Kinds and Groups[1]

Karen Bennett
Rutgers University
2025 Draft

Abstract: We talk about kinds all the time. But what *are* they? The topic has received little philosophical attention, in contrast with questions about whether there are any *natural* kinds, and in what their naturalness consists. I spell out eleven desiderata on an adequate theory of kindhood. I argue that once we have the question in better view, it becomes clear that social groups and kinds are very similar to each other. Indeed, I argue that social groups are in fact a kind of kind. Investigation into the nature of kinds should learn from recent work on the nature of social groups, which should in turn learn from existing work on the metaphysics of material objects.

1. Introduction

People talk about kinds all the time. What kind of sandwich do you want? What kind of restaurant should we go to? What kind of books do you like? Of course, talk about kinds does not always explicitly use the word 'kind'. Sometimes we use a synonym, like 'sort', 'type', 'species', or 'genre', and sometimes we do not use a kind-term at all. The sentence 'Ned likes board games better than video games' is clearly about kinds, despite not having an explicit verbal marker.

It is crucial to see, from these very first sentences, that a lot of our talk about kinds neither pretends nor aspires to be about *natural* kinds. We are at least as happy to talk about kinds of sandwiches, restaurants, and novels as we are to talk about kinds of fundamental particle, types of molecular compound, or biological species. Yet when philosophers write about kinds, they almost exclusively write about natural kinds—kinds like PHOTON or ACID or the

[1] This paper began life as a paper purely about kinds, drafted for a 2018 conference at the University of Toronto about ontological categories, organized by Nick Stang. That ancestor also received useful feedback at Rutgers and the University of Vermont. I am grateful to participants in my fall 2019 seminar on nonfundamental entities for first working through the social groups literature with me. Thanks to audiences at Arché, Stanford, the Jowett Society at Oxford, and the Rutgers Metaphysics Reading Group for discussion of more recent incarnations.

biological species like *MUSTELA NIGRIPES*, kinds that might fall short of perfect naturalness but which play an important role in scientific explanations or the laws of nature. They typically focus on whether there really are any objectively natural kinds, and in what their naturalness might consist (a nice exception is Hawley and Bird 2011). Indeed, in my experience some philosophers have difficulty even hearing the word 'kind' without a silent 'natural' prefix.

But they will have to, because my topic is kinds in general, not just natural ones. Ordinary people certainly appear to quantify over non-natural kinds like TURKEY SUB, ETHIOPIAN FOOD, and SCIENCE FICTION. The intuitive thing to say is that there are lots of kinds, and some of them, to varying degrees, have the further special feature of being natural. Natural kinds are a special kind of kind, in the same way that chocolate milk is a special kind of milk.

This way of understanding the structure of the topic makes it very clear that there is a distinction between questions about a basic phenomenon, and questions about some interesting further feature that some instances of the basic phenomenon possess. There is a difference between asking what milk is, and asking what makes some of it count as chocolate. There is also a difference between asking what kinds are, and asking what makes some of them count as natural. Both are perfectly good questions, but they are *different* questions. In this paper, I am only pursuing the first one; my topic is not naturalness but kindhood.[2]

So what are kinds? This is both an interesting question in its own right, and also in its connection to a seemingly unrelated question about the nature of *social groups*: entities like

[2] Perhaps, following Lewis, natural kinds are kinds whose members are qualitative similar and "*ipso facto* not entirely miscellaneous": they carve at the joints, they are intrinsic, they are highly specific, there are only just enough of them to carve up the world completely and without redundancy (1986, 60). For more recent discussion, see Dorr and Hawthorne 2013, Bennett 2017a, §5.7-9, Dorr 2019. I myself think naturalness is an important notion, though unfortunately tangled, and not the central notion of fundamentality.

corporate boards and football teams. My goal in this paper is to articulate a number of constraints on an adequate theory of kinds, and to investigate the connection to social groups. I will not, in the end, defend a substantive view about what kinds are—sets, sums, pluralities, other?; this paper is more of a prologue to future theorizing.

I start by focusing entirely on the independently interesting questions I have raised about the nature of kinds. In §2, I clarify the topic a bit more, and in §3 I argue at length for eleven substantive desiderata on a theory of kindhood. Some are facts about kinds that an adequate theory of kindhood must respect; some are jobs for which an adequate theory of kindhood must render kinds suitable. The pivot comes in §4, when I bring social groups into the mix. It is a striking fact that many of the desiderata that I argue apply to a theory of kindhood also apply to a theory of grouphood (§5). In §6, I argue that the best explanation of this fact is that social groups are simply a kind of kind, and in §7 I consider a few objections to this idea.

2. Three further clarifications

I have already made abundantly clear that my topic is kinds, not natural kinds. In this section I make three additional clarifications.

First, my question is not "*are* there kinds?" but rather "*what* are kinds?". That is, I will take for granted that kinds exist. But I mean this in the most minimal sense possible. I do not intend it to entail anything substantive about what kinds *are*, or the existence of objective natural kinds, or anything like that. My starting point assumption only amounts to this: someone can utter a truth by uttering a sentence like 'I'm trying to decide what kind of car to buy,' and someone can ask a substantive, meaningful question by uttering 'what's your favorite kind of

pie?' There are kinds, and they are whatever is needed to make sense of this talk. The question is, what is *that*?

Second, it is important to distinguish the question 'what are kinds?' from the question 'what are *K*s, for some particular kind *K*?' Various instances of the latter question have received lots of philosophical attention: what are persons? what are reasons? what are possible worlds? But the former question has received much less attention, and that is the one I am laying the groundwork to address. It is in effect a question about an ontological category. Just as one might ask what events are, or what material objects are, one can ask what kinds are.

Third, even thus clarified, the question "what are kinds?" hides an important ambiguity. Talk of kinds is sometimes intensional and sometimes extensional. That is, it is sometimes about *ways things can be* and sometimes about *things that are that way*.[3] Sometimes it is about what determines the extension, and sometimes it is about the extension.[4]

In informal conversation, *questions* about kinds tend towards the intensional. If I ask you what kind of books you like—particularly when the context is that I intend to buy you a present, or offer some recommendations—what I want is some information that will enable poor, limited-brain me to predict whether you will like some particular book. I therefore I want an answer like 'science fiction,' rather than a list of all the sci-fi novels in existence! I am asking about the features that determine membership in the kind, rather than for the extension of the kind.

