COLLECTIVE EPISTEMIC TRAITS AS SYSTEM PROPERTIES[1]

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Abstract: The essay deals with the issue of how a non-summativist account of collective epistemic traits can be properly justified. We trace the roots of this issue in virtue epistemology and collective epistemology and then critically examine certain views advanced to justify non-summativism. We focus on those considered by Fricker, including Gilbert's concept of plural subjects, which she endorses. We find her analysis of these views problematic for either going beyond the parameters of the summativism-non-summativism debate or contradicting common intuitions about epistemic trait ascriptions. As an alternative, we advance the idea that collective epistemic traits are system properties; or that epistemic traits act as system properties when attributed to collectives taken in their own right. Working as a system, the individual members of a collective perform their designated roles or tasks in coordination and cooperation with each other to achieve their joint intentions. Being attributes exclusive to systems, collective epistemic traits cannot, therefore, be attributed in the same respect to the individuals comprising these systems, thereby blocking any summative account of these traits. This model also easily sidesteps the problems besetting Fricker's preferred one.

Keywords: virtue epistemology, vice epistemology, collective virtue, collective vice, collective intentionality

Introduction

We usually attribute intellectual character traits, also called *epistemic traits,* to human individuals either in the form of virtues or vices. We say, for instance, that a person is intellectually humble or that someone is gullible. In addition to human individuals, we also attribute such traits to social collectives, such as when we say that a particular committee is fair-minded or that a specific political group is closed-minded. Since a collective consists of individuals and given that we usually use the same expressions for these traits when attributing them to both individuals and collectives, the attribution of such traits to a collective can give rise to ambiguities and confusion.

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A question arises about what we are actually doing when attributing an epistemic trait to a collective. Either we are simply saying, in a rather convenient way, that all or a sufficient number of the collective's individual members have the trait, or we are saying that the collective, in its own right, has the trait independent of the traits that its individual members may have. In current discussions on this topic, those who subscribe to the former construal endorse the view of *summativism*; while those who subscribe to the latter endorse the view of *non-summativism* (see, for instance, Fricker 2010; Lahroodi 2007; Astola 2021; Byerly and Byerly 2016; and Ziv 2011).

The question is deemed critical, among others, when determining one's epistemic accountability for the beliefs held by one's group. For instance, when someone accuses a group of being racist, should we think that she is necessarily likewise accusing the individual members of the group of being racists and thus holding them accountable for being so? A master argument for a negative response here, which supports the case of non-summativism, is the possible occurrence of the so-called *divergence phenomenon* where the collective's individual members do not share an epistemic trait attributed to a collective. As Fricker (2010, 237) notes: "Summativism does not work as a general account of group features, for there can be cases where a group possesses a feature that few or even one of its component individuals possess…."

It is possible that a group is racist while its individual members are not, and this is deemed sufficient to block the reasoning that attributing an epistemic trait to a collective is a mere shorthand for attributing the same trait to the group's individual members. However, the possible occurrence of the divergence phenomenon cannot be merely justified by its coherence with common intuitions. It needs grounding in some theory or model which can provide a plausible explanation for how the phenomenon comes about.

In this essay, we aim to provide such theoretical grounding. First, we show why other such attempts failed. For our purposes, we focus on those analyzed by Fricker (2010), including the model she endorses, namely, Gilbert's concept of plural subjects. Then we propose an alternative model which easily explains the divergence phenomenon without falling into the same problems besetting Fricker's preferred model. In this alternative view, we regard (non-reducible) collective epistemic traits, those epistemic traits attributed to collectives taken in their own right, as system properties. Working as a system, the collective's individual members perform their designated roles or tasks in coordination and cooperation with one another to carry out their joint intentions. It is then their joint actions, resulting from the coordination of their individual tasks and their cooperation with one another, that

warrant the attribution of the collective epistemic trait to the group. As such, this trait cannot be attributed to any of the individual members of the group in the same respect.

We divide the paper into three parts. First, we put the issue in perspective by tracing its roots to virtue epistemology and collective epistemology. And then, we tackle Fricker's analysis of certain views intended to justify non-summativism, along with her preferred model based on Gilbert's concept of plural subjects. Finally, we lay down the basic elements of the alternative model that we are advancing to justify non-summativism.

The Issue in Perspective

Baehr (n.d.) defines virtue epistemology as "a collection of recent approaches to epistemology that give *epistemic virtue concepts* an important and fundamental role." Hookway (2003) defines it as an approach to the most central problems of epistemology which give states called 'intellectual' or 'epistemic' virtues a central or 'primary' explanatory role. Virtue epistemologists, consequently, have come to "analyse or define knowledge or justified belief in terms of the virtues" (Hookway 2003, 186). As Hookway (2003, 192) puts it: "knowledge may be explained as virtuously acquired true belief." Lahroodi (2007) explains that virtue epistemology, as an area of study in epistemology, emerges partly as a reaction to the *belief bias* in mainstream epistemology. The bias has led epistemologists to overlook or neglect the importance of the intellectual traits of the epistemic agents in explaining the nature of knowledge. If for virtue ethics, the shift in focus is from acts to agents in terms of their character traits; in virtue epistemology, it is from beliefs to the agents in terms of their intellectual traits (Baird and Calvard 2019).

