

Online Communities as Group Agents

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Abstract

Online communities are typically analysed through their effects on individuals (echo chambers, conspiracism, the distortion of testimony), while the groups themselves are largely unexamined. I argue that some online communities are agents, and this matters epistemically. I proceed in three stages. I begin by building a social ontology of one kind of online community, namely subreddits. I then argue against John Greco's shared agency account of large-scale knowledge transmission, which is toothless in adjudicating failures of knowledge transmission. I suggest that we must supplement it by an account of the group as a bearer of epistemic properties in its own right. So, using r/wallstreetbets and the 2021 GameStop affair as a case, I then show that a subreddit possessing a community-specific trust structure and entrenched action-guiding conventions instantiates a realizer-kind of the functional role of agency. I close by identifying a harm that only comes about when we understand the group as an agent: members inherit their evidential weightings from a group whose own weightings are insensitive to evidential quality.

Epistemologists who study groups have well-developed theories that identify whether a group is agential or not; that is, identify the groups that are intentional, goal-directed agents in their own right¹. I'll define a group as an agent when it forms attitudes, reasons from them, and can act on these attitudes. By attitudes, I mean states directed at propositions. And by reasoning from them, I mean taking these attitudes as an input and producing further attitudes as an output in a way that's sensitive to relations between the contents. In this paper, I will construct an account of online communities as group agents. However, let there be no doubt: I am not claiming all online communities are agential, only some. By online communities, I mean social groups on large-scale communication platforms like Reddit and Instagram, where people transmit, consume, and produce beliefs, values, and information. Due to the divergent purposes and dynamics of social groups, I think it's impossible to pose some necessary and sufficient conditions that both capture all online communities and are insightful. As such, we have my first aim: to build a social ontology of one kind of online community, namely subreddits (§1). I do this by understanding online communities as a kind of social group. And I choose Reddit because of a recent example of what seems like (and I'll argue is) group agency, namely the 2021 r/wallstreetbets short squeeze against hedge funds.

One recent attempt by John Greco (2026) tried to make sense of Wikipedia through a shared agency account of large-scale knowledge transmission. That is, a source and an audience stand in a shared intention that the source transmits knowledge to the audience (along with other conditions like meshing subplans). To many, this may seem more plausible than giving certain communities wholesale agency. We can simply scale up pre-existing accounts of shared intention between two or more people, and capture the phenomena of online communities, right? Wrong. I'll argue that for online communities, and particularly for epistemic ones like Wikipedia, shared agency accounts are often toothless when it comes to cases where disinformation or false information is shared, such as with hoaxes. I think this reveals that the path of group-level analysis taken in §1 is the right one,

¹This is a common approach (Gilbert 1990, List & Pettit 2011, Bratman 2022)

and presents a fork: should we then look at the impacts on the members, or consider what happens when we consider groups as agents themselves. I'll choose the path less trodden.

Much attention has been paid to issues online communities bring about for individuals, especially regarding echo chambers, conspiracy theories, and conspiracism. However, the groups themselves are rarely analysed. Consider, for instance, C. Thi Nguyen's work on echo chambers: 'an epistemic community which creates a significant disparity in trust between members and non-members' (Nguyen 2020, p.156). This explicitly concerns the impact on the individual; that is, the epistemic harms to the individuals are the result of echo chambers acting as a social-epistemic structure that manipulates trust between individuals and their in-group and out-group. Equally, both conspiracy theorists and conspiracists (conspiracy theorists without the theory) focus on issues with the conspiracy claim itself, not on the groups who act to perpetuate or harm resulting from these beliefs and epistemic culture of the social group (Rosenblum & Muirhead 2019)². And while I think these pursuits can be very fruitful, the groups themselves are often neglected. And as communities that were exclusively online have come to impact beyond the digital sphere³, there is clearly a need to ask what these groups are. As I said, I think this requires us to look at online communities on a per-platform level which is an enormous project. However, when we view one group as an agent, we can explain many of these more abstract findings. So, we get the aim of going down this other path: to give an example of one of these groups as an agent (§3).

This leads us to the third and final aim: to show this project worthwhile by introducing a distinct epistemic harm that cannot be accounted for without considering the group as an agent. Here, I will look to a case where r/wallstreetbets weighted evidential value incorrectly. And because the group's members are often parasitic on the group for the weights of evidential value, this is a harm which cannot be understood without also understanding the group as an agent.

With these three aims in mind, let's get started.

1 Online Communities as Social Groups

Building on Brian Epstein's work, I conceive of online communities as social groups. He argues against simple typologies, such as Ritchie's division into 'organised groups' and 'feature groups' (2015). Such distinctions exclude many intuitive cases of social group and he asks us to instead conceive of them from a bottom-up perspective, 'constructing profiles of the metaphysical features of groups of specific kinds' (Epstein 2017, p.4899). While I won't get into this debate, I do agree that a unifying and parsimonious set of features that capture every type of social group isn't the right way to go about dealing with such a complex phenomenon.

Let's start by defining social group:

SOCIAL GROUP

x is a social group if and only if x is an entity constituted by and only by people.

(*ibid.*, p.4914)

This is an incredibly ecumenical definition, telling us only what a social group is made of. And as such there is the concern that it overgenerates (Effingham 2010). However, I see this as innocuous for my purposes. Throughout this paper, it'll become clear that my argument turns on which groups we ascribe agency to, not on being too permissive at the group level. What's more, if I were to be more restrictive in my definition, I then risk undergeneration, whereby my following framework is inapplicable to many intuitive cases of social group. For instance, to add the seemingly intuitive condition 'is founded by someone' excludes instances where the same people discuss a creator's content in the comments section over multiple posts. This means that to accept this trade-off, we need to introduce restrictions downstream, which I do through restricting at the level of kinds.

²See also (Sunstein & Vermeule 2008, Cassam 2019).

³QAnon and January 6 raid on the Capitol is an obvious example Moskalenko et al. (2024).