What are kinds in the intensional sense? Perhaps they are properties, whatever properties are. Perhaps they are universals. Perhaps they are, as in possible worlds semantics treatment of

[3] To illustrate this distinction, contrast *being a black-footed ferret* or *being annoying* with the black-footed ferrets and the annoying things. The former are ways things can be, and the latter are things that are that way.
[4] It is not clear that the literature on properties always has this distinction firmly in mind. Certainly, the dispute in about properties/universals between David Armstrong and David Lewis in the 1970s and 1980's seems to occasionally run into this issue. In particular, some of Armstrong's complaints about class nominalism turn on the fact that classes or sets are more plausible candidate answers to the *extensional* question than the intensional one (1978 chapter 4 §4; 1989 chapter 2 §5). Perhaps, to some degree, they were talking past each other.

predicates, functions from worlds and times to extensions. All that matters right now is that they are beyond the scope of this paper. I am focusing on kinds in the extensional sense. What are *they*? Sets, sums, pluralities, something else?

I focus on the nature of kinds in the extensional sense both because it is neglected, and because a lot of kind talk is extensional. When I say that mountain goats are sure-footed, or that they are almost extinct, I am talking about a kind in the extensional sense. I am not talking about a property or a universal or a function: such things are never furry or almost extinct. As Cian Dorr says, citing the linguist Greg Carlson, "kinds seem more "concrete" than properties: compare 'I used to drive that kind of car' versus 'I used to drive that property' (see Carlson 1977)" (2019, §3.6).[5] My topic is kinds in the extensional sense.

3. Desiderata on a theory of kindhood

What do we want from a theory of kindhood? Well, some of what we want is simply what we always want when embarking upon an investigation into the nature of anything. We want a story about kinds that at least to a reasonable extent matches our ordinary notion of a kind; we want a story about kinds that will enable them to do whatever theoretical work we want them to do; we want a story about kinds that has the standard theoretical virtues like explanatory power and parsimony.

[5] Despite using it in the text, I admit that I am skeptical of this example. The sentence 'I used to drive that kind of car' is presumably elliptical for 'I used to drive a car *of that kind*—i.e. a car that is a member of the kind'. But then the correct translation, if kinds are properties, is not 'I used to drive that property', but rather 'I used to drive something that instantiated that property'—which is fine. For a comparison, consider the view that kinds are sets or pluralities rather than properties. 'I used to drive that set' and 'I used to drive that plurality' are just as bad as 'I used to drive that property'; and the correct translation is surely 'I used to drive a member of that set' or 'I used to drive something that was one of that plurality'.

Those are generic desiderata at a quite high level of abstraction. More concrete desiderata are more tied to the subject matter at hand; in this section, I will suggest eleven. Many of these will play a role in what's to come; a few will not, but are (I hope) of independent interest. Indeed, I take enumerating these to be a large part of the substantive content of this paper.

1. There must be a unified theory of natural and non-natural kinds. As I said at the beginning, natural kinds, if there are any, are a kind of kind. This is both intuitive and parsimonious. It just feels like I'm doing the same thing when I talk about a reasonably natural kind like ELECTRON as when I talk about a much less natural kind like, say, CONDIMENT. To think otherwise would be to take the occurrence of the word 'kind' in the phrase 'natural kind' to be misleading, and to take natural kinds to be their own *sui generis* thing. I see no reason to do that.

2. The theory must account for direct kind predication as studied by linguists. Linguists have posited kinds to account for various semantic phenomena. One fairly uncontroversial one is the contrast between what linguists call 'characterizing generics' and 'direct kind predications'.[6] Consider these two pairs of sentences, where (1) and (3) are characterizing generics, and (2) and (4) are direct kind predications:

(1) Black-footed ferrets are furry.
(2) Black-footed ferrets are endangered.[7]

[6] See, e.g., Krifka et. al 1995, Pelletier 2010, and Mari et al 2013. There are of course more controversial claims in the vicinity. For example, David Liebesman (2011) has argued that characterizing generics should also be understood as predicating something of a kind. This is up for dispute (Leslie 2015). And the linguist Gregory Carlson used to claim (1977) that all bare plurals function as proper names of kinds. (I take it he has changed his view, however, and I do not claim expertise in this area.) I take no stand on these more controversial matters.

[7] The standard examples involve claims of extinction: e.g. 'dinosaurs are extinct' or 'the dodo is extinct'. But such examples bring the additional orthogonal question of what the subject terms refer to. Probably, they can be treated as negative existentials along the lines of 'Santa Claus does not exist'. (More precisely, a proper treatment would require accounting for the connotation that the relevant sort of thing once did exist, unlike the Santa example.) Thus I prefer examples involving notions like *being endangered* or *almost extinct*.

(3) Mosquitos are annoying.
(4) Mosquitos are widespread.

While (1) and (3) say something about individual ferrets and mosquitos, (2) and (4) do not. No individual ferret is endangered,[8] and no individual mosquito is widespread. It is generally agreed that direct kind predications do what their label says—they, well, directly predicate something of *kinds* rather than of their members. So this is a central bit of theoretical work for kindhood. Whatever kinds are, they have to be things that can be, say, widespread or almost extinct.

3. The theory must make kinds at least somewhat ubiquitous. Kinds are cheap, or at least cheap-ish. Here's a kind: SANDWICH. Here's another kind: THINGS ON TOP OF MY DRESSER AT *T*. My daughter once had a great book called *All Kinds of Families* that is effectively about this, e.g.:

> A knife and a fork and a spoon are a family
> The stars and the sun and the moon are a family
> The socks in the drawer
> And the rocks on the shore
> And the blocks on the floor
> They can all become families
> Bottle caps, gingersnaps, buttons or rings
> You can make families from all sorts of things!

Two questions arise here. One is, why do I take kinds to be at least somewhat ubiquitous? And the other is, just how ubiquitous are they?

The why is straightforward. There are far more kinds than natural kinds, and we can utter true direct kind predications of quite disunified kinds. For example, the things on my dresser are a bit of a hodgepodge. So if that sentence predicates hodgepodge-ness of a kind, then the things on my dresser do indeed form a kind. It follows from this point that the desiderata on a theory of

[8] Obviously an individual ferret can be *in danger*, from a bald eagle perhaps. But an individual ferret cannot be *endangered* in the sense of 'almost extinct'.

kindhood are different than the desiderata on, say, peanut butter: I don't want my theory of kindhood to have all natural ingredients.

The joke is terrible, I admit. But this is actually a significant point. Even philosophers purportedly talking about kinds in general, rather than natural kinds in particular, frequently levy some significant unity requirement on kindhood (e.g. Hirsch 1997; Summerford 2003; Johnston 2006, 654). By my lights, any such requirement must be pretty minimal. I certainly do not require, as E.J. Lowe does, that kinds bestow criteria of identity upon their members (2009/15, chapter 2). He uses the term 'kind' interchangeably with 'sortal'; I do not.

