Minimal Group Agency: A Bio-Social Ontology

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Abstract: When considering the type of agency that might support group activity, social ontologists often think of full-fledged moral and intentional agency. However, many organism-agents found in the biological sphere fail not only to be morally responsible but also would seem incapable of the rational guidance characteristic of intentional agency. This raises the possibility that some groups may qualify as minimal agents without necessarily qualifying as moral or intentional agents. In this paper, I review conditions for minimal agency as set forth by enactivists and draw from existing social ontological work to explore the extent to which these conditions might be satisfied by existing accounts of group agency. Although no account of group agency aligns with the enactivist conditions, I conclude that a suitably modified version of List and Pettit's account could.

Keywords: group agency, enactivism, normativity, power, organizational closure, intentionality, moral responsibility, organicism

1. INTRODUCTION

In a panel presentation at the 2023 Social Ontology conference, Sally Haslanger urged social ontologists to see the social world and material world

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as interdependent (Haslanger, 2024a). In a similar vein and at about the same time, Joseph Rouse published a book in which he argued that "prominent rationales for intellectual segregation of nature from human society and culture are no longer sustainable" (Rouse 2023, 5).

What explains the intellectual temptation to drive a wedge between the biological and social spheres? Both Haslanger and Rouse point to a hastily drawn fact/value distinction, according to which the "supposed scientific disenchantment of nature leaves no place for a normative order […]. Consequently, normative accountability could only be instituted by or within human ways of life" (Rouse 2023, 6).[1]

By contrast, a "bio-social ontology,"[2] first, finds intrinsic normativity in the natural world and, second, draws a connection between that liberal naturalism (McDowell, 1996) and the objects of social ontological inquiry. Accordingly, Haslanger invites social ontologists to recast society as a "complex dynamic system in which social animals (not just human animals) coordinate to survive and flourish in their environment" (Haslanger 2024a, 28).

So far as the first task is concerned, for over 20 years enactivists have argued for a conception of minimal agency that entails a commitment to *intrinsic* teleology or normativity (Weber and Varela 2002, 100). This commitment is codified in an enactivist conception of minimal agency, which takes microbial life as a paradigm case. As detailed in section 2, such a conception of agency consists in the following three conditions (Barandiaran et al., 2009): (1) individuality, (2) interactional asymmetry, and (3) intrinsic normativity. All organisms are minimal agents, and the norms to which such minimal agents are sensitive are "intrinsic" in the sense that they are not dependent on imputation from human observers (Di Paolo, Buhrmann, and Barandiaran 2017, 121).

After rehearsing this enactivist conception of minimal agency, the remainder of this article is concerned with the second task of drawing connections between this minimal account of agency and existing social ontological work on the possibility of group agency.[3] This discussion is

1 Haslanger likewise aligns herself with those who reject the presumption that "the 'natural' world is devoid of value" (Haslanger 2024a, 25fn2), including Anscombe (1958); Foot (2003); Murdoch (2001); Midgley (1992); Diamond (1991); Rosen (1994); Crary (2011).

2 What I am describing as "bio-social ontology" is closely related to what Rouse calls a "philosophy of nature-culture" (Rouse 2023, 4), which he associates with Tim Ingold and Gisli Palsson's (2013) notion of "biosociality".

3 Length limitations prevent this discussion of the application of existing social ontological work to an enactivist account of minimal agency from being as comprehensive

structured by each of the three enactivist conditions. In section 3, I discuss how Michael Bratman's observation that certain groups are robust with respect to certain changes in participants explains how such groups satisfy the first, individuality condition. In section 4, I appeal to Björn Petersson's work to explore the way in which groups can satisfy the second, interactional asymmetry condition. In section 5, I draw from Philip Pettit and Christian List's account to show how group agents can be said to satisfy the third intrinsic normativity condition. In section 6, I address four objections to the proposed enactivist account of minimal group agency. I come to the conclusion that while no existing social ontological account of group agency satisfies each of the three enactivist conditions, an appropriately modified version of Pettit and List's account could.

Before proceeding, I briefly motivate the application of a minimal conception of agency to human groups.

First, an inquiry into minimal group agency represents a way to respond to skepticism about the possibility of genuine group-level agency. Kirk Ludwig argues that institutions are not agents because they lack the dense, holistic, broadly coherent network of attitudes required to make sense of their having any given belief or desire (Ludwig 2017, 239). Accordingly, Ludwig arrives at the "deflationary" conclusion that institutional doings are fully expressible in terms of the intended actions of an institution's members; talk of corporate agency is merely a "convenience of language" (Ludwig 2017, 218). However, Michael Bratman points out that institutions might not be agents in the way that humans are, and so raises the possibility that there is a more "generic" or minimal conception of agency that is not subject to the strong constraints of Davidsonian holism, and under which some institutions might fall (Bratman 2018; 2022, 176–77). Thus, an investigation into minimal agency is a plausible path to side-stepping a skeptical argument about the possibility of genuine group agency.

Second, an investigation into minimal agency can productively complicate our inquiries into the possibility of group-level moral responsibility. Many social ontologists are concerned with assessing the sense and extent to which we can attribute fully fledged moral agency to corporate entities. For

as it could be. For example, I do not discuss how the proposed enactivist account of minimal group agency relates to Michael Bratman's Frankfurtian conception of minimal group agency (Bratman 2022, 174–78). Henrike Moll and Michael Tomasello's investigations into the social agency of nonhuman great apes also raise important questions about the extent to which group agency requires collective intentionality (Moll and Tomasello, 1480; Papadopoulos, 2023).

example, Gunnar Björnsson and Kendy Hess argue that if a group satisfies the conditions for rational agency, then it must be capable of harboring the (morally equivalent) reactive attitudes indicative of fully-fledged moral agency (Björnsson and Hess 2017, 273, 293). Björnsson and Hess's conditional tracks "the intuitive everyday concept of a social group [that] attributes [to] social groups features like intentions, rights, duties, and responsibility […]" (Thomasson 2019, 4832).

On the one hand, the proposed conception of minimal agency under which corporations might be brought challenges Björnsson and Hess's conditional. If an account of minimal agency takes a unicell as a paradigm case, then it is clear that some systems could qualify as minimal agents without being able to carry the reactive attitudes, as required by full-fledged moral agency. On the other hand, since all agents, including fully fledged moral agents, qualify as minimal agents, showing that a system satisfies the conditions for the latter does not thereby *preclude* the possibility that it is also a moral agent, even if it is the case that satisfying these conditions is insufficient for moral agency. And this is a point that would appear to be granted by Björnsson and Hess, who note that "social pressure can prompt corporate agents to create and fine-tune mechanisms [of guilt or remorse], helping create fully fledged moral agents" (Björnsson and Hess 2017, 293).

So, one motivation for looking at minimal notions of agency is that it productively complicates some intuitively attractive presuppositions regarding the link between group agency and moral responsibility. This thought is in line with a recommendation of Amie L. Thomasson's, who grants that while a social group as a bearer of duties and responsibilities is our "intuitive everyday concept of a social group," social ontologists should nevertheless "think of ourselves as faced with the task of determining what function we want the notion of 'social group' to serve—whether of playing a role in legitimating attributions of group responsibility, of helping identify and correct forms of injustice, or of serving in social scientific prediction and explanation. For different purposes, different notions may be appropriate" (Thomasson 2019, 4845). An investigation into the possibility of minimal group agency isn't the only way to explore different notions of a social group, but such an inquiry is productive in that minimal notions of agency prompts us to explicitly address the question of what needs to be added to minimal agency—a conception that supports prediction and explanation—to secure attributions of moral responsibility. This methodology not only allows us to explore different notions of group agency but also to examine how these different notions might relate to each other.