Another point: ‘by and only by people’ fixes the bearer of group agency to the people it is constituted by. It introduces a distinction for group membership. Within online communities, members of online communities are represented by accounts, and accounts can be controlled by either humans or bots. And applying the definition here yields the following condition: a person is a member iff she operates an account registered by Reddit as a member of g . So, accounts are never members, they are what a person acts through; this excludes bots from being members⁴. In turn, some group constituted by bots isn’t a social group, and cannot be agential in the sense discussed throughout this paper.

What, then, are we inquiring about when we ask about social groups? In the language of metaphysicians, we are inquiring about the *kinds* of social groups, where ‘social groups’ is an umbrella for groups that satisfy SOCIAL GROUP (Epstein 2017, p.4904). Within this paper, I will explore one kind of online community, namely subreddits: a moderated community with a specific theme or purpose. We can have instances of this kind, such as ‘r/philosophy’ or ‘r/askphilosophy’, with philosophy themed posts and discussions. More formally: we have a kind K , and instances of this kind x and y . The instances, or groups of a given kind, are denoted by K -group. And when we talk about the constitution or membership of groups of a K -group at a time, we are talking of given stage s of some given group g at time t in world w . A stage s exists only at a particular moment in time at a particular world. That is, stages are merely ‘snapshots of collections of people’ (*ibid.*, p.4908).

We can ask two types of questions about kinds. First: ‘When and how does an instance of kind K come to exist?’ Second: ‘Where do the conditions come from pertaining to the existence, membership, and identity of groups of that kind?’ (*ibid.*, p.4906). Answers of the first type—ones concerning what the kind’s conditions are—compose the kind’s ‘construction profile’; answers of the second type—ones concerning whatever put those conditions in place—compose the kind’s ‘anchor profile’. In the case of subreddits, a condition of the construction profile may be that it’s ‘founded by a creation act on the platform’. And a condition for the anchoring profile would be what makes the creation act the founding condition, which is carried out by *enactment*: Reddit’s platform rules, terms of administration, and software.

COMING TO EXIST IN A WORLD

A new K -group comes to exist at time t in world w if and only if...

CONTINUING TO EXIST IN A WORLD

Given a K -group g that came to exist at time t_0 in world w and a time $t > t_0$. Then g exists at t in w if and only if...

CONSTITUTION IN A WORLD

Given a K -group g at a time t and world w . Then, stage s constitutes g in w at t if and only if...

(*ibid.*, p.4909).

The second will prove useful later on when dealing with some issues concerning changing membership. So, for now, let’s consider only the first and third in turn. We’ll do this with the K -group being a subreddit G .

When, then, does a subreddit come to exist in a world? At first glance, the answer appears simple: when a new subreddit is created on the Reddit platform by a user. But there are conditions that restrict the creation of a group. Let’s look at what they are.

1. *Authorised Founder*: Some person a satisfies, at t in w , the conditions of using Reddit on a logged-in account meeting Reddit-imposed thresholds (e.g., account age) for subreddit creation.

⁴Clearly bots do act within these groups, introducing issues like the false consensus effect (Woolley & Guilbeault 2017). This, however, is beyond the scope of this paper.

2. *Founding Act*: a performs at t the act of clicking ‘Start a Community’ in w , amounting to founding a subreddit. Existence is tied to this action.
3. *Individuation*: The founding act individuates G by assigning g a name f for G ’s existence, unique among already-existing K -groups in w at t .
4. *Initial Conditions*: The act establishes G ’s initial conditions: purpose, posting restrictions, description. These conditions structure future membership and posts, but the conditions are amendable.
5. *Platform Acceptance*: The institutional framework of w (Reddit’s terms and conditions) registers G under f , thereby recognising its existence.

With these conditions in place, we can think about COMING TO EXIST IN A WORLD’s relevance to us. Firstly, (1), (2) and (3) allow us to distinguish K -groups. Many subreddits can exist at once, but (3) means they are distinguished by their founding act, even if certain features (e.g., members and posts) are identical. Furthermore, because we can identify G by its founding act and f , we can talk about G without reference to its membership. Though this introduces an oddity: what about a subreddit of ≤ 1 members? For even with (1), the founder can, themselves, leave. In the case of one member, the constituting stage is a singleton. In the case of a memberless group, it still exists due to maintenance by the institution (if Reddit bans or deletes the subreddit, it doesn’t exist any more), but G isn’t constituted by any members. That is, existence is distinct from constitution⁵. I’m okay with this. For sometimes when we speak of a social group, we speak of an empty group. For example, if an institution creates a committee, but hasn’t yet elected members to it, the group has been formed, but is yet to be constituted. That is, it exists in virtue of the creation act by a , and even if a leaves immediately, that simply means the group is yet to be constituted, but doesn’t have members yet. This gives a more fine-grained analysis of groups that will be useful later. For it allows us to identify online communities independent of their consistently shifting membership.

Secondly, (4) and (5) allow us to consider structural restrictions placed on G . For instance, if the purpose outlined in (4) violates certain policies instantiated by Reddit, then either the founding act is blocked or, if it forms, G becomes liable to moderation. This restricts which groups can exist. And though these restrictions are often rather lax, there are levels of moderation from ‘quarantining’ (warning when one attempts to access the subreddit) to banning (making inaccessible) groups violating Reddit’s content policy. *Prima facie*, this assigns responsibility to members of the group to align with the platform’s policies⁶. Furthermore, (4) sets the type of content to be posted in the community. This shapes the type of information that will be transmitted through the community, and permits, proscribes, or limits user’s capacity to generate knowledge.

We can understand groups under moderation better if we first understand CONTINUING TO EXIST IN A WORLD. For, when G is banned, we are talking about it not continuing to exist. Two conditions are relevant. From t_0 to t in w :

- (i) *Platform Requirement*: Reddit has continued to exist and maintain G ’s registration under f ; and,
- (ii) *Not Banned*: G isn’t banned on Reddit.

These conditions are intentionally thin because persistence through time requires very little for a subreddit. And if either is violated, then G ceases to exist. As such, even archived or inactive subreddits continue to exist. However, the group is inert and of little relevance to group agency.

