### **Condorcet and Communitarianism: Boghossian's Fallacious Inference**

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## I. Introduction

One of the accounts of meaning that Boghossian (1989) considers and rejects in his survey of Kripke's interpretation of Wittgenstein's arguments for the 'Sceptical Conclusion' – the claim that there is no fact that grounds meaning or content – is 'Communitarianism'.<sup>1</sup>

Communitarianism is the thesis that it is ultimately the dispositions of a community of speakers that determine the content of a symbol. Boghossian's reasons for rejecting this theory turn on the fact that he sees the account as unable to accommodate the normativity of meaning, i.e. the fact that the content of a symbol must exclude parts of the world (application of the symbol to which would thus be a *mistake*).<sup>2</sup> However, as this paper aims to make clear, Boghossian's arguments are fallacious: using a version of Condorcet's 'Jury Theorem', it shows that Communitarianism *can* account for the normativity of meaning after all.<sup>3</sup>

Importantly, studying Boghossian's argument is also shown to be worth doing for its own sake, beyond the direct relevance for any particular theory of meaning. Boghossian's key inference – the one that leads him to reject Communitarianism – is one that has a great amount of surface plausibility, despite being *in fact* fallacious. An explanation of where and why it goes wrong, therefore, has wider implications for the understanding of the invalidity of certain kinds of inferences. Moreover, using *formal methods* – as I do here – to give this explanation can also be

seen as a methodological case-study for showing the fruitfulness of using these methods in philosophy.

The paper is structured as follows: section II presents Boghossian's arguments against Individual Dispositionalism. This is used as the background against which section III sets out Boghossian's specific argument against Communitarianism. Section IV presents a model that shows this argument to be flawed. Section V concludes.

## II. Boghossian's Rejection of Individual Dispositionalism

Boghossian's case against solving "the Sceptical Problem" by appealing to communal dispositions rests crucially on seeing dispositional accounts *in general* as unable to account for one of the two requirements of any satisfactory account of meaning:

- (A) It must allow for *an infinity of possible applications* (the infinitary characteristic)
- (B) It must allow for the possibility of misapplications (the normativity characteristic).

(A) is required, since it is a fact about our thoughts and utterances that there is no upper limit to the situations they can be applied to: if '+' means *addition* then it does so for *all* numbers flanking it, not just ones below a certain threshold. (B) is required, since there cannot be a truly meaningful symbol-system that has *everything* as the content of *every* symbol: it might be acceptable to have some (few) symbols with everything as their content (e.g. a symbol for 'self-identity'), but this certainly cannot be the case for *every* symbol.<sup>4</sup>

It turns out that a good starting point for understanding Boghossian's rejection of the *communitarian* account is the consideration of his arguments against grounding meaning in the

dispositions of an *individual*.<sup>5</sup> This type of account – 'Individual Dispositionalism' in what follows – assigns content to a symbol by considering the manner in which an individual is disposed to token that symbol. That is, 'horse' is said to mean *horse* if an individual is disposed to token 'horse' in front of horses. According to Boghossian, this sort of account is unsuccessful since he thinks that while it is able to deal with the (A) desideratum of meaning, it fails to be able to accommodate (B).

It can deal with (A), since accounts of individual dispositions can be made to be counterfactual-supporting, and thus extended to an infinity of situations (i.e., all those where the counterfactual holds). Here, Boghossian stands against Kripke's arguments that extending dispositions in this way is unjustifiable, as too many other (unknowable) counterfactuals would have to be evaluated at the same time. Boghossian rejects this argument since he thinks the counterfactual extension of a disposition *can* be harmless: following Fodor (1990, 94-96), he states that scientific idealisations (for example) show that one can know the truth of such a counterfactual without knowing that of all the other counterfactuals that surround it (Boghossian 1989, 508-509).<sup>6</sup> For present purposes, there is no need to assess these arguments, and I therefore simply assume that Boghossian is right about dispositionalism being able to satisfy (A); the interest of the present paper is only on the (B) desideratum of meaning.

Importantly, Boghossian argues that Individual Dispositionalism has a much harder time accommodating *this* desideratum: it seems inherently descriptive in a way that *cannot* account for the normativity needed here.<sup>7</sup> If I am disposed to token 'cow' in front of horses on a dark night, then that does not point to me having made a *mistake*, but rather *describes* what I am disposed to do. On the individual dispositionalist account, this would therefore entail that either 'cow' means 'cow or horse' – which is unacceptably disjunctive – or that some way of selecting amongst the individual's dispositions has to be found. However, Boghossian thinks there is no principled way

of doing so – bearing in mind that intentional and semantic criteria are out of the question, since these are the very notions we are trying to ground.