There are two main considerations with regard to the concept of 'intellectual virtues.' First, given the general understanding of virtues as excellences, what kind of intellectual excellence is an intellectual virtue? Second, what constitutes the primary role of intellectual virtues in epistemology? Disagreements among virtue epistemologists regarding these considerations have given rise to the two general versions of virtue epistemology, namely *virtue reliabilism (*or *reliabilist virtue epistemology*) and *virtue responsibilism* (or *responsibilist virtue epistemology*). Virtue reliabilism understands intellectual virtues as referring to well-functioning intellectual abilities or faculties such as good vision, good memory, and good introspection. Their epistemic primary role refers to their being *truth-conducive* or being *reliable* for getting to the truth. For instance, good vision is a reliable ability trait to get to the truth about appearance of one's immediate surroundings; good introspection ability enables one to know the truth about one's inner experiences

such as pains and pleasures; and a good memory is necessary to accurately describe one's past experiences like what they have seen or heard.

On the other hand, virtue responsibilism understands intellectual virtues as referring to intellectual character virtues or good intellectual character traits such as inquisitiveness, fair-mindedness, open-mindedness, intellectual carefulness, thoroughness, and tenacity. Their epistemic primary role consists in making epistemic agents responsible knowers or inquirers. Being responsible, such knowers are able to use their intellectual abilities or faculties properly. As Hookway explains:

> If someone is observant, he uses his good eyesight and his recognitional capacities appropriately. His open-mindedness is reflected in his readiness to admit appropriate or relevant questions and challenges to his views. His carefulness is manifested in the fact that he knows when to check inferences and observations and rarely makes mistakes. And his intellectual perseverance, is shown in, for example, his ability to acknowledge the consequences of his views without wavering. Such virtues regulate the ways in which we carry out such activities as inquiry and deliberation: they enable us to use our faculties, our skills, and our expertise well in pursuit of our cognitive goals. (Hookway 2003, 187)

Proponents of virtue responsibilism acknowledge the epistemic importance of the intellectual faculties, but they argue that one needs the intellectual character traits to put such faculties to good or proper use. Hookway explains: “we would not be reliable seekers after the truth or effective solvers of theoretical problems if we did not possess specific skills and capacities: good eyesight and hearing, a reliable memory, good knowledge of specific subjects but our success also requires us to possess traits of character which enable us to use our skills and capacities effectively while inquiring and deliberating.” (2003, 187) Baehr (n.d.) further explains:

> An important scientific discovery, for example, is rarely explainable primarily in terms of a scientist’s good memory, excellent eyesight, or proficiency at drawing valid logical inferences. While these things may play a role in such an explanation, this role is likely secondary to the role played by other qualities, for instance, the scientist’s creativity, ingenuity, intellectual adaptability, thoroughness, persistence, courage, and so forth.

Unlike good intellectual abilities, intellectual virtues are regarded as closer to moral virtues. For instance, Baehr (n.d.) notes that intellectual abilities, unlike intellectual character traits, do not make their possessor a better person in any relevant sense. Following Lahroodi (2007), Baehr (n.d.) explains: “It is commonly agreed that, roughly, people can be praised for displaying both these types of properties, while they can be blamed only for the absence of ‘character virtues’ but not for the absence of ‘faculty virtues (or faculties).’ This distinction is based on the

assumption 'that character traits are those dispositions over which we can exercise certain types of control' (Lahroodi 2007, 285)."

Virtue epistemology has a number of subfields, foremost of which is *vice epistemology,* "defined as 'the philosophical study of the nature, identity, and epistemological significance of intellectual vices'" (Cassam 2016, 159). Hookway (2003, 198) makes a distinction between virtues and vices, claiming that: Intellectual character vices impede "effective and responsible inquiry," while intellectual character virtues abet effective and responsible inquiry. Intellectual virtues are cognitive excellences, intellectual vices are cognitive defects. Just like in the case of intellectual virtues, intellectual vices can also refer either to intellectual faculty/ability vices, manifested when we form beliefs by guesswork, wishful thinking, and ignoring contrary evidence; or to the intellectual character vices such as closed-mindedness, gullibility, dogmatism, prejudice, and negligence. Cassam (2016) refers to the former as intellectual vices that are not character traits, and the latter as intellectual vices that are character traits.

Vice epistemology intends to fill a gap in virtue epistemology. While virtue epistemology includes the study of both intellectual virtues and vices, the focus of virtue epistemologists had been on virtues. Intellectual vices are equally interesting and important as intellectual virtues, especially since we are most prone to intellectual vices. As Cassam (2016, 159) points out: "When it comes to the epistemological predicament of human beings, vices are arguably more important. Few of us are model epistemic citizens."

Another subfield which we can call *collective virtue epistemology*, results from the intersection between virtue epistemology and *collective epistemology.* Lahroodi (2007) explains that if virtue epistemology arises as a reaction to mainstream epistemology's focus on beliefs which leads to the neglect of the epistemic agent's epistemic traits, collective epistemology arises as a reaction to mainstream epistemology's focus on individual epistemic agents leading to the neglect of collective or group epistemic agents. Collective epistemology, in this regard, studies social collectives as epistemic agents in their own right. Given that collectives are such, it naturally follows that they can also be bearers of epistemic traits. As Lahroodi (2007, 282) explains: "Combined together, they suggest the possibility that some collectives too may have cognitive character traits and be worthy of epistemic assessment as virtuous or vicious." Lahroodi, in this regard, notes that in fact: "We sometimes speak of groups as if they could instantiate epistemic virtues." (Lahroodi 2007, 282) Some of the examples he gives are the following: "(1) The jury is the murder trial was thorough and diligent… (2) The investigative committee gave a fair hearing to all sides; it was open-minded… (4)

Our family is open-minded. (5) The investigative committee was patient and tenacious." If virtue epistemology studies the epistemic traits of epistemic agents in general, collective virtue epistemology would then focus its study on the epistemic traits of epistemic collective agents. Correspondingly, *collective vice epistemology* would be another subfield which focuses its investigations on the vicious intellectual traits of collective epistemic agents.