Nevertheless, subreddits’ persistence is oftentimes institutionally controlled. Provided no authorised account makes the subreddit private (removing access to any unauthorised users), then the

⁵Epstein explicitly allows empty groups, and groups that exist before having members (Epstein 2015, pp.156-161).

⁶There is also a responsibility of the platform to have an ethical policy. However, this is beyond the scope of this paper.

only way it can cease to exist is if Reddit decides it has violated its policy. That is, members cannot end G , only the platform can. One important point follows from this: communities are robust. For if Reddit decides to ban a subreddit, then it is possible for a large proportion of its members to migrate to a distinct subreddit G' , so the community persists while the group doesn't. And this marks a distinction between community and group which will be made clearer by CONSTITUTION IN A WORLD. This point, however, will be more nuanced once I outline the anchor profile.

So let's finish the construction profile with this. For CONSTITUTION IN A WORLD, there is one condition:

Membership: Stage s , at t in w , is a snapshot of the collection of persons, each of whom operates an account registered by Reddit as a member of G under f , and who isn't banned from G .

This simply fixes the genuine members of G . A further distinction is worth drawing here, though it doesn't bear on constitution:

Active Participation: A person actively participates in g at t in w iff she posts, comments, or votes in g at t in w , irrespective of whether she satisfies *Membership*.

This means that some people engage with content in G despite not being recognised by Reddit as joining. Moreover, many who have joined never post, comment or vote. And I think this is right. For not all members participate and not all participants are members. What's more, it exposes cases of internal dissenters. Consider a left wing individual who joins a right wing subreddit to argue. They fundamentally disagree with the group's purpose and, probably, all posts on there. This means that the number of participants doesn't equal number of members, and membership doesn't equal agreement.

Now this makes it difficult to say anything about the doxastic or intentional states of the individuals within these groups. Should we be worried by this? Not really. As I made clear earlier, the goal here is to evaluate the group, and to do this one has to consider the members. But in this case, analysis of the group isn't reducible to analysis of the individual. As is the case with most online communities, membership is complicated by divergent beliefs, intentions, goals, and extent of participation. So my analysis is roughly non-summative. That is, I treat the group as having features that are more than a mere aggregation of the members' beliefs and actions. In part, this is required. The disparate nature of online communities makes them tricky, and group-level treatment mitigates such issues.

We now have a grasp of the construction profile of subreddits. Let's now turn to the anchoring profile, and ask 'What put these conditions in place?' For Reddit, we can loosely generalise the anchors for the essential properties of groups of a kind. And in the case of subreddits, they are anchored in two distinct ways:

SRA1: Anchored by functional intentions, practices, and regularities in the environment;
SRA2: Anchored by enactment through Reddit's rules and code.

We'll take these in turn, using r/wallstreetbets, a subreddit where participants discuss stock and option trading, as our model. SRA1 anchors community-side elements. Specifically, the extra-essential properties we'll meet shortly, and active participation. So what does it mean? I take functional intentions to mean the subreddit is oriented through the shared goals and their shared sense of the community's purpose. Its orientation to stock and options trading is due to the community members participating to this end. By practices, I mean the conventions of how participants engage, such as what posts count as on-topic, and how posts or comments should be made and received. These can be strict, such as in r/wallstreetbets' rules and content guide. Regularities in the environment refer

to the stable patterns of the community, such as recurring patterns of what’s posted, what’s acceptable to post, acceptance of new members, and also voting behaviour on the content. Concerning the last of these, users can upvote and downvote content, with the most upvoted (recent) content being shown over ones with fewer. That is, the community determines the information environment.

SRA2 anchors institutional elements. As is stated in their definition, they rely upon abiding by Reddit’s policy and code. For instance, to be an authorised founder (1), one has to control an account registered by Reddit. And for individuation (3), the name has to be unique within Reddit’s database of existing subreddits. This displays a contingency of the group on the platform. The existence, identity, and persistence of the group are wholly contingent on the platform. And the platform also ranks the content shown to individuals. While the community are the ones who upvote and downvote, which is a behavioural regularity, the upvoting and downvoting system relies upon Reddit, which is part of SRA2.

Stated thus, this is the community’s epistemic environment, its scope and permissibility. It is jointly anchored by SRA1 and SRA2. On the community side, they decide what is posted, what is upvoted or downvoted, and also, individually, the comments. But this requires Reddit’s code to aggregate, rank, and display them. The community itself establishes throughout its existence certain epistemic norms, such as what should be posted, commented, and what deserves attention. It also establishes an attitude to members, which is a trust-structure between both members and participants. In the case of r/wallstreetbets, there is a lionisation of high-conviction, high-risk trades, and a trust-structure favouring retail traders over institutional finance⁷. And there is also a point to be made about the community’s dependence on the institution to persist, but not necessarily its epistemic environment. If we imagine G gets banned, then it’s possible that the epistemic environment, the culture of posting, etc., reconvenes in a different subreddit G' , or a different platform altogether.

So far, the profiles have told us what a group is, and how groups come to exist. But we must also take into account essential properties that do not constitute the kind. Epstein calls these ‘extra-essential’ properties: ‘a catch-all category for those essential properties that groups are set up to have, but that are not included among the construction properties’ (*ibid.*, p.4918). So if we have two kinds that are built in exactly the same way, they may still differ in their extra-essential properties. In the case of the subreddits: a few people are moderators, requiring more participation and holding a certain power over what is permitted in the epistemic environment; a few people are popular posters within the community, and their posts are often more salient to the community; and there are people who exclusively consume. And even if a group has exactly the same members, where they sit in this hierarchy can differ. So, an extra-essential property of all subreddits is this hierarchy. And another extra-essential property that differs per subreddit is the type of claims that are trusted within the group. Drawing on Nguyen (2020), I’ll understand this trust structure a ‘disparity in trust between members and non-members’ (p.156). Every social group fixes some disparity of trust between members and non-members through assigning a differential value to the information of members against the value of information for non-members. Nguyen’s echo chambers are at one extreme of this. The important point is that this shows the trust-structure is separable from the information, which is essentially the separation between community’s own trust patterns anchored in SRA1, and the platform’s feed and ranking anchored by SRA2. I’ll take these for granted so that we can understand this trust structure as an extra-essential property of subreddits.