This (alleged) inability to account for the Normativity Characteristic is clearly fatal for Individual Dispositionalism.<sup>8</sup> Importantly, however, this argument shows more than just the inadequacy of Individual Dispositionalism, for Boghossian thinks this problem extends straightforwardly to *communitarian* accounts as well.

## III. Boghossian's Rejection of the Communitarian Account

To see why Boghossian thinks that the above argument against Individual Dispositionalism carries over to communitarian accounts, begin by noting that, *at first*, the situation seems to improve greatly when shifting attention to these accounts. Communitarian accounts (at least if they are dispositionalist in nature) are defined by their distinguishing *individual* from *communal* dispositions: they argue that it is the dispositions of the community that ground meaning or content, not those of the individual. Thus, 'cow' means cow and *not* horse on a dark night, since while *I* might have a disposition to utter 'cow' in the presence of a horse on a dark night, this is not true (so it is alleged) for the entire community.<sup>9</sup> Thus, it seems as if we can take the meaning of a token to be determined by the disposition of the community of individuals in question.

However – and this is the key argument for present purposes – Boghossian claims that this first impression is misguided: when it comes to the *normativity* of meaning, communitarian accounts fail to be compelling after all – and that for essentially the same reason as do the individually dispositional ones. Boghossian's argument for this conclusion is quick.

According to him, whatever applies to the individual must also apply to the community, since the community of speakers has to be assumed to be identical in all relevant aspects to the *individual* – i.e. since all the *members* of the community have the same dispositions, the *community* itself must have these dispositions, too.<sup>10, 11</sup> Thus, Boghossian concludes, there cannot be a distinction between communal dispositions and those of the individual members: if I am disposed to token 'cow' in front of horses, then so is the community.<sup>12</sup> In turn, this means that the former cannot be used to determine the correctness of the latter, and thus, it cannot serve as a fact that grounds meaning or content (Boghossian 1989, 536). However, Boghossian's reasoning is fallacious, as I show in the next section.

## IV. Condorcet's Jury Theorem and Communal Dispositions

Appearances to the contrary notwithstanding, the fact alone that all the members of the community are said to have the same dispositions does *not* entail that the *community* does so, too. This paper shows how this is possible by applying a version of Condorcet's Jury Theorem to the issue.<sup>13</sup> Intuitively, this theorem states that for a group of individuals making independent decisions about how to react to a given circumstance (whether the defendant is to be pronounced guilty or not, say), the majority of the members of that group is more likely to make the 'right' decision (i.e. pronouncing her guilty if and only if she is, in fact, guilty) than the members are individually, assuming only that they make the right decision more often than not. In the limit, for infinitely large groups, the majority will *always* make the right decision – and that despite the fact that the individual members might be only *slightly* more likely than not to make the right decision. To see how this theorem applies to the present case, consider the following model, resting on four assumptions that are justifiable in Boghossian's framework.

(1) An individual's *disposition* for tokening a specific symbol can be represented by the *probability* of this individual's tokening that symbol.

Before justifying this assumption, it is useful to distinguish two different *types* of dispositions: the disposition to token a symbol *simpliciter* (the 'total disposition'), and the disposition to token that symbol *in some specific situation* (a 'situation-specific disposition'). The idea behind this is that any total disposition should be seen to be divisible into a number of 'sub-dispositions', each of which is constrained by some particular situation. For example, the agent's *total* disposition to token 'cow' is to be understood as a combination of her disposition to token 'cow' in front of cows, to token it in front of horses, and so on. For what follows below, it is actually these situation-specific dispositions that are most important: it is they that can be used to ground meaning or content in the dispositions of an individual, by linking a symbol to a situation in the right way.