Third, our interest in institutional design corresponds to an additional motivation for looking at groups vis-à-vis minimal conceptions of agency. Even if it is true that institutions help us accomplish things that would be difficult or impossible to realize independently, Åsa Burman reminds us that "[e]mphasizing the bright side of institutions […] means that the dark side of institutions—illegitimate power relations like oppression and domination—have not been paid much attention" in social ontology (Burman 2023, 77–78). Guiding metaphors of institutional design can be one source of oppression and domination. Max Weber was especially sensitive to the fact that a legal-rational economic order, bound as it is "to the technical and economic conditions of mechanical and machine production," "determines, with overwhelming coercion, the style of life not only of those directly involved in business but of every individual who is born into this mechanism" (Weber 1905, 120). However, other paradigms besides that of the tool or machine can guide our attempts at institutional design. How might we construct our institutions if we were to emphasize properties that characterize living systems, such as resilience, complexity, adaptivity, a sensitivity to precedent, and multi-level co-adaptation? For a persuasive gesture to how the cultivation of natural or complex organizations might represent a neo-organicist alternative to coercive, computational, or Fordist models of institutionality see Michelle Maiese and Robert Hanna's *The Mind-Body Politic* (Maiese and Hanna 2019, 229; see also Gaus 2021; Fard 2024; Haslanger 2024b). Formulating a conception of minimal agency founded on the paradigm case of an organism rather than a machine would be an important first step in exploring both the promises and the perils of such a neo-organicist design program.

Although I briefly return to the point of institutional design in section 5.3, the remainder of this article is primarily concerned with formulating and applying a minimal conception of agency to groups. While much more needs to be said about each of these points, I hope these gestures are sufficient to show that such a project is prima facie well-motivated.

2. THREE ENACTIVIST CONDITIONS FOR MINIMAL AGENCY

According to enactivists, organisms, including unicells, are paradigm cases of minimal agency, although many enactivists remain open to the possibility that social systems and AIs could also qualify as minimal agents. Enactivists identify three conditions for minimal agency (Barandiaran, Rohde, and Di Paolo 2009; see also Stapleton and Froese 2015; Di Paolo, Buhrmann, and Barandiaran 2017): a minimal agent is characterized by (1) "individuality:" the

ability to distinguish itself from its environment because it is an "operationally closed" system, (2) "interactional asymmetry:" being the source of its own activity, and (3) "intrinsic normativity": acting in accordance with intrinsic goals or norms. Conditions (1) and (2) capture what organismic systems share in common with other self-organized systems, such as autocatalytic reactions. Condition (3) is the differentiating feature of minimal agents; unlike tornadoes, only organisms are sensitive to intrinsic norms.

In the remainder of this section, I describe each condition in more detail. The rest of the paper builds on existing work in social ontology to ascertain whether each of the conditions could be satisfied by certain human groups. If so, such groups would appear to qualify as minimal agents.

Condition (1) ("individuality") holds that all agents are "operationally closed" systems.[4] Operational closure, which is related to the traditional notion of autopoiesis, "refers to a network of processes whose *activity* produces and sustains the very elements that constitute the network" (Di Paolo, Buhrmann, and Barandiaran 2017, 112).[5] A closed, self-maintaining system persists in virtue of its ability to continuously regenerate its constituent parts and processes. While organisms are closed in this sense, as each of their parts is refreshed by the operations of other parts, an autocatalytic set of chemical reactions is also operationally closed, because each molecule is produced by a reaction catalyzed by other molecules within the network (Di Paolo, Buhrmann, and Barandiaran 2017, 112; see also Kauffman 1986; Hordijk, Steel, and Kauffman 2013). Thus, operational closure is a necessary but

4 Enactivists use "individuality" to flag a relation of operational closure. However, if the notion of "individuality" is meant to imply the conditions of a fully developed notion of biological individuality in terms of evolutionary role, genidentity, material continuity, and/or physiological integration (Hull, 1976, 1994; Pradeu, 2011; Molter, 2017), then the connection between biological individuality and operational closure needs to be explicitly articulated rather than presupposed. Since this project falls outside the scope of this paper, I take "individuality" as a simple synonym for "operational closure." For a discussion of how an institution might qualify as a genidentical individual (in this more fully developed sense) see Rust (2023b).

5 Autopoietic systems are a special case of operationally closed ("autonomous") systems. While the components of both autopoietic and operationally closed systems produce other components needed by the system, in the case of autopoietic systems, such components necessarily include a boundary or membrane that physically separates the system from its environment whereas some operationally closed systems may not have such a boundary (Thompson 2007, 44). Thus, an ant is both an autopoietic and an operationally closed system whereas an ant colony is just an operationally closed system. A focus on operational closure would seem more appropriate for the present project, given that the task is to apply an enactivist conception of agency to some of our institutions and given that these institutions are not neatly demarcated by physical locations and boundaries (Hindriks 2012, 111fn5).

insufficient condition for minimal agency.

Additionally, closed systems are "thermodynamically open" in the sense that this reflexive, self-maintaining activity depends on a relatively continuous supply of matter and energy to resist entropic pull. In other words, an operationally closed system is precarious in the sense that it will unravel if it does not continuously obtain the requisite resources. Note also that an additional dimension of operational closure is that the parts of the system are relatively integrated or unified. Such systems "have components that integrate and relations among these components [are] such that the unity attains coherence" (Varela 1979, 53).

I turn now to condition 2 ("interactional asymmetry"), which maintains that minimal agents are "a source of activity, not merely a passive sufferer of the effects of external forces" (Barandiaran, Rohde, and Di Paolo 2009, 370). The interactional asymmetry condition is arguably the least worked out of enactivists' three conditions for minimal agency.[6] Still, some guiding generalizations can be made about the condition's significance. The enactivist idea that there could be activity without agency is deeply continuous with an "anti-passivist" or "anti-Humean" ontology that maintains that some of the world's inventory possesses genuine power, even if only a subset of these entities also qualify as agents: "it is not just sentient agents who engage in activity. Chemical interactions count as activity too, for example, as does any other instance of causation" (Groff 2021, 9883). In other words, the fact that chemical elements carry fundamentally natural "powers" (Molnar, 2003), "potencies" (Bird, 2010), or "capacities" (Groff, 2021) exemplifies interactional asymmetric activity while showing how activity is possible without agency. For the purposes of this paper, I will treat the interactional asymmetry condition as, following the causal powers account, flagging the fact that at least some things, including some non-agents, have the capacity to be "genuinely, irreducibly, non-metaphorically dynamic" (Groff 2021, 9884).[7]

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6 Di Paolo, Buhrmann, and Barandiaran note that "[i]t is far from trivial, however, to give an operational definition of what exactly we mean by interactional asymmetry" and go on to supply three different glosses of the condition (2017, 117). For example, one measure of interactional asymmetry might be derived from the measurable, relative capacity of the system to produce work by channeling energy flows (relative to the environment). Strangely, while enactivists flag the possibility of a system that satisfies the second, interactive asymmetry condition without satisfying the third, intrinsic normativity condition, they do not identify an example of such a system; all their examples of interactive asymmetry are systems that would also satisfy the third, intrinsic normativity condition.

7 I note that because interactional asymmetry (condition 2) would seem to depend on the precarity implied by organizational closure (condition 1), enactivists think that

If systems can satisfy the interactional asymmetry condition without qualifying as minimal agents (Di Paolo, Buhrmann, and Barandiaran 2017, 128), then the satisfaction of condition 3—intrinsic normativity—flags the key, differentiating feature of minimal agency. "It is not enough that a self-individuating individual be itself the active source of" its behavior. Rather, minimal agents must "actively modulate their interactions with respect to norms" (Di Paolo, Buhrmann, and Barandiaran 2017, 120).