But this brings us to the question of extent: just how ubiquitous are kinds? Do I wish to claim that any random assemblage of things forms a kind? Or should I instead levy *some* unity requirement, even if it is fairly minimal? For example, the things on my dresser occupy a particular spatial region, must meet some rough size/mass requirement (unsurprisingly, there are no elephants on my dresser), and meet an easily understandable description in English. They are not *quite* an arbitrary collection. I do think that taking this latter route will probably require some corollary restriction on what counts as a true direct kind predication: for example, it will have to deny that the predicate 'are an arbitrary grouping' (and maybe 'are a bit of a hodgepodge') can figure in direct kind predications, on pain of collapse into the fully unrestricted view of kinds. I confess some uncertainty on this matter. I think the correct theory of kindhood could likely go either way, and for now will remain neutral.

Still, the next desideratum is tightly connected to this one.

4. The theory must allow kinds to have different members at different times and worlds. That is, the membership of a given kind is often temporary and contingent. The kind *MUSTELA NIGRIPES* (i.e., BLACK-FOOTED FERRET) does not have the same members now that it had

100 years ago, or even yesterday, assuming that either some ferret died or another was born. Similarly, the kind could have had different members than it actually does: there could have been more ferrets than there actually are, had only things worked out better for star-crossed ferrets Fred and Fiona. The point is straightforward enough, but two facts are nonetheless worth noting. One is that the claim is about kinds, not particulars: the claim is that the kind *MUSTELA NIGRIPES* has its members temporarily and contingently, not that some particular ferret might only be temporarily and contingently a ferret. (It is silent on the latter.) The other is that the claim is that *some* kinds have their members temporarily and contingently, not that *all* do. Maybe the membership of the kind GOD'S FAVORITE THINGS is immutable and necessary. More mundanely, the membership of kinds that are time- and world-stamped is immutable and necessary. But many kinds do change members, and the theory must permit that.

5. The theory must allow it to vary across times and worlds which kinds have members.[9]

This awkward statement of desideratum 5 is the result of trying to generically formulate something that can be implemented in either of two quite different ways. It is probably clearer to just give an explicitly disjunctive version: the theory must either allow different kinds to exist at different times and worlds, or else allow kinds to exist without members.

The datum that must be accommodated *somehow* is that there are lots of true sentences like the following:[10]

> In 2025, there are primates but no dinosaurs.[11]
> In the Jurassic period, there were dinosaurs but no primates.

[9] This section was initially written in 2018, and I have not updated it to account for recent developments in higher-order metaphysics. I reiterate that the 5th desideratum can be satisfied in any number of ways.
[10] In the main text I stick to a temporal example rather than a modal one, but a modal version can easily be filled in.
[11] Counting birds as descendants of dinosaurs, not dinosaurs themselves.

There are two ways to make sense of this (at least). One is to say that the kind PRIMATE came into existence at some point (presumably gradually, involving vagueness) and the kind DINOSAUR went out of existence (possibly more suddenly). The other is to say that the kind PRIMATE preexisted its members, and the kind DINOSAUR still exists today—lonely, empty, unfulfilled. I suppose there may be additional ways to make sense of such cases, but it does not matter. My intention is that desideratum 5 can be satisfied in more than one way. That is why it is so awkwardly formulated.

Still, though nothing here turns on this, I will go ahead and say that I prefer the first implementation over the second. That is, I prefer the claim that some kinds only exist contingently and temporarily to the claim that those kinds exist necessarily and permanently, but only contingently and temporarily *have members*.[12] There are no memberless kinds, and kinds can go in and out of existence. In the Cretaceous period, there were no mammals at all, and thus no kind MAMMAL. And when the last black-footed ferret goes, so too does *MUSTELA NIGRIPES*.

Here are several reasons why I prefer this implementation of the 5th desideratum. First, memberless kinds are somewhat mysterious, and, indeed, incompatible with some views of what kinds are. Just as an illustration, consider the view that kinds are sets. If kinds are sets, then a memberless kind is presumably the empty set, which entails that there is only one of them. (Of course, this may be reason to deny that kinds are sets.) Second, artifact and invented kinds surely show that kinds can be created. The kind IPHONE simply did not exist in 1970. To think otherwise is to think that the processes by which seemingly new kinds come into existence—technological innovation, laboratory creation of chemicals not found in nature, etc.—are simply

[12] Advocates of the second position include Nicholas Wolterstorff (e.g. 1970, 239) and Tobias Rosefeldt (2017).

filling out pre-existing recipes in the sky. This is silly; the iPhone was created, not discovered. (And the same basic thought goes for non-artifactual things that are neither created nor discovered by people, but through other kinds of change: biological evolution being the notable example.) Third, the fact that there are true sentences about kinds that are either memberless or nonexistent shows nothing. Most of them are tensed claims: there *were* dinosaurs. And the present tense claims that do remain true of empty kinds—claims like 'dinosaurs are extinct'—can be explained away or read as negative existentials (see note 7). Indeed, note that this issue about tensed claims is not distinctive of kinds. The very same kinds of sentences are at issue for individuals. If you do not think that the present truth of 'Abraham Lincoln is dead' entails the present existence of Abraham Lincoln, you ought not think that the present truth of 'dinosaurs are extinct' entails the present existence of the kind DINOSAUR.[13]

But, and this is crucial, nothing in the rest of the paper turns on this. Views that *do* posit the existence of memberless kinds count as satisfying the 5th desideratum. The previous paragraph, about why I dislike them, was an aside.

6. The theory must allow it to be vague whether some particular belongs to a given kind. Perhaps some kinds have clear 'boundaries' or criteria for membership. E.g. maybe CLOSED CIRCUIT or OXYGEN ATOM is like that. But many others permit of vagueness in just the ways that one would expect: is Bob a member of the kind BALD PEOPLE?

7. The theory must allow different kinds to have different membership conditions. This is almost too obvious to bother with. Of course what it takes to be a mystery novel is different from what it takes to be a condiment. Still, it is worth noting that this is a point about differences in the membership conditions on kinds. 'What it takes to be a mystery novel' just means 'the

[13] It should be obvious that these worries port to parallel questions about *individuals*.

membership conditions on the kind MYSTERY NOVEL', so to say that what it takes to be a mystery novel is different from what it takes to be a condiment is to say that the membership conditions on the kind MYSTERY NOVEL are different from the membership conditions on the kind CONDIMENT. Further, this obvious 7th desideratum is related to the more interesting 8th desideratum.

8. The theory must allow different kinds to be characterized or unified in different ways. Different kinds not only have different membership conditions, but also have different *kinds* of membership conditions.

Some kinds are 'bound together', as it were, by significant similarity among the members. Perhaps ELECTRON is like that. But some are bound together differently. Perhaps some involve resemblance to a prototype rather than to each other. And some kinds are instead bound together by causal-historical features. Biological species, for example, are not characterized in terms of morphology, but in terms of ancestry. Similarly, causal history can matter a lot to the kind-grouping of certain artworks. A really weird, avant garde piece of performance art might count as a performance of *Romeo and Juliet* only in virtue of the Shakespeare script playing a role in its causal history, and not in virtue of any resemblance between what happens on stage and what happens in an ordinary production.