Collective virtue epistemology is generally concerned with understanding the nature and justification of collective epistemic trait attributions. Specifically, those working on this area question the plausibility and implications of the two main accounts, summative and non-summative. Fricker (2010, 236) explains: "If for instance a member of the jury in a contentious court case were to privately remark, 'The jury was fair-minded', she might quite properly be describing the jury under either of the first two aspects. That is, she might be saying (1) that enough of the *individual* jurors displayed fair-mindedness; or she might be saying (2) that the jury taken collectively displayed fair-mindedness." The first interpretation has been called the *summative account* (or *summativism,* for short); while the second is referred to as the *non-summative account* (or non-summativism, for short) (see also Lahroodi 2007).

On the summative account, Group G has trait T if, and only if, all or most members of G have T. Virtues are not ultimately attributed to groups but to certain individuals. As there are only individual human virtues, there are, therefore, no irreducible collective virtues. While there may be traits that can only be attributed to a collective taken as a group, such as 'hierarchically organized,' 'cooperative,' 'interactive,' and 'well-coordinated,' epistemic traits normally attributable to individuals such as "'air-mindedness,' 'closed-mindedness,' and others cannot be attributed to a collective taken as a group. When such is being done, it is actually just a shorthand for saying that all or some members of the group have such and such traits (Lahroodi 2007). One argument in support of this view is that only individuals have minds, and intellectual traits can only be attributed to those having minds. Since groups do not have minds of their own, intellectual traits cannot be attributed to groups (Lahroodi 2007).

For the non-summative account, it is possible for epistemic traits to be attributed to collectives taken as a group. One main supporting argument for this account is the so-called *divergence phenomenon*, which refers to the possibility for a group to possess a trait not possessed by its members. As Fricker (2010, 237) explains: "Summativism does not work as a general account of group features, for there can be cases where a group possesses a feature that a few or even none of its component individuals possess (so individual possession of the feature is not

necessary); and there can be cases where the group lacks a feature even though it is possessed by many or even all of the component individuals (so individual possession of the feature is not sufficient).” Lahroodi (2007) demonstrates this by showing the possibility of a church committee being closed-minded with regard to gay rights even if the individual members of the committee are open-minded about it. Fricker (2010, 237) gives the example of a team that is competitive when its individual players are not. As a corollary to this argument, Lahroodi (2007, 288) likewise argues the fact that it is possible for two groups having identical membership to have two contrasting epistemic traits proves summativism to be wrong.

It is not enough for proponents of non-summativism, however, just to give examples showing the possibility of the divergence argument. To fully rule out the possibility that these examples can be given a summative account, there needs to be a plausible explanation of how the divergence comes about. Such an explanation may be in the form of some phenomenon or theory grounding the irreducibility of some epistemic trait attributions to a collective.

Justifying Non-Summativism

To justify non-summativism is to provide a plausible explanation for what makes the divergence phenomenon possible. For our purposes, let us examine those views intended to explain this phenomenon whose plausibility was analyzed by Fricker (2010) along with the model she herself endorses. Fricker begins by considering three explanations which we shall conveniently refer to as the *views of social pressure, practical identities,* and *invisible hand.* Fricker (2010, 237-238) refers to these explanations or views as “styles of examples” for the divergence phenomenon.

For the social-pressure view, the divergence phenomenon is due to pressures imposed on individuals when they join a group. Fricker (2010, 237) explains: “Social contexts can bring all sorts of pressures to bear on how we behave, how we think, and what judgments we make—sometimes these pressures may be to good effect, sometimes bad.” The reason that a group trait is not shared by the group’s individual members is that membership in a group may exert certain pressures on the individual members to behave in certain ways. As private individuals they may not possess trait X but as members of the group they may be pressured to display trait Y. Fricker gives the example of the individual players of a football team who are not competitive as private individuals but are pressured to be so as members of the team.

Some other authors also consider this view as a possible explanation for the divergence phenomenon. Lahroodi (2007, 288), for instance, notes: “A related factor is the pressure on members to reinforce their group membership by performing conforming behavior. The members’ specific expectations about the rewards of

membership and the comparable penalties for losing it often put considerable pressure on them to avoid what could threaten their ability to maintain their membership." Mathiesen (2011) advances the view that the divergence phenomenon is due to the differences of epistemic risk settings of a group and its individual members taken as distinct agents. Such differences, she further notes (2011, 40), "may be due to their different pragmatic interests." Such pragmatic interests, however, may in turn be shaped or influenced by social pressures.

For the practical-identities view, the divergence phenomenon is explained by fact that the individual members of a group, as private individuals, assume various practical identities which engender conflicting commitments. Fricker (2010, 238) explains:

> The mere fact that social subjects have a range of practical identities (so that one may confront a situation, decision, or choice as a professional, as a parent, as a friend, as a gay man, as a Christian, as interested or disinterested party, and so on) means that there can be tension, and sometimes downright conflict, between commitments associated with different practical identities of the same person. This in turn generates the possibility of that individual having a certain attribute only as a group-member and not as a private individual.