Enactivists maintain that these norms are not extrinsic in two senses. First, the claim that there are intrinsic biological norms is in contrast to a view like John Searle's, who maintains that non-human biological functions and norms are observer-relative in the sense that they only exist "relative to a system of values that we hold" (Searle 1995, 15). Searle and the enactivists differ as to the outcome of a thought experiment in which we are to assess whether or not such normativity remains upon subtracting human observers from the universe. According to Searle, normative attributions to most of the biological world are derived from human intentionality. But according to the enactivist, bats perceive and approach fruit as a meaningful affordance, irrespective of human systems of value.

Second, such intrinsic normativity is not reducible to function, as described by the selected effect account (Wright, 1976; Neander, 1991; Millikan, 1989). Even if it is the case that most intrinsic norms also have functional effects, there is no contradiction in the idea of a maladaptive intrinsic norm. Accordingly, enactivists explicitly reject attempts to ground organismic normativity in "adaptive function, as in neo-Darwinism" (Thompson 2007, 153; see also McLaughlin 2000; Weber and Varela 2002, 100; Di Paolo, Rohde, and Di Jaegher 2010, 46; Bickhard 2019, 234–35; Gambarotto 2023). Such intrinsic norms are grounded, not in a process of natural selection, but in a variant of the self-maintaining structure described by condition 1.

As described in more detail in section 5, enactivists are divided as to how to best characterize the intrinsic normativity that underwrites attributions of minimal agency. On the one hand, most enactivists adopt a "protentive" or

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condition 1 is more fundamental than condition 2: the "individuality condition appears as a precondition for the other two" conditions (Barandiaran, Rohde, and Di Paolo 2009, 373). However, as discussed in section 4, if one embraces a non-Humean, powers-based fundamental ontology, some fundamental systems, such as subatomic particles, are active but would not qualify as closed, precarious systems, so inverting the posited priority. Rather than adjudicating this dispute, the purposes of this paper are such that I can focus on a point of agreement between power-theorists and enactivists—namely, that there are systems capable of activity that do not qualify as minimal agents.

forward-looking ideal type of intrinsic normativity, so that minimal agents are, in a Davidsonian mode, necessarily instrumentally oriented to a future goal, such as survival. Ezequiel Di Paolo, Marieke Rohde, and Hanne De Jaegher argue that "the struggle for continuing autopoiesis—in other words, survival—is at the core of intrinsic teleology and the capacity of sense-making" and, further, that there are "essential differences between the claim that what affects an organism's autopoietic organization is of value and the claim that values are built-in because they benefit survival and hence have been selected for" (Di Paolo, Rohde and De Jaegher 2010, 46). On the other hand, radical enactivists and others adopt a "retentive" or "precedential" ideal type of intrinsic normativity, oriented to a history of response (Rust, 2022).[8] Such "Darwinian creatures" (Dennett 1995, 373–74) perseverate on initially random responses to a situation; these habits are, in turn, tested against nature, although the normative force of such habits doesn't depend on such selection. Hybrid positions have also been taken up. As discussed below, I think there are good reasons for thinking that the retentive conception of intrinsic normativity is more appropriate to an account of minimal agency because, among other reasons, it is less cognitively demanding (Rust, 2023a).

In sections 3, 4, and 5, I draw on existing social ontological discussions to consider how a group agent could satisfy each of the three enactivist conditions.

3. ENACTIVIST CONDITION 1 AS APPLIED TO GROUPS: OPERATIONAL CLOSURE

The first enactivist condition of minimal agency is operational closure. A closed, self-maintaining system is able to continuously regenerate its component processes via a relatively continuous influx of energy or nutrition.

Many human groups and institutions would seem to straightforwardly satisfy this condition because, in Bratman's words, they are robust with respect to certain changes in participants (Bratman 2022, 172; see also List and Pettit 2011, 31; Ludwig 2017, 5). It is not just that such groups persist *in spite* of a change in membership, but that their ability to persist over long periods of time depends on their capacity to fill key roles as members die or otherwise leave the institution. Such groups or institutions are also thermodynamically open, insofar as their membership and supporting infrastructure require a continuous supply of energy. Finally, as discussed in section 5.3, such groups will tend to

8 Husserl's and Merleau-Ponty's distinction between "protension" and "retention" (Merleau-Ponty 2010, 439) was taken up by Hans Jonas (1966, 86), who goes on to reject the retentive account.

be relatively unified in purpose or "rational" (List and Pettit 2011, 24–25).

4. ENACTIVIST CONDITION 2 AS APPLIED TO GROUPS: INTERACTIONAL ASYMMETRY

The second enactivist condition for minimal agency, interactional asymmetry, holds that minimal agents must be bearers of genuine, irreducible causal powers. As discussed in section 2, this is an anti-passivist, anti-Humean view which casts at least a subset of the world's inventory as genuinely, productively causal, where "causality involves a display of powers [...] so as to effect changes in other things" (Groff 2011, 297).[9]

Two increasingly strong points can be made about such bearers of causal power. First, a system can have causal power without having intentions. A pea aphid is the source of its own activity but may not be capable of harboring intentions. Second, a system can have causal power without even qualifying as an agent, intentional or otherwise. Lithium has the power to produce hydrogen

9 Nicolas Luhmann's social systems theory appears relevant to this paper's attempt to apply enactivism to collectivities. Luhmann's analysis of social systems begins with the notion of autopoiesis, which is closely related to the first, operational closure condition of the enactivist account of minimal agency. However, as argued by Dave Elder-Vass, Luhmann's account and the enactivist account, when directly applied to the social sphere, are in fact "conflicting paradigms" (Elder-Vass 2007, 408). This conflict becomes apparent when considering the implications of enactivists' second condition, interactional asymmetry, for Luhmann's methodological program. As we have seen, interactional asymmetry maintains that agents are genuinely, materially productive. However, Luhmann sees social systems as satisfying autopoiesis *through communication,* meaning that abstract systems of meaning, rather than embodied and embedded material systems, are subject to processes of self-maintenance (autopoiesis). However, such Luhmannian systems are, if not causally inert, isolated from the biologically influenced concerns that partially animate our social interactions. As expressed by Elder-Vass: "Luhmann does recognize that autopoietic systems are ontologically dependent upon their material substrata but argues that this is irrelevant to their autopoiesis. [...] It is hard to see how he could make such an argument. Humans do indeed produce communications, and in doing so they are influenced not only by previous communications but also by their biological nature (consider the communication 'I need something to eat') and by their previous non-communicative experiences of the world (consider 'we need flood defenses') or indeed their previous non-communicative interactions with other people (consider 'please don't hit me')" (Elder-Vass 2007, 423). In the terms of the present essay, even if Luhmann's account satisfies the first, operational closure condition (because systems of communication are self-perpetuating), the fact that he transposes autopoiesis from the material domain to the communicative domain, where "social systems are to be seen not as systems of material interactions between human beings but as evolving systems of concepts" (Elder-Vass 2007, 422–23), means that his account either struggles to satisfy the second, interactional asymmetry condition, or is at least conspicuously silent on how it would do so.

under certain conditions, but this activity is not an action because the element is not an agent.

Before proceeding, it will be helpful to stipulate how I am using key terms (Figure 1). *Agents*, including both intentional agents and minimal agents incapable of carrying intentions, are capable of *action*. Thus, both human beings and pea aphids are agents capable of action, even if only the former is a full-blown intentional agent. Furthermore, while intentional or non-intentional *action* is a type of *activity*, the interactive asymmetry condition entails that there are some kinds of activities that are not initiated by an agent. This is because, although having power is a necessary condition for minimal agency under the interactional asymmetry condition, it is not sufficient; satisfaction of the third, intrinsic normativity condition is also required for agency.

