Social Groups, Structure, and Change

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Abstract: The social groups we are often concerned with, such as clubs, teams, and bands, are relatively organized. Structures, as complex properties of collections of individuals, play a central role in providing the existence and identity conditions, among other things, for such organized groups. A structuralist view is one that individuates groups primarily in terms of their structures, as opposed to only in terms of their members. Any structuralist view must be able to accommodate not only changes in membership, when a group gains or loses members, but also structural changes, such as when a group gains or loses roles in its structure. I describe and refine two versions of structuralism which allow both kinds of changes. The discussion further highlights the need for a richer conception of structure for the structuralist, in order to limit the kinds of changes that groups can survive as well as distinguish between structurally identical groups. I propose two such conceptions which better capture the complexity inherent in groups.

Keywords: social ontology, social groups, structure, structuralism, change, persistence

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1. PRELIMINARIES

1.1. Social groups

Social groups are, roughly, entities with members who engage in social interactions. Chess clubs, rock bands, reading groups, and families such as the Simpsons[1] are among paradigmatic examples of social groups.[2] So are the International Red Cross, the United States Supreme Court, All Souls College, and the Pittsburgh Steelers.[3]

What is common to social groups of these paradigmatic kinds is that they are all more or less organized, or *structured:* They are created with distinct positions, or *roles,* which may concern, among other things, rules and norms governing members' activities in their capacity as members of the group, interactions with other members, relations with the group's resources, and contributions to the group's objectives. Each role may also carry requirements regarding what kinds of things can fill it and how many such things can fill it at a time.[4]

For example, the president of a club may have the responsibility of organizing and presiding over club meetings; members may have the responsibility of attending club meetings and following club rules, as well as the right to use the club's facilities; and so on. These roles and their associated

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1 of the eponymous show, which, for the sake of illustration, let us pretend is a real family.

2 Here I focus on groups that more or less map on to what sociologists consider *social groups,* or what Ritchie (2013, 2015) terms *organized groups*—groups where there is some significant amount of interaction and coordination among members. Moreover, I take her to have in mind mostly *small* organized groups, such as clubs and teams, as opposed to larger-scaled ones, such as countries and societies, which may also satisfy her conditions for organized groups (2015, 314) but which are often too large to be placed under the same discussion. The resulting restriction should still be large enough to justify the narrowed focus.

3 as featured prominently in Ruben (1983), Uzquiano (2004), Fine (2020), and Faller (2021), respectively.

Some of these may seem vastly different from each other. Ruben (1985), for one, thinks that things like the Red Cross and France exhibit distinct mereological behavior from things like teams and families. Nevertheless, the questions of structure and change at the heart of this paper are ultimately relevant to all the different kinds of social collectivities—of various sizes from organized ones (from committees to countries) to unorganized ones (from crowds to socioeconomic classes). That said, and as noted in fn.2, I will center my discussion around small organized groups.

4 A role may be occupied by more than one person, if it allows multiple occupation. A person may also occupy more than one role in the same group. Role occupation can be monadic (i.e., only one individual can do so at a time), dyadic (as in the case of mandatory co-chairs), etc., or otherwise multigrade or variably polyadic, when a role carries no specified number of occupiers (such as when a club can admit any number of members at a time).

norms are sometimes explicitly spelled out at least in part in a constitution or bylaw, although most of them are often left implicit. Together, they make up what may be called the group's *structure.*

In this way, group structures may be understood simply as complex properties of collections of individuals, which may be collectively instantiated, or *realized,* by those individuals. As properties, they are complex in the sense that they involve further properties and relations, which are packaged into what we consider to be the roles in the structure.[5]

Now, it seems from our understanding that every group's structure is central to it.[6] This is manifest in three ways:

First, a group is formed at least as soon as a structure of a certain kind is realized, that is, once there are individuals who take on the roles in the structure. For example, the Simpsons family exists in 1989 with Homer, Marge, Bart, Lisa, and Maggie as members, as there is a certain family structure and certain individuals—Homer, Marge, and so on—who fill all the various roles in this structure in 1989.

Second, given that social groups may be placed into kinds or classified, what kind of group a group is—whether they are a family or committee, authoritarian or democratic—depends in large part on what kinds of roles it has and how they are related, that is, on its structure.[7] For example, the Simpsons are a family and not, say, a committee, because they have a family structure, as opposed to a committee structure, which involves significantly different kinds of roles and norms. The Simpsons and the Flanders are both nuclear families, specifically, because the family structures they have, while distinct in some ways, share features that can be found in any nuclear family.

Third, given that distinct groups can share all the same members at the same time—the same four individuals can simultaneously make up the entire membership of a chess club and a debate team—whether two groups are indeed distinct when they have the same membership can be determined in large part

5 Importantly, I mean to say all this without implying the reification of such things as roles. On this understanding, when I speak colloquially of some individuals filling the roles in a structure, I mean simply that these individuals bear the relevant properties and stand in the relevant relations to one another.

6 Fine goes so far as to say that the structure of every group is *intrinsic* to it, by being not only *internal* to it but *essential* to it (Fine 2020, 89).

7 Such kinds may belong more broadly to social kinds. It is, however, no easy task to determine what group kinds are or to specify what group kinds there are (cf. similar issues with social kinds, e.g., Mason 2016).

by whether they have distinct structures.[8] Imagine, for example, that all the members of the Simpsons family form a bowling team and enter a tournament. It is the team that plays and wins, not the family; the trophy then belongs to the team, not the family; and so on. The distinction between the team and the family can be made by appeal to structure: the family has a hierarchical structure of parents who are in charge and children who are, say, ranked by age, while the team has a flatter structure with only one person as the leader and everyone else as an equal member.[9]

Moreover, all this seems to hold regardless of whether we think of the collection of individuals who realize the relevant structure as a plurality, set, fusion, or something else.

In short, structure enables us to identify groups when they exist at given times, classify groups, and individuate groups that are intuitively distinct.[10] The identity of the members of a group can only get us so far, and only once we let structure play such a central role do we seem to get the right results. Call any view that takes this idea seriously and identifies and individuates groups primarily in terms of their structures, as opposed to, say, only in terms of their

8 In support of this, Noyes et al. (2023) present empirical studies which show that structure, understood as the network of roles and relations between members, makes up a central component of our ordinary group concepts. These findings about our concept of groups may serve as motivation—albeit not an indefeasible one—for including structures in our model of groups.

9 The distinction may also be made in more mundane ways, e.g., by appeal to differences in temporal properties: The team was not created until long after the family has already been created, and only lasts for a short time while the family carries on. However, this is not guaranteed to capture the right intuition in all situations.