This appeal to situation-specific dispositions also has a natural formal analogue, for these 'sub-dispositions' can be represented by the agent's probabilities of tokening a certain symbol, *conditional* on her being in a specific situation. This yields a precise relationship between the total disposition to token a symbol *A* and the various situation-specific dispositions that constitute it – the law of total probability:

$$q(A) = \sum_{i=1}^{n} q(A / S_i) q(S_i)^{14}$$

As noted earlier, only the situation-specific dispositions are relevant here, so the 'priors'  $q(S_i)$  can be assumed to be equal to each other for simplicity. Note also that these probabilities are assumed to be the same for all individuals. This identity assumption is the counterpart of Boghossian's claim that the individuals are identical in all relevant respects – i.e. their dispositions. This allows one to focus on the 'representative individual', since all other members of the community will be exactly the same for the purposes of this model.

By way of a justification for this assumption, note that the probabilistic representation of dispositions has gained wide acceptance in many different subjects, from physics to political science. In fact, it is frequently argued that the very *meaning* of the term 'probability' is that of a disposition or 'propensity' (see Gillies 2000 for an overview over interpretations of probability).

Moreover, even if one doubts that (total) dispositions can *always* be accounted for in terms of situation-specific dispositions, and that both of these can *always* be captured without loss by means of probabilities and conditional probabilities, this has, as such, no implications for their reasonableness in the present case. There seems to be nothing specific about semantic dispositions that makes a probabilistic treatment inapplicable. At the very least, the onus of proof is clearly on the opposing side – if there is a problem, it is incumbent upon *it* to point it out.

Setting the model up in this way might be thought to introduce another question though: given the importance of the nature of the above situations for the determination of meaning or content, how are they to be individuated? Should one distinguish amongst the situations 'facing a cow in broad daylight' and 'facing a cow on a dark night', or can both of these be combined in the situation 'facing a cow'? Would not any decision here be entirely arbitrary? More importantly, does the individuation of the situation require an appeal to the *beliefs* and *desires* of the agents in question – since an agent's disposition to token 'cow' in front of a cow might vary depending on whether she *wants* to token 'cow'? This would clearly be very problematic: it would make the account circular. By way of a reply, let me make the following two remarks: firstly, I am not convinced that this really *is* a worry for Communitarianism: it should be possible to find adequately detailed descriptions of the situations that do not involve reference to content-bearing mental states. It is helpful to consider a scientific analogy: the boiling point of water is the temperature at which it boils (i.e. turns gaseous). However, this is only a dispositional property: the exact temperature at which it boils depends on the pressure of the ambient air, as well as on many other factors. That is, water has a different disposition to boil, depending on the situation it is in. Individuating these situations, though, is just a matter of finding out what is relevant for changes in the boiling point of water (e.g.: the height of the person measuring the boiling point is *not* relevant). This is a straightforward scientific question – and there is clearly no worry here about the answer being in some sense 'arbitrary'.

Similarly for semantic dispositions: one could use a purely naturalistic, statistical measure to individuate the situations relevant for content-determination. For example, the agents might be 'shaped' (by natural selection, say) in such a way that they are, as a *matter of fact*, disposed to react in specific ways to specific circumstances. One could then use these 'evolutionarily programmed' dispositions to individuate the situations.<sup>15</sup>

Secondly, if this is a problem for the communitarian account, it is *not* Boghossian's problem of *normativity*. He does not argue that Communitarianism fails to be compelling *because* it is unable to individuate the situations in the right way.<sup>16</sup> For this reason, the present issue is orthogonal to the interests of this paper: the aim here is not present a fully worked out theory of meaning, but just to defend Communitarianism against *one* specific charge.

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(2) For any (basic) symbol, there is exactly *one* situation such that the individual is particularly strongly disposed to token the symbol in that situation. That is: for any  $K_j$ , there is exactly one  $S_i$  such that  $q(K_i/S_i) > 0.5$ .<sup>17</sup>

The first thing to note about (2) is that it makes clear that, on the present account, dispositions are a matter of *degree*. That is, an individual can be *more* disposed to token symbol A than to token symbol B, and she can be *more* disposed to token A situation  $S_1$  than in  $S_2$  (for example, the agent's propensity to utter 'cow' might be higher when she is facing a cow that when she is facing a horse, even on a dark night). Whilst not entirely standard in the literature on dispositions, this gradualism seems a very compelling extension of the common accounts; in fact, it is partly this gradualism that clearly brings out the fallacious nature of Boghossian's inference.

It is on this background that it turns out to be useful to distinguish in particular those dispositions whose probabilistic representation yields a value greater than 0.5, and those that do not.<sup>18</sup> Note though that even relatively weak dispositions are still *dispositions*, and that (2) therefore does not beg the question against anything that Boghossian says. However, it does sketch the outlines of a solution to the above normativity problem.