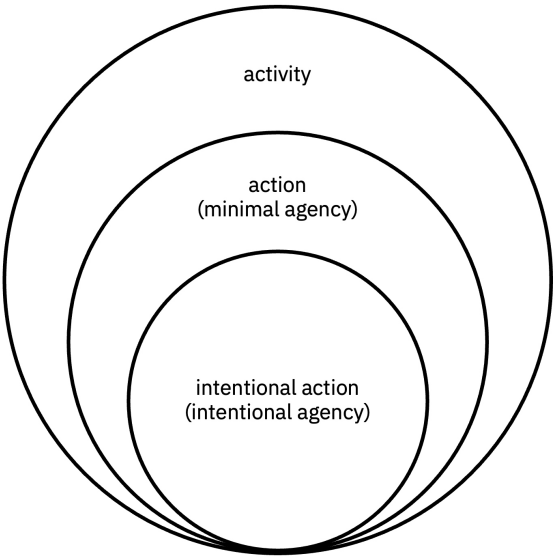

Figure 1. Systems capable of activity satisfy the second, interactional asymmetry condition as described by enactivists. Minimal agents, including intentional agents, must also satisfy the third, intrinsic normativity condition.

I take it for granted that some human groups have genuine abilities or powers—"abilities to stage Olympic Games, wage wars, raise taxes, hold elections, establish international treaties, conduct strikes, form monetary unions, and so on" (Lawson 2013, 298).[10] Additionally, many social ontologists maintain that these groups qualify as collective agents, meaning their activities count as actions. But under what conditions is such action possible? On a Davidsonian view, action is a function of intention, so that group activity requires group intentionality. However, if minimal agency can be found across the biological sphere, and if some organisms are incapable of full-blown intentionality, then intentionality cannot be a necessary condition for agency, much less activity (even if it is a necessary condition for some kinds of agency). For this reason, Haslanger recommends that "[s]ocial ontology should include activities and relationships that do not depend on collective intentionality" (Haslanger 2024a, 29).

In this section, I consider a way in which this Davidsonian condition has already been challenged in the social ontology literature. Petersson (2007) follows power theorists George Molnar (1999) and Susan Hurley (2005) in arguing for a broad conception of activity that is inclusive of plants, insect swarms, and even chemicals. A chemical solution can be said to dynamically bring about certain effects, as when acid manifests the power to corrode iron in virtue of its microstructural dispositions. In inviting us to conceive of chemical interactions in terms of powers, Petersson is explicitly working within an Aristotelian tradition that construes things as capable of activity. And since acid has the power to corrode iron unintentionally, Petersson argues that there might be an analogous sense in which a group of human agents are primed for activity even in the absence of a joint intention to do so. For example, members of a football team might simply think about playing in a way that disposes the team to, say, play defensively without also forming the (joint) intention to so play, which is a sophisticated, higher-order thought. Accordingly, this would be collective activity without collective intentionality—"a collective activity does not require shared preferences, goals, or intentions" (Petersson 2007, 147).

When Petersson's argument is transposed into enactivist terms, we find a partial vindication of his conclusion. Systems that satisfy the interactional asymmetry condition are not limited to intentional agents; insect swarms and

10 That I am taking it for granted that groups have genuine powers should not imply that this claim is uncontested. Tobias Hansson Wahlberg argues that the positing of such group-level activity runs afoul of the causal-exclusion problem: "*any* putative, intrinsic social power at the level of a social whole is arguably redundant given the abilities and interactions of the interrelated components" (Wahlberg 2020, 1364).

plants are capable of activity and even action but may not be intentional. This is a point that can be granted by both Petersson and the enactivist. Where they diverge concerns the extension of the notion of agency. While both Petersson and the enactivist concur that some kinds of non-organismic systems, such as chemical elements, are capable of activity, Petersson maintains that such chemical systems are also agents, like insect swarms and plants: "To regard an entity as having causal powers or dispositions is to view that entity as a *causal agent.* […] Without resorting to anthropomorphism, we might even explicitly say about a chemical, that it acts upon a certain substance by making it corrode or dissolve, and we may point to explanatory conditions as being *responsible* for their effects." (Petersson 2007, 148, 149)

Petersson's "weak notion of agency, which is not intentional under any description" (Petersson 2007, 149), is even broader than that of the enactivists' minimal notion of agency. This is because, in enactivist terms, while Peterssonian causal agents need only satisfy the interactive asymmetry condition, enactivist minimal agents must also satisfy the third, intrinsic normativity condition.

From the enactivist point of view, if Petersson is concerned to draw social ontologists' attention to the possibility of non-intentional agency in groups, this comparison between the actions of such groups and the activity of chemical solutions is one step too far. An enactivist social ontologist could arrive at the same conclusion by comparing such groups to non-intentional organisms, both of whom would qualify as minimal agents under the enactivist conditions.[11] Perhaps, then, the activity of Pettersson's football team qualifies as the actions of a (non-intentional) minimal agent because the team is bound by intrinsic norms. This is the thought explored in the next section.

5. ENACTIVIST CONDITION (3) AS APPLIED TO GROUPS: INTRINSIC NORMATIVITY

In sections 3 and 4, I argued that some human groups satisfy the first two of the three enactivist conditions for minimal agency. Such groups are organizationally closed insofar as they can survive changes in group membership, and they are capable of genuine activity even if that activity is, following Petersson, not always sourced in the intentionality of its

11 Indeed, while Petersson founds his account of causal agency on Hurley's conception of a unit of activity, he departs from her account precisely at this point: "Assignments of purely causal agency do not presuppose that any goals can be assigned to the agent in question. All causal agents are not units of activity in Hurley's sense" (Petersson 2007, 148).

members. However, organizational closure (condition 1) and interactionally asymmetrical activity (condition 2) are not sufficient for minimal agency—"we are still missing an extra ingredient in order to call it an agent" (Barandiaran, Rohde, and Di Paolo 2009, 372). Accordingly, when "considering agency we presuppose that the interaction is not random or arbitrary but makes some 'sense' for the agent itself. Agents have *goals* or *norms* according to which they are acting […]" (Barandiaran, Rohde, and Di Paolo 2009, 372). As discussed above, such normativity is intrinsic, both in the sense that it is not imposed on the system by human observers and in the sense that it is not grounded in the selected effects of an evolutionary process. Rather, such intrinsic normativity is, according to the enactivist, grounded in a particular form of self-maintaining organization.

5.1. Two enactivist ideal-types of intrinsic normativity

As noted above, this third condition of minimal agency is the site of a juncture within enactivist thought, as different theorists work with importantly different ideal types of intrinsic normativity. On the one hand, most enactivists subscribe to a "proscriptive" or forward-looking conception of intrinsic normativity, centered around a sensitivity to a persistence or survival goal. On the other hand, some enactivists, including radical enactivists, articulate a "retentive," backward-looking, or precedential conception of intrinsic normativity. I briefly describe these competing conceptions of intrinsic normativity[12] before directly addressing the question of whether some groups satisfy this condition of minimal agency under either the protentive account (section 5.2) or the retentive account (section 5.3).

