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Empathy for Avatars:

Social Media, Political Dysfunction, and Empathic Cues

Abstract

Social media platforms have come to function as our contemporary "Town Squares". A huge proportion of political life now occurs in online virtual spaces. According to a standard, *rationalist* view, the goal of political discourse is to share information and arguments. If that were true, social media platforms, which make this easier than ever before, should be a boon to political life. And yet, it is a familiar fact that online political discourse is highly dysfunctional: Jonathan Haidt characterises it as filled with "anger, contempt, insults and obscenity".

Many recent discussions focus on the role of social media algorithms in amplifying toxic content. I want to explore a different line of explanation – the *moral psychology* of the human beings who *use* social media. A large body of psychological research indicates that physical, and especially facial, cues are vital for promoting empathic responses. When we debate on most platforms, these cues are systematically absent. The design of these platforms creates a low-empathy environment.

If we accept an *emotivist* view of political discourse, according to which a core goal of political communication is to create emotional connections, it is no surprise that social media should be disappointing as fora for political life. Empathy is central to political life, and so the design of the online virtual spaces in which political discourse now occurs needs to reflect this fact.

1. Introduction

As Ezra Klein puts it, social media sites have come to function as "Town Squares" (Klein 2022) – they are the medium and conduit of a large proportion of our political engagement and conversation. Twitter (also known as "X") and other social media sites are where we go to hear the pronouncements of political leaders, follow the latest updates from journalists, and engage in political debate.

But if this is a fact of modern political life, it is rarely seen as one to be welcomed. The migration of political discourse to social media is associated with the rise of perpetual political dysfunction. Twitter, it is often said, is a cesspool[1] – and other social media platforms are worse. It's not just that fascists and other extremists gather online, or use social media to circulate falsehoods and

[1] See, for example: https://www.sfchronicle.com/opinion/openforum/article/twitter-elon-musk-hate-speech-17553858.php; https://apnews.com/article/elon-musk-spacex-twitter-inc-technology-europe-30b55f9c3cbe64c0b98d0cfbe7ab5a9f; https://thehill.com/blogs/blog-briefing-room/news/3773933-fauci-responds-to-elon-musk-twitter-a-cesspool-of-misinformation/

conspiracies. What is striking is the pervasive *aggression* that characterises online political discourse. Proponents of rival political views on social media routinely subject their opponents to ridicule and abuse – it is common to see political actors on social media speak to one another in terms that it would be almost unthinkable to use when addressing a stranger in the physical world.

This fact is so commonplace that it is easy to forget how surprising it is. But I think it shows us something vitally important about the nature and purpose of political discourse. And this, in turn, can guide us in the project of regulating and reforming social media platforms in order to make them fit spaces for the conduct of political life.

On a common understanding of the nature of democratic political discourse – which I shall label *Political Discursive Rationalism* – the primary goal of democratic conversation is to share information and arguments, in order to reach true beliefs about matters of fact. If Political Rationalism were true, then we would have expected the rise of the internet and of social media to be an epochal *boon* to political discourse. Never before has it been so easy to access and share information and arguments with our fellow-citizens.

This, then, is my question: *If the purpose of political discourse is to share information and arguments, then why has the migration of political discourse to social media made political discourse more rather than less dysfunctional – given that social media facilitates the sharing of information and arguments?*

My conclusion is that the fact of social media's discursive dysfunction (if it is a fact) is a reason to *abandon* Political Rationalism. Instead, we should embrace some form of Political Discursive *Emotivism*, according to which, while information- and argument- sharing may be key normative political achievements, a further central goal of political discourse is to forge emotional connections between political actors. In particular, I will focus on *empathetic* and *sympathetic* connections. On this view, success in political discourse is either unlikely, or impossible, unless the participants forge empathic connections.

Political Emotivism has resources to explain the fact of social media's discursive dysfunction which are unavailable to Political Rationalism. For while social media platforms are excellent at allowing political discussants to share propositional claims, such conversations, of course, *happen online*. Given the current technological state of the most popular social media platforms,

that means that they occur in a mainly text-based medium, where we can rarely see the faces and bodies of our interlocutors. If Political Rationalism were true, then this fact should be irrelevant. But there is ample evidence that empathic and sympathetic responses are prompted by facial and physical cues. In other words, the migration of political discourse to the internet has allowed us to share information and arguments whilst *robbing* us of the physical cues that, in our embodied lives, prompt us to *empathise* with those to whom we are talking. Political Emotivism appeals to this fact in explaining why online political discourse is so toxic. No wonder that political discussants behave terribly on the internet, for they are operating in an environment that systematically screens out natural cues to empathy and fellow-feeling.