To see this, note that once it is made clear that dispositions are *gradated*, the path is open for *distinguishing* them from one another – contrary to Boghossian contention. In particular, a basic dispositionalist theory of meaning can assign content to a token according the *strongest* disposition that is associated with the token. This immediately provides a potential reason for privileging some dispositions over others, thus opening up the second horn of the above dilemma.

That said, it ought to be noted that this alone might not be enough to rescue *Individual* Dispositionalism: after all, the relevant dispositions can be made arbitrarily close to one another whilst still preserving a strict ranking of one of them as stronger (i.e. we could have p('cow'/cow)=0.5000000001, p('cow'/horse) = 0.4999999999, p('horse'/cow) = 0.49999999999, and p('horse'/horse)=0.5000000001). That is, assumption (2) remains rather weak: admitting that every basic symbol is associated with a situation where the individual is absolutely most strongly disposed to token it might not give one enough grounds to comfortably privilege that disposition. As in the above numerical example, the relevant dispositions might be practically indistinguishable, so that the individual is virtually randomising over what symbol she tokens. In other words, in these cases, one might still strongly feel the force of Boghossian's argument that either the content of the symbol is disjunctive, or there are no good reasons for preferring one disposition as meaning-determining over the other. However, as I shall make clear below, all of this changes once we move to the communal level.

By way of justification for (2), I shall restrict myself to two brief remarks. Firstly, there might be some reason to think that this assumption is satisfied in many cases. What it implies is that the individual's tokening of symbols is systematically biased in certain ways; this is particularly reasonable if the population the individuals are a part of had to face some evolutionary pressures in the past. That is, if it is the case that it is an empirical fact that we are disposed to conceptualise situations in certain ways (as well we might be), then it is no wonder that we seek to invent symbols – linguistic ones, for example – to represent these situations with.

Secondly, requiring individuals to have strong dispositions of this sort is not *inconsistent* with anything in Boghossian's framework (nor is it greatly *implausible* within it).<sup>19</sup> The point of the present paper is to show how *some* Communitarian account could *in principle* overcome Boghossian's objection; for that, it is not necessary to show that *any* Communitarian account could *actually* do so.<sup>20</sup>

(3) Each individual's probability of tokening a specific symbol is independent of that of the next. That is, there are no dependencies amongst the individuals such that if individual 1 tokens K in situation  $S_i$ , individual 2 is more likely to do so herself.

This assumption is fairly straightforward in the present context, since the 'community' in question here is meant to be a set of *distinct*, but dispositionally identical individuals. All that the present assumption adds is that these individuals token symbols independently of each other – and this surely is not unreasonable: for example, these tokenings might be *mental* and *automatic* in a way that takes no account of what other individuals token. Thus, the assumption can be justified again most compellingly by simply seeing it as a constraint on the account to be developed.

Furthermore, if this is not to be seen as compelling, this assumption can even be weakened at the cost of further complications. The most important reason for allowing probabilistic dependencies is to make room for learning (e.g. by mimicry) – i.e. to allow for cases where individual 1 is more likely to token a symbol simply because individual 2 is tokening it. However, it turns out that it is possible to extend Condorcet's result in such a way that all the main underlying conclusions remain the same, even though there is a positive correlation between the individuals' tokenings of symbols (see e.g. Dietrich and List 2004). This makes it reasonable to leave this complication aside, and proceed with (3) as it stands.

(4) The dispositions of a *community* are determined by the *majority* of the dispositions of its members.

This assumption is the core claim of the present proposal; the idea behind it is that we need to find a way of (probabilistically) modelling the dispositions of a *group* of individuals. Unlike in the individual case, however, groups lack an ontological status that would permit us to assume that they simply *have* such dispositions – the properties (dispositions included) of a group must somehow be derivable from those of its members.<sup>21</sup> How could this be done? It appears that there are a number of permissible paths: for example, Boghossian (1989) takes communal dispositions to be simply identical to those of the individual members. However – and this is the key of the argument set out here – this is not the only way of proceeding. In fact, there are many other options that appear more convincing than Boghossian's: after all, a community is not simply a large individual, but it is *constituted* in a particular way *out of* these individuals.