10 Here is another motivation for including structure in one's theory of groups: Group structures may feature in *structural explanations*—as opposed to, e.g., *individualistic explanations,* such as those about people's psychological states or choices. As argued in Haslanger (2016), structural explanations serve as better, more helpful answers to questions about groups as well as those about the behavior of individuals who are members of groups—that is, answers that are more informative and more stable against irrelevant differences between individuals or minor changes in conditions. Structural explanations can also be useful, such as to help facilitate the connection between philosophical discussion and research in the social sciences, such as that done by social psychologists and sociologists, who pay much attention to social groups' internal organization in their studies of group dynamics and group processes, as well as to help highlight moral, political, and social problems that occur that are structural and systematic, such as how social structures can constrain or enable the behavior of individuals insofar as they occupy nodes in the structure. Such uses for structural explanations within philosophy is evident in the work of, e.g., Young (1990, 2011) and others following her, e.g., Zheng (2018).

members, a *structuralist* view about social groups.[11]

1.2. Structures

The idea of structures featuring in the identity conditions of social groups was recently explicitly defended in Ritchie (2013, 2020).[12] She conceives of structures as "complexes, networks, or 'latticeworks' of relations" (Ritchie 2020, 405). On this understanding, which Fine (2020) also adopts, each structure can be represented or modeled as a *graph* that consists of *nodes*, which represent positions, places, or roles in the structure, connected by *edges*, which represent the relations between those nodes.[13]

Importantly for our purposes, in both Ritchie's and Fine's cases, structures are distinguished from one another by which roles they have and how those roles are related—that is, by the relations that hold between members as members of the group and the properties they satisfy as occupiers of their respective roles, rather than, say, features of members themselves as individuals. Call this the *formal* conception of social structures.

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11 In general, views that align more with methodological or ontological *holism* about the social, as opposed to *individualism*, are going to be more amenable to the structuralist framework. See, e.g., Schmitt (2003), for an overview of the historical debate between holism and individualism, as well as an early discussion of structuralism about social groups in this context; see also Epstein (2009) for a discussion of the debate and a defense of holism.
Some examples of views formed along structuralist lines in this and related literature include Johnston (2006), who has considered a *hylomorphic* view with potential applications to social groups; Tuomela (2013), who adopts what he calls a *positional* view; and Epstein (2019), who analyzes groups in terms of *profiles*, which include, among other things, the roles and norms that members have in relation to each other.

12 By "structure" I will always mean a particular subclass of social structures which may simply be called *group structures*. Not all social structures are group structures: the structure of an economy, i.e., who gets how much of what resources, is not a group structure; the grading structure for a course graded on a curve, i.e., how many get what grades, is not a group structure, either, even though the students in the course form a group.

13 This picture is not entirely different from that assumed in work that focuses on social categories or kinds, such as particular genders and races. On Haslanger's conception, e.g., social structures are "networks of social relations" (Haslanger 2016, 125), which also have nodes representing occupiable positions in the structure.
The notions of structures and roles here are also not far from those employed in the sociological literature on social groups. Compare, e.g., Forsyth's (2009) explanation:
"The structure of a thing is the relatively fixed arrangement of and relations among its constituent elements that links those elements together to form a single integrated whole. In groups, structure creates the social order, including the regulatory standards that define how members are supposed to behave (norms) given their position in the group (roles) and the connections among members (intermember relations)." (Forsyth 2009, 157)

This conception can be supplemented by specifying the relations that feature in the structure, which, for both Ritchie and Fine, must be *social* relations. Fine (2020), for instance, suggests that these relations unify the individuals in a group as a matter of *social cohesion*, as opposed to the physical cohesion that unifies ordinary material objects. Haslanger (2022) takes a step further to construe of such social relations as relations constituted through *social practices,* so that one comes to occupy a role in a social structure through regular engagement in a social practice.[14]

We will, eventually, run into some difficulties with a purely formal conception, but that need not concern us until Section 4. The formal conception is powerful enough for our present purposes.

1.3. Structuralism about groups

On the picture as I have sketched it, organized social groups involve structures realized by individuals. More carefully, we may distinguish between at least three kinds of entities in the picture, at each time at which a group exists: a complex *property* that is the group's structure at the time; a *collection* of individuals who realize the structure by filling roles in it at that time, and who together form the group's membership at that time; plus a third kind of entity, which in some sense involves the other two, namely, an instantiation or *realization* of the structure at the time. The distinction between a structure and a realization of that structure, in other words, is one between the structural property and the thing that bears that property. The latter is a *structured whole,* so to speak.[15]

Given this trifold picture, the three entities seem equally available as candidates for identifying the group with. Yet it would be counter to the structuralist spirit to go for the second option, to identify the group with the collection of its members—be it their plurality, set, fusion, or the like. After all, two groups may be distinct even though they involve identical collections of individuals.[16]

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14 This is also similar to Young's (1990) construal of social groups as forms of social relations, which are distinguished by *cultural practices,* and which are furthermore defined by a sense of shared identity.

15 Cf. Elder-Vass's (2007) distinction between what he terms *structure-as-relation* and *structure-as-whole,* and Shapiro's (1997) analogous distinction between *places-are-offices* and *places-are-objects*.

16 These are similar to the concerns that lead, e.g., Uzquiano (2004) and Ritchie (2013) to reject simple fusionist and setist views.

For this and similar reasons, a structuralist shopping for options is likely to be attracted to either the first or third one—identifying the group with a structure or with a realization of a structure. Indeed, the third option best approximates Ritchie's view, who explicitly rejects the view that groups are mere collections (pluralities, aggregates, sets, or fusions) of individuals (Ritchie, 2013) as well as the view that groups are structures (Ritchie 2020, 411), and who at the same time advocates a view on which "groups are realizations of structures" (Ritchie 2013, 268–71) and "[groups] are structured wholes" (Ritchie 2020, 409).[17]

Call the first option the *Property view*, and the third the *Realization view*. This gives us a distinction between two basic forms of structuralism.

The Realization view may be stated simply as follows:

> **Realization.** Social groups are realizations of social structures.

To start, we may understand this notion of a realization of a structure in such a way that realizations are identical at a time if and only if the same individuals realize the same structure in the same way at the same time.

While the Realization view construes social groups as *material*, the Property view construes social groups—being complex properties of collections of individuals—as *immaterial* entities:

> **Property.** Social groups are social structures, which are realized by their members.

On this view, given some individuals, the condition for the formation of a group by those individuals is similar to that on the Realization view: Some individuals form a group at a time if and only if they realize the relevant structure at that time. However, since groups themselves are not identified

17 Fine (2020), similarly, thinks of groups as variable embodiments manifested at each time by a rigid embodiment, and in turn of rigid embodiments as structured wholes, "whose component elements are related, within the whole, via the various structural links" (Fine 2020, 89). Cf. Fine (1999).
Since this presentation is intended only as a schema, to be filled out in more detail by individual structuralists, I have glossed over the exact sense in which realizations *involve* individuals and hence the precise ontological status of realizations or structured wholes.
One may, for instance, construe of realizations as *hylomorphic* compounds of individuals and the structure whose roles they fill, so that the identity of a group depends on the identity of the "parts." This follows closely at least Fine's (2020) view, and is analogous to neo-Aristotelian views of objects such as Koslicki's (2008), according to which objects are structured in the sense of having both formal as well as material parts, where the former specify requirements that must be satisfied by the latter.

with realizations of structures, the group itself may exist independently of any realization of it—including before and after any such realizations. As above, we may take a first pass at this notion of groups as structures as follows: groups are identical if and only if they *are* one and the same structure.