There are likely other possibilities as well (cf. my 2017, §2.3 for some relevant discussion). I am not going to attempt an exhaustive list of the ways a kind could be unified. My only point is that there are a variety of ways, and that none of them should be baked into the very characterization of what a kind is.

9. The kind membership relation must be one that can hold between kinds and kinds as well as between individuals and kinds. That is, it is a two-place relation that takes kinds in one

position, and takes *either* individuals or kinds in the other. Both particular things and kinds can be members of kinds. I am a member of the kind MAMMALS, but so is the kind HOMO SAPIENS. Cf. Lowe 2009/2015, 37.[14]

10. Kind membership is not transitive. The previous point involves the following pattern of membership: individual *i* is a member of *K* and *K* is a member of *K**. That raises the question: must *i* be a member of *K**? That is, is kind membership transitive? No.[15] The easiest way to see this is to consider cases involving direct kind predication. Particular mosquito Mozzie is a member of the kind MOSQUITO, and MOSQUITO is a member of the kind WIDESPREAD THINGS, but Mozzie is not a member of the kind WIDESPREAD THINGS.[16]

11. Kind membership is not extensional. The very same particular entities can be all and only the members of more than one kind at a time. It could be the case that the kind CANDY IN MY HOUSE is coextensive with THINGS IN THAT CUPBOARD. It's easiest to get cases with obviously non-natural kinds, but there can also be failures of extensionality with reasonably natural kinds as well (perhaps not with perfectly natural ones, if any there be). For example,

---

[14] It is not always easy to tell what kinds a kind is a member of, because characterizing generics contribute an added wrinkle. As is well known, generics are not universal generalizations, and are not best understood as quantificational at all. They can be true even when the relevant predicate is only true of a handful of the members of the subject kind: 'mosquitos carry the West Nile virus' is famously true even though hardly any mosquitos in fact carry the virus. So ought we to take the sentence to entail that the kind MOSQUITO is a member of the kind CARRIER OF WEST NILE VIRUS? I am not sure what the best thing to say here is.

[15] Thanks to an audience at Rutgers, led by Daniel Rubio, for correcting me here.

[16] Now, it does seem that something transitivity-*like* is going on here, or that kind membership *often* behaves transitively, or something like that. For example, I am a member of HOMO SAPIENS, and HOMO SAPIENS is a member of MAMMAL, and I am also a member of MAMMAL—indeed, I am a member of MAMMAL *because* I am a member of HOMO SAPIENS. This feels… transitiveish.

I have a tentative diagnosis. To ease explanation, I shall speak of the *x*, *y* and *z* positions in a potential transitivity chain, after the standard formal statement of transitivity (if *x* bears *R* to *y*, and *y* bears *R* to *z*, then *x* bears *R* to *z*). The problem in the Mozzie example is that the thing in the *x* position is an individual, but the kind in the *z* position is a kind that has only kinds as members. No individual is a member of the kind WIDESPREAD THINGS. So, perhaps the following conditional transitivity principle is correct: *if* the *z*-kind can take both individuals and kinds as members, then if *x* is a member of *y*, and *y* is a member of *z*, then *x* is a member of *z*. Again, this is a very tentative proposal; it is merely a gesture toward the ballpark of what might be right. So I emphasize: desideratum 10 is that the correct theory of kindhood not require that kind membership be transitive, not that the theory should require the replacement principle I have suggested.

there are cases in biological taxonomy in which a genus is comprised of a single species—this is called a 'monotypic genus'. The Australian pitcher plant (*Cephalotus follicularis*) is the only species in its genus (*Cephalotus*), which is in turn the only genus in the family (*Cephalotaceae*). Here, the species, genus, and family are all coextensive, yet they are distinct because they have different membership conditions.

4. The pivot

I have offered eleven constraints on a theory of kindhood. But instead of starting to construct that theory, I will hit the brakes, bring the car to a screeching halt, and—seemingly—change the subject.

Recent years have seen an explosion of interest in social ontology. How is it that people's intentions and words can call new things, like money or governments, into existence? (See, e.g., Ruben 1985 and Searle 1995 for some classic discussion.) Can money be identified with its material manifestations? Should restaurants or countries be identified with their locations, and if not what are they instead? (See, e.g. Thomasson 2001 and Korman 2020.) What are races and genders? The particular subliterature that I want to call attention to here is the literature on *social groups*: what is a football team, a corporation, the Supreme Court? What sort of entity are they, metaphysically, and how do they persist over time? A representative selection of papers includes Uzquiano 2004, 2018; Effingham 2010; Ritchie 2013, 2020; Epstein 2015 ch.10, 2019; Hawley 2017; Thomasson 2019; Wilhelm 2020; Faller 2021.

Strikingly, many of the desiderata that I have argued apply to a theory of kindhood also apply to a theory of social groups. Indeed, many of them have been explicitly invoked by the authors just listed, and consensus has been reached about some. In the next section, I will walk

back through the list of desiderata, and argue that nearly all of them apply to a theory of groups as well. This raises the question: just how different are kinds and groups? Should we continue to think of them as metaphysically quite different? Or…should we not? In the rest of this paper, I will provide some reasons to think that we should *not* think of them as metaphysically different: indeed, I shall argue that social groups are a kind of kind.

My argument for this claim will be somewhat oblique, and come in three stages. The first stage (§5) consists of arguing that many of the same desiderata apply in both cases; the second stage (§6) consists of arguing that the best explanation of this fact is provided by the claim that social groups are a kind of kind; the third stage (§7) consists of rebutting objections. All this admittedly falls somewhat short of a direct positive argument that groups are a kind of kind, and indeed I am not sure what direct positive argument there is to be had. At a minimum, my arguments make clear that the view is worth exploring further.

As I get started, it would be useful to get a little clearer about the term 'social group'. Canonical examples involve things like the U.S. Supreme Court, football teams, and clubs. But the literature also relies upon examples of less formal groups—races, genders, movie ticket lines, even crowds or mobs. I consider these cases to lie on an spectrum, with the social groups on one end having more explicitly defined powers, responsibilities, membership conditions, internal roles, and so on than the groups on the other end.[17] I will largely focus on examples from the formal, structured end of this spectrum, because doing so only makes my case more difficult.

[17] Spectrums are messy, and I am not committing myself to anything like a *rank ordering* here. There are multiple incommensurable measures of how structured a social group is.

On the different kinds of social groups, see Epstein 2015, 133-135, and Ritchie on type 1 vs. type 2 groups (2015) or organized groups vs. feature groups (2020). See also Epstein 2019, 4901-4904 for criticisms of Ritchie's distinction.