However, my conclusion is not entirely pessimistic about the possibility that online spaces can be a forum for successful political discourse – which is important, since the migration of politics to virtual spaces is something that is hardly likely to change. Rather, I propose that the Political Emotivist, in helping us to *understand* what is going wrong in online political discourse, can also suggest ways to make it *better*. Because existing work on the politics of the internet has been informed by Political Rationalist assumptions, it has tended to focus primarily on more narrowly epistemological features of online environments – on their propensity to develop epistemic bubbles and echo chambers (Nguyen 2020), and foster the spread of falsehoods and propaganda (Rini 2017, Croce & Piazza 2023), and on the algorithms that promote biases of various kinds (Fazelpour & Danks 2021; Peters 2022). This work is important, but I believe that it offers us an incomplete picture of the online world.

Political Emotivism reminds us that, when we think about the design of online spaces, we must also think about the moral psychology – in particular, the *embodied* moral psychology – of the actual human beings who *use* these spaces. As such, I conclude by considering some ways in which the design of social media sites could aim to address the problems that I identify – the problems that arise in an environment characterised by pervasively low empathy – and suggest some lines for future research.

I end by considering some fledgling steps in this direction, and finish with some ideas about the development of virtual reality and suggestions for further research.

2. Rationalism and the puzzle of dysfunction

Political Discursive Rationalism – or, as I shall generally call it, simply *Political Rationalism* or just *Rationalism*, is, I take it, the dominant theory of successful political discourse (it is, for example, presupposed by most of those who offer epistemic arguments for the value of democracy (see for example, Landemore 2012, 2013; List & Goodin 2001; Müller 2018; Peter 2008, 2016).

It is, in my understanding, a *normative* claim. It says that the *primary goal* of political discourse, and the *mark* of successful political dialogue, is the sharing of information and arguments. In other words, political discourse is, when it is going well, primarily a *ratiocinative* activity, in which participants aim to form and share *cognitive* mental states which aim to represent *truths*.

As such, political discourse should go well when participants are able to share information and arguments with one another – and, in a political system in which political discourse has fundamental significance, such as a democracy, we should expect *political life* to flourish when such discourse is enabled and widespread.

If this were true, then we would – other things being equal – expect technological advances that make it far easier to access, share and discuss politically-relevant information and arguments to be a *boon* to political life. After all, it would make successful political discourse easier, and thus should be expected to improve politics. For example, if a primary justification for democracy is that the pooling of information should allow citizens to form more accurate beliefs about matters of fact (as per epistemic-democratic arguments inspired by the Condorcet jury theorem (List & Goodin 2001), then technologies that facilitate the pooling of information should be conducive to flourishing politics.

But of course, this is not what we see. New technology, in the form of social media, has made the ratiocinative aspects of political discourse – the sharing and discussion of information and arguments – easier, faster and cheaper than ever before. And yet we do *not* associate politics, as practiced on social media, with flourishing political discourse, nor do we typically hold that social media, by facilitating information- and argument- sharing political discourse, has made political life better.

Rather, we tend to think the opposite – Twitter/X and similar sites are a toxic swamp, and the discourse conducted there is a cancer on the body politic. Shortly after Elon Musk's acquisition of Twitter, the psychologist Jonathan Haidt took to the platform to proclaim:

> In real conversations, speakers who frequently spout anger, contempt, insults and obscenity are shunned. On Twitter, they are amplified. Twitter is not a public conversation, it's a public coliseum. @elonmusk, please rethink the social incentives.

At least part of this observation is true. People discussing politics in online virtual spaces routinely treat each other with a cruelty and vindictiveness that would be absolutely shocking to witness in the physical world, even – perhaps especially – with strangers. Conversations happen there, but not, in a normative sense, successful political *discourse*.

This, then, is the *striking fact*. Despite making the exchange of information and arguments easier, the migration of political discussion to social media has not made it *better*. (I could make the stronger claim, that it has made discourse *worse* – but will mostly content myself with the weaker claim that it *has not made it better*.) If *Political Discursive Rationalism* were true, this would be extremely surprising.