Lastly, for the invisible-hand view, the divergence phenomenon is due to the accidental canceling out of the prejudices of the individual members of a group. Fricker (2010, 239) gives the following example:

> Imagine a debating society, the members of which are thoroughly prejudiced individuals. But their prejudices are all opposed and equally balanced, so they cancel each other out in debate and the debate overall displays not prejudice but rather neutrality… Such a debating society, then, is itself non-prejudiced, even while all of its members, and their contributions.

Among these views, Fricker (2010) considers the practical-identities view as the most decisive explanation for the divergence phenomenon because it avoids the problems of the other two. On the one hand, she finds the social-pressure explanation still susceptible to a summativist account. Fricker (2010, 237-238), referring to her football example, notes that: "even if the individuals ... lack competitiveness in other contexts, still the team's competitiveness is to be understood as none other than the sum of the individuals' contributions of competitiveness... The summativist can therefore maintain that the group feature is simply the sum of the individual features, and a summativist reduction beckons." On the other hand, while she finds the invisible-hand explanation not susceptible to a summativist account, she finds it conflicting with a common understanding of what makes a trait virtuous or vicious. For being accidental in its generation, the trait is

neither creditworthy nor blameworthy. Speaking of fair-mindedness as a group trait achieved through such process, Fricker (2010, 239-240) writes:

> For the fair-mindedness exhibited here is not achieved because of any group sensitivity to the demands of fairness—it is a mere accident of the way the individuals' prejudices happen to cancel one another out. Accordingly, there is no sense in which the jury is creditworthy for its conduct. In such a case as this, the group's behaviour might display something like group fair-mindedness, but it would be too much of a stretch to say it possessed the virtue.

In her analysis of the three views, Fricker goes beyond the parameters of the issue between summativism and non-summativism. First, in her response to the social-pressure view, Fricker deviates from or goes beyond the standard understanding of summativism, which Lahroodi (2007, 285) puts as follows:

According to summativism, let us recall, for a group *G* to have a cognitive character trait *T*, it is *logically* necessary that most members of *G* have *T*. *Simple summativism* asserts that a group *G* has the trait *T* if, and only if, all or most members of *G* have *T*. The collective trait, in other words, is the *common and widespread* trait in a group.

Fricker (2010, 236) herself understands summativism in the same way: "According to a basic summative account, if someone says 'The jury is fair-minded', this must be understood as the claim that enough of the jurors are fair-minded individuals."

Recall that for Fricker, the social-pressure view does not work since it is susceptible to a summativist account whereby the individual traits of the individual members contribute to the formation of the group trait. This clearly deviates from the way summativism is defined above. Now, arguing that summativism, defined in a certain way, is false using an argument against summativism defined in another way is a clear case of equivocation. Interestingly, however, when Fricker says that the practical-identities and invisible-hand views are not susceptible to the summativist account, she goes back to the standard definition of summativism. For it may be asked, are not the different commitments of the individual members associated with their practical identities and the canceling out of the prejudices of these individuals to form a group trait likewise cases of the process whereby the individual traits contribute to the generation of the group trait? Fricker here seems to be using a certain definition of summativism according to what will suit her purposes.

Second, it seems clear that the divergence phenomenon concerns the relation between the traits of a group and the traits of the group's individual members as members of the group, and not as private individuals. When summativism claims

that to say that group X has trait Y is to say that all or enough members of group X have trait Y, it means members of the group in their capacity as members of the group, and not as private individuals. As private individuals, they are not members of the group; as such, their traits as private individuals have nothing to do with the divergence phenomenon or the whole issue between summativism and non-summativism for that matter. When Fricker (2010, 236) says "According to a basic summative account, if someone says 'The jury is fair-minded,' this must be understood as the claim that enough of the jurors are fair-minded individuals," it seems clear that is the jurors, as jurors and not as private individuals, who are regarded as fair-minded individuals. Accordingly, to say that the individual members of a group, as private individuals, have such and such traits which are different from the collective trait of their group does not really constitute a critique of summativism.

If the practical identities of the individual members of a group outside of their membership in the group were considered in the debate, two problems, among others, would arise. First, which of these practical identities, considering their innumerability, should be considered? Take Fricker's example of the football team. She says that as private individuals, the members of the team may be uncompetitive while they become competitive as they become members of the team. Outside of the team, their private life would consist of multifarious private identities, a fact that Fricker herself recognizes. Which practical identities of these individuals should be covered when she says that the individual members of the team are uncompetitive as private individuals?

The most likely scenario is that these individuals may be competitive in some of their practical identities (say, when playing games with competitors in a job promotion) while uncompetitive in some of their practical identities (say, when playing games with family members for relaxation). If they become competitive as football team members, they may also become competitive or uncompetitive as members of other groups with their own distinct characteristics. Lahroodi (2007, 287-288) gives the example of the same group of individuals forming two different groups in which they assume a certain trait in one group and a different one in the other. This only involves two groups. In reality, however, we are involved in so many groups at the same time.

Second, if the claim of summativism would be made to include these practical identities of the individual members of a group in their private individual lives, then it becomes an absurd position. For we cannot meaningfully claim that saying that group X has trait Y means that all or enough individual members of group X have trait Y when in their private lives, given their many aspects (such as different group

memberships) and depending on which one is considered, they may or may not have this trait Y. Consequently, the debate between summativism and non-summativism would be meaningless.