Let me close this interstitial section by heading a misguided objection off at the pass (I consider more serious ones in §7). It goes like this:

> The fact that the same desiderata apply to a theory of *A* as to a theory of *B* does not show much at all about the relation between *A* and *B*. After all, the same desiderata apply to a theory of kinds as to a theory of, say, comets. A good theory of either of these things should achieve the right balance of simplicity, explanatory power, elegance, and so forth. But this fact should not lead us to believe that kinds are comets, nor that comets are a kind of kind, nor any other such nonsense.

Fair enough, but this is not my argument.

I am not merely saying that the same abstract high-level theoretical virtues like simplicity or elegance apply to theories of kinds and to theories of groups. I set aside those generic theoretical virtues at the very beginning of §3, and went on to list eleven desiderata on a theory of kindhood that were *tailored to the case of kindhood*. So the fact that social groups turn out to share many of these desiderata indeed is interesting. Really, my claim is that kinds and groups share a lot of central features.

So that is what I shall argue in §5: kinds and groups share many central features, reflected in the desiderata that apply to theories of both.

5. Desiderata on a theory of groups

Many authors writing about social groups explicitly lay down some constraints on a theory of grouphood—see e.g. Ritchie 2015 §1, as well as the opening few pages of many other articles. For continuity, however, I will not follow any particular author's list, but rather simply recast my earlier list of desiderata on a theory of kinds as desiderata on a theory of groups, retaining both my earlier numbering and formulations. Additionally, I will temporarily skip desideratum 3, about the need for a unified theory that crosses the natural/non-natural divide. It

is less obvious that it applies in the case of groups, and it will reappear when I consider objections in section 7.

1. We should aim for a unified theory of natural and non-natural groups. This may sound odd; after all, social groups are never natural! But the desideratum is in fact trivially satisfied if that is the case. So while it is not something anyone has bothered to explicitly levy on a theory of social groups, at least I have not run aground from the start.[18]

2. The theory must account for direct group predication. This is not a desideratum that has ever been discussed, to my knowledge. And, of course 'direct group predication' is not really a phrase that is in use. Still, the basic idea is clear. Just as some claims of the form 'kind *K* is *F*' are about the kind itself rather than the members, some claims of the form 'group *G* is *F*' are about the group rather than the members. To say that a particular committee expires in 2030 is not to say that any of the *members* expire in 2030. Similarly, to say that the committee has the power to do *x*, or the responsibility to repay debt *y*, is not to say that any individual member does.

4. The theory must allow groups to have different members at different times and worlds. Groups, like kinds, often have their members temporarily and contingently. The Supreme Court had different members in 2012 than it does in 2022, and it could have had different members than it actually does, if some confirmation hearings had gone differently. This point is universally accepted in the literature on groups, e.g.: Ruben (1985, 19), Uzquiano (2004, 135-6; 2018, 423), Effingham (2010, 256), Epstein 2015, 137, Ritchie (2013, 258; 2015, 313), and Thomasson (2019, 4833). There is clear consensus here.

[18] The fact that it is the very *first* desideratum on a theory of kinds, but an odd thing to bother saying about social groups, reflects the extent to which natural kinds have dominated thinking about kinds.

It is worth again explicitly saying that the claim is not that *all* social groups are like this; perhaps some have some or all of their members necessarily. Here I think of Mark E. Smith, late lead singer of the British post-punk band The Fall, who famously responded to questions about the ever-changing lineup by snarling, "if it's me and yer granny on bongos, it's the Fall."[19] A natural way to read this is as saying that Smith is essential to The Fall, and no one else is.[20]

5. The theory must allow different groups to have members at different times and worlds: it must either allow groups to come in and out of existence, or it must allow groups to exist uninstantiated. A department chair can create and then disband a search committee—or perhaps cause the eternal shell of a committee to have members, and then go empty again. As in the case of kinds, I personally find it more plausible to say that groups, or at any rate most groups,[21] can come into and go out of existence than to say that groups can exist uninstantiated. But I need not and will not defend that claim here. While there is no consensus in the literature about which disjunct is the right one, the general principle—that which groups exist and/or have members varies over time—is widely accepted (e.g. Effingham 2010, 252 and 2858-9; Hindriks 2011, 429; Ritchie 2013, 258.)[22]

6. The theory must allow it to be vague whether some particular belongs to a given group. Like desideratum 2, this hasn't to my knowledge come up in the literature on groups, but it nonetheless seems to be clearly applicable. While some social groups have explicit

[19] https://en.wikipedia.org/wiki/The_Fall_(band)#Members

[20] Another example might come from figure skating pairs or tennis partners: they do have their members essentially, unlike, say, soccer teams. (I owe this example to Gonzalo Rodriguez-Pereyra.) This is tricky, though; it might be that the names for such pairs function as plural rigid designators of the individuals.

[21] I wonder whether it might vary from group to group. It is somewhat more plausible to say that a highly structured group with explicit rules, powers, and member roles—the Supreme Court, for example—can exist while memberless than to say that a less structured group can. Further, it might be instructive to consider to what extent a similar point might be made for individual roles. Perhaps it is more plausible to think that the United States Presidency or a particular United States Senate seat exists while vacant than to think that, say, the neighborhood mailmanship exists while vacant.

[22] Thanks to Toby Bollig here.

membership conditions that make it a black-and-white, binary matter whether a particular individual is a member, other social groups have much fuzzier membership conditions. One way this can happen is if there is a lacuna in the explicit rules governing membership. Another way is when there is a conflict between the explicit rules governing membership and longstanding traditional attitudes towards who is a 'real' member. For example, imagine someone who fills out the membership forms for a club, and pays dues annually, but never, over years, attends a meeting nor participates in any way in the club's activities. Is she a member of the club? The almost irresistible temptation to distinguish between 'active members' and 'official members' makes my case for me. The strength of the temptation indicates that there is no straightforwardly correct answer to the question, 'are they a member, full stop, unmodified?', which in turn indicates that the matter is vague.

Besides, remember that I am setting aside less structured groups in order to make my case harder. Membership in groups like movie lines or crowds is *paradigmatically* vague. Just how far away from a crowd do you have to be in order to not be a part of it?

7. The theory must allow different groups to have different membership conditions. As in the case of kinds, this is too obvious to merit much discussion. What it takes to be a member of the U.S. Supreme Court is obviously different than what it takes to be a member of the Boston Red Sox, which is in turn obviously different from what it takes to be a member of the Rutgers Department of Philosophy.

8. The theory must allow different groups to be characterized or unified in different ways. As I mentioned when talking about kinds, this 8th desideratum is really just a more abstract version of the 7th one. Not only do different kinds and groups have different membership conditions, but they also have different *kinds* of membership conditions. Some

groups have membership conditions that require nothing more than an agent's decision to join, perhaps as reflected in actions such as attendance at meetings or signing an application form. Other groups require decisions and intentions on the part of others—politicians who are voted into office, for example. Some groups have membership conditions that invoke the causal history of the members, such as the Daughters of the American Revolution. And some groups have membership conditions that largely involve spatial proximity: a crowd, or the neighborhood.