3. Social Media's Empathic Deficit

Of course, I am far from the first person to notice the pervasive dysfunction of the political-epistemic life of social media. But many of the putative *diagnoses,* I think, miss an explanation that is staring us right in the face – or, more to the point, *not* staring us the in face.

Most of the social media platforms on which political discourse occurs are primarily *text-based* and verbal. This is certainly true of the most political social media site, Twitter/X, and its imitators, and true to a lesser extent of Facebook. Even on more visually-oriented sites such as Instagram, we are rarely engaged in anything that approaches, *live, face-to-face* political discussion.

If the goal of political discourse is to exchange information and arguments, then a primarily text-based online platform should be an ideal place in which to conduct such discussions. Not only does it facilitate the sharing of large quantities of information (for example, through the sharing of links), but, moreover, this exchange is conducted in a format that screens out large

quantities of information about the embodied appearance of our interlocutors which, if rationalism is true, should be irrelevant to the conduct of political debate.

But that information is not *emotionally* irrelevant. Rather, there is extremely ample evidence from social and cognitive neuroscience that visual cues of the bodies – and most importantly, the faces – of other people are vital in stimulating a range of *emotional* responses. We mimic the facial expressions of others, and this is thought both to increase our understanding of their emotions and stimulate corresponding emotions in ourselves (this observation is untroubled by the recent neuroanatomical controversies about the existence of mirror neurons – see e.g. Schilbach, *et al* (2007)).

Dimberg, *et al* (2011) have shown that high-empathy subjects are more responsive to facial stimuli than low-empathy subjects, and Rymarczyk, *et al* (2016) have shown that high-empathy subjects are also more sensitive to dynamic – that is, *moving* – facial stimuli. Facial stimuli also let us know when others are empathising with us – Goetz *et al* (2010)'s review of the literature concludes that there are distinctive facial expressions related to sympathy, and Falconer, *et al.* (2019) have shown that subjects are reliably able to identify facial expressions associated with empathetic compassion. In other words, facial cues help us to know how others feel, and it makes us feel for them and with them. That's to say, facial cues stimulate *sympathy* and *empathy*.

In social psychology, Batson *et al's* (1981, 1983, 1988, 1991) famous experiments are widely regarded as strong evidence that empathy (which, in his experiments, is in large part prompted by visual cues) is a stimulus for various kinds of *altruistic motivation* – or what Hume would have called benevolence. Correspondingly, Christov-Moore and Iacobini (2016) have shown a strong correlation between the observation of facial cues, "self-other resonance" and pro-social behaviour. In other words: seeing the faces of others is causally related to experiencing the psychological responses – sympathy, empathy, and benevolence – central to the sentimentalist moral psychology of philosophers such as Adam Smith and David Hume.

Now, if the social media platforms on which we conduct our political discussions do not show us the faces of our interlocutors as we engage in discussion, then we should expect these conversations to be accompanied by *lower levels of sympathetic, empathetic and benevolent engagement than face-to-face conversation*. But, again, if the primary purpose of political discourse was information sharing, *why would this matter*? If anything, we should expect the removal away of

non-rational motivation-formation and emotional stimulation to constitute an improvement, allowing reason to hold sway unimpeded.

4. Political Emotivism Introduced

The irony of Jonathan Haidt's tweet is that he is a proponent of the view that moral and political thought is emotionally-driven, and yet he fails to see that it is *emotional* malfunctioning, not just the mis-arrangement of incentives, that explains the toxicity he deplores. What I want to suggest is that we should *reject* Discursive Political Rationalism, and instead embrace Discursive Political *Emotivism.* While the primary goals of political discourse may be *partially* ratiocinative, concerned with the sharing of information and arguments, they are *also* emotional. We do not successfully engage in political discourse if we fail to *feel* certain things – and, in particular, if we fail to empathise and sympathise with our interlocutors.

If Political Emotivism is true, then it should come as no surprise that political discourse on social media is not especially successful. For some of the greatest stimuli to empathy and sympathy – bodily and, particularly, facial stimuli – are systematically screened out. When we simply *write* lines of text to one another, we are *typically* missing out on one of the primary achievements of political conversation – the formation of empathetic emotional responses to one another.

