THE PARADOX AND DILEMMA OF DEMOCRACY IN THE INFORMATION AGE

GABRIEL BEDNARZ, Jagiellonian University, Institute of Philosophy, Poland

The article presents a paradox and a dilemma associated with democracy. The paradox regards the issue of rule in an informationally transparent democracy: whereas transparency may lead to the exploitation of democracy by hostile agents, restricting transparency may lead to the transformation of a democracy into an autocracy. Within the terms of this paradox, I argue that achieving transparency in a democracy may not be possible by means of ‘informational disarmament’. The dilemma is that a democracy may likely lose the information war if it presents information objectively via its media. Not only do transparent democracies and informational disarmament appear to be impossible, but the stability of democracies which adhere to ethical standards of presenting information objectively is also at risk in the information war.

Keywords: Democracy – Autocracy – Information war – State secrets – Power – Media

1. Introduction and the paradox

Faced with disinformation, surveillance and foreign influence on elections, many are concerned about the ability of democracies to withstand the challenges posed by the advancing information and digital era. In relation to this, a new phenomenon called informational autocracy (see Guriev and Treisman 2020) has emerged: an autocracy pretending to be democratic. In the present article, hoping to draw attention to the question of what kind of democracy we should wish for, I present a paradox and a dilemma as possible sources of trouble with the ideal of democracy – namely, the contrast between a democracy’s ideals (e.g. transparency, objective media) and its need to defend itself.

In 1972 and 1973, W. A. McMullen and H. M. Jones discussed the paradox of informed extreme participatory democracy (ID). This type of democracy was defined by McMullen as ‘one in which all the members have access to all the information relevant to all the decisions that the organisation has to take’ (McMullen 1972, 207). The paradox, which Jones (1973, 143) considered merely a problem, is...
particularly interesting in terms of state secrets. By definition, all such secrets are known by everyone in an ID. The paradox, then, can be presented as follows:

(1) ID is the desired ideal of democracy (see McMullen 1972: 207), and thus;
(2) it demands loyalty from everyone in an ID, since it needs to keep state secrets from other countries;
(3) such ‘universal loyalty is usually thought of as a demand of totalitarianism rather than a need of participatory democracy’ (McMullen 1972, 208).

Here, I wish to modify the paradox so that it concerns the possibility of ruling in an ID. Assuming (1) and (2), let us add (3*) instead of (3):

(3*) since everyone in an ID is privy to all classified information (confidential, secret and top-secret), the probability of a weak link\(^1\) (e.g. a traitor) is very high, and thus the desired ideal of ID is not worth realising.

(3*) implies that the ID likely would be exploited; thus, citizens do not rule in an ID. The crucial point is that ID assumes citizens are perfectly informed (everyone knows everything) so as to make good decisions and rule themselves. Thus, we could say that

(4) if citizens rule in an ID, they are perfectly informed in an ID.

But we know from (3*) that citizens ruling in an ID, who are thus perfectly informed, will very likely include traitors who will exploit these state secrets, and therefore these citizens do not rule in an ID. This can be rephrased as follows:

(5) if citizens in an ID are perfectly informed, they do not rule in an ID.

If we take the contraposition of (4), i.e. if citizens are not perfectly informed in an ID, they do not rule in an ID, then from the contraposition and (5) we derive:

(6) if citizens are or are not perfectly informed, they do not rule in an ID.

---

\(^1\) A ‘weak link’ means any part of a system prone to a foreign attack (e.g. cyberattack).
Since the antecedent of (6) is true, we conclude that citizens do not rule in an ID. Therefore, it seems plausible that, practically, a democracy should restrict its endeavours to inform its citizens perfectly, as suggested by (1), or should modify (3*).

2. The first scenario: informational disarmament and the dilemma of democratic media

To this paradox, two solutions can be proposed. In the first, which I call ‘global agreement’ (GA), we wish to modify (3*) to prevent the potential existence of a weak link, so that (5) will most likely be false. GA may be called informational or intelligence disarmament. Since the presented reasoning about ID presupposes its exploitation via the leak of state secrets to a foreign country, we may propose a scenario in which there is no possibility of a weak link or of exploitation of this kind because each country knows all information concerning all other countries, including their state secrets. This is not to say that all countries should be IDs before GA or that they should immediately become IDs after GA. Assuming a real-world situation, we concede that autocracies (whether overt or informational) exist. Apparently, even if someone wished to betray an ID, they could not do so, since the information i they might provide to a foreign country would be of no value in a global situation whereby everything would be known by everyone.

However, is i really of no value for autocracies? We assume that, in GA, an autocracy knows an ID’s secrets and vice versa, but since the autocracy need not and likely would not become an ID after GA, it could manipulate i or deliver to its citizens only (true or false) information which supports autocrats and compromises the ID and its media, which would not be in the interest of the ID. This especially would be not in the interest of an ID or, in general, any democracy in the following circumstances, which constitute a dilemma for democracies. For the sake of simplicity, let us assume here that ‘autocracy’ means an autocratic country or a non-democratic ruling party in an informational autocracy; similarly, ‘democracy’ means a democratic country or democratic opposition in an informational autocracy. Analogously, we wish to discuss, on one hand, democratic, objective media, and on the other, autocratic, state-run media which increases support for an autocracy. Suppose now that two scandals were to break: (S1) compromising autocracy and (S2) compromising democracy. Each scandal, when presented objectively to the public, has the power to increase (S1) or reduce (S2) support for democracy by \( x \) \((x > 0)\).