Let’s take stock before moving forward with . Combining these profiles and the preliminary definitions of social groups, we obtain an account of a subreddit as a kind of social group, how they exist and persist, and how they are set up. And we have also an understanding of certain dependencies between participation and members, and the purpose, goals, and content of the group. It is these dependencies that will become useful when we come to understand certain groups as

⁷Talk of this structure is very reminiscent of Nguyen’s definition of echo chambers and the disparity in trust between members and non-members. It is worth noting that understanding groups in the way outlined could be fruitful for the evaluation of epistemic phenomena like echo chambers.

agential.

2 Issues of Agency

I noted above that there are various ways to approach agency among groups of people. Given how permissive SOCIAL GROUP is, and given the kinds of social groups can differ widely in how they're constructed and anchored, I don't expect a single account of agency to fit every kind. So, where might we look for the defining features of agency within a group? If a subreddit coordinates and acts upon a common plan, then a natural move is to look to the shared agency account of knowledge transmission from the posters to the audience. In this section, I'll argue that this is the wrong place to look.

Let's look at John Greco's (2026) account of shared agency. Using Michael Bratman's (2022) framework, Greco argues that, when knowledge is transferred between a source and an audience via technologies like Google Search and Wikipedia, shared agency helps us understand this knowledge transfer at large scale. In the epistemology of testimony, there is a separation between knowledge transmission and knowledge generation. That knowledge is sometimes transmitted from one person to another is uncontroversial. He frames Wikipedia as a 'compilation model' that 'compiles information from various existing knowledge sources', and Google as a 'curation model' that 'curate[s] existing knowledge sources and direct[s] users towards them.' (Greco 2026, pp.94-5). That is, they are communication channels that mediate the transmission of knowledge to an audience. Greco's claim is that that shared agency helps us better understand such platforms. Let's see how.

What does it mean for knowledge to be transmitted from a source to an audience? Here is Greco: 'Knowledge that p is transmitted from a source S to an audience A just in case:

1. S possesses knowledge that p ;
 2. S asserts that p with the intention of transmitting knowledge to A ;
 3. A understands and shares S 's intention; and,
 4. S and A cooperate so as to fulfil the shared intention in (2).'
- (*ibid.*, p.94)

The basic elements of Greco's construction are: the knowledge source; an epistemic institution that mediates knowledge; a set of agents who are the audience; and social rules and norms. We can further divide his jointly necessary and sufficient conditions for knowledge transmission: (1) is a factive claim; (2)-(4) are the shared agency account of large-scale knowledge transmission. It is easy to imagine what this transfer of knowledge might be like. Perhaps I want to know what happens during the dissolution of parliament in the UK, and I look it up on Wikipedia. No single person wrote the article, but it was instead compiled by editors intending to pass on what they knew, and I, along with many others interested in such a topic, am their target audience. I then take up the audience role in this intention of transmitting knowledge, trusting the information in the measured way one should when reading a Wikipedia article. The editors and I cooperate across a set of social norms—such as sourcing rules, edit histories, the habits of the reasonable reader—and as such I, and whoever else is reading the article, come to know the details of the dissolution of the parliament of the UK. Or perhaps I want to know when the last UK census was held, and I search Google for the answer. Google didn't produce any of this knowledge, but instead curates existing sources and ranks the most helpful (in terms of 'expertise, authoritativeness, and trustworthiness') source at the top, pointing me to what is known. Taking up my side of the intention to transmit knowledge to me, I then click on the official statistics page and read it, thus coming to know the answer to my inquiry. In both of these cases, knowledge is transferred to me through a shared agency regarding (2). And

this structure scales up to pages that are consulted in their millions, such as the Wikipedia page on World War I.

However, this just isn't what happens in many cases. Often, falsehoods or propositions that don't amount to knowledge are transmitted. Wikipedia themselves has an extensive history of falsehoods, controversies, and cases of 'trained and trusted Wikipedia volunteers, called "patrollers," [...] approving long and well-referenced hoax articles for publication on Wikipedia' (Kumar & Shah 2018, p.7). Even Wikipedia, in a page entitled 'Wikipedia is wrong', states a 'threshold for inclusion' as being 'verifiability, not truth' (Wikipedia 2026b). Equally for Google, ranking isn't just by, as Greco claims, 'the most helpful' results, but also variables, like searcher engagement that favour gaming the algorithm and 'big business over smaller ones' (Grind et al. 2019, Greco 2026, p.95). And while I'm not in the business of entering the debate on knowledge here, it is clear that these platforms aren't always reliable communication channels. Greco acknowledges this. His point is that, while not always reliable, when they are, they 'take knowledge as input for the communication channels that they employ,' and this is 'part of the explanation regarding how they transmit knowledge' (*ibid.*). That is, cases where (1) fails fall outside the scope of his paper.

But I think failures of knowledge transmission expose a rather serious issue about the role shared agency plays in his account. We'll focus on Wikipedia for these objections. Consider first the case where a Wikipedia editor makes an error such that p is false, but still intends to assert p with the intention of transmitting knowledge to A . That is, condition (1) isn't satisfied, while (2)-(4) are. In this case, there is shared agency between S and A , whilst no knowledge is transmitted. Now recall Greco's claim that shared intention accounts can help us better understand knowledge transmission at a large scale. If this is true, then a minimal requirement would be that shared agency helps us distinguish between cases of genuine knowledge transmission and falsehood transmission. But this clearly isn't the case if the distinguishing feature is the factive condition (1). That is, the shared agency view of knowledge transmission stays neutral beyond a negative claim that no knowledge has been transferred.