9. The group membership relation must be one that can hold between groups and groups as well as between individuals and groups. Here are a few examples. NATO only has countries as members, not individuals. While the United States is a member of NATO, I personally am not. Additionally, though I don't know of any colleges or universities that actually do this, one can easily imagine a system of governance in which whole departments get to vote on certain matters, but individual faculty do not: each department gets one vote and one vote only, on behalf of the department as a whole. Perhaps some groups have *both* groups and individuals as members: arguably, the NCAA (National Collegiate Athlete Association) has both individual student-athletes and universities as members. All that matters for the claim at hand, though, is that the theory must permit some groups to have groups as members.

10. Group membership is not transitive. This is shown by the same kind of case that I used to make the point for kinds, and which I used just above to illustrate groups that have groups as members. Structurally, these cases are ones in which individual i is a member of group G_1, and group G_1 is a member of group G_2 that only takes groups as members. NATO is a case in point: I am a member (citizen) of the United States, and the United States is a member of NATO, but I am not a member of NATO.

11. Group membership is not extensional. The same people can exhaust the membership of two distinct groups. This is one of the desiderata on which there is consensus: see e.g. Ruben 1985, 19; Uzquiano 2004, 141-2 and 2018 423; Richie 2013, 258; Ritchie 2015, 313; Thomasson 2019, 4833. The local school board might have the same members at time *t* as the members of a local running club. The groups are distinct because they have different membership conditions, as well as different powers and responsibilities.

Thus far, I have argued that most of the independently plausible desiderata on a theory of kindhood are equally plausible as desiderata on a theory of social groups. This amounts to saying that kinds and groups are strikingly similar: they share a number of central features. But of course this leaves open a number of hypotheses about just *why* they share so many central features. It also leaves open what to say about the desiderata that are *not* shared—those that are plausible desiderata on a theory of kinds but not on a theory of groups. I turn to these two questions in the next two sections: in §6, I explain the similarities between kinds and groups, and in §7 I dismiss their differences.

6. Why do they share so many features?

Why are social groups so strikingly similar to kinds? I can only think of five possible explanations of the similarities between kinds and social groups.

i) It's just a coincidence.
ii) Social groups and kinds are identical: every social group is a kind, and every kind is a social group.
iii) Every kind is a social group, but not *vice versa*.
iv) Every social group is a kind, but not *vice versa*.
v) Kinds and social groups are both sub-kinds of a broader category.[23]

[23] Thanks to Antonia Peacocke here.

Starting at the top: the claim that there is no explanation of the shared features, that it is simply a coincidence, is claim of last resort. It should only be invoked after the other options have been ruled out. So there goes claim i). Claims ii) and iii) are off the table because it is clear that whatever *exactly* social groups are, not all kinds are not social groups. Electrons are not a social group. Pencils are not a social group. So it is not the case that all kinds are groups, and this rules out both hypotheses ii) and iii).

The two live options, then, are iv) and v). Either social groups are a kind of kind, or kinds and social groups are both sub-kinds of some broader category. I endorse claim iv), that social groups are a kind of kind.

A tidy, deductively valid argument for this claim would probably take the form of arguing that social groups meet some sufficient condition on being a kind. My argument will not. My argument is neither tidy nor deductively valid, but at least it is pretty straightforward. It has three steps.

First, there is no immediately obvious reason to deny that social groups are a kind of kind. They satisfy readily apparent necessary conditions on being a kind. For example, groups meet the following two necessary conditions on kindhood:

> For all x, if x is a kind, x can have members.
> For all x, if x is a kind, the membership relation by which x can have members is neither transitive nor extensional.

Perhaps there are additional necessary conditions beyond these; I do not know. Few of the desiderata I have been discussing state anything like necessary (or sufficient) conditions on kindhood.

The second step in the argument is that there is straightforward—if somewhat soritical—pressure to accept that groups are a kind of kind. It goes like this. Everyone who writes about

social groups agree that some groups are more structured than others, and that things like genders and ticket lines are social groups despite the absence of explicit powers, sub-roles, and so on. Katherine Ritchie, for example, takes her distinction between type 1 vs. type 2 groups to be important, but she very clearly thinks it is a subdivision between kinds of social groups (e.g. 2015, §2). But it also seems clear that as social groups get less and less structured, they start shading into kinds. We do talk about kinds of people, after all. Some such talk is racist, sexist, or xenophobic; some involves other stereotypes like 'jock' or 'almond mom' or 'IT guy'; some is more vague 'she's just not that kind of person' talk. But kinds of people are nothing but relatively unstructured social groups. (Some are far more natural than others, of course.)

This second stage of the argument is designed to pull you along from the starting point thought that a corporate board is a social group, to the thought that genders and ticket lines are also social groups, to noticing that there isn't any appreciable difference between a ticket line and the kind PEOPLE STANDING IN AN ORDERLY WAY IN LOCATION L IN ORDER TO SEE A MOVIE. And then—hopefully!—you agree that all social groups are kinds. It's a bit of a sorites move, I admit. But it really is quite plausible that unstructured groups—whether ticket lines or people who like roller coasters or races or ethnic groups or sexual orientations—are kinds. Not *natural* kinds, but kinds.

The third step of the argument is not so much about the metaphysical picture I have sketched as about the language used to express it. After all, I haven't yet said enough to rule out the v)-style view that kinds and social groups are subtypes of a third umbrella category that I'll call *assemblages*. We could treat unstructured social groups as assemblages that occupy a porous, vague border between groups and kinds. Why not just say that?

Well, because it's a pointless bit of wordsmithing that obscures the overwhelmingly overlapping natures of kinds and social groups. The difference between the iv) claim that social groups are a kind of *kind* and the v) claim that social groups are a kind of *assemblage* is merely verbal, given that in my mouth, 'kind' is as general and vague as 'assemblage' is in my opponent's. And if it's just a verbal point, I prefer to state the claim in the way that *highlights similarity rather than obscures it*. Social groups are a kind of kind. (For related discussion about verbal choices in metaphysical theorizing, including opting for conceptual revision precisely to highlight similarity, see my 2020, §2.)

7. Objections to the claim that social groups are a kind of kind

Those who want to deny that social groups are a kind of kind will insist that there are profound differences between them. But care is required here; it is not clear that there is a difference that would do the job. The most readily apparent differences do not.

The objector cannot appeal to any feature that social groups have but not all kinds do. She cannot, for example, claim that social groups are distinctively human, or distinctively intentional, or something, while kinds are not. That's because, as a strictly logical point, such claims are irrelevant. Even assuming that some such claim is true—the one about groups being distinctively human sure isn't![24]—it would not show that social groups are not a kind of kind. That would be like arguing that because electrons are negatively charged, but subatomic particles in general are not, ELECTRON is not a subkind of SUBATOMIC PARTICLE.