Protentive normativity takes Davidsonian means-end rationality as its paradigm, wherein we attempt to realize a further, forward-looking goal or preference by way of a basic action—such as illuminating a room by flipping a light switch. Because such normativity needs to apply across the biological sphere, most enactivists construe the normativity constitutive of minimal agency in terms of a protentive orientation to a survival goal. Evan Thompson, for example, maintains that intrinsic or "immanent purposiveness" is grounded in a forward-looking, self-persistence goal: "For the enactive approach, a system is cognitive when its behaviour is governed by the norm of the system's own

12 Hybrid positions have also been articulated. For example, Di Paolo, Buhrmann, and Barandiaran's (2017) sensorimotor account has both protentive and retentive dimensions. However, as this account casts the protentive conception of intrinsic normativity as more fundamental, it is effectively a variant of the protentive account of minimal agency.

continued existence and flourishing" (Thompson 2022, 238; see also Di Paolo, Rohde, and De Jaegher 2010, 46).

One difficulty with the protentive account of intrinsic normativity is that, as a differentiating condition of an account of minimal agency that is supposed to apply across the biological world, it is too cognitively demanding. Bacteria presumably lack the cognitive capacities to instrumentally comport themselves to the further goals that might be realized by their activity or, if they do have the capacity for instrumentally motivated action, lack the kind of reflexivity required for their own persistence to be included among those further goals. Even if a bacterium might run rather than tumble in order to secure the further goal of feeding itself, doing so in order to realize the goal of maintaining itself implies a degree of self-awareness that likely falls outside the "cognitive horizon" of such creatures (Levin and Dennett, 2020). Of course, we can take the intentional stance toward bacteria because bacterial behaviors and traits are shaped by an evolutionary process. However, as discussed above, the functional attributions that such a stance permits remain *extrinsic*.

If the protentive account of intrinsic normativity is forward-looking, the retentive account is backward-looking in the sense that the norms to which the agent is sensitive are a function of what it has done in the past under similar circumstances. Such model-free norms can, when coupled with a natural selection process, nevertheless give rise to a complex behavioral repertoire, even if it remains the case that, from the internal point of view, there is no further goal the system might be trying to realize in acting as it acted in the past under similar circumstances. According to radical enactivists' Developmental-Explanatory-Thesis, an organism's habitual norms are "grounded in, shaped by, and explained by nothing more, or other, than the history of an organism's previous interactions. […] A prolonged history of interactive encounters is the basis of creatures' current embodied tendencies, know-how, and skills" (Hutto and Myin 2012, 8–9). Likewise for Joshua Rust's precedential account of intrinsic normativity (Rust, 2022, 2023a, 2024c). What was an initially stochastic response to a novel situation can serve as precedent when that situation is reencountered. Of course, as a population randomly responds to a novel situation in a variety of different ways, most of these response types might result in death; precedential norms are culled by natural selection.

The retentive account of intrinsic normativity is less cognitively demanding than the protentive account, insofar as retentive norms facilitate a "generate and test" approach to competence building. Such Darwinian creatures are also biologically ubiquitous. Aaron Novick and Milton Weiner famously observed that genetically identical *E. coli* stochastically responded in

different ways to a lactose imitate (Novick and Weiner, 1957). Moreover, these responses were sticky or perseverative in the sense that the initial response, while random, predicted subsequent responses. Remarkably, these self-engendered habits were epigenetically transmitted to subsequent generations of bacteria via methylation (Zimmer 2008, 48–49), facilitating the Baldwin effect.

More generally, biologists have, over the past couple of decades, become increasingly attuned to the possibility of what they call "personality" or "behavioral individuality"—perseverative and predictable among-individual differences in the behavior of genetically identical conspecifics (Rust, 2024a). For example, highly inbred mice differ markedly in their tendency to exhibit exploratory behavior when placed in a maze-like environment (Lewejohann et al., 2011; Freund et al., 2013). However, if a given mouse initially responds to such an environment by, for example, exploring it, it will tend to respond in the same way to similar environments over the course of its life cycle. Klaus Gärtner estimates that only 20–30% of behavioral variation in 30 years of inbreeding experiments on laboratory mice and rats can be explained by environmental and genetic factors (Gärtner, 1990).

Note that this capacity to perseverate on an initially stochastic response to a given situation is arguably unique to organismic systems; Bernard cells, candle flames, or tornadoes may exhibit random fluctuations in structure but they have no internal mechanism by which to increase the probability of a certain pattern of fluctuation under a given set of circumstances. Thus, while enactivists and other liberal naturalists are willing to describe even a unicell's sensitivity to precedent in unapologetically normative terms, even bald naturalists—naturalists who are skeptical of the idea that simple organisms could be sensitive to intrinsic norms—might nevertheless concede that the capacity to perseverate in this way is a marker of a correspondingly naturalized conception of minimal agency.

According to enactivists, intrinsic normativity is the differentiating condition of minimal agency and in this subsection I canvassed two enactivist ideal types of intrinsic normativity. In sections 5.2 and 5.3 respectively, I will discuss the relevance of both the protentive and retentive varieties of minimal agency to a bio-social ontological account of group agency. However, I shall focus on the retentive account because the protentive account would seem too cognitively demanding to qualify as a condition for minimal agency.

5.2. Groups as minimal agents protentively oriented to goals

To my knowledge, no social ontologist has made orientation to a self-persistence goal a condition for group agency.

However, structural functionalism is helpfully cast as an attempt to apply conceptions of minimal agency founded on a protentive survival imperative to large-scale institutions or groups (Rust, 2023a). Philip Selznick, for example, held that while most institutions are comparable to "an *expendable tool,* a rational instrument engineered to do a job" (Selznick 1957, 5), a subset of institutions are better conceived as "adaptive 'organism[s]' […] deemed to have basic needs, essentially related to self-maintenance" (Selznick 1948, 48).

Sheldon Messinger documented the transformation of the Townsend Organization from a political interest group, whose efforts to secure pensions for the elderly were made irrelevant by the passage of national U.S. social security in 1935, to a sales and recreational organization. Because the Townsend Organization appeared animated by the intrinsically purposive goal of "*maintaining the organizational structure as such,* even at the loss of the organization's central mission" (Messinger 1955, 10), Messinger concluded that this organization was akin to an organism because it satisfies the conditions of minimal agency on the protentive account.[13]

However, conflict and strategic contingency theorists argued that the structural functionalist appeal to a system-level survival goal is anthropomorphic and, in any case, not required to explain the kind of adaptivity exemplified by the Townsend Organization. Since key stakeholders have vested interests in the organization's persistence, this is sufficient to explain its change in orientation (Ancona et al. 2004, sec. 9).

Enactivists themselves have only occasionally applied their accounts of protentive minimal agency to large-scale human institutions or groups (Protevi, 2009; Di Paolo, 2010; Stapleton and Froese, 2015). Their reluctance to extend their accounts to the social sphere may be because most enactivists endorse a protentive account of intrinsic normativity, and the possibility of a "social lifeform" (Di Paolo 2010, 66) oriented only to its self-persistence raises pressing ethical considerations about the desirability of their enactment (Stapleton and Froese 2015, 227–28; Di Paolo 2010, 66). For example, Varela notes that he "refus[es] to apply autopoiesis to the social plane […] for political reasons," including the "slippages toward fascism" that he thinks such inquiries tend to engender (as cited in Protevi 2009). In a similar vein, Di Paolo maintains that self-maintenance or "autopoiesis is a ruthless concept." Just as "the cells in

13 Note that this is a reconstruction of Messinger's argument in enactivist terms.

our bodies are the perfect slaves. […] Nothing would be better for a strictly autopoietic company than to quickly install its local version of Fordism and promote consumerism […]" (Di Paolo 2010, 44).[14] Students of history are appropriately anxious about an organicist theory of the state or corporation that licenses talk of a survival imperative while simultaneously reducing its members to mere organs.[15]

In summary, there are at least three obstacles to the application of a notion of minimal agency grounded in a protentive account of intrinsic agency to social groups or institutions. First, if an account of minimal agency is supposed to cover at least the entirety of the biological sphere, it is not clear that, e.g., unicells are capable of organizing their activities around an intrinsic protentive survival imperative. Second, a group-level survival goal is not necessary to explain the adaptivity of institutions like the Townsend Organization. Third, even if it is possible that some groups or institutions might qualify as minimal agents protentively oriented to a survival goal, enactivists have expressed important moral reservations about the desirability of such organicist organizations.