And we can run a similar, yet more pernicious, argument in the case of hoaxes on Wikipedia to show that framing knowledge transmission this way misdescribes this phenomenon. In the case of hoax posts, the intention S differs to the intention of A , insofar as S 's intention is to spread disinformation, while A 's is to partake in a transmission of knowledge. In turn, there is a failure of (2)-(4), which means there isn't shared agency, and, for Greco, nothing for his account to say. Yet something epistemic is clearly happening. The hoax has been constructed, passed patrollers and other editors, published, and then consumed. People have ended up with false beliefs as a result of a system designed for knowledge transmission, yet an account of knowledge transmission cannot say anything about it. That is, the hoax case is a product of the knowledge transmission system.

Finally, another problem with this argument is that the account cannot improve our understanding of knowledge transmission. Consider a case of two editors who both satisfy Wikipedia's standard of inclusion—'verifiability, not truth'—yet whose contributions contradict. We can assume that S sources and asserts p with the intention of transmitting it, while editor S' sources and asserts $\neg p$ with the same intention. Assuming the principle of noncontradiction, both p and $\neg p$ cannot both be true; at most, one is true. However, both p and $\neg p$, assuming they have been sourced properly, can be verified, and thus meet the platform's standards to be published. Wikipedia maintains an entry on articles that have been controversial based on this principle (Wikipedia 2026a)]. Two fixes present themselves. First, one could add a coherence condition: transmission coheres with the rest of the entries. But this is to appeal to a body of claims, and a body of claims needs a bearer that holds it—i.e., a group-level bearer. Or, one may add some reliability conditions. But, once again, reliability needs to be applicable across cases, which once again appeals to a group-level analysis. In each case, repairing Greco's account introduces the group-level to account. What, then, is going on?

I think Greco was on the right track. However, being limited to the apparatus of audience-source dynamics, can only present properties like coherence and reliability as relations between the two, which loses the group-level issues trying to be explained. This points us towards what Greco requires:

a genuine framework of knowledge transmission, including all its failures and the way information is transmitted, must be posited at the group level. And we can do this by understanding the Wikipedia community, the contributors and audience, as a kind of social group; it certainly fits our ecumenical definition of SOCIAL GROUP. I'm not going to do this here. However, the issues with shared agency accounts have been made explicit. And if a much less social online community like Wikipedia requires a group-level analysis, then the more social ones like Reddit certainly do. For the norms governing them are far less structured.

3 Understanding Group Agency

When we consider group agency, we ask whether groups can perform actions, and if so, in virtue of what. The most common answer is that they can perform actions, but only if we assign groups intentional states. By intentional states, I mean representational states like beliefs, desires, intentions, knowledge, and reasoning. And the upshot of this is that such states are partly constitutive of what it is to be an agent. I agree. Group agency requires group-level intentional states. My working definition of agential social groups:

SOCIAL GROUP AGENCY

Let g be a social group and F the functional role. Then g is an agent at t in w iff g instantiates, at t in w a kind such that K is a realizer-kind of F . of a kind of social group that is able to perform the functions of agency.

I'll consider this definition regarding the case of subreddits. But let me clear the ground for discussion with some preliminary points of group agency. The definition implies that agency, and thus intention, is evaluated at the level of the group's kind. Specifically, we individuate intentional states by the group's kind, and also that they're anchored in the community's practices and the platform's encoded regulations. The upshot of this is that a community may act on a group intention without any member necessarily having the same intention, which further grounds the non-summativism I have thus far been assuming. This raises the questions of which online communities are agential, and in virtue of what.

In answering these questions, I 'understand the agency of a thing in terms of the characteristics of the *kind* of which it is an instance' (Epstein 2017, p.4922). A common way to spell out these characteristics is with functionalism, on which agency is a functional role within a system of practical activity. To specify the functional role is to specify a state's relations to inputs, outputs, and other states of the system. An intentional state—a belief, desire, or intention—is thus individuated by its position within an interlocking system of attitudes, reasoning, and action (Shea 2020, p.246). This system is an 'abstracted or high-level set of interacting modules, each of which plays a functional role in a larger system' (Epstein 2017, p.4922). And because a functional role is fixed by its relations, groups' intentional states need not be realised in the same way as humans' intentional states. So, realising a functional role within a system of practical activity is what it means to be agential. This lets us 'provide a unified account of individual and group belief' (Brown 2024, xv). In turn, I'll assume that groups' intentional states have the same function as humans' intentional states.

So now we have met the functional role, which we'll call F . A system perform F just in case (i) it forms and revises attitudes in response to inputs, and (ii) it processes those attitude by a procedure capable of issuing outputs that no input state determines on its own, and (iii) it produces behaviour explained by (i) and (ii) together. Epstein thinks that we can understand group agency better through role- and realizer-kinds. A role-kind is a kind defined as whatever performs F . And as he observes, we rarely classify groups or objects into pure role-kinds, and should thus see if groups are realizer-kinds of F . I think this is right, especially for my purpose. So I'll jettison role-kinds. As such, let's meet realizer-kinds. Consider some property P such that things having P normally perform F (or P was selected for that reason), and a group g such that:

REALIZER-KIND

g is an instance of kind K if and only if g has property P (even if g itself is not performing F).

(Epstein 2017, p.4923)

And for group agency, we assess g as a member of this kind K , and whether or not g is a group agent is ‘parasitic on the fact that $[K]$ is a realizer-kind of F ’ (*ibid.*). This means a group can be an agent even when not performing F , provided it is in the relevant realizer-state. For instance, a group can be in a ‘group belief’ or ‘group intention’ state, and can thus be a group of kind K even if it is incapable of ‘integrating that state into a system of practical activity’ (*ibid.*).