After endorsing the practical-identities view, Fricker proceeds by grounding it philosophically in Gilbert's concept of plural subjects. For Fricker, Gilbert's concept of plural subjects provides an "excellent template for our thinking about group virtue and vice of the collective sort" (Fricker 2010, 240). While Gilbert's concept of plural subjects is intended to explain the nature of collective actions and beliefs, Fricker believes that it can be extended to cover collective virtues. For a short review of the basic features of the Gilbert's plural-subject model, let '*J*' to refer to any joint action (e.g. to walk together, to paint the house together), and 'we' to refer to you and I. According to Gilbert, we intend to *J* if and only if: you and I jointly commit as a body to *J* (or that "we commit to '*J*-ing' as a body"). For Gilbert, you and I, as a result of our collective commitment, form a plural subject—the proper subject of our joint intention to *J*. A plural subject, in this context, simply refers to any group whose members are jointly committed as a body to perform a joint action. It must be noted that the plural subject exists not in the ontological sense, but merely in the as-if or functional sense. As such, it does not refer to some supra-individual entity.

Furthermore, it is assumed that collective commitment is common knowledge to the members of the group. That is, there is a mutual belief among the members that they are engaging in some collective commitment to perform a joint action. For Gilbert, this collective commitment not only explains the irreducibility of joint action but, more so, the normativity that goes with the joint action. More specifically, it explains why the individual group members of a group have certain rights and obligations when engaged in performing a joint action. An example of this right is the right to rebuke a nonperforming member. For example, suppose Jose and Maria commit to walking together, and Jose suddenly walks fast, thereby leaving Maria behind. Maria has the right to rebuke Jose. What gives Maria such a right is the collective commitment that she has with Jose to walk together.

Using Gilbert's model, Fricker regards collective virtues as plural virtues, that is, as the virtues of plural subjects. If, under conditions of common knowledge, a number of individuals commit to a virtuous moral motive, they thereby constitute themselves as the plural subject of the collective moral motive. But for the plural subject or the group to have the collective virtue, Fricker (2010, 242) needed to add the *reliability condition,* which would assure that the collective motive will be put into action: "Let us now add to this group motive the requisite reliability condition; and voilà, we have a collective virtue." For instance, the group members may jointly commit to a moral motive, say achieving fair-mindedness as a group, but for the

group to have the desired trait it must carry out the motive. Fricker (2010, 241) also notes that "the group members need not possess the motive as individuals (*qua* private individuals). Rather, in jointly committing to it, they each come to possess it *qua* member of the group." Fricker, in this regard, reiterates the practical-identities explanation in which "there is room for considerable tension between one's personal motives/beliefs and the motives/beliefs one comes to have in virtue of this or that group identity" (241-242).

Fricker (2010, 242-243) identifies two challenges to the Gilbertian model. As the Gilbertian collective commitment requires the *condition of common knowledge,* the model necessarily entails: (1) that the commitment is unanimous among the members of the group, that is, each member of the group has the said commitment; and that (2) the members are *self-aware* in their commitment, that is, each of them knows about the collective commitment. Clearly, the unanimity requirement conflicts with the divergence phenomenon. On the other hand, the self-awareness requirement conflicts with an essential feature of virtues and vices in which it is not necessary for the bearer of virtue or vice to be aware that one has the virtue or vice or to consciously aim for virtue or vice. As Fricker (2010, 245), in this regard, notes: "A compassionate person need not be aware that he is compassionate; an intellectually courageous person need not be aware that she is intellectually courageous; and indeed it is famously plausible that a modest person is necessarily unaware that he is modest."

Fricker, in defense of the Gilbertian model, tries to overcome these challenges. On the self-awareness problem, she first identifies two reasons for the possibility that an individual subject may not be aware of having virtue or vice. First, they may not conceive of their good motive or skill as virtuous. Second, they may not be aware that they are reliable in achieving their motive. Then Fricker claims that the same reasons may apply to collectives. She explains: "... even while all parties must indeed be aware of the joint commitment to a given motive or skill, it does not follow from this that they are aware of all features of that to which they are committed (such as that it is virtuous), or again of their performance in relation to it (such that it achieves reliability)." (245)

Earlier, Fricker remarks: "If, under conditions of common knowledge, a number of individuals commit to a virtuous moral or epistemic motive, they thereby constitute themselves as the plural subject of that *collective motive*... Or, as we might put it, a joint commitment to a virtuous motive is a matter of jointly committing to the virtuous end for the right reason." (Fricker 2010, 241) As an illustration, Fricker speaks of a night watch with the moral motive of displaying the virtue of vigilance. Using the same illustration, what Fricker, in her defense of the

self-awareness challenge, in effect, is saying is that the individual members of the night-watch team are aware of their collective motive to display the virtue of vigilance, but they may not know that their motive is virtuous. It may be asked: *how can individuals collectively commit to a virtuous motive without them knowing that such a motive of theirs is virtuous?* In the sense that her defense would require individuals to know and not know something simultaneously, Fricker's defense falls into a contradiction.