Without implying that there is not more to be said in defense of the idea that some human groups or institutions might qualify as minimal agents on a protentive conception, these obstacles are at least sufficiently daunting to motivate an investigation into the possibility that groups might qualify as minimal agents on the alternative, retentive account of intrinsic normativity.

5.3. Groups as minimal agents retentively oriented to norms

We have seen that all organisms have the capacity to treat as precedential what might be an initially random response to a given set of circumstances. Genetically identical mice respond in different ways to a novel maze-like environment, and such responses strongly predict how the mouse will behave in future such encounters. Can we find this retentive normative profile in some of our human groups and institutions? In what follows, I argue that List and Pettit have articulated an account of group agency that overlaps with, but is not perfectly correspondent to the retentive enactivist account described here.

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14 However, Di Paolo also thinks that "higher" organisms "sublate" or "overcome" their autopoiesis or metabolism in becoming sensorimotor agents (Di Paolo 2010, 65).

15 This normative point is relevant to considerations of institutional design raised in the introduction. In the next section, I return to the question of whether an enactivist account of minimal agency, as applied to the social sphere, necessarily implies such "slippages toward fascism."

List and Pettit's overall expository strategy tracks the rough trajectory of the one endorsed in this paper: they begin their book by outlining conditions for a "basic account of agency" and then use that account to support attributions of basic agency to social groups. However, their proposed account of minimal agency differs from the enactivist account canvassed here insofar as their paradigm case of minimal agency is, not a unicell, but a simple robot that is capable of recognizing the orientation of cylinders and motivated to place fallen cylinders on their ends. They assume the appropriateness of attributing intentional attitudes to such a device, however lacking in extent, detail, and scope (List and Pettit 2011, 21–22), and this focus on such attitudes inflects their characterization of minimal agency. For example, whereas enactivists require that the operationally closed structure of an organism-agent is relatively unified, List and Pettit analogously require that the propositional attitudes of even a simple robotic agent are "rational" or coherent (List and Pettit 2011, 24–25). Thus, if a social group is to qualify as an agent, List and Pettit maintain that the "group must ensure that whatever beliefs and desires it comes to hold, say on the basis of its members' beliefs and desires, form a coherent whole" (List and Pettit 2011, 37). Additionally, since this robot is not a self-maintaining system, List and Pettit do not bake operational closure into their account of minimal agency, although, when they turn their attention to agency in the social sphere, they focus on groups that arguably satisfy the conditions for operational closure because they have an "identity that can survive changes of membership" (List and Pettit 2011, 31).

While the accounts differ in what they take to be a paradigm case of minimal agency, in what follows I document a key point of overlap: both contend, as on the precedential or retentive enactivist account of minimal agency, that sensitivity to a history of how the system behaved in the past under similar situations is sufficient to maintain the coherence or unity-of-purpose characteristic of agency, including group-level agency. As for the remaining points of divergence, I simply assume the possibility of some reconciliation between the two accounts of minimal agency.

If the attitudes of such minimal agents must be relatively rational or coherent, List and Pettit build their account of group agency around an attempt to solve a problem raised by what they call the "impossibility theorem." The impossibility theorem, which is analogous to Arrow's theorem (List and Pettit 2011, 50), purports to show that there is no aggregation method—e.g., majority rule—that builds a rational or coherent set of group-level attitudes from rational sets of differently oriented member attitudes while also satisfying four theoretical desiderata—universal domain, collective rationality,

anonymity, and systematicity. In this way, the impossibility theorem gives us prima facie grounds for denying the possibility of group-level consistency and, consequently, group-level agency that would also preserve the agency of the group's constituent members.

Having set up the problem by way of the impossibility theorem, List and Pettit dedicate their efforts to the problem's resolution. If the four desiderata logically preclude the possibility of group-level agency, how do they sidestep the impossibility result? By strategically relaxing (at least) one of the desiderata—namely, systematicity. Where the anonymity desideratum requires that each individual's set of attitudes is taken into account in generating the attitudes of the group agent, systematicity requires that each attitude in each of those sets is given equal weight, as opposed to prioritizing some propositions over others (List and Pettit 2011, 57). While ensuring that no individual's set of attitudes is ignored (maintaining anonymity), in relaxing systematicity we make it possible to disregard some attitudes within each of those sets. This prioritization makes it possible, in principle, to achieve coherence or integrity at the group level (List and Pettit 2011, 56).

So, group-level agency is possible as long as members adopt a priority procedure that designates some attitudes in their set as having a higher priority than others if adopted by the group-agent under an aggregation method. What, exactly, is the priority procedure that would determine which members' attitudes would be so de-prioritized? List and Pettit describe a "sequential priority procedure" by which propositions are ranked vis-à-vis other propositions and they articulate two viable interpretations of such a procedure. The first interpretation sequences propositions "in order of importance" and the second sequences propositions "by temporal order" (List 2004, 499). A "premise-based" priority procedure is an example of the former, because premises are cast as more important or basic than conclusions irrespective of the order of presentation. However, while most of List and Pettit's examples are almost exclusively premise-based, they remain open to the possibility that priority designations could also result from "precedent-based decision procedures under which prior decisions constrain posterior ones, such as in judicial contexts" (List and Pettit 2011, 61).

Here, then, is the key connection between List and Pettit's account of group agency and the retentive enactivist account presented here. If, on the retentive account, minimal agents are constrained by a history of response, it is precisely this sensitivity to precedent that, on List and Pettit's view, prevents such group agents from dissembling. Such a group agent enacts a temporally inflected priority procedure whereby "the agent can resolve an inconsistency

between his or her disposition on a new proposition and previously accepted propositions" (List 2004, 500).

Talk of "accepted propositions" might seem inappropriate when it comes to simple robots or unicells, but List and Pettit's distinction between merely "rational agents" and "reasoning agents" makes it clear we are to understand such attributions with a sufficiently light touch: a robot's simple attitudes may be rational (i.e., coherent), even if they "leave the robot incapable of reasoning" (List and Pettit 2011, 21).[16] Thus, even if a rat that previously explored a maze-like environment feels presently disinclined to do so, if it "resolve[s] an inconsistency" by doing what it had done, it does so, not by addressing a logical contradiction, but a practical one, by allowing its prior attitudes to settle the matter of how to proceed.[17] The difference between the rat and a group agent is that these practical contradictions are resolved, not just by an appeal to the agent's history of response, but, in the case of group agency, to the temporal order in which the preferences (and judgments) of the individuals that comprise the group agent were endorsed as the group's by way of an aggregation method.[18] And in both cases, present practical conflicts are resolved by privileging earlier attitudes over present attitudes.

In summary, minimal agents that are subject to retentive norms are able to resolve practical contradictions as they arise by privileging previously accepted dispositions (on a proposition) over a novel, mutually incompatible one. If List and Pettit are correct, this is sufficient to account for the rationality or coherence indicative of group-level agency, despite the panoply of attitudes found in the various individuals that comprise it.

While the connection is not drawn by List and Pettit, I think that Ronald Dworkin's conception of the "true political community" illustrates and concretizes how a group agent could emerge vis-à-vis a precedent-based priority procedure. Such a community would qualify as a minimal agent on the retentive enactivist account discussed here.