How might we adapt Epstein’s telegraphic account to apply to the case of online communities? Let’s consider the example of r/wallstreetbets where, in early 2021, certain members of the subreddit judged that GME stock was undervalued, their claims were propagated through the subreddit’s ranking, resulting in a group-level position, then there was coordinated buy-and-hold activity of GME, and the buying activity contributed to a short squeeze against hedge funds, an outcome no member brought about alone. These are the components of a practical system. Members believing GME is undervalued is an attitude towards the stock; the coordination of buying activity is reasoning and planning; and the coordinated buying is the action. Together, we can understand the group as performing F . Epstein’s argument then suggests that, if subreddits are agents instantiating a realizer-kind, then there we need some essential properties P . I’ll consider properties that, together, are sufficient for agency.

To understand P , it’ll be helpful to look back to our discussion of subreddits as a kind of social group in §1. The first property I propose is the community’s trust-structure p_1 : the community-specific pattern of whose claims are valued and on what basis. And for this we can look to CONSTITUTION IN A WORLD from the construction profile, and the extra-essential structure of hierarchy. Let’s start with CONSTITUTION IN A WORLD, which fixes membership. For membership, if we were to look at the stage s of the subreddit-group r/wallstreetbets at any point during the rough period of early 2021, then the stage will capture who the members of r/wallstreetbets were. And then for participants, if we were to look at the posts and their comments on r/wallstreetbets at that time, then we would also observe the active participants of r/wallstreetbets. And then, from the trust-structure, we can understand how a position becomes the group’s position rather than a mere set of individual ones. r/wallstreetbets favours high-conviction retail positions, so a claim of the type ‘GME is undervalued’ is the type of claim the community is predisposed to adopt and amplify. Since is determined by a ranking system that aggregates votes, the votes themselves determine the community’s differential trust. The trust structure therefore operates through the ranking to establish and sustain a group-level position. The ranking platform-side and ubiquitous across all subreddits; the trust-structure differs per community and influences the type of claims that will ultimately be promoted by the platform-side system and propagated within the community. And so even if many people captured within the stage have conflicting attitudes about the value of GME, or it is only a portion of membership, then the group-attitude can still be ‘GME is undervalued’ due to the trust-structure.

How, then, should we understand the cooperation required for coordinated activity? This question brings us back to the introduction about distinguishing what makes coordinated activity an action of the group rather than a mere set of individuals acting alike. One answer is Bratman’s formulation: ‘a shared intention that we J ’, based on shared intentions that interlock insofar as each participant intends that we J by means of the other participants’ intention that we J . So far, so good. However, in the GameStop case, there is no interlocking intention that we J by way of the other member’s intentions; the members didn’t know that others intended that we J (e.g., many members of the group aren’t active participants), and many had incompatible subplans (some planned to hold indefinitely, some to sell at a target, some to buy options, etc.). So, what produced the squeeze? I think a better answer understands cooperation within the context of the essential properties of a kind. We can start with CONSTITUTION IN A WORLD, where, like in p_1 , the members

and participants of the agential group are captured, thus giving us the people among whom coordination happens. Next, CONTINUING TO EXIST IN A WORLD establishes the temporal continuity required for sustained coordination over time. For instance, groups can display agency over time despite being constituted differently (i.e., the members participating can change), and this makes sure we’re still talking about the same group coordinating throughout, even as the participating members change.. Now, we can look to both SRA1 and SRA2. The former individuates, anchoring the community’s practices and behavioural regularities. These differ per community, and for r/wallstreetbets these include members’ risk-seeking conventions of ‘buy and hold’ and ‘diamond hands’, whereby members are more likely to hold, rather than sell, their positions. And we can isolate what establishes these action-guiding norms as the trust-structure. What’s more, practices mean that the type of information that will be posted and upvoted is ‘on-topic’ and aligns with the regular attitudes of the community. And functional intentions means that there are shared goals and purposes established through the community’s own expressions of its purpose. Now SRA2 only anchors the platform’s mechanics that synchronise the group members’ actions. Reddit supplies a shared feed and ranking that provide the same information to participants and members at roughly the same time, so they act of the same information, provided by the same source, and thus act together. With this in place, we can now state p_2 : a community instantiates p_2 iff it possesses entrenched, action-guiding conventions such that, when the platform’s ranking makes a group-level position salient, participants are disposed to act on that position as the community’s position. Two points. First, p_2 exists in virtue of the norms constituted within the group. Second, p_1 is an epistemic property, and p_2 an action-guiding one. Therefore, p_2 is distinct from the functional role F of agency, and agency requires both p_1 and p_2 . In the GameStop case, p_1 can be understood as the belief ‘GME is undervalued’ being made group-level through the trust structure; and, p_2 can be understood as the shared feed synchronising the coordinate buying that resulted in the short squeeze. Importantly, p_2 is a capacity insofar as it is present in the community whilst not necessarily being exercised: r/wallstreetbets had it before and after early 2021, and exercised it only then.

Before finally establishing agency, let’s step back from analysis of the conditions and ask about the content of the posts in the subreddit. On the view I’m sketching, this is a descriptive question about the subreddit’s purpose, and can thus be understood through COMING TO EXIST IN A WORLD. Particularly through initial conditions (4), whereby an act establishes the purpose and posting restriction of the subreddit, thus structuring future membership and posts. For r/wallstreetbets, its purpose is to act as a forum to create and discuss content regarding stock and options trading. Now, the type of content posted during early 2021 regarding GME clearly fits into this. Equally, we can imagine the subreddit being consumed by discussions about any other stock or options topic. However, it seems highly implausible that there’d be any posts about a member’s partner’s infidelity (unless, for instance, it caused or brought about something stock or options related). This gives us a rough outline of the domain the group’s attitudes relate to. And to fill this in, we can bring in extra-essential properties like the subreddit’s own rules (e.g., no cryptocurrency), which themselves are contingent on the type of community the subreddit has. There are myriad directions the community could take: more or less serious, more or less quantitative, more or less risk-seeking, and so on. We can call this extra-essential property ‘malleable milieu’. And for r/wallstreetbets, r/wallstreetbets is *inter alia* less serious, less quantitative, and more risk-seeking. As such, risk-seeking positions, such as buy-and-hold, are more common at the group level. Simply looking at the group and what it’s about isn’t a profound insight. However, it fixes the reference of the group’s attitudes. And when paired with properties P , we finally have the enabling conditions for a group to act on these attitudes.