I think there is good reason to think that Political Emotivism (which, note, I take not to preclude the importance of rational information-sharing, but to subsume that goal within a broader package with *also* includes emotional responses) is true, on independent grounds. In the section after next, I will outline three views that entail forms of Political Discursive Emotivism. But I should also say – I take it that the "striking fact" is also good *evidence* for Political Emotivism. Social Media should have given Political Rationalists what they want – but it has led to toxic discourse. If that is true, and if Rationalists cannot explain it, whilst Emotivists can explain it, then this constitutes a point in favour of Political Emotivism.

5. Rationalist Responses

Of course, this argument contains two *ifs*. Both can be rejected by Rationalists.

First, Rationalists may simply object that the "striking fact" is *not* a fact. Sure, it is a *commonplace* to hear people bemoan the toxicity of social media. But that doesn't mean that political discourse on social media is particularly or unusually unsuccessful. Perhaps this is all just the

typical hand-wringing and declinism that pervades public life – after all, at what point in our lives have journalists and intellectuals *not* proclaimed that we are living in dark times, or times of unprecedented crisis – coupled with an extra infusion of Luddite hysteria. Perhaps things are, after all, not so bad. If they were, would we all be on social media?

This view has something going for it – hand-wringing declinism *is* pervasive, and it often blinds us to instances of real progress. But I think it is insufficient to explain what I take to be the data. After all, even if political discourse isn't *utterly terrible* on social media, then it is at least *not great*. And it hardly seems as though our wider political functioning is *better*, in Western democracies, than it was in the era immediately before social media, in terms of levels of polarisation, misinformation, and authoritarianism.

Alternatively, Rationalists might acknowledge the striking phenomenon, but deny that they owe us an explanation. Rather, they might claim that the concurrent rise of social-media-based political discourse and such forms of dysfunction is in fact a *coincidence*. Perhaps the political malaise I am discussing occurs online only because it *would have occurred anyway*, and places like Twitter are just where a lot of politics goes down. We might, in this vein, argue that what undermines contemporary political discourse is nothing special about social media, but background conditions of polarisation and economic resentment, which are not caused by social media, but instead stem from globalisation, inequality, and a trend in legacy media towards populist outrage which predates the rise of the political internet.

Again, this is a fine point, as far as it goes. And it should remind us always to be wary of our predilection for "one-shot" explanations[2] – it is overwhelmingly likely that complex social phenomena will be best-explained by appealing to a wide variety of causes. Nevertheless, the proponent of this view cannot deny political discussion on social media is *especially* unpleasant – that, as Haidt points out, we treat one another in social media in ways we would never treat strangers in our embodies lives. If that is true, and if much of our political lives are playing our on social media, it would be remarkable if that were *not* one of the causes of political dysfunction.

[2] I take this term from Currie (2019).

A more popular line, among philosophers, has been what we might call Rationalist Discursive *Pessimism*. Rationalist Pessimists agree that the goals of political discourse *should* be primarily cognitive, ratiocinative, and veritistic. But they claim that – unless carefully managed – political discourse is not apt to achieve these aims. Pessimists fall into two main camps. Some focus on group deliberation. There is a large literature, represented by Sunstein (2000, 2002) among others, which argues that deliberation fosters group polarisation in beliefs, in ways that appear epistemically irrational. Others focus on information-gathering. Anti-Millians *deny* that a "marketplace of ideas" is one in which accurate information are likely to surface and true beliefs formed; epistemic authoritarians think that information needs to be controlled by expert central authorities in order to promote population-level epistemic flourishing. More narrowly, Brennan (2016) argues that those most engaged in politics are disproportionately likely to be biased and have irrationally-formed beliefs.

On these accounts, then, *social media* political discourse is dysfunctional because *any* free forum for political discussion and information sharing is unlikely to promote cognitive and veritistic goals. Social media takes something basically unhelpful or even corrupting – citizens, most of whom are not experts or particularly wise, talking about politics – and turns it up to 11.

Again, these explanations are good as far as they go. But they require us to surrender to a certain pessimism about the prospects for democracy in general – a conclusion that some of their proponents ardently accept. And, while they do serve as an explanation for the weak version of the striking fact – that social-media-based political discourse isn't *better* than physical-world political discourse, they don't particularly speak to the stronger version of my claim – the idea that there is something *especially* toxic about political conversations on social media. It seems that people *are* crueller, less willing to engage, and faster to polarise, when they talk politics on Twitter, than when they do so at the pub or the town hall. It's not just that social media seems to be more of a neutral or bad thing, but that it appears to have qualitatively different issues from political discourse in the physical world.