To motivate this idea of identifying groups with structures and in effect with properties, consider an analogy with offices, which we may think of as limiting cases of at least certain kinds of social groups, such as committees and courts. For example, consider the office of the president of the United States—the job, not the person or the place. It seems more plausible to identify this office with a complex property made up of the relevant powers and responsibilities, as opposed to any individual that occupies it at any point in time (say, Donald Trump or Joe Biden), or the realization of the office at each point in time (say, Trump *qua* president or Biden *qua* president). If this is right, then there is at least *prima facie* reason to identify groups with the relevant structural properties and hence construe them as immaterial entities.[18]

2. A CHALLENGE

Whether material or immaterial, groups are, of course, not static things which, once formed, are fixed. Organized groups notably often change in either membership or in structure—they may gain or lose a member, they may gain or lose a role in their structure, members may change roles, and so on.

How do organized groups persist through changes? Whatever metaphysical theory of social groups we adopt must be able to supply an answer to this question.

The kind of change in a group most often discussed in the literature is change in membership, i.e., gain or loss of members over time.[19] For example,

18 One may think that the analogy does not hold up given that we seem to talk about groups and roles differently. It seems right to say, e.g., "The Supreme Court overturned their decision on *Roe*," while it seems wrong, or at least odd, to say "The Chief Justice overturned their decision on *Roe*." (I am thankful to an anonymous referee for raising this point.) Compare: "The United States fought in both the War of 1812 and the World War I" sounds fine; "The President started both the New Deal and the Affordable Care Act" sounds bad. Both cases have the flavor of a zeugma test, similar to "The storm sank my boat and my dreams." Zeugmaticity is typically taken to be a sign of ambiguity or polysemy. Perhaps what we can take this to show, then, is that we tend to use names of groups and institutions like courts and nations differently—less ambiguously—than we tend to use names of roles and offices. For recent discussions on the use of the zeugma test in philosophy, see Viebahn (2018) and Liu (2024).

19 The ability (or lack thereof) to accommodate changes in membership is considered one of the main reasons for endorsing (or rejecting) a view for Uzquiano (2004); Effingham

this occurred each time a new child was born to the Simpsons and whenever a new justice is confirmed to the Supreme Court.

Yet another kind of change that is less commonly considered is structural change.[20] Such a change is independent of, even though it is often accompanied by, gains or losses of individual *members*. Structural changes sometimes involve gains or losses of *roles* over time, such as when two seats were added to the U.S. Supreme Court in 1837, or when a club finds itself in need of better financial management creates a new position for a treasurer.[21] Other times, they involve changes in the nature of roles, such as when the 25th Amendment to the U.S. Constitution added to the vice president's role that of being the president's direct successor in certain situations, or when a student organization's community officer in charge of organizing social events is now also charged with handling climate issues.

Whether the Realization view can accommodate either kind of group change depends on how strictly we understand the idea of groups as realizations of structure. If groups were, on a naïve reading as stated above, nothing over and above realizations of structures, then both kinds of changes would be perplexing.

Consider changes in membership first. When Justice Ginsburg passed away in 2020, her seat was filled by Justice Barrett.[22] Presumably, one and the same Supreme Court persists through the replacement, as opposed to it being the case that the old court with Ginsburg ceased to be and a new court with Barrett came to be, both of which may nonetheless be appropriately referred to using the same description "the Supreme Court." After all, we assume that it is one and the same court, albeit of drastically different leanings over time, which ruled and later overruled *Roe v. Wade* and numerous other decisions. But the Ginsburg court and the Barrett court must somehow be one and the same for the Court to remain numerically the same throughout. Yet, if supreme courts

(2010); Ritchie (2013); Hawley (2017).

20 Structural changes are addressed in Greenwood (2020) and briefly in Fine (2020), and, as noted, mentioned but not elaborated on in Ritchie (2020).

21 This assumes that an *n*-seat court, for any natural number *n*, has *n* distinct roles, each to be filled by at most one individual; these roles are hierarchically ordered by seniority, that is, they stand in distinct relations from each other. Yet another plausible understanding is that an *n*-seat court has only two roles, one for the distinguished Chief Justice and another for all the Associate Justices, the latter to be filled by up to *n-1* individuals. Perhaps only one of these models accurately reflects the structure of the Supreme Court. What is important for us, however, is that either model will involve a structural change, giving rise to the challenge at hand.

22 To avoid potential complications not relevant to the present discussion, let us assume, here and henceforth, that all replacements happen instantly; there is never a vacant seat.

are nothing over and above realizations of particular court structures, which involves, among other things, who fills what roles, then the Ginsburg court and the Barrett court are not the same.

Likewise, consider the Court just before and then just after two seats were added to it in 1837. Presumably, one and the same Court persists through this addition of seats. Yet, on the current understanding of courts as nothing over and above realizations of structures, the seven-seat court and the nine-seat court are distinct, the one ceasing to be as the other came to be.

As for the Property view, if groups were, again on a naïve reading of the view, nothing over and above certain kinds of structures, then they would have no trouble persisting through changes in membership. A change in membership would simply involve a change as to which collection of individuals realizes the relevant structure; the structure itself may remain the same throughout. Structural changes, however, would be perplexing if we maintain that groups persist through them, since the introduction of a new structure, one with a numerically distinct set of roles, would seem to entail the introduction of an entirely new group and the termination of the old group.

The source of trouble, especially in the case of structural change, lies in the tension between the idea that structure is somehow central to groups on the one hand, and the idea that groups can change in structure on the other hand. Thus, structuralist views in general are faced with the challenge of accommodating change, and specifically structural change.

All this goes to show that whoever holds the Realization view cannot hold the naïve view that groups are nothing over and above realizations of structure; the same goes for the Property view. Ritchie, for instance, makes room for potential variation of membership as well as structure in her identity conditions.[23] Indeed, while she admits that she has not provided persistence conditions that would also allow for structural changes, she suggests that such conditions could be supplied (Ritchie 2020, 412). The question, then, is *how* exactly we can coherently develop the view to account for groups' persistence through such variations. The next section briefly sketches potential

23 The naïve Realization view just considered may be put thus:
A group G_1 and a group G_2 are identical if and only if (1) the structure of G_1 is identical to the structure of G_2, and (2) for all x and all n, x occupies node n in the structure of G_1 if and only if x occupies n in the structure of G_2.
Compare this with Ritchie's official account:
A group G_1 and a group G_2 are identical only if (1) for all t and all w, the structure of G_1 at t at w is identical to the structure of G_2 at t at w, and (2) for all t and all w and all x [and all n], x occupies node n in the structure of G_1 at t at w if, and only if, x occupies n in the structure of G_2 at t at w (Ritchie 2020, 412).

developments for the Realization view, and then likewise for the Property view.