Finally, then, we can assemble these results. Recall SOCIAL GROUP AGENCY, whereby a group is an agent iff it instantiates a kind that is a realizer-kind of F . Let g be a SOCIAL GROUP that is an instance of the kind subreddit. Then g is a group agent iff:

- GROUP AGENT (i) g instantiates p_1 and p_2 , and subreddits instantiating p_1 and p_2 normally perform F such that they are a realizer-kind of F ; and, (ii) g has a domain

fixed by its initial conditions (4) as amended and its malleable milieu, over which P can be exercised.

One point about this definition is that it counts groups satisfying P as agents even if they cannot take action as a consequence of F . This follows from adopting realizer-kinds rather than role-kinds, and is settled by possession of P . This warrants counting an agential subreddit as an agent before and after the period in which agency is manifested in action

The final step is to apply GROUP AGENT to r/wallstreetbets. As I made clear while unpacking p_1 , p_2 , and malleable milieu, the subreddit satisfies both (i) and (ii). It is an instance of the realizer-kind and has a domain that P can be exercised over. Therefore, the group is an agent. This agency is dispositional, and doesn't necessarily begin in early 2021; what that period does show is the agency manifesting in action. Through p_1 , the community's trust structure establishes the group-level position that GME was undervalued and should be bought and held. Through p_2 , that position met the community's entrenched buy-and-hold conventions and was synchronised by the shared feed into coordinated buying, thus resulting in the short squeeze. And in performing F at that time, r/wallstreetbets as an agent took action.

4 The Epistemic Harms of Online communities

So, some subreddits are group agents. What, then, does this account buy us when evaluating what goes wrong in online communities? In most cases, not a great deal. Much of what goes wrong online is described well through analysing individuals. Perhaps someone comes to believe a falsehood, or someone is unjustly defamed, or someone is radicalised, etc.. And while I do believe there are myriad insights group level analysis could provide in such cases, I want to resist simply augmenting existing analyses. So when is an group agency-level analysis warranted? So when does an agency-level analysis of an epistemic harm earn its keep? I think when the harm is produced by the very property in virtue of which the group counts as an agent in the first place. In such cases, the explanation of the harm and the explanation of agency cannot come apart, and if you leave out the agent you leave out the mechanism.

The harm I have in mind is the incorrect assignment of evidential value, which I think meets this condition exactly. Recall p_1 : the community-specific pattern of whose claims are valued and on what basis. Whilst it covers a lot, it can apply to assignments of weights to sources. For instance, a norm instantiated by the community instead of its members that concerns whose testimony is accepted. Such a norm which composes part of what it means to agential is an apparatus for assigning group-level evidential value. And if a norm that assigns evidential value goes wrong, then misassigning evidential value is a characteristic epistemic harm of a group agent of this kind. Notice also that this property rules things out. Members of r/wallstreetbets lost a great deal of money, and that loss ran through the buy-and-hold conventions synchronised by the shared feed in p_2 . This is a practical harm which I'll put aside.

Just to prevent an obvious objection, I am not saying that someone within a community cannot misjudge the weight of evidence because she trusted the testimony of someone within the group. Nor am I denying that some people simply want to damage people epistemically or in some other way. Trusted individuals who spread disinformation, or individuals who believe things just because it justifies a desire to hurt people, are certainly harmful. What's more, to simply say the group qua agent incorrectly weights evidence and thus suffers epistemic harm doesn't say much beyond what a summative analysis would tell us. Instead, the point is that the evidential value the group assigns to some proposition is transmitted through the ranking to its members. And the members defer to it when determining how they should value some evidential proposition. The group is the agent of this harm, and the members its target.

Let's begin with some terminology. Evidence can be understood as that which justifies belief; that is, 'one thing is "evidence for another just in case the first tends to enhance the reasonableness or

justification of the second' (Kim 1988, p.391). Evidential value is how strongly evidence supports a hypothesis; that is, how much we should adjust our belief in some hypothesis H given the probative for of evidence E (Kelly 2016). And we can draw a distinction between indicator evidence and normative evidence. Consider Koplik spots, which indicate measles. That they indicate measles is a fact independently of what anyone believes about them. This is indicator evidence. However, whether the spots justify someone's belief depends on his prior understanding: for a doctor, Koplik spots are normative evidence, whilst for someone ignorant of the relevance of Koplik dots and their connection to measles, they are not. And for the ignorant individual, it would be unreasonable for her to become more confident in her likelihood of measles upon seeing them. Upshot: altering background understanding alters E 's value, even if both E and H are the same.

Two constraints follow. First, the group won't affect indicator evidence. Assuming some expert is telling the truth, then the group won't alter the fact it indicates truth. What it affects is the normative value: it supplies background understanding relative to which that testimony gains or loses force for the member. Second, the harm can't just be that the member holds a background understanding relative to which E carries no weight. Our ignorant observer show us this: her understanding is impoverished and her credence unmoved—there's no failure here. Suppose, however, that instead of merely being ignorant of the connection, she believes Koplik spots are a harmless reaction to cooking in seed oils. Now she's worse off than if she'd never seen the spots. So what does the harm are false propositions about evidential baring, not missing ones. False beliefs can fix E 's weight below its indicator value, and thereby nullify or invert the effect the evidence should've had.

With this in mind, let's turn to the familiar case of the r/wallstreetbets short squeeze. Consider Angelo, a member of r/wallstreetbets in early 2021. He reads the feed daily, and holds GME through the increase in price and the crash that follows. Some of his beliefs, like GME is heavily shorted, are true; some of his beliefs, like that the price will keep rising, are false. And it isn't like nobody told him. Isabelle, an analyst who knows a lot about squeezes, tells Angelo that this one will result in a crash, showing him models and data backing this up. Her testimony indicates truth. But Angelo doesn't adjust his credences. Why not? Not, I think, because weighed Isabelle's warnings and thought they were unlikely. It's that the community had assigned a weight to the belief that the price will keep rising, and Angelo simply adopted it because he trusts the community.