Fricker then identifies two possibilities for a group virtue to occur without its members unanimously possessing such virtue. First is when the commitment of some members is half-hearted, that is, when "they lack the good motive/skill as (private) individuals" and "they all merely 'go along with' it *qua* group members (minimally acting according to it)". Second is when the commitment of all members is half-hearted; that is, when "they all merely 'go along with' the motive/skill of conducting themselves in a manner that promotes equal opportunities" (Fricker 2010, 246-247).

What Fricker is implying is that the individual members' commitment may vary in terms of degree; some may commit half-heartedly while some may commit whole-heartedly. Fricker thinks that since the individual members are not all whole-hearted in their commitment, this then overcomes the problem that the members are unanimous in their commitment. The issue is not the degree of commitment but the commitment. Whether half-hearted or whole-hearted, the question is whether all the members commit. Regardless of how one signifies their commitment to the collective motive, the normativity arising from the commitment applies equally to all those who make the commitment. They, for instance, will be subject to the same rebuke if they renegade from the collective commitment. This makes Fricker's defense of the unanimity challenge off tangent.

In sum, Gilbert's concept of collective commitment is indeed necessary to explain the normativity of collective action and belief. It clearly explains why members of a group acquire duties and rights when performing a collective action. It does not, however, sufficiently explain why a collective, taken in its own right, can acquire virtue or vice. It sufficiently explains why we should rebuke a member of our group not honoring our group's collective commitment. But, as endorsed and defended by Fricker, this model fails when used as a framework to philosophical ground non-summativism. First, the model is incomplete. For a group to have virtue or vice, it is not enough for the group to make a collective commitment to pursue a virtuous motive. The group should actually perform the motive, which explains why Fricker needs to add the *reliability condition* to the model. Second, the model is premised on the practical-identities explanation, which we have earlier shown to be

problematic for several reasons. Third, Fricker fails to defend the model from the challenges arising from its condition of common knowledge with regard to collective commitments. Consequently, an alternative model that will avoid all these complications is necessary. In the following section, we shall outline the features of one such model.

An Alternative View

There are undoubtedly traits, epistemic or otherwise, that can only be attributed to groups, and not to their individual members as well. Consequently, their attributions cannot be given a summative account. As Lahroodi (2007, 285) notes: "... consider predicates such as 'hierarchically organized,' 'cooperative,' 'interactive,' and 'well-coordinated.' These are predicates that can only be applied to groups, not to their individual members. Clearly enough, summativism does not hold for the traits corresponding to such predicates." When we say, for instance, that a committee is well-coordinated and hierarchically organized, we cannot mean that each of the individual members of the group, or a sufficient number of them, is well-coordinated and hierarchically organized.

What is it about groups that these exclusively collective traits are describing such that these traits cannot likewise be attributed to the group's individual members? One possible explanation is that these traits describe groups working as systems. When we say, for instance, that a group is well-coordinated and hierarchically organized we are saying in effect that the group is functioning as a system in a well-coordinated and hierarchically organized way, or, more simply, that the group is a well-coordinated and hierarchically organized system. This cannot be a shorthand for saying that each member of the group is functioning in the same way, for what is being described here is the dynamics among these members in terms of how they perform their designated tasks or roles in coordination and cooperation with one another to achieve their joint intentions or their group's objectives. In short, these traits are what may be called 'system properties.'

As system properties cannot be given a summative account, we contend that the simplest and best model for justifying non-summativism with regard to collective epistemic traits is to regard these traits as system properties. Fricker, in fact, hints at this when she explains a possible way by which a speaker's utterance of "The jury was fair-minded" can be interpreted non-summatively. Accordingly, she refers to a possible follow-up statement by the speaker which describes the jury as a system. She writes: "If, following up with a more general reflection, she were to add 'The jury is a just system', she would be referring to the institution of trial by jury defined purely structurally and procedurally in the manner specified in (3)—

that is, in abstraction from the performance of any particular collective jury or number of jurors who realize the institutional procedures in any given instance." (Fricker 2010, 236) For Fricker, this would indicate that the speaker likewise intended her first utterance to mean that she was referring to the jury as a system—that, as a system, the jury was fair-minded. In this case, the speaker regarded the epistemic virtues of justice and fair-mindedness as *system properties* of the jury.

Two theories, among others, may philosophically ground this model. One is Plato's theory of justice which gives plausibility to the idea that some epistemic traits are system properties. The other is Searle's theory of collective intentionality which can serve as a framework for explaining the irreducibility of system properties and thus the divergence phenomenon as well. In Plato's theory of justice, the virtue of justice is regarded as a *master virtue* and which can very well likewise be regarded as a *system virtue.* Justice is attributable to both human individual and state, which Plato regards as systems consisting of three interacting correlative basic elements. On the level of the human individual, justice is achieved when the three basic components of her soul achieve their respective excellences and are harmoniously working together.

On the level of the state, justice is achieved when the three basic classes of society, corresponding to the three basic elements of the individual human soul, achieve their respective excellences and are working harmoniously (see Evangelista and Mabaquiao 2020; Denise et al. 1996). For Plato, the three basic elements of the soul are (1) reason, to which the rulers of the state correspond; (2) spirit or passion, to which the military or soldiers of the state correspond; and (3) appetite or desire, to which the merchants and workers of the state correspond. When working excellently, that is, performing their designated natural functions, and harmoniously with the other elements, reason and the rulers achieve the virtue of wisdom, spirit and the military achieve the virtue of courage, and appetite and the merchants and workers achieve the virtue of temperance. When these three virtues are achieved, both individual soul and state achieve the virtue of justice. Justice is not a virtue of each of the basic elements; it is a virtue of the system formed by these three basic elements. It can be said that the virtue of justice supervenes on these three individual virtues. In any case, justice is here regarded as a system virtue or, generally, a system property.