[24] Plenty of species other than *homo sapiens* form social groups: bees, gorillas, lions, beavers….

Different kinds of kinds have different interesting or distinctive features. It's an interesting feature of electrons that they are negatively charged. This is not a feature of condiments, nor black-footed ferrets, nor social groups. Perhaps it is an important feature of social groups that they involve intentionality or sentience or humanity in some way. This is not a feature of condiments, nor black-footed ferrets, nor electrons. *C'est la vie*.

What the objector instead needs, of course, is the other way around: a feature of all *kinds* that is not possessed by all *social groups*. This has the right logical structure to problematize my claim that social groups are a kind of kind. And it might appear that my own discussion provides not one but two nice examples!

First, the unshared desideratum about ubiquity or cheapness represents a feature of kinds that is not shared by social groups. Kinds are (at least somewhat)[25] cheap, and social groups are presumably not. Not just any arbitrary collection of people counts as a social group (c.f. Ritchie's "Goldilocks Constraint," 2020, 402-3). Second, I have emphasized from the beginning that kinds come in more and less natural subvarieties. But here too, it seems that social groups are not like this. There are no natural social groups![26]

So here are two claims that are allegedly true of kinds, but not true of social groups.

(U) Kinds (groups) are ubiquitous in the sense that their existence conditions are relatively undemanding.

(N) Kinds (groups) come in natural and non-natural subvarieties.

[25] I will leave this qualifier off henceforth, but do remember that I am not sure I want to commit to full universalism about kinds.

[26] I suppose that some are more natural than others: biological family units are more natural than Tuesday's jury selection pool.

I'm happy to assume that (U) and (N), or something like them, indeed are true of kinds. And they *seem* to be of the right form, stating features of kinds that are not features of social groups. And yet, they are still irrelevant.[27]

The problem with both (U) and (N) is that neither attribute features to *individual* kinds at all. They are not characterizing generics, but instead—in an almost second order way—direct kind predications. Recall that 'mosquitos are widespread' attributes widespread-ness to the kind MOSQUITO, not to any individual mosquito. (U) and (N) work in the same way, except that each attributes something *to the ontological category KIND rather than to individual kinds.*

(U) attributes ubiquity to KIND, but not to any individual kind. It does not require that SOCIAL GROUP be ubiquitous any more than it requires that ELECTRON or CONDIMENT be. Condiments are not ubiquitous and CONDIMENT does not have cheap or easy membership conditions. Similarly, (N) attributes natural-and-nonnatural-subvarietied-ness to the ontological category KIND, not to individual kinds. It does not require that SOCIAL GROUP have those subvarieties any more than it requires that NATURAL KIND or ARTEFACT do.

The fact that (U) and (N) are not characterizing generics renders the following three claims compatible with each other (I have used (N); *mutatis mutandis* for (U)):

> Kinds come in natural and non-natural subvarieties
> Social groups do not.
> Social groups are a kind of kind.

The lesson here is that a convincing objection to the claim that social groups are a kind of kind would have to identify a genuine feature that each particular kind must have (or can have) that social groups do not or cannot have. This feature is not coming-in-

[27] Thanks to Ben Henke for discussion here.

natural-and-nonnatural-subvarieties, and it is not cheapness or ubiquity. I have kicked the ball back into my opponent's court, and will leave it there.

8. So what's next?

I have argued that there is an independently interesting question about what kinds are, articulated a number of desiderata on a theory of kindhood, and argued that social groups are a kind of kind—in just the same way that ELECTRON, NOBLE GAS, BIOLOGICAL SPECIES, ARTWORK, and CONDIMENT are kinds of kinds.

This leaves a lot of work left to do. In particular, I have not addressed the question with which I opened the paper: what *are* kinds and groups, quite generally? What sort of ontological beast are they—sets, sums, pluralities, something else? My goal here has been to clear the ground for an adequate answer to this question. Here are three closing thoughts to help guide future investigation.

First, many proposals have already been explored in the particular context of social groups. For example, Ruben (1983, 1985) argues that social groups are not mereological sums; Uzquiano (2004) argues that they are not sets or pluralities. Effingham (2010) argues that they are sets after all, but a special sort of set taking ordered pairs involving times and worlds as members. Ritchie (2020) argues that they are a certain sort of structure; Uzquiano (2018) argues that they are plural embodiments constituted by specific rigid embodiments at particular time-world pairs. I see no need to reinvent the wheel. These proposals should be assessed in the broader context of kinds as well.

Second, many of the considerations raised by these authors against identifying groups with entities like sets, sums, and pluralities are very much of a piece with familiar arguments against identifying ordinary material objects with mereological sums. Familiar machinery—

temporal parts, counterpart theory, and so forth—is available to assuage these concerns. I highly recommend Hawley 2017 on this point. Is that machinery worth the cost? I take no stand here. My point is merely the more abstract one that the cost-benefit tally that needs to be performed here is not something new to the case of social groups—nor even to the case of kinds quite generally.

My third closing thought is that the literature on social groups would likely benefit from distinguishing two questions, and that my view that social groups are a kind of kind helps us see this. Here are the two questions:

> *The Ontological Question*: what *are* social groups? What ontological category do they belong to?
>
> *The Interesting Features Question(s):* Are there any features that all social groups must have? Are there any features that only social groups can have? Are there any features that are distinctive in some weaker sense than these?[28]

Clearly these questions are connected in that the answers to one can *constrain* the available answers to the other. But answers to the first do not themselves constitute answers to the second, unless social groups are a *sui generis* phenomenon.

To see what I mean, consider the claim that social groups are sets. This is an answer to the *Ontological Question*, regardless of whether or not it is a *good* answer. But it is not an answer to the *Interesting Features Question*. For that, we would need to be told the interesting extra feature(s)—we would need to be told what is special about some sets to make them count as social groups.

It will help to think about the idea in terms of kinds generally: it is clear that there are all kinds of kinds, that different kinds can have radically different membership conditions. This straightforwardly requires that the answer to the *Interesting Features* question be different for

[28] On distinctiveness, see my 2015, §1.

different kinds. But it does not conflict with the idea that all kinds belong to the same ontological category, whether they are sets or sums or pluralities or whatever. The *Ontological Question* can get a single answer even though the *Interesting Features Question* cannot. It is perfectly consistent to maintain that kinds are sets, that social groups are a kind of kind, that social groups are distinctively human, and also that there is nothing distinctively human about sets. To think otherwise requires, I think, conflating the *Ontological Question* with the *Interesting Features Question*.

References

Armstrong, David. 1978. *Nominalism & Realism: Universals and Scientific Realism* Volume 1. Cambridge: Canbridge University Press.

——. 1989. *Universals: An Opinionated Introduction*. Boulder, CO: Westview Press.

Bennett, Karen. 2016. There is no special problem with metaphysics. *Philosophical Studies* 173: 21-37.