How does this weighting become Angelo's own? Through p_1 . In §3, p_1 was establishing a trust-structure that favoured high-conviction retail positions such that 'GME is undervalued' was the kind of claim the community is predisposed to amplify, and thus rank it highly. But the ranking also determines what its members consume, presented alongside figures who are worth listening to. As was established, the ranking is anchored in SRA2 insofar as the community upvotes, but the aggregating and ordering is done by Reddit. Angelo didn't rank this claim, but the contributions selected by the structure which he had no part in did. He takes it up as an audience member, not through deep contemplation over a variety of positions about the claim.

The harms here are twofold. First, the discrediting dimension of p_1 supplies a background understanding relative to which the warning carries no weight for many of its members. Institutional finance, they are told, is the adversary, so instead of being corroboration, the evidence Isabelle presents may be interpreted as collusion by the opposition. This is what Nguyen (2020) calls inversion, whereby echo chambers 'attribute a problematic form of non-independence to outsiders who are actually independent, and thereby underweighting outside testimony' (p.148). And we can note that Angelo's understanding is false in the way the seed-oil theory is false, thus making him more confident in his false belief by inverting the effect the warning should have had.

The second issue is about attitudes to higher-order evidence. Angelo doesn't assess the first-order evidence by modelling the short himself. And while a competent source has given him a view based on models and data, the ranking offers him prominence within the algorithm as what evidence for his own evidence. But the hundred posts at the top promoting the views of r/wallstreetbets aren't a hundred assessments of GME. Instead, they're largely just repetition of a few assessments. In

counting each as further ratifying his beliefs, Angelo is double-counting evidence that isn't independent. Now the fault isn't necessarily discrediting outsiders. The community was indeed correct, and as much as one may hope, it's not necessarily true that institutions are always correct. In fact, they're wrong frequently. But if we consider Max, an analyst who thought the whole GameStop affair absurd and just posted unsubstantiated rants about this belief, r/wallstreetbets members would discredit both Isabelle and Max equally. However, only Isabelle's evidence was valuable evidence disregarded. What this shows is that p_1 doesn't necessarily harm by disregarding outsiders. Instead, it fails because it unequivocally prefers insiders no matter what. That is, because members' evidential weighting is parasitic of the groups', it is harmful.

Now, literally everything described can be said without assigning agency to the group. Nguyen carries out a similar analysis on different online communities without commenting on their agency. However, this talks about the 'groups assignment of evidential value' in the summativist sense, insofar as it being a statement about a lot of people assigning evidential value similarly. What's the problem with this?

The problem: r/wallstreetbets' membership wasn't stable. In fact, its membership count increased rapidly during the GameStop affair and huge portions of the people constituting the group at the end of it weren't constituting it at the start. Presume Angelo is one of these latecomers, joining during the early 2021. He has never interacted with any posts, nor has a history in the community. Assuming he doesn't immediately adjust his belief, there will be an uptake period where he doesn't necessarily weight Isabelle's claim harmfully. And we can imagine this with many of the huge influx of members, then during the period where we'd want to say 'r/wallstreetbets weighed evidence harmfully (for members)', to aggregate the members' weights we could get the completely wrong result. If the summativist is to hold that the evidential value at a time is some function of its members' assignments at that time, then aggregates could possibly get the opposite result to what is actually the case.

There are two possible escapes. First, the summativist could weight the aggregate based on, for example, participation. But this requires appealing to huge portions of the online community that aren't really visible yet still belong to the group. Many people who do belong in the group simply don't participate. This is the distinction from CONSTITUTION IN A WORLD. But as both (a) and (b) from that made clear, members who aren't active are still part of the group, and even those active participants don't necessarily agree with the group-level attitudes. So we can't look to any weighting contingent upon members. Another possible rebuttal is that the latecomers joined because they already aligned with r/wallstreetbets' norms. That is, they self selected. However, the existence of an uptake period means this is just wrong. Maybe they share some norms and beliefs with the community, but a wholesale rejection of institutional views in favour of the ones on the subreddit can equally deliver a highly inaccurate weighting mechanism for the group.

What these objections and my responses, along with my own objection thus shows us three requirements to properly grasp evidential weighting. First, a system that can carry the assignment when many members don't yet hold it. Second, we need an object of reference even despite constant member change; and thirdly, a relation between Angelo as audience and feed as source. We can look to subreddit as a kind for the answers. Concerning the first and second, CONTINUING TO EXIST IN A WORLD keeps existence distinct from constitution, so the subreddit can persist through changes in the stage that constitutes it. Concerning the third, the trust structure is anchored in SRA1, with practices and regularities belonging to the community over time, so there is a bearer that survives throughout the change of membership also.

This is what an agency-level analysis buys us. In this example, it is what we can assign an evidential weighting to that facilitates much analysis in this area. And it also explains why Angelo is a target of the harm. He did with a source of information what many audience members reasonably do with a source. And he merely adopted the misassignment to Isabelle's claim from the group *qua* agent.

5 Conclusion

At the beginning of this paper, I set out three aims. And throughout I have developed a social ontology that distinguishes existence from constitution to develop an account of group agency of an online community, and drawn out a specific epistemic harm that exists in virtue of the agency of the community. By this point, we can see that there are incredibly rich insights we can gain by a social group in first detailing a social ontology of a specific kind of social group, and then looking at certain real world cases when it was agential. Inherently, when dealing with real world events, it is difficult to not encroach upon disciplines other than philosophy. So I've presented arguments for a rather modest conclusion. Online communities are agential in the sense argued for in this paper. And if the arguments presented in this paper are sound, then there are myriad epistemic and practical harms resulting from the online communities as group agents. This means that exploring the connections between the existing literature on online communities and the social ontology of these communities is certainly fruitful. However, the overall conclusion is that such an analysis is possible. And as we increasingly engage epistemically and practically with online communities, there are stark issues of manipulation through social groups and our reliance upon them as agents for epistemic standards.

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