Searle's theory of collective intentionality begins with the thesis that "There really is such a thing as collective intentional behavior that is not the same as the summation of individual intentional behavior" (Searle 1990, 402). Searle's classic illustration for this thesis involves two different groups of people whose external bodily movements were indistinguishable but were clearly *internally* different. One

group consisted of random people who all got up from the places in the park where they were sitting and ran to a shelter when the rain suddenly started to pour; the other consisted of actors in an outdoor ballet where the choreography called for the actors to perform an act in ways that incidentally resembled what the first group did. Searle contends that while the members of the ballet group performed a collective intentional action, the members of the random group did not.

Members of a group perform a joint action (collective intentional behavior) when the members jointly intend to cooperatively do their part in the joint action. The group's collective or joint intention entails certain specific roles or tasks for the individual members to intentionally perform. Searle's illustration for this feature of joint actions involves a football team intending to execute a pass play. To begin with, the players, individually, cannot execute the play. What the players can execute individually are their particular roles in the play, which they must do in cooperation with one another. For this cooperation to be possible, the individual players should perform their roles in the play as part of their joint intention to perform the play. That is, they should derive their individual intentions from their joint intentions. This means that each individual player, in performing their individual actions, has two simultaneous intentions in their mind: one is their intention that their team execute a play (Searle calls this the individual's 'We-intend.'); the other is their intention to do their part of the play (Searle calls this the individual's 'I-intend.'). As Searle (1990, 403) explains: "Each member of the team will share in the collective intention but will have an individual assignment that is derived from the collective but has a different content from the collective. Where the collective's is 'We are doing A,' the individual's will be 'I am doing B,' 'I am doing C,' and so on."

While virtues may generally be understood as an agent's traits of character dispositions to behave in certain ways (Lahroodi 2007, 291), their attribution is nonetheless usually made based on the actions performed by the agent. To use Lahroodi's example, we say, for instance, that an agent is open-minded when they perform actions, which may come in the form of making decisions, which accord a certain degree of plausibility to views contrary to what they already believe. In this light, the mode of attribution of an epistemic trait to a collective, whether distributively or not, would depend on the kind of action that the group does, which serves as the basis for this attribution. In Searle's theory of collective intentionality, if the action of the group is just an aggregate of individually independent 'I-intends' which are not derived from a 'We-intend' that the member of the group share with one another, then the trait attributed to this group can be understood summatively—just a shorthand for attributing the trait to the individual members of the group. But if such action is a collective or joint action, in which their

individual "I-intends" are derived from their shared 'We-intend,' then the trait attributed to this group cannot be understood summatively or as a system property.

To further elaborate take this example given by Lahroodi (2007, 287):

> Now we can conceive of a church committee that is narrow-minded about gay rights as a group, while all or most of its members are open-minded about gay rights. As individuals, all or most members of the committee routinely resist their initial tendency to dismiss ideas favoring gay rights that are contrary to their own and to grant them enough plausibility to take them seriously. The group, however, moves in the opposite direction. It fails to assign any plausibility to a wide range of contrary views about gay rights, summarily dismisses them and does not consider them worth of discussion, let alone adoption.

The first thing to note here is that the way by which the members of the church committee will individually decide on what actions to do about gay rights will be different from how the church committee will decide as a group. So, it is possible that the decision of the church committee as a group may be different from the individual decisions of the members of the committee. The case here is analogous to Searle's example of the two groups performing the same external behaviors in the park and so is also explainable using Searle's conceptual apparatus in explaining the internal difference between the behaviors of these groups. The members of the church committee can perform individual actions regarding gay rights that may be derived or not from their committee's joint intentions. In the first case, where the committee members are open-minded about gay rights, their 'I-intends' are not derived from the 'We-intends' of their committee; whereas in the second case, where the committee as a group is narrow-minded about gay rights, the members' 'I-intends' are derived from the 'We-intends' of the committee. Or we can also say that the committee is not functioning as a system in the first case, but they do in the second one. The joint intentions or We-intends of the committee, which entails the designated I-intends of the members, may consist of the objectives that the committee is tasked to pursue upon its creation.

Let us now discuss the advantages of our model for justifying non-summativism in which irreducible collective epistemic traits are regarded as system properties. First, this model can easily explain the divergence phenomenon. Obviously, a system property, being a higher-level property, cannot be predicated on the individual elements consisting of a system. Using a familiar example provided by Searle (1997, 451-459) in explaining his theory of *biological naturalism* in the philosophy of mind, the properties of water such as liquidity, transparency, and wetness cannot be reduced to the properties of hydrogen and oxygen. The properties of water are emergent properties arising from the causal interaction of the properties of hydrogen and oxygen. Searle claims that consciousness is an emergent property

of the brain arising from the causal interactions of properties of the brain's neurons. For Searle, conscious states cannot therefore be equated with the brain's neural states.

Second, which follows from the first, it does not need to make the problematic distinction between members of a group as members of the group and members of a group as private individuals to explain the divergence problem. As system properties cannot be attributed to individuals, the divergence phenomenon becomes a necessary consequence of regarding collective epistemic traits as system properties.