3. REFINEMENTS

3.1. Two refined Realization views

Recall that groups are simply material objects on the Realization view. The question of how groups can persist through changes in membership or structural changes, thus, is analogous to the question of how material objects can persist through changes in their parts or the arrangement of those parts.[24]

Analogous questions will inspire analogous answers. One salient solution, then, is to adopt a form of four-dimensionalism on which groups are not themselves realizations of structures, but are four-dimensional entities whose temporal parts are the things that are more accurately said to be such realizations.[25] Whenever we look at a group, what we are looking at is really only one instantaneous part, or slice, of a temporally extended being, preceded by and followed by many different slices that may or may not bear the same structure.[26] In short:

> **Four-Dimensional Realization.** Social groups are perdurant material objects whose temporal parts are realizations of structures.[27]

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24 For instance, if group structures are intrinsic properties of the collections of individuals that instantiate them (as, e.g., Fine thinks (2020, 89)), then the present challenge will be analogous to the problem of *temporary intrinsics*, that is, of accounting for how one and the same object may gain and lose intrinsic properties over time (as described, e.g., by Lewis (1986, 203–4); see also discussions in Lowe (1988), Haslanger (1989), and Wasserman (2003)). In that case, my four-dimensionalist refinement below will correspond to Lewis's *perdurantist* solution to the problem, and my third-dimensionalist refinement to the *endurantist* one.

25 This does not collapse into four-dimensionalist versions of fusionist views about groups, since those may not incorporate structures at all (e.g., Hawley (2017); cf. the view considered in Hansson Wahlberg (2019, 4973–74)).

26 Here I assume a perdurantist or worm-theoretic version of four-dimensionalism about social groups, where the group persists by having temporal *parts*. For a defense of a stage-theoretic, or exdurantist, account, where a group persists by having temporal *counterparts*, see Faller (2021).

27 Another four-dimensionalist view in the vicinity is one on which a group is a four-dimensional entity with temporal parts which, as a whole, is a realization of what may be called a *four-dimensional structure*, for lack of a better term. A four-dimensional structure S is an even more complex property that involves further structures s_1, s_2, etc. (i.e., structures as we have understood them) such that for a group g to be a realization of S is for it to be such that at t_1 g realizes s_1, at t_2 g realizes s_2, etc. A similar idea is suggested in passing, but not endorsed, by Faller (2021, 7159).

For example, in the case of the Simpsons, there is a four-dimensional entity that consists of a temporal part present before Maggie's birth which is a realization of a certain two-child family structure, and another temporal part present sometime after Maggie's birth which is a realization of a certain three-child family structure.[28] These temporal slices of the family, being instantaneous entities, do not change in either membership or structure. Yet the family itself can be said to have undergone a change in membership as well as in structure upon Maggie's birth, by virtue of having two temporal parts, one present before and one after her birth, which consist of different members who also realize different structures. It is the fact that these temporal slices are part of one and the same four-dimensional entity that explains the group's persistence over time.

Alternatively, one may opt for a form of three-dimensionalism and hold a view on which groups remain the primary realizations of structures; they are not spread out over time but are wholly present at each time. On such a view, groups persist through changes in membership or in structure in the same way that ordinary material objects persist through changes in parts or the arrangement of their parts—for instance, by relativizing the realization relation to times.[29] In short:

> **Three-Dimensional Realization.** Social groups are endurant material objects constituted by realizations of structures.

It is easy to see how Four-Dimensional Realization can still perform the three basic functions of a theory of social groups, with appropriate qualifications to make room for the notion of temporal parts as the primary bearer of structure. Similar points, with analogous qualifications, can be made about Three-Dimensional Realization.

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28 Here, I assume that a two-child family is (sociologically, etc.) significantly different than a three-child family, just as it is plausible that being a middle child is (psychologically, etc.) significantly different than, say, being the younger of two. Not much of the discussion hangs on this assumption, but it helps me simplify matters and discuss both membership and structural changes in a single example.

29 Fine's (2020) view of groups as variable embodiments, which I consider to be sufficiently structuralist, may be placed under the three-dimensional heading. On his view, organized groups are, generally speaking, variable embodiments manifested by rigid embodiments. More precisely, an organized group is a variable embodiment that is manifested, or constituted, at each time by a rigid embodiment, which is in turn composed by certain people, buildings, etc., related to one another in a suitable manner. Since the same variable embodiment may be manifested at different times by different rigid embodiments, groups can thus persist through changes.

3.1.1. Refined Property view

Before we are in a position to consider a possible refinement of the Property view, notice that the members of each group simultaneously realize many structures, some more general and others more specific. For example, a general structure realized by members of the Simpsons family is that of a family with adults and some children; another is that of a family with two adults and three children; a more specific structure is that of a family with two married adults and their three biological children; and so on.

We may borrow from the ideology of determinable properties[30] and construe less specific structures as *determinable* ones which have other, more specific structures as *determinates*. For every determinable property, there are different ways for something to instantiate it, namely, by instantiating different properties that are all more determinate—one way to be colored is to be blue, another is to be green. Similarly, there are many ways to realize the same determinable structure, namely, by realizing more determinate structures—being a nuclear family is only one way to be a family, among others.

Properties that are determinates of another might themselves have their own determinates: There are many ways to be blue, and likewise there are many ways to organize a nuclear family. Moreover, the same collection of individuals may realize different determinate structures which are not necessarily determinates of the same determinable structure: The Simpsons may simultaneously realize a nuclear family structure and a bowling team structure, and these two structures may not be determinates under the same determinable.

The difference between realizing a determinable structure and realizing a more determinate structure may be put in terms of the difference in level of description. For example, consider a chess club. The generic structure of a chess club—call it *C*—does not seem to place a limit on how many members are in it and can therefore be realized by three chess players in New York, once more by ten people in Los Angeles, and so on. These all involve more determinate structures of *C*. We are still able to distinguish between the three-membered club and the ten-membered club: At one level of description, they are both realizations of *C*, yet at another, they each involve a distinct, more determinate

30 The notions of determinables and determinates were introduced by Johnson (1940) and further elaborated on by Prior (1949); Searle (1959); Elder (1996), Armstrong (1997, 48–63), and Funkhouser (2006), among others. A relatively recent argument against determinable properties is Gillett and Rives (2005); for a recent defense, see Wilson (2012).

structure with a specified number of members at any given time.[31]

The distinction between more and less determinate structures gives us many theoretical possibilities: We can identify a group with one of the more determinate structures that it has, or with one of the less determinate ones. However, the more determinate the structure that we identify the group with, the more trouble we will face with structural changes. Thus, it makes more sense to identify groups with structures that are, relatively speaking, less determinate. The result is what may be called the *Determinable Property view*:

> **Determinable Property.** Social groups are determinable immaterial structures manifested by realizations of more determinate structures.