One way of taking this fact seriously is by making communal dispositions a function of what the majority of them is disposed to token in that situation. On the one hand, this could be supported by an appeal to a basic, rough form of 'egalitarianism': every member ought to have an equal say in what the community does. This might be best captured by a majority-based determination of communal dispositions.<sup>22</sup> On the other hand, it could be seen as simply another constraint that is put on the communitarian account set out here: it is not necessarily always justified, but there are certainly cases where it can be plausibly seen to be applicable. On this latter option, this assumption is being put forward as a suggestion for further exploration, and as a claim that is plausible enough to justify this closer scrutiny.

Given these four assumptions, it is possible to show that even though all individuals are assumed to be the same dispositionally, this does *not* mean that the majority of them has to have the same dispositions as those of the representative individual. The key to understanding this is that assumptions (1)-(4) allow an appeal to Condorcet's Jury Theorem,<sup>23</sup> which states that the

*communal* situation-specific-disposition – i.e. the situation-specific-disposition of the (simple) majority of its members (n/2+0.5) – to token *A* in *S<sub>i</sub>* is larger than that of its representative member, if that member is disposed to token *A* in *S<sub>i</sub>* with a probability value greater than 0.5. To see this, set  $p = q(A/S_i)$  (so that *p* is the relevant situation-specific-disposition of the representative individual, which will always exist by (2)) and define *P* as the communal disposition in the way set out in (4). Then *P* will always be larger than *p* and will approach 1 as *n* approaches infinity.<sup>24</sup> Formally:

$$P = \sum_{i=(n/2+0.5)}^{n} {n \choose i} p^{i} (1-p)^{n-i} > p.^{25}$$

A simple example will make it clearer how this theorem works. Imagine three identical biased coins being tossed independently of one another, each of which has a probability 0.6 of coming up heads. Then the probability that a simple majority – i.e. two or more of them – comes up heads is the sum of two of them coming up heads (of which there are three possibilities) and all three coming up heads, i.e.  $P = (3) \ 0.6.* 0.6* 0.4 + 0.6* 0.6* 0.6$ . Further, this sum is greater than the coins' individual probability of coming up heads: P = 0.648 > 0.6 = p. Generalising this for n coins yields the above equation.

In the present context, this thus makes clear that the communal dispositions can *differ* from those of the individuals, even though all the latter ones are presumed identical in terms of their dispositions.<sup>26</sup> This, in turn, means that we *can* use the community's disposition as a standard by means of which the dispositions of the individual members can be assessed. For example, when some individual might be disposed to token 'cow' in the presence of horses on a dark night, this can be classified as a 'mistake', since the community as a whole is *less* disposed to do so, and

more disposed to token 'horse'. In the background of this result is the idea that the "wild tokenings"<sup>27</sup> of individuals are 'crowded out' by the presence of yet other individuals: it might be quite likely that *one* of the members of the community produces a wild token, but it is highly unlikely that a *majority* of them will do so.

To see this in more detail, note that while it is true that the community might still be disposed to token 'cow' both in front of cows and in front of horses, its dispositions are significantly less 'overlapping' than those of the individual. In fact, as Condorcet's theorem shows, even if the representative individual is disposed to token 'cow' in front of cows only negligibly more strongly than in front of horses (as long as q('cow'/cow) > 0.5), the communal dispositions can be made *arbitrarily disjoint* with some finite group size. That is, the existence of arbitrarily large differences in dispositional strength on the communal level is compatible with the existence of arbitrarily small differences on the individual level.<sup>28</sup> It is this fact that shows so clearly why Boghossian's inference is fallacious: it is true that an individual might be disposed to token 'cow' in front of cows *and* in front of horses on a dark night, and that she is disposed to do so in a way that makes it difficult to find good reasons for seeing one disposition as privileged in determining content over the other. However, as Condorcet's Jury Theorem shows, this fact *alone* is simply not enough to pose a worry for a communitarian theory of meaning, since the lack of a reason for privileging dispositions need not carry over to the communal level.<sup>29</sup> Even with the above individual dispositions in place, the community might be disposed to token 'cow' in front of horses hardly at all, thus providing a very good reason for privileging the disposition to token 'cow' in front of cows as content-determining. In short, Boghossian fails to show that greatly overlapping individual dispositions need to be mirrored on the individual level, thereby providing no grounds for thinking a Communitarian theory could not allow for the normativity of meaning or content.

