reductive analysis of the concept of substance. Substances are irreducibly fundamental, but in giving an account of their character, we do not need to appeal to the universals of the realist. We can and should invoke the idea of particular properties. Heil wants to construe these properties as ways substances are, and he suggests that if we understand them in these terms, we should give up the idea that they are parts or components of substances. But while deviating from Williams in his account of familiar concrete objects, Heil accepts Williams' account of universals as sets of resembling particular properties and argues that it represents a theory that has all the virtues of traditional realism about universals without its ontological costs.

Realists about universals frequently claim that universals succeed while tropes and their ilk fail in grounding the generality of laws. Heil challenges this view. In her 'Tropes and the generality of laws' Sophie Gibb does as well. She argues that the realist has no advantage whatsoever over the trope theorist here. The realist's argument is that if we assume the numerical identity of a universal in its various instances, it is easy to explain how a law of the form 'Every *F* is *G*' should hold generally. We have, after all, a single universal '*F*' at work here; but since that universal is identical in all its instances, it can assumed, *ceteris paribus*, to act in the same way

in all those instances. Gibb argues that the realist's notion of identity of property provides no more plausible explanation of the generality at work here than does the trope theorist's notion of exact similarity. Just as a single property can be assumed to make the same causal contribution in similar circumstances, so can tropes that are exactly similar; and Gibb argues that this is true whether we understand properties in dispositional or categorical terms.

The last two chapters deal with a variety of topics central to discussions about universals and their relations to particulars. Besides their intrinsic merits in relation to the debates on universals, these two chapters are intended to show how far-reaching and ramified the problem of universals is, as it fruitfully intersects with a number of neighboring metaphysical issues. An important theme in early analytic philosophy is the defense of realism about universals. Russell argued for the existence of universals by arguing for the ineliminability and generality of relations. In 'On the origins of order: non-symmetric or only symmetric relations?' Fraser MacBride echoes this theme, arguing that non-symmetric relations are ineliminable. A non-symmetric relation is one for which there are different ways in which it applies to the things it relates. So if R is a binary non-symmetric relation, then, for appropriate x and y, there are two different ways in which it is capable of applying to x and y, either by its being the case that $x\ R\ y$ or its being the case that $y\ R\ x$. MacBride argues that we have to take this requirement on non-symmetric relations to be a primitive and non-eliminable fact about the world, a fact in no need of further explanation; and he goes on to attack recent attempts at reducing non-symmetric to symmetric relations. In so doing, MacBride rejects the Humean principle that there are no brute metaphysical necessities (i.e. necessities that call for no further explanation), and argues for the importance of grounding metaphysical discourse on some metaphysically primitive assumptions.

One influential version of constituent ontology tells us that in addition to particulars and properties we need to posit complexes called states of affairs. The argument goes as follows: to explain how it could be that a particular, x, could exemplify a property, F, we need more than the existence of x and F since both could exist without its being the case that x is F. To get the result that x is F, we need to posit a new item – the state of affairs consisting in x's being F. In 'States of affairs and the relation regress' Anna-Sofia Maurin explores this line of argument. She argues that the postulation of the relevant state of affairs succeeds in giving us the result that x is F only if the items in that state of affairs are unified. But, Maurin argues, to get the requisite unity, we need a tie or relation, but

that only gives us a new ensemble (*x*, *F*, and the relation/tie/nexus). That ensemble likewise needs to be unified, and so we are off on a familiar regress. Maurin goes on to consider ways of insuring the requisite unity while either avoiding the regress or rendering it harmless. The results, she argues, are not encouraging, so she concludes that if states of affairs are posited to show how particulars and universals can be unified, they do not serve the purpose very well.

CHAPTER 1

An exercise in constituent ontology

Michael J. Loux

I

I want to do some comparative ontology. I want to examine a certain pattern of ontological explanation, to identify and compare various ways the pattern has been or could be deployed, and to argue that one instance of this pattern is, in a number of ways, superior to the others. The pattern concerns the phenomenon of character, that is, the fact that familiar concrete particulars have character or (as we might put it in non-philosophical or commonsense parlance) the fact that familiar particulars possess properties, fall under kinds, and enter into relations. Many (but not all) philosophers have believed that the individual facts making up this phenomenon are the sorts of facts that stand in need of explanation. As they see it, familiar particulars have their character derivatively; they derive their character from other things, things that have their own distinctive forms of character non-derivatively.

But these philosophers have not all agreed about how this derivation works itself out. Indeed, there are two opposed accounts of the way familiar particulars derive their character. Some philosophers hold that the underived sources of character are things that exist 'apart from' or 'in separation from' familiar particulars and that it is in virtue of standing in some relation to these privileged bearers of character that familiar particulars have the character they do. These philosophers tell us, for example, that familiar particulars exemplify transcendent universals or that sensible individuals participate in separated intelligible forms. Other philosophers, by contrast, tell us that the items underlying the character of familiar particulars are immanent in those particulars, immanent in the sense that they are something like their parts, components, or constituents. On this view, a kind of mereological structure underlies the character of familiar particulars. Particulars have their distinctive forms of character in virtue of having the appropriate underived sources of character as components.

So there are two different strategies for accounting for the pre-philosophical phenomenon of character. They have been called, respectively, the relational and constituent strategies.[1] I will stick with these labels.

The relational strategy is perennially important; it is also thoroughly familiar. It is, after all, the dominant strategy in contemporary discussions of character. But while the relational approach may dominate contemporary discussions, over the whole history of metaphysics, the constituent approach is arguably the dominant strategy. And it is the strategy I want to consider.

To one accustomed to recent ontological discussions, my interest in the constituent strategy might appear puzzling; for among defenders of the relational approach, the consensus is that the constituent strategy is, at bottom, incoherent: its central claim embodies a category mistake. The claim is that the items that have character non-derivatively are components or parts of familiar particulars. Those items, however, are abstract entities, whereas familiar particulars are concrete objects, and, we are told, no concrete object can be made out of abstract entities.

More than anything else, I think, this objection explains why contemporary metaphysicians have been so ready to endorse the relational approach. To endorse the opposing constituent approach, they have assumed, is to make the category mistake just set out; it is to endorse the incoherent idea that abstract entities can be parts or ingredients of concrete particulars. This is an important objection, one we need to address if we are to take the constituent approach seriously. After all, there can be little point in pursuing an ontological strategy that is doomed from the start.

Is it so doomed? I am not convinced it is. It is not clear that the distinction between abstract and concrete will bear the weight the objection assigns it. For the objection to work, we need some principled way of drawing the distinction so that the things philosophers want to call abstract turn out abstract and those they want to call concrete turn out concrete. We need, that is, criteria that give the right results; but, further, those criteria must be such that by reflecting on them we can see why a concrete entity cannot have abstract entities as components or constituents.

But what are the criteria here? We might suppose that an entity is concrete iff it has a spatial location and that it is abstract iff it is not concrete.[2] One difficulty is that this way of drawing the distinction either gives the wrong results or presupposes controversial philosophical claims that are independent of the issues at hand. Traditional dualists tell us

[1] Wolterstorff (1991). [2] See Simons (1994) for this sort of criterion.