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16 They write that "an agent counts as reasoning, not just rational, only if it is able to form not only beliefs *in* propositions—that is, object-language beliefs—but also beliefs *about* propositions—that is, metalanguage beliefs" (List and Pettit 2011, 63).

17 Moreover, because only reasoning (as opposed to merely rational) agents would seem to be able to enact a premise-based priority procedure, a precedent-based priority procedure would seem more evolutionarily rudimentary.

18 There is a relatively tight analogy between one's prior intentions or attitudes and attitudes of one's fellow participants of a group agent that have been taken up via an aggregation method insofar as both kinds of attitude settle the matter of how to proceed without having to relitigate (Roth, 2004) .

Many judicial systems are such that what they have done in the past remains relevant to what they ought to do now. Or, as Dworkin puts it, "[h]istory matters in a law as integrity" (Dworkin 1986, 227).[19] If minimal agents are capable of treating initially stochastic behavior as a general norm against which to preclude incompatible behavior, and if the true political community is normatively bound by its own history of response, then such communities would appear to qualify as minimal agents. Surprisingly, this is an implication Dworkin unflinchingly draws about such communities:

> My account of political integrity takes […] personification […] seriously, as if a political community really were some special kind of entity distinct from the actual people who are its citizens. Worse, it attributes moral agency and responsibility to this distinct entity. For when I speak of the community being faithful to its own principles […] I mean that the community has its own principles it can itself honor or dishonor, that it can act in good or bad faith, with integrity or hypocritically, just as people can. (Dworkin 1986, 168)

A true political community governed by Dworkinian integrity is retentively "faithful to its own principles," rather than being (just) protentively oriented towards the goals or agendas of its members. As such, the true political community qualifies as a minimal agent (or, as Dworkin misleadingly puts it, a "person") on the retentive account.[20]

Before concluding, I want to highlight several virtues the retentive account of minimal group agency has over the protentive account. First, the protentive account implausibly implied that a unicell was capable of instrumentally orienting itself around a survival goal. The retentive account carries no such implication. The intrinsic norms to which unicells are subject need not be forward-looking (even if natural selection ensures that we are able to take the intentional stance to their activities), and there is ample empirical evidence that unicells exhibit the behavioral profile that corresponds to a precedent-based priority procedure (e.g., Novick and Weiner 1957).

19 Political integrity stands in contrast with the doctrine of legal pragmatism, wherein the goodness of a judicial decision is entirely premised on forward-looking, goal-directed considerations: legal pragmatist "judges do and should make whatever decisions seem to them best for the community's future, not counting any form of consistency with the past as valuable for its own sake" (Dworkin 1986, 95).

20 For an extended discussion of the way in which Dworkins' true political community satisfies the retentive or precedential account of minimal group agency see (Rust 2023a, sec. 6.1).

Second, the retentive account is capable of accounting for group agents that would suffer extinction over the loss of their traditions. This is mysterious on the protentive account, which grounds the intrinsic normativity characteristic of minimal agency in a self-persistence goal.

Third, recall that the protentive account could not unambiguously explain the adaptivity of institutions like the Townsend Organization, since the capacity to endure also benefits key stakeholders. However, retentive accounts, such as Dworkin's, really do seem to describe a unique motivational profile of, say, a well-functioning judiciary bound by precedential norms—norms that might run against the self-interest of some members. Indeed, if for-profit corporations are not sufficiently bound by a history of response (e.g., by a "corporate culture"), they would not qualify as group-agents on the retentive account. For this reason, and against Messinger's (1955) conclusion, the Townsend Organization would also not qualify as a group agent.

Fourth, and perhaps most surprisingly, the appeal to a precedent-based priority procedure has implications for institutional design—it helps resolve important worries about the desirability of organizations that would seem to have a life of their own. The impossibility theorem addressed by List and Pettit entails that group-level agency precludes the agency of its members and vice versa. The idea that agency at, e.g., the state level crowds out agency at the membership level, might be called the "agent-exclusion principle" (Rust, 2024b, 2023a), which is a tacit premise of much early 20th-century organicist thinking. Arthur Lovejoy, writing during the "tragic spectacle of Europe" in 1941, reflects on "the conditioning of the mind of individuals to think of themselves (to a degree perhaps unprecedented in history) as *mere* members of *das Ganze* [the whole], as 'tools or organs' of the national State—as existing *um des Ganzen willen* [for the sake of the whole]—and as finding the interest and value of their existence in the realization of the ends of the State, which are by no means merely the summation of the private ends even of all of its members" (Lovejoy 1941, 273). However, if List and Pettit are correct, and there are conditions under which the impossibility theorem does not hold, then multi-level agential copresence is possible and the agent-exclusion principle is falsified. Thus, talk of group agency need not necessarily come at the expense of a commitment to liberalism, even if their reconciliation proves difficult to realize in practice. As discussed in more detail in (Rust, 2024b), this solution to the agent-exclusion problem is covered over by protentive characterizations of intrinsic normativity that would cash out the intrinsic normativity of group agency in terms of a group- or nation-level survival goal.

6. OBJECTIONS TO THE PROPOSED ENACTIVIST ACCOUNT OF GROUP-LEVEL MINIMAL AGENCY

I have argued that a group could qualify as a non-intentional, minimal agent if it satisfies three enactivist conditions—operational closure, interactive asymmetry, and intrinsic normativity. In this section, I briefly address four objections that might be raised about the proposed account. The first three objections are narrowly focused on the retentive account of the intrinsic normativity condition, and the fourth objection broadly concerns the very idea of minimal collective agency.[21]

1. Retentive norms and the possibility of failure. One advantage of the protentive account of intrinsic normativity is that such agents clearly are *able to fail* vis-a-vis the further goal to which their basic actions are oriented (survival, reward, etc.) and many theorists see the possibility of failure as conceptually linked to the notion of normativity.[22] However, if there are minimal agents whose behaviors are not protentively oriented to a further or future goal—agents that are only retentively responsive to what they did in the past under similar circumstances—in what sense can they be said to fail?[23]

The retentive account of agency should be taken as an invitation to stress a different, less restrictive dimension of normativity than the possibility of failure. The retentive account describes a process by which the "is" of an initially stochastic response to a given situation comes to exemplify the system's "ought" of a general policy, to be enacted the next time that system finds itself in a similar situation. This is a core feature of Charles Peirce's account of habit: "For every habit has, or is, a general law. Whatever is truly general refers to the indefinite future; for the past contains only a certain collection of such

21 I am grateful to an anonymous peer reviewer for raising these points. A variant of the fourth objection was also proposed to me by Kirk Ludwig in conversation.

22 As noted by Patrick Butlin, "[t]o be an agent, a system must engage in goal-directed interaction with an environment. This means that its interaction with the environment must be governed by a norm, at least in the weak sense of a non-arbitrary standard of success or correctness" (Butlin 2024, 24).

23 In more detail: failure is typically explained in the context of instrumental actions, where there can be a gap between one's further goal (e.g., survival) and the effects of one's basic action (e.g., darting left instead of right while being pursued by a predator). However, such instrumentally rational actions developmentally and evolutionarily presuppose the capacity to engage in what Kent Bach calls minimal actions (Bach, 1978)—something that we do without having to do something else, that we do immediately, directly, or "just like that" (Hornsby 1980, 20). As Bach notes, "the only kind of action within the psychological capacity of modestly endowed animals, and a great many of the actions of sophisticated beasts like ourselves are minimal" (Bach 1978, 362). The idea of a minimal action invites a conception of normativity not founded on the dynamics of instrumental action.

cases that have occurred. The past is actual fact" (Peirce 1932, sec. 2.148; see also 1992, 277). This isn't about failure, as we will assume that a system that doesn't respond in the same way the next time it finds itself in a similar situation simply didn't generalize from its original response (or, if it did, that the new situation was different enough not to activate the policy). This Peircean conception of normativity is founded, rather, on the primordial ability to, in an almost Kantian mode (Rödl 2007, 118–19), be an author of policies that are, in some sense, the agent's own—the capacity to bind itself to a novel policy by exemplarizing an initially random response to a situation.[24] And this implies a conception of normativity less focused on failure and more focused on notions in the neighborhood of autonomy (Rust 2024c, sec. 5.2).