Before concluding, the following objection ought to be considered: why do we have to go all the way to the community? Why can't we simply use an individual's strong situation-specific-dispositions to ground the normativity of meaning? If for every symbol, there is one situation in which the representative individual is (most) strongly disposed to token it, why don't we simply take the content of that symbol to be whatever it is that individuates that situation (e.g. the presence of cows)?<sup>30</sup>

For an answer, consider the following three remarks. Firstly, here, Boghossian's initial objection to Individual Dispositionalism might still apply: as noted in the discussion of (2), it is entirely compatible with the above 'model' that the dispositions of the individual, while gradated, are so close to one another that it is hard to see how one can be taken to be privileged in determining content. In other words, even with the formal tools set out here, Boghossian might very well be right in thinking that on the individual level, the normativity characteristic cannot be satisfied.

Secondly, there might be many reasons that lead one to give preference to communal over individually dispositionalist accounts; that is, the route through Individual Dispositionalism might not be the only (or even the best) way of approaching Communitarianism. For example, there might be independently motivated arguments that give prominence to the fact that language, at least, simply *has to be* understood as a communal phenomenon.

Also, one might worry that overly individualist accounts cannot allow for differences in individual's (innate) dispositional endowments: maybe my dispositions are different from yours, so that if the strongest disposition is seen to ground content, 'cow' means cow for me and horse on a dark night for you. Both of these points could be easily addressed on the present account; the formal analysis then becomes much more difficult, but none of its conclusions change. For example, if the community consists of differently disposed individuals (i.e. individuals who token

symbols with different probabilities), but that all individuals continue to satisfy assumptions (1)-(4), then the communal disposition will still be greater than the disposition of any individual, even if all the  $p_i$  are different. This can hold even when for some, though not all *i*,  $p_i < 0.5$ .<sup>31</sup>

Thirdly, there are also some reasons to think that anybody who is drawn towards an individualist dispositionalist theory of meaning should take a communitarian account of the above general structure seriously: it has all the benefits of the former, but also further features that make it more attractive still. That is, Communitarianism of the above sort is as naturalist as Individual Dispositionalism, but potentially also more descriptively accurate.<sup>32</sup>

For these reasons, I think there is much reason for taking Communitarianism seriously. On top of this, as mentioned earlier, much of the present interest in the discussion is the investigation of a specific form of fallacious reasoning through formal methods; this interest goes beyond the specific discussion of content set out earlier.

### V. Conclusion

In short: Condorcet's Jury Theorem shows that Boghossian is wrong in arguing that *all* communities of identically disposed individuals must have the same dispositions as their members. There is a restricted set of suchlike communities for which this does not hold: namely, at least all those communities that satisfy the above four constraints. This thus means that he has not provided an argument for thinking that a communitarian account does not work as a solution to the Sceptical Problem *due to the normativity requirement*. Whilst there might be other problems remaining with these types of account, it is hoped that it has at least become clearer where research energies should be concentrated – and where not. Also, I hope to have made clear how formal methods can be used to fruitfully investigate these issues.

#### Notes

<sup>1</sup> Note that in what follows, I do not want to engage in any way with the question if Kripke's interpretation of Wittgenstein is accurate, and if Boghossian's survey is an accurate representation of Kripke or Wittgenstein. I think that the problem Boghossian identifies is worth discussing independently of whether it is also Kripke's or Wittgenstein's problem. For this reason, I shall refer to Boghossian's account of Kripke's Wittgenstein under Boghossian's name only; this though should not be taken for an answer to any of the above questions.

<sup>2</sup> As an aside, it is worth remarking that one may question the entire foundation of this problem. As Jerry Fodor has suggested (in personal communication), appeals to an agent's instrumental rationality may well be enough to make sense of the required normativity: if the agent *intends* to refer to cows and *therefore* tokens 'cow', then she is making a mistake if she tokens it when in the presence of horses. Of course, this does not explain why the agent's intention is about cows rather than horses, but it may be possible to explain *this* independently. However, short of this radical *dissolution* of the problem, it still apppears that there is much interest in trying to find a genuine *solution* to it as well, some steps towards which are taken here.

<sup>3</sup> It is important to realise that this is the *only* aim of the paper – specifically, it does not actually *present* a communitarian theory of meaning. It only seeks to dispel one particular argument against this type of account. Note also that the argument of this paper clearly does not address all the other problems of dispositionalist theories of content – the aim is rather to show that whatever else is wrong with Communitarianism, it is not the normativity of meaning.