———. 2017a. *Making Things Up*. Oxford: Oxford University Press.

———. 2017b. Part and whole again. *Philosophical Issues* 21: 7-25.

———. 2020. Reply to Audi, Bliss, Rosen, Schaffer, and Wang. *Inquiry* 63: 758-794.

Boolos, George. 1984. To be is to be the value of a variable (or some values of some variables). *The Journal of Philosophy* 81: 430-449.

Carlson, Greg. 1977. A unified analysis of the English bare plural. *Linguistics and Philosophy* 1: 413–57.

Dorr, Cian. 2019. Natural properties. In Edward Zalta, ed., *The Stanford Encyclopedia of Philosophy* (Fall 2019 edition. URL = <https://plato.stanford.edu/archives/fall2019/entries/natural-properties/>

Dorr, Cian, and Hawthorne, John. 2013. Naturalness. In K. Bennett and D. Zimmerman, eds., *Oxford Studies in Metaphysics* 8: 3-77.

Effingham, Nikki. 2010. The metaphysics of groups. *Philosophical Studies* 149:251–267.

Epstein, Brian. 2015. *The Ant Trap: Rebuilding the Foundations of the Social Sciences.* Oxford: Oxford University Press.

———. 2019. What are social groups? Their metaphysics and how to classify them. *Synthèse* 196: 4899-4932.

Ereshefsky, Marc. 2002/2017. Species. In Edward Zalta, ed., *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition. URL = <https://plato.stanford.edu/archives/fall2017/entries/species/>.

Faller, August. 2021. How groups persist. *Synthèse* 198: 7149-7163.

Hawley, Katherine, and Bird, Alexander. 2011. What are natural kinds? *Philosophical Perspectives* 25: 205-221.

Hawley, Katherine. 2017. Social mereology. *Journal of the American Philosophical Association*, 3: 395-411.

Hirsch, Eli. 1997. Complex kinds. *Philosophical Papers* 26: 47-70.

Irmak, Nurbay. ms. Kinds, properties, and types.

Johnston, Mark. 2006. Hylomorphism. *The Journal of Philosophy* 103: 652-698.

Kitcher, Philip. 1984. Species. *Philosophy of Science* 51: 308–333.

Korman, Daniel. 2020. The metaphysics of establishments. *Australasian Journal of Philosophy* 98: 434-448.

Koslicki, Kathrin. 1999. Genericity and logical form. *Mind and Language* 14: 441-467.

Krifka, Manfred, Francis Pelletier, Gregory Carlson, Alice ter Meulen, Gennaro Chierchia, and Godehard Link. 1995. Genericity: an introduction. In Carlson and Pelletier, eds., *The Generic Book.* Chicago: Chicago University Press, 1–125.

Leslie, S-J. 2015. Generics oversimplified. *Noûs* 49: 28–54.

Lewis, David. 1986. *On the Plurality of Worlds*. Oxford: Blackwell.

Liebesman, David. 2011. Simple generics. *Noûs* 45: 409-442.

Linnebo, Oystein. 2004 (revised 2017). Plural quantification. In Edward Zalta, ed., *The Stanford Encyclopedia of Philosophy* (Summer 2017 edition). URL = <https://plato.stanford.edu/archives/sum2017/entries/plural-quant/>
Lowe, E. J. 1991. Noun phrases, quantifiers, and generic names. *The Philosophical Quarterly* 41: 287-300.
Lowe, E.J. 2006. *The Four Category Ontology*. Oxford: Oxford University Press.
Lowe, E.J. 2015. *More Kinds of Being: A Further Study of the Individuation, Identity, and Logic of Sortal Terms*. Oxford: Wiley Blackwell.
Mari, Alda, Claire Beyssade, and Fabio del Prete. 2013. Introduction. In Mari et al, eds. *Genericity*. Oxford: Oxford University Press, 1-92.
Oliver, Alex, and Smiley, Timothy. 2006. A modest logic for plurals. *Journal of Philosophical Logic* 35: 317-348.
———. 2016. *Plural Logic*: *Second Edition, Revised and Enlarged*. Oxford: Oxford University Press.
Pelletier, Francis. 2010. Generics: a philosophical introduction. In Pelletier, F., ed. *Kinds, Things, and Stuff*. NY: Oxford University Press, 3-15.
Ritchie, Katherine. 2013. What are groups? *Philosophical Studies* 166: 257–272.
———. 2015. The metaphysics of social groups. *Philosophy Compass* 10: 310-321.
———. 2020. Social structures and the ontology of social groups. *Philosophy and Phenomenological Research* 100: 402-424.
Rosefeldt, Tobias. 2017. Counting things that could exist. *The Philosophical Quarterly* 67: 127-147.
Ruben, David-Hillel. 1983. Social wholes and parts. *Mind* 92: 219–38.
———. 1985. *The Metaphysics of the Social World*. London: Routledge & Kegan Paul.
Searle, John. 1959. Determinables and the notion of resemblance. *The Aristotelian Society, Supplement*, 33: 141–58.
———. 1995. *The Construction of Social Reality*. NY: The Free Press.
Sharvy, Richard. 1968. Why a class can't change its members. *Noûs* 2: 303-314.
Summerford, James. 2003. Neither universals nor nominalism: kinds and the problem of universals. *Metaphysica* 5: 101–126.
Thomasson, Amie. 2001. Geographic objects and the science of geography. *Topoi* 20: 149-159.
———. 2019. The ontology of social groups. *Synthèse* 196: 4829-4845.
Uzquiano, Gabriel. 2004. The Supreme Court and the Supreme Court Justices.
———. 2018. Groups: toward a theory of plural embodiment. *The Journal of Philosophy* 115: 423-452.
van Cleve, James. 1985. Why a set contains its members essentially. *Noûs* 19: 585-602.
Varzi, Achille. 2003 (revised 2016). Mereology. In Edward Zalta, ed., *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition). URL = <https://plato.stanford.edu/archives/win2016/entries/mereology/>.
Wallace, Meg. 2014. Composition as identity, mereological essentialism, and modal parts. In Donald Baxter and Aaron Cotnoir, eds., *Composition as Identity*. Oxford, Oxford University Press, 111-129.
Wilhelm, Isaac. 2020. The stage theory of groups. *Australasian Journal of Philosophy* 98: 661-674.
Williamson, Timothy. 1998. Bare possibilia. *Erkenntnis* 48: 257–273.

———. 2000. Existence and contingency. *Proceedings of the Aristotelian Society* 100: 117–139.
Wilson, Jessica. 2017. Determinables and determinates. *The Stanford Encyclopedia of Philosophy* (Spring 2021 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2021/entries/determinate-determinables/>.
Wolterstorff, Nicholas. 1970. *On Universals: An Essay in Ontology*. Chicago: University of Chicago Press.