6. A Hybrid Response

The rationalist might aim to accommodate this observation, while holding on to the key tenets of their view. According to a *Hybrid Response*, emotional states are vital to successful political discourse, but only in a negative and instrumental sense. On this view, negative emotional responses such as hostility, anger and attitudes of cruelty, supress participant's capacity for

rational debate and inquiry; furthermore, empathy with our interlocutors tends to counteract the tendency for disagreement to prompt these negative responses Therefore, empathic responses are valuable in an instrumental sense, because they counteract the negative influence of emotions on the ability of political actors to engage in ratiocinative processes. Social media interactions, in lacking empathic counterbalances to anger and hostility, are for this reason *worse* in purely ratiocinative terms.

This view has much to be said for it, and I think it's a part of any plausible story to be told here. However, it seems incomplete as an explanation of the phenomena. After all, if rationalism is correct, then we should expect *positive* as well as negative emotions to be antithetical to rational debate and collective deliberation. Shielded from the biasing effects of warm and compassionate responses to those we happen to interact with, we ought in certain ways to do *better* qua political reasoners. In that case, we should expect a low-empathy environment to give back with one hand what it took with the other – to be one in which, even if the distorting effects of negative emotions are amplified, nevertheless the distorting effects of *positive* emotions would also be suppressed. In other words, lacking further explanation, one should expect the positive and negative impacts of a low empathy to come out in the wash, as it were.

Now, it's not entirely obvious to me that this is not the case – that, whilst social media might be a political forum unusually rife with hostility, it is also one with certain other, counterbalancing advantages taken as an environment in which to engage in reasoning. Certainly, this is a hypothesis that demands further exploration. Equally, there might be some more complex explanation available to the rationalist as to why positive emotions are in general less distorting to reasoning than negative ones, such that a low-empathy space should be expected, in purely rationalistic terms, to serve less well as a forum for reasoned engagement and debate.

Nevertheless, lacking any particular evidence for the first claim, or any concrete explanation of the second sort, I think it best to look beyond this explanation. My working hypothesis is that political discourse in social media spaces isn't just more hostile, but is overall *not better*, than political discourse in physical spaces. This suggests to me that we should look to theories of political discourse that figure empathetic states as a telic, and not merely instrumental, goal of political conversation.

7. Emotivist Diagnoses

If we are not satisfied with Rationalist explanations – either because they seem too pessimistic about the prospects for democracy, or because they don't seem to explain what is *distinctive* about the conduct of political life on social media – then it's worth turning to Emotivist explanations in order to see if they can do a better – or at least less depressing job. In this section I discuss three styles of Emotivist view which are distinguished by each rejecting *one* of the claims of Political Rationalists – that successful conversations are *ratiocinative,* that their upshots are *cognitions,* and that these cognitions aim at *truth* about political questions.

We can call the first view the *Empathic Openness* view. This argues that political polarisation – perhaps up to the point of the formation of epistemic bubbles or even echo chambers, is not necessarily an irrational process. Rather, it can occur rationally. If we genuinely believe that our conversational partners are not only *misinformed* but *politically or morally bad*, then it makes sense to disassociate from them, and to pay little heed to their views. Empathic responses play a crucial role in breaking open closed groups and bubbles. When we empathise with our interlocutors, we gain an incentive to take their views seriously which is *not* epistemically rational. Rather, in caring about other people, who want us to hear what they have to say, we gain a *practical* reason to be open to their views. Indeed, not only is this not an epistemically ratiocinative process, it even matches standard accounts of *motivated reasoning*. But perhaps that is *precisely* what we need to break out of our echo chambers. And that is exactly what we lack in our online interactions – hence our imperviousness to the views of others as we form our online epistemic ghettoes.