On this view, then, someone is a member of a group at a time when they are one of the individuals who together realize a certain structure and certain ones of its determinates at that time.[32] And it is this identification of the group with a merely determinable structure, rather than with any particular determinate structure, that enables the group to persist through structural changes as well as changes in membership: Membership change occurs as the same structure comes to be realized by a different collection of individuals, and structural change occurs as one and the same collection of individuals comes to realize different determinate structures while continuing to realize the same determinable structure.

To return to the Simpsons: The family is a certain determinable structure, say, the structure *S* of a family with a married couple and their children, which continues to be realized throughout, while some determinate of *S* is realized before Maggie's birth but not after and *vice versa.* Before, it is a determinate structure of a family with a married couple and their two children, and after, one of a family with a married couple and their three children. Thus, there are levels of description at which a structural change took place upon Maggie's birth, yet there is also at least one level of description at which the structure of the family did not change, and it is at this latter level that the family's persistence can be explained.

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31 Alternatively, one may understand the determinable/determinate relationship as a relation between higher-order properties and lower-order properties, or as a form of constitution.

32 Even on this view, we may still speak of *the* structure of the group to refer to a particular determinate of the determinable structure. In colloquial speech, we may also continue to speak loosely of "the group," as we already do anyway, to refer to a particular realization of the structure, or alternatively to the collection of individuals who are members of the group in question at a given time.

4. FURTHER CHALLENGES

We are now able to accommodate changes of both sorts with our refined views. So far, however, we have considered relatively mundane kinds of changes. Yet there is a kind of case of apparent change which is more extreme and which we intuitively would like to rule out rather than allow. Our challenge is thus twofold: to accommodate changes we think groups undergo, while limiting the kinds of changes we think groups can survive. Cases of the latter may serve as stress tests that help illustrate both what the proposed views about groups are capable of and how they may need to be further developed or supplemented in order to do what they are designed to do.

As we will see, the discussion also highlights the need for a richer conception of structure, and, in section 5, I will propose two such conceptions for the structuralist.

4.1. Trout-turkey groups

Consider this: The Beatles broke up in 1970, and Queen was formed in the same year. What, on either the refined Realization view or the refined Property view, prevents it from being the case that The Beatles, instead of disbanding, actually carried on its life with all new members under a new name, "Queen"? Call this alternative description the *Beatles-Queen hypothesis*—a social and temporal version of the trout-turkey, if you will.

Even more exotic cases could be generated by manipulating the various variables. Suppose, for example, that the U.S. Supreme Court actually ended abruptly in 1970 only to reemerge three decades later as OneRepublic; and so forth.[33]

On the current hypothesis, what we call "The Beatles" has a Beatles-like structure before 1970 and, actually, after 1970, has a Queen-like structure and Freddie Mercury *et al.* as members. Likewise, what we call "Queen" has a Queen-like structure after 1970 but also a Beatles-like structure and John Lennon *et al.* as members before 1970. Thus, at every moment, The Beatles and Queen are identical since the former's structure is identical to latter's structure

33 Other dramatic changes are considered in Greenwood (2020) with the case of "The Ravens," a club whose rules and goals change significantly over the years while membership remains unchanged (Greenwood 2020, 80); as well as briefly in Fine (2020) with the case of "The Inconstants," a group which changes its structure radically from one year to the next as a matter of policy (Fine 2020, 87). Unlike my Beatles-Queen and Supreme Court-OneRepublic cases, however, it seems we would like to accommodate such cases in our theory, not disallow—as their authors also intend.

at that time and any individual plays a role in the one then if and only if they also play the same role in the other then. This would satisfy, for instance, Ritchie's identity conditions: The Beatles and Queen turn out to be one and the same trout-turkey group.[34]

Presumably, such a hypothesis is not plausible, and the situation should instead be described as one in which 1970 is the year in which The Beatles ceased to exist and Queen came to be for the first time. In other words, we would like to be able to say that the relevant changes in the situation are existential ones, not merely qualitative ones.

That said, a Four-Dimensionalist may not wish to rule out such cases right away. Given four-dimensionalists' usual friendly disposition toward universalist views about composition, they can simply grant that there is such a thing as the Beatles-Queen which existed before and after 1970, but also that there is The Beatles which ceased to exist in 1970 and the Queen which only came to be in 1970. However, which one we are referring to at any point is a matter of intention and interest, and as it turns out, says the Four-Dimensionalist, we simply tend to ignore Beatles-Queen most of the time, for instance, because it does not exhibit enough structural or musical unity and is therefore not worthy of scientific or artistic consideration in most contexts.[35]

The Four-Dimensionalist who happens to be less amenable toward universal composition for social groups, on the other hand, can rule out such cases by stipulating, as a fact of the world, that the earlier Beatles-like slices are not part of the same four-dimensional entity as the later Queen-like slices, just as it can declare in the more banal cases that, as a matter of fact, the relevant earlier group does in fact persist into the relevant later group. An analogous stipulation can be made on behalf of the Three-Dimensionalist.

The Determinable Property view, by contrast, can rule out a hypothesis like the Beatles-Queen one, using the same resources that it uses to allow changes in the more mundane cases and explain how groups persist in the first place: The Determinable Property theorist can say that there is a determinable structure associated with The Beatles that was maintained up until 1970 but which failed to be realized afterwards, and that the determinable structure associated with Queen was only realized for the first time that year. This has

34 See fn.23. I omit worlds for simplicity.

35 This, of course, resembles a familiar response by defenders of unrestricted composition against objections, that the apparent conflict with common sense beliefs about how many things—here, how many groups—can be explained by appeal to quantifier domain restriction (as modeled in, e.g., Lewis (1986, 213) and Sider (2001, 218), among many other places).

an advantage of appealing to what seems to be the right kind of truth-making feature, thus better fitting what we would ordinarily appeal to in describing the case.

4.2. Isomorphic groups

Unfortunately, the above attempt does not by itself fully resolve the case for the Determinable Property view. What is the relevant determinable structure that was realized by John Lennon *et al.,* but not by Freddie Mercury *et al.*? Suppose we identify this as a four-piece rock band structure. The Beatles-Queen hypothesis is not ruled out, since this structure can have a certain Beatles-like determinate at one time and another, Queen-like determinate at the next, and hence the four-piece band can continue to exist through 1970 by virtue of these two determinates being realized throughout this year—albeit by quite different sets of individuals at the beginning of the year than at the end. What is worse, the same structure that we have identified as "The Beatles" would at the same time be realized by numerous other four-piece sets all over the world—and surely, this cannot be the correct result.