<sup>4</sup> In fact, it is not even clear that a symbol containing everything in its content could be *basic* in the sense required here.

<sup>5</sup> At the end of the paper, I question whether this is, in fact, the best way of approaching Communitarianism. For now, though, it is certainly a useful heuristic.

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<sup>6</sup> This inference was recently called into question by Kusch (2005): he argues that, due to important disanalogies between the two fields, the extension to an infinity of possible situations might indeed be defensible in the *scientific* case, but not in the *semantic* one. Hence, Kusch concludes that we have no reason to think that dispositional accounts *can* be made to satisfy the infinitary characteristic of meaning. Whether this argument poses a strong challenge to semantic dispositionalism is not something I discuss here; what is interesting to note though is that if the arguments of *both* the present paper *and* Kusch (2005) are successful, it would show that what needs to be discussed is characteristic (A) – not (B), as suggested by Boghossian.

<sup>7</sup> There are actually *two* worries about normativity that Boghossian might be concerned with: on the weaker reading, he is to be seen as suggesting that Individual Dispositionalism cannot make sense of the individual making a *mistake*; on the stronger reading, he is to be seen as concerned with the fact that meaning is *inherently* normative, whereas dispositions are *inherently* descriptive (making it puzzling how the former should be reducible to the latter). This stronger reading actually turns out to be far less worrisome for a communitarian account than the weaker one. See the end of the paper for more on this.

<sup>8</sup> Boghossian raises a further problem for Individual Dispositionalism, namely the fact that there would seem to be infinitely many dispositions an individual needs to have, since a symbol might be disposed to be tokened in an infinity of possible situations: see Boghossian (1991, 79). However, I shall not discuss this issue here, since it introduces no formal complexities (it merely requires that probabilities are countably additive, which is standardly assumed to be the case) and is best seen in connection with the *infinitary* characteristic, not the *normativity* characteristic. See also note 5 above.

<sup>9</sup> Any issues concerning the Infinitary Characteristic are of course left untouched by this move. Also, there is a further problem here as to whether this account can offer a substantive

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replacement for the notion of 'truth'. However, following Boghossian (1989, 535), I shall not debate this problem further, as it does not bear on the issues of relevance here.

<sup>10</sup> Boghossian writes: "After all, if *I* can be taken in by a deceptively horsey looking cow, what prevents 17000 people just like me from being taken in by the same, admittedly effective, impostor?" (Boghossian 1989, 536). Now, as I show below, one reason that prevents the community from being taken in is the very fact that there are 17000 other people around.
<sup>11</sup> In personal communication, Boghossian has emphasised that the issue really only concerns the fact that the communal dispositions *share the problems* of the individual ones: they are overlapping and there are too many of them. However, it is unclear to me why this needs to be so, short of making this identity assumption. At any rate, deciding this interpretative issue is not greatly relevant in the present context: the argument of this paper applies to either version.
<sup>12</sup> Another argument for this conclusion might be this: individual and community must share dispositions, as it is only by means of dispositions that we can determine whether an individual is part of the community or not. However, that seems clearly false: there are many ways of assigning individuals to a community (from spatial proximity to reproductive links) other than

their dispositions. Accordingly, I shall not consider this reading any further.

<sup>13</sup> For more on the theorem, see Condorcet (1785/1994), Black (1958, especially chapter XVIII), Grofman (1975) and Young (1988).

<sup>14</sup> This thus means that this individual's probability (i.e. her disposition) of tokening a symbol other than *A* in situation  $S_i$  is given by  $1-q(A/S_i)$ .

<sup>15</sup> It is also worthwhile to note that there is significant work in developmental psychology investigating innate dispositions to conceptualise certain situations: see e.g. Carey (1994). Note also that the *descriptive* nature of these dispositions means that they might not be enough to ground the content of the agent's tokenings by themselves (see note 6). However, this is not

necessary here either, since for a communitarian account, individual dispositions are but a stepping-stone towards the grounding of content.

<sup>16</sup> That said, he does raise a similar worry in his discussion of the holism of beliefs and desires: see Boghossian (1989, 540; 1991, 79) and note 7 above. However, he treats this as a *separate* worry for a *different* version of dispositionalism; for him, the key issue concerning *Communitarianism* is clearly the normativity problem.