Second is the *Collective Identification* view. This starts from the observation that political life is rife with collective actions problems – indeed, collective action problems might even be thought of as the ur-political problems. Recent work in behavioural economics (Bacharach 2006; Gold & Sugden 2007; Colman and Gold 2020; and Sugden 2015); has argued that our ability to solve collective action problems requires not just altruism, but the adoption of a distinctive approach to decision-making, called *team reasoning*, in which members of a group deliberate as though they were acting as a collective (even if they are choosing independently). One of the major challenges for team reasoning theories is explaining when and why it is rational to *adopt* the team-framing of decision problems in the first place. One possibility is that there *is* no rational solution to this problem, and that team-reasoning, and with it the solution to collective action problems, relies on what social psychologists refer to as *group identification*, in which individuals come to identify with a larger group. In that case, the group polarisation observed by the

Rational Pessimists might in fact be the flipside of a *desirable* result – the formation of affective group identification, allowing citizens to think collectively to solve their shared problems. In that case, a primary goal of political conversation is not to form *beliefs* at all, but to forge affective shared identification. Social media interactions might be excellent for whipping up hostility, but in the absence of empathic connections, they do a worse job of getting us to think as a team.

Finally, we have the rejection of veritism, as recently exemplified by Michael Hannon's (2019) *verstehen* theory of political discourse. On this view, the goal of political conversation is in a sense cognitive, but it centrally involves what is sometimes called *cognitive empathy*, in which we learn to see a situation from the perspective of another. On this view, the goal of political conversation is not just to share information and arguments in order to arrive at truths about independent, objective matters of fact. Rather, we talk in order to allow others to understand our point of view, to see how we think and why we diverge from them in the ways that we do. This shared understanding allows us, despite the high stakes involve, to see political disagreement not as a form of war, but as a shared endeavour with fellow-citizens whose perspective we respect. Indeed, it may even be worth *paying* a veritistic price – that is to say, ending up with *less* accurate beliefs about the world, or becoming less certain in our (true) opinions – in order to realise the good of mutual understanding.

In my view, *all three* of these views are highly plausible, and they all entail that *empathising,* as well as sharing information, are crucial to successful political discourse. To the extent that social media interactions suffer from a deficiency of empathy, we should expect these to be systematically limited in their success *qua* political discourse.

8. Lessons and ways forward

If my arguments are correct, what practical steps do they suggest? Political emotivism may *explain* why online political discourse is so toxic – but, after all, online political discourse is something that we are, realistically, stuck with. Our opportunities to meet and discuss politics with strangers in the physical world are dwindling, and geographical sorting means that we are unlikely to meet people who disagree with us anyway. The migration of political debate to the internet is here to stay. But if online political discourse suffers from an empathy deficit, doesn't that mean that we are doomed to political dysfunction?

Not quite. After all, just because *one* route to empathy has been removed, that does not mean that political conversations on social media platforms cannot avail themselves of others. Already Twitter has started to put warning on threads discussing heated political topics reminding them to "remember the person behind the screen"; in addition, it asks users to rethink their decision before tweeting responses to one another that might be deemed hurtful or insulting. We need more research to see if this is in fact effective, and whether similar interventions can be designed in order to cue empathy in our online discussions.

Looking further forward, a wider range of tools may become available. The worry I have raised about the social media platforms which we use in order to conduct political debate is that we cannot see one another's faces or bodies as we talk. But one vision for the future of online social interactions – shared by Mark Zuckerberg and David Chalmers – envisions an online world composed, not of text and static images, but of immersive virtual worlds, navigated by three dimensional, ambulatory avatars. If my arguments are correct, and facial cues make a significant difference to the success of online political discourse, then the future development of virtual reality should aim to render facial details in our online avatars in such a way as to deliver the cues needed for empathic responses. If we are unable to empathise with one another when viewed as lines of text, perhaps we can empathise with each other's avatars.

Bibliography

Bacharach, M. (2006). *Beyond Individual Choice: Teams and Frames in Game Theory*. Princeton, NJ: Princeton University Press

Batson, C. D., Duncan, B., Ackerman, P., Buckley, T., & Birch, K. (1981). Is empathic emotion a source of altruistic motivation? *Journal of Personality and Social Psychology, 40: 290–302.*

Batson, C. D., O'Quin, K., Fultz, J., Vanderplas, M., & Isen, A. (1983). Self reported distress and empathy and egoistic versus altruistic motivation for helping. *Journal of Personality and Social Psychology, 45: 706–718.*

Batson, C. D., Dyck, J., Brandt, R., Batson, J., Powell, A., McMaster, M., & Griffitt, C. (1988). Five studies testing two new egoistic alternatives to the empathy–altrusim hypothesis. *Journal of Personality and Social Psychology, 55: 52–77.*

Batson, C. D., Batson, G., Slingsby, J., Harrell, K., Peekna, H., & Todd, R. M. (1991). Empathic joy and the empathy–altruism hypothesis. *Journal of Personality and Social Psychology, 61: 413–426.*

Brennan, J., (2016). *Against Democracy*. Princeton: Princeton University Press.