At the other extreme, suppose we identify the relevant structure as something more determinate by specifying the vocal and instrumental structure—The Beatles was composed of, say, a lead vocalist/guitarist, vocalist/bassist, guitarist, and drummer, whereas Queen was composed of, say, a lead vocalist/pianist, vocalist/guitarist, bassist, and drummer, and to not complicate matters even further let us imagine that no other four-piece British rock band has ever had exactly the same vocal/instrumental structure as either of these. In this case, even though the Beatles-Queen hypothesis can now be ruled out, it might be hard to make the case for the group to be amenable to any variations at all in their vocal/instrumental structure, which are in fact common and frequent.

Similar problems arise for other types of groups, from families and student clubs to professional sports teams, which frequently includes similar numbers of players filling in the same specific roles.

Thus, in giving their answer, the Determinable Property theorist runs into a dilemma: Either determinable structures are more determinate and so cannot accommodate many intuitive types of structural changes, or they are less determinate and so a group may have multiple simultaneous memberships.

The dilemma is most clearly seen in what may be considered a limiting case of groups, namely, the dyad. Consider the comedy double act Stephen Fry and Hugh Laurie. "Fry and Laurie" is the brand: if you take either one away,

the duo is no more; if you add anyone else, it is, of course, no longer a duo, but also arguably no longer the same group; if you substitute anyone else for either Fry or Laurie, again, you arguably do not have the same comedy act any more. Dyads, duos, and couples seem extremely fragile, being so resistant to any change in membership or any significant structural change. Yet their structure is also so minimal that in specifying the structure of Fry and Laurie, or Romeo and Juliet, we might as well be giving the structure of Key and Peele, or Abelard and Heloise, respectively.[36]

5. FURTHER REFINEMENTS

The case of apparently structurally identical or isomorphic groups raises a classic question, now posed in light of our new understanding of groups and their structures. If the question about change was about what unifies structurally distinct groups, we are now left with the other side of the coin: What distinguishes structurally identical groups?

The question is pressing for the Property theorist, as the preceding discussion has shown. Yet it may also be posed to the Realization theorist: What distinguishes structurally identical groups with exactly the same members? There are, of course, more structurally isomorphic groups than there are structurally isomorphic *and* coextensive groups (let alone groups that are so throughout their career). Nonetheless, the latter remains a possibility that must be accounted for, ideally by appealing to the right kind of distinguishing features for each kind of groups in question.

Recall that the conception of social structure I have been working with is a purely *formal* one, where groups are distinguished simply by what roles they have and how those roles are related. What we have uncovered through the above discussion is that this conception of structure, as employed in either a Realization view or a Property view, is not sufficient to do all the work we would like it to do.

What would be needed, then, is for the structure to be identified with the group in question to not be so general, or coarse, as to also capture what the group has in common with many other groups of the same kind of the same age; it must be more specific so as to capture what we would normally consider

36 Mere rigidity should, in principle, sit well with the Determinable Property view: Some groups may have ever only very similar determinates or even always exactly the same determinate. And for that matter, these limiting cases would pose no problem on a view like Fine's, either: Some groups are simply rigid, while others are more variable, and we can tell which is which by the type of changes a group can survive.
The challenge of distinguishing between structurally identical groups, however, remains.

to constitute, say, the essence of the group, so to speak—what it is that makes The Beatles itself, and what it is that makes Fry and Laurie a unique moment in comedy history. This may involve, for instance, certain musical and comedic qualities or dispositions, respectively.

On the other hand, the structure to be identified with The Beatles cannot be so specific that it becomes an arbitrary description that happens to uniquely pick out the structure of The Beatles in this world. It cannot cite, for example, the combined number of hairs on John Lennon's and Paul McCartney's heads or the number of people who played one of their records on a particular summer afternoon. By contrast, referring to either Lennon or McCartney himself (or both or whoever), or an essence, haecceity, or some *de re* property of at least one of the Beatles—is a surer way of uniquely picking out the relevant structure that also seems less *ad hoc.* So is referring to a particular time, place, or event that was momentous in the band's formation. Either way, we obtain what may be called an *essential* conception of social structures.

Thus, for at least some groups, some individuals, times, places, or events, or some combination of these, are essential to the identity and continued existence of the group.[37] The issue, so it turns out, is not merely a matter of what level of determination or specificity the relevant structure should be at, but what kind of information it should specify.

Yet we are not done: It is possible that Lennon or McCartney are part of another four-piece rock band where they also play an essential role in the identity of the group, or that there is more than one such band that embodies the Liverpudlian spirit of the early 60s. The essential conception may not be adequate, either.

A final possibility to consider, which I think gets closer to the heart of the matter, is to include among the stable, central things about a group something which is rather salient yet has been missing in the picture so far, namely, the *goal*, or *function,* of the group—its project or mission, so to speak.[38]

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37 This seems highly plausible. Ritchie, for one, suggests that this might be the case for some groups, including bands (Ritchie 2020, fn.20), and this matches what many musical fans might believe, pre-theoretically, especially as observed in common reactions to lineup changes, reunions, and tributes. Uzquiano (2004, fn.14) and Hawley (2017, 399) make similar observations. Likewise, Epstein (2019) suggests that historical origins, such as the property of having been formed by a particular action, may be essential to groups of many kinds.

38 Goals and functions are at least conceptually distinct, although certainly related. One's functions are generally determined in part by one's goals; a group may also have functions relative to other groups while its goals may refer only to things internal to itself. To fully distinguish between functions and goals in the context of groups requires a longer discussion; for the present point, both are important.

Courts have different goals and functions than families, of course, but different courts of different levels or different jurisdictions also differ from each other teleologically and functionally. The U.S. Supreme Court differs from any other nine-person supreme court in its function as the final arbiter of the law and interpreter of the U.S. Constitution. The Simpsons family differs from other families with a married couple with their three biological children in that their goal is to further the well-being of those individuals who are connected to Homer and Marge Simpson in such-and-such ways. The goal of Fry and Laurie likewise turns out to differ from that of Key and Peele, that of The Beatles from that of Queen, and so on. Call this conception of social structure that incorporates goals and the like a *functional* conception.