2. What does intrinsic normativity add? An additional worry one might have about the retentive conception of intrinsic normativity is that an appeal to (retentive) norms adds nothing to our understanding of organism-agents conceived as a bundle of dispositions or powers. That is, the bald naturalist might worry that the appeal to a third, intrinsic normativity condition doesn't seem to add anything to the second, interactive asymmetry condition.

Enactivists are perhaps unique among cognitive theorists in that they seek to satisfy what Nathaniel Barrett calls "standards of phenomenological adequacy." This isn't to eschew naturalism, as the vitalist does, but to adopt a liberal naturalism (McDowell, 1996). While remaining sensitive to Eric Schwitzgebel's warning that "inferring beyond our species to very different types of animals involves serious epistemic risks" (Schwitzgebel 2020, 57; see also Birch 2024), enactivists maintain that, as creatures among creatures with whom we share a phylogenetic history, there is some reason to expect that dimensions of our own experience as agents might "'scale up' to apply to the full range of cognitive experience" across species (Barrett 2017, 432). Retentive norms carry a first-person perceived normative force for human beings—if I turn off the fan on a cool evening before I sleep, I might find myself inclined to turn it back on upon realizing I had become accustomed to the white noise it produced. It is, of course, an open question about the extent to which the normative force of retentive norms "scales up" to include the experience of non-human animals. However, since our purposes concern the application of an enactivist account of minimal agency to groups, we can safely ignore such questions of scope, as group members clearly feel the normative impact of institutionally inflected retentive norms. Along these lines,

24 The reference to Kant is meant to be evocative, not literal. Obviously, non-human animals are incapable of self-legislating the moral law. However, it is also the case that certain of their activities aren't simply happening to them.

political scientist Hugh Heclo (2011) describes "institutional thinking" as a historically oriented pattern of reasons-recognition that promotes diachronic solidarity among constituent members of an institution, as when the judiciary feels normatively bound by *stare decisis*.

3. Merely protentive agency? If the retentive account is supposed to be a condition of minimal agency, then we should expect to find backward-looking normativity in more individuated or evolved expressions of agency, such as full-blown intentional agents. But what of the possibility that some living or collective systems might be subject *only* to protentive norms? If the minimal account of agency specifies properties that can be found across the sphere of agency, and if this account implies a sensitivity to retentive norms, such merely protentive systems would seem precluded from the sphere of agency.

So far as living agents are concerned, retentive normativity would seem co-present with intentional, forward-looking normativity. I am an intentional agent and while much of my behavior can be explained by appeal to type 2 reasoning, where I attach preferences or values to possible outcomes and deliberate about the best way to realize those values, it also seems clear that much of my behavior is governed by habitual, acquired norms and drives, as illustrated by the fan example above.[25]

However, what if there were a group that was exclusively animated by protentive norms?—e.g., a corporation that is unwaveringly committed to doing whatever is necessary to bring about the outcome of maximizing shareholder value, without recourse to historically engendered precedential norms (e.g., "corporate culture"). Would such purely "reasoning agents" (List and Pettit 2011, 11) fail to qualify as agents because they are not responsive to the retentive norms that characterize minimal agency?

I am unsure that such institutions exist or even could exist as, on one prominent account, corporate culture is present in every corporation—such a culture is "influenced by the organization's history" and helps guide decisions that "parties to a particular transaction have not *ex ante* thought through, either because they were *ex ante* unimaginable or because it is simply too costly to think through all possible contingencies" (Kreps 2011, 94, 95). Here, Professor of Management David Kreps can be interpreted as gesturing to the ubiquity of what L.A. Paul (2015) calls "epistemically transformative choices"—choices that resist adjudication by normative decision theory and therefore require supplementation by habitual, retentive norms. While this thought warrants

25 If retentive and protentive norms are what respectively animate what Kim Sterelny describes as drive-based and preference-based motivational architectures, then "[h]uman motivation has a hybrid character" (Sterelny 2003, 95; see also Rust 2024a, sec. 3.1 and 3.2).

further development, it suggests that there may be principled grounds for deeming a purely reasoning agent, whether in the collective or biological spheres, a practical or even conceptual impossibility.

4. Unmotivated proliferation of agency concepts as applied to the social sphere? When social ontologists have asked whether some groups qualify as agents, they tend to assume what Bratman calls a "Davidson-inspired focus on subjecthood" (Bratman 2022, 177). I have argued that social ontologists should instead consider applying a minimal conception of agency to human groups. But why conclude that we *should* apply a minimal conception of agency to groups just because we *can*? Perhaps some conceptions of agency are so ontologically inexpensive that some groups will qualify in a way that either fails to track the intuitive sense in which groups could be agents or else out strips the conclusion of whatever interest drove the question. For example, if we were motivated to inquire into the agential status of groups because we think they should be held morally responsible, the finding that such groups are merely minimal agents—agents which, as discussed above, aren't morally accountable—might appear to have missed the point (cf. Thomasson 2019).

If our aim is to get an intuitive or correct account of collective agency, it is worth noting that the enactivist criteria were formulated on independent grounds using a living cell as a paradigm case (Thompson 2007, 44). Thus, it would seem to qualify as a discovery that some groups would count as agents in this sense. Still, one might worry that the application of this concept to *groups*—which are composed of living things but would not themselves appear to be living—remains counterintuitive or doesn't otherwise track our ordinary understanding of the concept. However, many sociologists and social theorists have been struck by the analogy between groups and living things. As noted above, Émile Durkheim, Philip Selznick, Talcott Parsons, Niklas Luhmann, and other structural functionalists were taken by the idea of "organization as a living social institution" (Selznick 1949, 10). This is also true of holistic social doctrines more generally. We might, following Alex Rosenberg, be critical of such doctrines, but such criticism is necessary precisely because the link between living and institutional systems is not unintuitive: "Holism and functionalism, by according social institutions a life of their own and attributing to them functions with respect to the needs of the society—as opposed to the needs of the individuals who compose it—threaten the priority of personal liberty and individual human rights" (Rosenberg 2015, 204). Even if Rosenberg is right to claim that conceiving of groups as having "a life of their

own" is a dangerous idea,[26] it does not thereby qualify as an artificial or post hoc idea.

7. CONCLUSION

Having described the three conditions for an enactivist account of minimal agency, I drew from existing social ontological work to gesture to an account of group agency that would satisfy these conditions. While numerous social ontological accounts of group agency satisfy a subset of these conditions, no existing account satisfies all of them. However, because, on List and Pettit's view, groups that adhere to a precedent-based priority procedure would thereby qualify as being responsive to intrinsic, retentive norms, their account could be made to conform to the proposed account of minimal agency if, for example, their paradigm case was changed from that of a simple robot to an operationally closed system. I also claimed that Dworkin's "true political community" would seem to satisfy these enactivist conditions while vindicating his claims about the "personification" of such a community.

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26 However, note that Rosenberg's defense of liberalism draws from the same premise that animates Schmitt's and Morgenthau's respective arguments for national socialism and political realism, as discussed at the end of section 5.3—namely, the agent-exclusion principle (Rust, 2024b).

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