Christov-Moore L., Iacoboni M. (2016). Self-other resonance, its control and prosocial inclinations: Brain-behavior relationships. *Human Brain Mapping. 2016 April;37(4):1544-58.*

Colman, A.M. & Gold, N. (2020). Team Reasoning and the Rational Choice of Payoff-Dominant Outcomes in Games. *Topoi 39 (2):305-316.*

Croce, M. & Piazza, T. (2023). Consuming Fake News: Can We Do Any Better? *Social Epistemology 37 (2):232-241.*

Currie, A. (2019). Simplicity, one-shot hypotheses and paleobiological explanation. *History and Philosophy of the Life Sciences 41 (1):10.*

Dimberg, U., Andréasson, P. & Thunberg, M. (2011). Emotional Empathy and Facial Reactions to Facial Expressions. *Journal of Psychophysiology, 25 (1), 26-31.*

Falconer C.J., Lobmaier J.S., Christoforou M., Kamboj S.K., King J.A, Gilbert P., et al. (2019) Compassionate faces: Evidence for distinctive facial expressions associated with specific prosocial motivations. *PLoS ONE 14(1): e0210283.*

Fazelpour, S. & Danks, D. (2021). Algorithmic bias: Senses, sources, solutions. *Philosophy Compass 16 (8):e12760.*

Goetz J.L., Keltner D., & Simon-Thomas E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin. 2010; 136(3):351–74.*

Gold, N & Sugden, R (2007). Collective Intentions and Team Agency. *Journal of Philosophy 104 (3):109-137.*

Hannon, M. (2019). Empathetic Understanding and Deliberative Democracy. *Philosophy and Phenomenological Research 101 (3):591-611.*

Klein, E (2022). TikTok Might Be More Dangerous Than It Looks, *New York Times, May 8, 2022, https://www.nytimes.com/2022/05/08/opinion/tiktok-twitter-china-bytedance.html*

Landemore, H. (2013). Deliberation, cognitive diversity, and democratic inclusiveness: an epistemic argument for the random selection of representatives. *Synthese 190(7): 1209–1231.*

Landemore, H. (2012). Democratic Reason: Politics, Collective Intelligence, and the Rule of the Many. Princeton University Press.

List, C. and Goodin, R. (2001). 'Epistemic Democracy: Generalizing the Condorcet Jury Theorem.' *Journal of Political Philosophy 9 (3): 277–306.*

Müller, J. F. (2018). Epistemic democracy: beyond knowledge exploitation. *Philosophical Studies 175 (5): 1267–1288.*

Nguyen, C. Thi (2020). Echo chambers and epistemic bubbles. *Episteme 17 (2):141-161.*

Peter, F. (2008). Pure epistemic proceduralism. *Episteme 5(1): 33–55.*

Peter, F. (2016). The Epistemic Circumstances of Democracy. In Michael S. Brady and Miranda Fricker (Eds.) *The Epistemic Life of Groups*. Oxford University Press, 133–149.

Peters, U. (2022). Algorithmic Political Bias Can Reduce Political Polarization. *Philosophy and Technology 35 (3):1-7.*

Rini, R. (2017). Fake News and Partisan Epistemology. *Kennedy Institute of Ethics Journal 27 (S2):43-64.*

Rymarczyk K., Żurawski Ł., Jankowiak-Siuda K. & Szatkowska I. (2016). Emotional Empathy and Facial Mimicry for Static and Dynamic Facial Expressions of Fear and Disgust. *Frontiers of Psychology 7:1853.*

Schilbach, L., Eickhoff, S. B., Mojzisch, A. & Vogeley, K. (2007). What's in a smile? Neural correlates of facial embodiment during social interaction, *Social Neuroscience, 3:1, 37 – 50*

Sugden, R. (2015). Team Reasoning and Intentional Cooperation for Mutual Benefit. *Journal of Social Ontology 1 (1), 143 – 166*

Sunstein, C., (2000). Deliberative Trouble? Why Groups Go To Extremes. *Yale Law Journal 110: 71–119.*

Sunstein, C., (2002). The law of group polarization. *Journal of Political Philosophy 10(2): 175–195.*