The functional conception is richer than the purely formal conception, and thus more useful for the structuralist about social groups. It allows us to explain why structural changes are not only ubiquitous but often inevitable and even desirable, as the group evolves in order to better serve its goal or function. Moreover, a group may also evolve over time by adopting new goals—the Simpsons might, for instance, at first focus on their children's education and later on their financial independence—but the group persists as long as there is still an overarching goal that remains, say, the Simpson children's welfare.[39]

After all, roles within a group typically already refer to the group's functions and goals.[40] This also allows us to explain why certain radical changes, in either structure or membership, do not preserve the group, namely, because the group would then cease to serve its original goal or function.[41]

With a sufficiently fine-grained notion of a goal or function, especially one that incorporates elements from the essential conception, the functional conception also enables us to distinguish between groups with what otherwise would appear to be the same roles related in all the same ways: Two teams in

39 This is true even for more extreme cases, as in Fine's (2020) "The Inconstants" (see my fn.33 above), where a group's goal might even be to constantly and completely change its structure, which potentially includes any associated functions or smaller goals. The Inconstants may persist nonetheless, as long as its overarching goal of changing so radically remains the same throughout.

40 Cf. Ritchie's (2020) reference to functions in explaining roles in a group structure, which is supposed to capture the group's "functional organization" (Ritchie 2020, 411); her appeal to "different aims and goals" (Ritchie 2020, 412) in distinguishing between coextensive groups; as well as her discussion of the roles that each group may play relative to other groups within "external structures" that they are part of (Ritchie 2020, 409–410). Other authors, e.g., Epstein (2019), also places high importance on recognizing functions in groups.

41 Cf. Ritchie's (2020) suggestion, in passing, that the intentions of members and relevant non-members may feature prominently in the persistence conditions of groups (Ritchie 2020, 412).

a match may both have the goal of winning the match, but each team's goal is really that *it* wins, specifically. It is at this level of description that enables us to say, truly, when they are playing against each other, that the two have *opposite* goals.

Finally, the functional conception validates an important feature of *social* groups, one that is not found in just any collection of ordinary objects, namely, their purposefulness or directedness—the fact that they are created with a project to complete or a function to fulfill. This in turn enables us to better fit our metaphysical theory with prevailing sociological understanding of groups as essentially involving shared goals or purposes.[42]

The moral is that, in the end, membership and mere structure are less important for the identity and continuity of a social group than its function or goal.[43]

6. CONCLUDING REMARKS

I have offered two implementations of structuralism about organized social groups that are able to accommodate both the kinds of changes in membership and structure that we would like to include for such groups while helping to avoid some of the kinds of apparent changes we would like to exclude. I have also proposed two enriched conceptions of structure that better capture the complexity inherent in groups and enable us to provide more satisfying answers to some more extreme cases.

I hope what we have achieved is set the stage for at least two viable forms of structuralism, and at least two richer conceptions of structure, which may be considered substantive developments from current views in the vicinity in the literature, and at the same time worthwhile contenders against other

42 E.g., Keyton (2002) defines a group as "three or more people who work together interdependently *on an agreed-upon activity or goal*" (Keyton 2002, 5), and Hackman and Katz (2010) as "an intact social system, complete with boundaries, interdependence *for some shared purpose*, and differentiated member roles" (Hackman & Katz 2010, 1210, emphasis added); see also the proposed definitions in Gould (2004, 119) and Frey & Konieczka (2010, 317), among others.

43 One may press: What is it that distinguishes The Beatles from Queen, then? However, such questions, as they address particular cases, likely cannot be fully settled in a purely metaphysical discussion; at some point the task of the philosopher ends and the social scientist, legal scholar, music historian, and the like must step in. These include, perhaps, what functions or goals precisely are served by the Supreme Court; which properties or relations exactly are involved in a structure that would strike the desirable balance in cases like Beatles-Queen or Fry and Laurie; whether any member of The Beatles is as a matter of fact essential to its continued existence as The Beatles; and so on.

contemporary views in the ontology of social groups.

I have, however, remained mostly neutral between the two basic lines—Realization and Property—since they seem more or less on a par with respect to accommodating various kinds of changes in groups. Moreover, each has their own advantages and disadvantages, each making relatively common, even if not uncontroversial, assumptions about properties and relations or issues such as persistence and composition, all such that I think the choice between them cannot be made independently of one's approach to social ontology or metaphysics more broadly speaking. For instance, one who thinks that there are no such things as determinable properties may want to reject Determinable Property outright; one who opposes temporal parts of all sorts may see Four-Dimensional Realization as out of the question; and so on.

Nevertheless, no doubt further examination of other specific issues surrounding groups, metaphysical and otherwise, will shed light on the relative strength or weakness of one over the other as a theory of groups, especially one as a materialist conception of groups as opposed to an immaterialist one—but that is for another paper.[44]

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REFERENCES

Armstrong, D. M. 1997. *A World of States of Affairs*. Cambridge: Cambridge University Press, URL https://doi.org/10.1017/CBO9780511583308.

44 In relation to problems of individuation and change for social groups alone, there will inevitably be other metaphysically puzzling cases worthwhile of exploration. For instance, there is a kind of change that is at least theoretically possible, which may be dubbed the *Ship of Theseus problem for groups*—gradual changes that amount to a dramatic change over a long period, such that from one moment to the next we would be happy to accept the group as numerically the same, yet between the first moment and the last we would recognize entirely distinct groups. Slater and Varzi (2007) imagines such a case, but perhaps there is no better real-life example than the English band Sugababes. I am thankful to Säde Hormio for directing my attention to this example.) This and similar kinds of problems will be, I hope, rich ground for future research.

Effingham, N. 2010. "The Metaphysics of Groups." *Philosophical Studies* 149: 251–267, URL https://doi.org/10.1007/s11098-009-9335-4.

Elder, C. L. 1996. "Realism and Determinable Properties." *Philosophy and Phenomenological Research* 56 (1): 149–159, URL https://doi.org/10.2307/2108471.

Elder-Vass, D. 2007. "Social Structure and Social Relations." *Journal for the Theory of Social Behaviour* 37 (4): 463–477, URL https://doi.org/10.1111/j.1468-5914.2007.00346.x.

Epstein, B. 2009. "Ontological Individualism Reconsidered." *Synthese* 166: 187–213, URL https://doi.org/10.1007/s11229-007-9272-8.

Epstein, B. 2019. "What Are Social Groups? Their Metaphysics and How to Classify Them." *Synthese* 196: 4899–4932, URL https://doi.org/10.1007/s11229-017-1387-y.

Faller, A. 2021. "How Groups Persist." *Synthese* 198: 7149–7163, URL https://doi.org/10.1007/s11229-019-02514-0.

Fine, K. 1999. "Things and Their Parts." *Midwest Studies in Philosophy* 23: 61–74, URL https://doi.org/10.1111/1475-4975.00004.

Fine, K. 2020. "The Identity of Social Groups." *Metaphysics* 3 (1): 81–91, URL https://doi.org/10.5334/met.45.

Forsyth, D. 2009. *Group Dynamics*. Belmont, CA: Cengage.

Frey, L. R., and S. P. Konieczka. 2010. "Group Identity." *Encyclopedia of Identity: Volume 1*, edited by R. L. Jackson, Thousand Oaks, CA: SAGE Publications, URL https://doi.org/10.4135/9781412979306.n102.