Third, it is not susceptible to the challenges of Fricker's Gilbertian Model. In our model, it is not necessary for a group to aim for a collective virtue to be eligible for an attribution of such virtue. What is necessary for the group to aim for is the proper execution of its intended collective action through the coordinated individual efforts of the group's individual members. The virtue or vice is attributed to the group on the basis of the quality of the collective action it does. For instance, if a government, through its collective actions, promote the common good of its people, then the government, as a collective, can be said to be virtuous. This avoids the self-awareness issue. On the other hand, as the virtue or vice attributed to the group in virtue of its collective action is a system virtue, the individual members, being elements of the system, cannot possess the system virtue or vice. They may, for instance, possess the virtue but not in its form as a system virtue. Individually, the members of the jury may be fair-minded; but they, individually, cannot possess the fair-mindedness attributed to the jury working as a system. This then avoids the unanimity problem. Moreover, as this model takes the joint actions of a collective as the primary basis for attributing the epistemic traits, not the collective commitment of the Gilbertian model, there is no need to supplement the model with a 'reliability condition.'

Finally, language plays a critical role in the analysis of the issue between summativism and non-summativism. This is in light of the possible effects of the ambiguities in the language used to refer to the epistemic traits in the various contexts of their attributions on how we understand the nature of these attributions. First, it shall be observed that we use the same expressions when referring to epistemic traits attributed to individuals and to collectives. As Byerly and Byerly (2016, 35) note: "Just as one might call an individual researcher, Bob, 'thorough,' 'cautious' or 'intellectually humble,' one might call a research team of which Bob is a member 'thorough,' 'cautious' or 'intellectually humble.'" Following this, one may incline one to analyze the epistemic traits attributed to both individuals and collectives in the same way. While a group taken in its own right and each of its individual members happen to be fair-minded, how an individual will arrive at

his/her action that will manifest the virtue will be different from how a group, working as a system, will arrive at its own action to manifest the same virtue.

More importantly, one plausible reason why epistemic traits attributed to collectives non-summatively are not readily recognizable as system properties is the following linguistic fact. On the one hand, most linguistic expressions for exclusively collective traits (such as hierarchically organized and well-coordinated) already indicate that these traits are taken as system properties which make it awkward to attribute them to individuals. On the other hand, linguistic expressions used for epistemic traits attributed to collectives taken in their own right does not have such indication which makes it still meaningful to attribute these traits to individuals.

Second, it shall be observed that when we are attributing epistemic traits to collectives, we can use the same expressions for these traits in both contexts where we are attributing them to collectives as a shorthand for attributing them to the individual members of the collectives, and where we are attributing them as traits of these collectives taken in their own right. Again, the following situation described by Fricker (2010, 236) shows this very clearly: "If, for instance, a member of the jury in a contentious court case were to privately remark, 'The jury was fair-minded', she might quite properly be describing the jury under either of the first two aspects. That is, she might be saying (1) that enough of the *individual* jurors displayed fair-mindedness; or she might be saying (2) that the jury taken *collectively* displayed fair-mindedness." An ambiguity could arise given that the speaker used an expression that could legitimately lend itself to the two significations. Of course, had the speaker formulated his/her expression in a way that would clearly show his/her intention, say he/she instead remarked that "The jury as a system was fair-minded," the ambiguity would not arise.

Given the different significations that the same expression for an epistemic trait can have we may need, in order to avoid unnecessary complications in our analysis, to stipulate some linguistic indicators to mark these differences. Take the case of being 'fair-minded.' We can, for instance, distinguish between 'fair-minded$_{IND}$' to mean that it is to the individual members of a group the trait are being attributed, and 'fair-minded$_{SYS}$' to mean that is to the group as a system that the trait is being attributed. So, when a speaker states that "The jury is fair-minded$_{Sys}$" we know that she is describing the jury as a system. Or when she says that "The church committee is open-minded$_{IND}$ about gay rights," we know that she is describing a sufficient number of the committee's individual members.

Conclusion

Collective virtue epistemology, an area of epistemology that intersects between virtue epistemology and social epistemology, investigates the nature and implications of attributing epistemic traits to a collective or a group of individuals. We examined two main issues concerning this, namely, the problems of (1) understanding collective epistemic trait attributions and (2) justifying non-summative collective epistemic trait attributions. With regard to the first issue, we showed that the debate between summativism and non-summativism is falsely framed as an issue of generality, which results from some sorts of linguistic confusions, referring to the failure to consider the intention of the speaker and the ambiguities inherent in ordinary language. With regard to the second one, we demonstrated that the challenges of the Gilbertian model as a framework for justifying non-summativism, referring to the problems of unanimity and self-awareness, have not been successfully overcome.

As an alternative model for the same purpose, we advanced the view, partly patterned after Plato's theory of justice and Searle's theory of collective intentionality, which regards epistemic traits non-summatively attributed to collectives as system properties. We have shown that this model can easily explain the divergence possibility and is not susceptible to the same challenges faced by the Gilbertian model. As system properties, collective epistemic traits are attributed to the group as a result of their collective intentional action, and thus irreducible and unattributable to the individual members of the group. It follows from this that collective epistemic trait attribution does not require that the members aim for or are aware of the epistemic trait that could or would be attributed. Instead, what is necessary is that the members properly execute their collective intention. And while individual epistemic traits may be attributed to the individual members of a group, it is only when the members have successfully executed their collective intention can a collective epistemic trait as a system property be attributed to the group.

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