<sup>17</sup> Note also that for any situation, there can only be *one* symbol that an individual is strongly disposed to token in it, i.e. that the probability distribution of tokenings in a specific situation is non-uniform (this follows from the probability calculus).

<sup>18</sup> Note also that the relative strengths of total and situation-specific dispositions are not independent: for a total disposition to have a probability value greater than 0.5, one of the situation-specific-dispositions that partially constitute it must, too. On the other hand, there are cases where the representation of a situation-specific-disposition yields a value greater than 0.5, but the corresponding total disposition does not.

<sup>19</sup> Consider for example the following: "[...] [M]any of the mistakes we make are *systematic*: they arise because of the presence of features – bad lighting, effective disguises, and so forth – that have a generalizable and predictable effect on creatures with similar cognitive endowments" (Boghossian 1989, 536).

<sup>20</sup> A third way of justifying (2) is that versions of Communitarianism might even be made to work for cases where, for all *j*, *i*,  $q(K_j/S_i) < 0.5$ ; these would be premised on the fact that the *weakest* communal disposition grounds content. The only case that *must* be excluded is where  $q(K_j/S_i) = 0.5$  (but see also note 31). These other versions though seem to me to be of doubtful plausibility only. See also note 26.

<sup>21</sup> This seems a very uncontroversial form of methodological individualism.

<sup>22</sup> There is even some empirical work concerning animals that appears to support a stance like this: see List (2004).

<sup>23</sup> Application of the theorem requires three conditions to be satisfied: the probability to token a symbol must be greater than 0.5 for every individual, all individuals must act (probabilistically) independently from one another, and they must not behave strategically. The first two requirements are satisfied in the present case for the reasons set out above, and the last one is trivially true given the modelling setup: tokenings might be automatic and mental, and people are generally presumed sincere in their utterances. See also Owen et al. (1989).

<sup>24</sup> I assume in what follows that *n* is odd (but the extension to even n is straightforward) and greater than or equal to 3. Note also that to be precise, the following result is a standard theorem, whose convergence to 1 as n approaches infinity (so that the probability that the community tokens cow non-exclusively in front of cows goes to 0) is Condorcet's actual result. Proofs of a more general version of this theorem (with various extensions and applications) are in Black (1958), Owen et al. (1989) and Dietrich & List (2004)

<sup>25</sup> This version of the theorem is similar to that given in Grofman (1975) and Grofman et al. (1983). Note also that p here is *identical* for all the members of the community; for extensions to the case where p differs across individuals, see note 31.

<sup>26</sup> It is further useful to note that the restriction that  $p > \frac{1}{2}$  (assumption (2)) can be loosened. However, if  $p < \frac{1}{2}$ , the communitarian account would have much work to do in explaining how meanings are assigned to tokens if the community is *less* disposed to token some symbol than *any* of its members. Whilst not impossible, I here concentrate on the more plausible case where p > $\frac{1}{2}$ . See also notes 20 and 31.

<sup>27</sup> This term is from Fodor (1984, 39).

<sup>28</sup> Boghossian writes: "The community, I submit, *however exactly specified*, is bound to exhibit precisely the same duality of dispositions that I do [...]". (Boghossian 1989, 536; emphasis added). This appears clearly overly general: the dispositions of the community depend very much on how the community is specified.

<sup>29</sup> Note also that the stronger form of the normativity issue (note 6) can equally be handled by this Communitarian account: the inherent normativity of meaning is preserved by not criticising the *communal* dispositions as being correct or not, but by seeing them as providing the standard with which *individual* dispositions are assessed. Using one descriptive fact as a standard by means of which another descriptive fact is assessed is the most common way of creating genuine normativity.

<sup>30</sup> A similar idea is in fact the core of the causal and informational accounts of content: see e.g. Dretske (1981), Stampe (1986), and Fodor (1990).

<sup>31</sup> The sufficient conditions for this to hold are quite complex and not greatly important in the present context. Examples include symmetrical distributions (e.g. the uniform or normal) with mean  $\mu$ >0.5. See also Grofman (1975), Grofman et al. (1983) and Owen et al. (1989).

<sup>32</sup> Stampe (1990) also ends up defending a similar position.

# Acknowledgments

I would like to thank Dennis Stampe, Luc Bovens and Peter Vranas for helpful comments on previous versions of this paper, and audiences at the University of Memphis, Princeton University, and the University of Illinois, Urbana-Champaign for much useful discussion.

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