Funkhouser, E. 2006. "The Determinable-Determinate Relation." *Noûs* 40 (3): 548–569, URL https://doi.org/10.1111/j.1468-0068.2006.00623.x.

Gillett, C., and B. Rives. 2005. "The Non-Existence of Determinables: Or, a World of Absolute Determinates as Default Hypothesis." *Noûs* 39 (3): 483–504, URL https://doi.org/10.1111/j.0029-4624.2005.00510.x.

Gould, C. C. 2004. *Globalizing Democracy and Human Rights*. New York: Cambridge University Press.

Greenwood, J. D. 2020. "On the Persistence of Social Groups." *Philosophy of the Social Sciences* 50 (1): 78–81, URL https://doi.org/10.1177/0048393119881098.

Hackman, J. R., and N. Katz. 2010. "Group Behavior and Performance." *Handbook of Social Psychology: Volume 2*, edited by S. T. Fiske, D. T. Gilbert, and G. Lindze, Hoboken, NJ: John Wiley, URL https://doi.org/10.1002/9780470561119.socpsy002032.

Hansson Wahlberg, T. 2019. "Why the Social Sciences Are Irreducible." *Synthese* 196: 4961–4987, URL https://doi.org/10.1007/s11229-017-

1472-2.

Haslanger, S. 1989. "Endurance and Temporary Intrinsics." *Analysis* 49 (3): 119–125, URL https://doi.org/10.1093/analys/49.3.119.

Haslanger, S. 2016. "What Is a (Social) Structural Explanation?" *Philosophical Studies* 173: 113–130, URL https://doi.org/10.1007/s11098-014-0434-5.

Haslanger, S. 2022. "Failures of Methodological Individualism: The Materiality of Social Systems." *Journal of Social Philosophy* 53 (4): 512–534, URL https://doi.org/10.1111/josp.12373.

Hawley, K. 2017. "Social Mereology." *Journal of the American Philosophical Association* 3 (4): 395–411, URL https://doi.org/10.1017/apa.2017.33.

Johnson, W. E. 1940. *Logic*. New York: Cambridge University Press.

Johnston, M. 2006. "Hylomorphism." *Journal of Philosophy* 103 (12): 652–698, URL https://doi.org/10.5840/jphil2006103125.

Keyton, J. 2002. *Communicating in Groups: Building Relationships for Effective Decision Making*. New York: McGraw-Hill.

Koslicki, K. 2008. *The Structure of Objects*. New York: Oxford University Press, URL https://doi.org/10.1093/acprof:oso/9780199539895.001.0001.

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

Liu, M. 2024. "How to Think about Zeugmatic Oddness." *Review of Philosophy and Psychology* 15: 1109–1132, URL https://doi.org/10.1007/s13164-023-00718-5.

Lowe, E. J. 1988. "The Problems of Intrinsic Change: Rejoinder to Lewis." *Analysis* 48 (2): 72–77, URL https://doi.org/10.1093/analys/48.2.72.

Mason, R. 2016. "The Metaphysics of Social Kinds." *Philosophy Compass* 11: 841–850, URL https://doi.org/10.1111/phc3.12381.

Noyes, A., F. C. Keil, Y. Dunham, and K. Ritchie. 2023. "Same People, Different Group: Social Structures Are a Central Component of Group Concepts." *Cognition* 240, URL https://doi.org/10.1016/j.cognition.2023.105567.

Prior, A. 1949. "Determinables, Determinates and Determinants." *Mind* 58 (229): 1–20, URL https://doi.org/10.1093/mind/LVIII.229.1.

Ritchie, K. 2013. "What Are Groups?" *Philosophical Studies* 166: 257–272, URL https://doi.org/10.1007/s11098-012-0030-5.

Ritchie, K. 2015. "The Metaphysics of Social Groups." *Philosophy Compass* 10 (5): 310–321, URL https://doi.org/10.1111/phc3.12213.

Ritchie, K. 2020. "Social Structures and the Ontology of Social Groups?" *Philosophy and Phenomenological Research* 100 (2): 402–424, URL https://doi.org/10.1111/phpr.12555.

Ruben, D. H. 1983. "Social Wholes and Parts." *Mind* 92 (366): 219–238, URL https://doi.org/10.1093/mind/XCII.366.219.

Ruben, D. H. 1985. *The Metaphysics of the Social World*. London: Routledge & Kegan Paul.

Schmitt, F. F. 2003. "Socializing Metaphysics: An Introduction." *Socializing Metaphysics: The Nature of Social Reality*, edited by F. F. Schmitt, Lanham: Rowman & Littlefield.

Searle, J. 1959. "On Determinables and the Notion of Resemblance II." *Proceedings of the Aristotelian Society* 33: 139–158, URL https://doi.org/10.1093/aristoteliansupp/33.1.125.

Shapiro, S. 1997. *Philosophy of Mathematics: Structure and Ontology*. Oxford: Oxford University Press, URL https://doi.org/10.1093/0195139305.001.0001.

Sider, T. 2001. *Four-Dimensionalism: An Ontology of Persistence and Time*. Oxford: Oxford University Press, URL https://doi.org/10.1093/019924443X.001.0001.

Slater, M. H., and A. C. Varzi. 2007. "Playing for the Same Team Again." *Basketball and Philosophy: Thinking Outside the Paint*, edited by J. L. Walls, and G. Bassham, Lexington, KY: University Press of Kentucky.

Tuomela, R. 2013. *Social Ontology: Collective Intentionality and Group Agents*. Oxford: Oxford University Press, URL https://doi.org/10.1093/acprof:oso/9780199978267.001.0001.

Uzquiano, G. 2004. "The Supreme Court and the Supreme Court Justices: A Metaphysical Puzzle." *Noûs* 38 (1): 135–153, URL https://doi.org/10.1111/j.1468-0068.2004.00465.x.

Viebahn, E. 2018. "Ambiguity and Zeugma." *Pacific Philosophical Quarterly* 99 (4): 749–762, URL https://doi.org/10.1111/papq.12229.

Wasserman, R. 2003. "The Argument from Temporary Intrinsics." *Australasian Journal of Philosophy* 81 (3): 413–419, URL https://doi.org/10.1080/713659708.

Wilson, J. 2012. "Fundamental Determinables." *Philosophers' Imprint* 12 (4): 1–17, URL http://hdl.handle.net/2027/spo.3521354.0012.004.

Young, I. M. 1990. *Justice and the Politics of Difference*. Princeton: Princeton University Press.

Young, I. M. 2011. *Responsibility for Justice*. New York: Oxford University Press, URL https://doi.org/10.1093/acprof:oso/9780195392388.001.0001.

Zheng, R. 2018. "What is My Role in Changing the System? A New Model of Responsibility for Structural Injustice." *Ethical Theory and Moral Practice* 21: 869–885, URL https://doi.org/10.1007/s10677-018-9892-8.