\(^2\) Alternatively, the same conclusion can be derived from (4) and (5): if citizens rule in ID, they do not rule in ID. This is equivalent to: citizens do not rule in ID or do not rule in ID. Thus, citizens do not rule in ID.
Therefore, when S1 and S2 are presented objectively by democratic media, the difference in support for democracy is \( x + (-x) = 0 \). However, the autocratic media will likely misrepresent S1 by e.g. playing the role of a victim, or will silence S1 and sow mistrust concerning the credibility of democratic media. This prevents S1 from reducing support for the autocracy in question. The autocratic media will also present S2 populistically, using any means available to blow it out of proportion. A highly biased representation of S2 gives autocracy the ‘payoff’ \( y \), likely higher than but at least equal to \( x \) \((y \geq x > 0)\). The sum of S1 and S2 is 0 vs \( y \), which may be interpreted as stating that the support for democracy is not likely to change; however, more citizens\(^3\) watching state-run media will be persuaded to support the autocracy.

The S1/S2 situation poses a question and a dilemma, which will not be resolved in this article. If a democracy and democratic media, setting their ethical standards higher than those of an autocracy, are engaged in informational warfare with the autocracy and its media, should they use more pronounced, less objective and less ethical methods of presenting information – methods that, in S1/S2, will at least give the democracy the payoff of \( y \)? If democratic media were to use such methods, it could backfire, with the democracy or democratic opposition becoming an easy target for the autocrats polarising democracy by accusing it of not conforming to its own ethical standards. That is, democracy might lose its reputation.

Moving on to the problems with \( GA \), such an agreement would oblige every country to reveal all its secrets, including those of intelligence services. In other words, as a result of \( GA \), every country would call a halt to its part in the arms race through revealing its engagement in espionage, ‘active measures’, surveillance, potential techniques of cyberwarfare, etc. This situation resembles mutual co-operation in the prisoner’s dilemma, which has been frequently proposed as a model of the nuclear arms race. But \( GA \), unlike any particular form (e.g. nuclear) of disarmament, represents the global disarmament of intelligence services and informational disarmament. A particular kind of disarmament is more likely to occur when both sides conclude that the armament in question either will lead to a global disaster or is useless because even if its use is possible, it will not give one country significantly more power than another.\(^4\) However, it seems likely that intelligence services are never useless and will not result in global disaster. If they are always capable of achieving relative gains, it will be difficult to achieve \( GA \). But even if this is not

\(^3\) These need not be citizens confined within the autocracy, as some informational autocracies (e.g. Russia) possess media platforms in EU countries.

\(^4\) If a country can destroy the earth with a quantity \( X \) of nuclear weapons, \( X + t \) will not make much difference in deterrence potential.
true, GA as global and informational disarmament seems highly unlikely to occur for the following two reasons.

First, most likely every country possesses information concerning immoral or illegal operations it has undertaken, e.g. secret prisons or persecution of minorities. Most likely, then, no country would pursue GA because suspending justice (sanctions and punishment for atrocities) would lead to outbursts of popular protests, at least in democracies. But justice would be neither suspended nor employed, in the latter case because it would be nearly impossible to have a global justice court, given that democracies and autocracies (informational autocracies or overt dictatorships) differ dramatically in their interests and values. Even if GA were based on the gradual revelation of state secrets, some democracies might see the requirement to make their immoral or illegal operations transparent to the world as a threat to their reputation which would serve the interests of autocrats. Such a perceived threat may derive from the irreverence of autocracies regarding ethical standards of presenting information. GA might prove unfavourable for democracies if, as in S1/S2, autocracies were to silence or misrepresent their scandals and atrocities to their citizens. If a democracy aimed at becoming an ID and, following GA, revealed its scandals or atrocities to its citizens, it would become destabilised to a greater degree than an autocracy which silenced or misrepresented its own scandals and atrocities.

Another reason GA will not come into effect is the real possibility of defection and deception through feigned informational (intelligence) disarmament. Not all secrets unknown to another’s country foreign intelligence could be revealed. If relative gains are supposed to be important for players in the prisoner’s dilemma through deception using cheap talk, each player will choose not only to defect but also to persuade the other player that they should co-operate, i.e. reveal classified information.

Research in social psychology may provide an argument for the real potential for deception and defection. People differentiate poorly between lying and telling the truth (Aamodt and Custer 2006; Bond and DePaulo 2008); projection, which politicians often use, is an effective means of lying to the audience in the prisoner’s dilemma (Rucker and Pratkanis 2001); online false news produces more pronounced effects than truth (Vosoughi et al. 2018), whereas truth may be characterised by a possible ‘backfire effect’ (see the introduction to Wood and Porter 2019). Moreover, political leadership is connected to dark-triad traits (see Chen et al. 2020, 580 – 583). These traits predict a defection strategy in the prisoner’s dilemma (Deutchman and Sullivan 2018; Malesza 2018, 2020). The situation might be different if a practical, moral enhancement method or a perfect polygraph existed, but these topics are beyond the scope of my article.
At this point, we may conclude not only that ID and GA are probably impossible, but also that the stability of democracies is at risk in informational warfare if they adhere to ethical standards of presenting information objectively.

3. The second scenario and conclusion

Consider, then, the second scenario, in which citizens, now in a democracy but not an ID, are not perfectly informed, i.e. some citizens do not possess certain information. Practically, we should assume that some citizens are better informed and possess more information, in particular that which is vital to state security, while others are less informed. Political power is associated with being better informed, and, moreover, being better informed through e.g. possession of top-secret information (as in the case of Edward Snowden) may lead to a significant enhancement of power and social influence. The use of valuable information increases one’s power. It can also be assumed that information functions as a means of exchange (as in markets for zero-day exploits). Recalling (3*), we might say that as more citizens possess more information, in particular, classified information, it is more probable that a democracy will be exploited. Thus, perhaps, the converse is true:

(3**) as fewer citizens possess more information, in particular, classified information, the democracy becomes more secure.

But this assumption may lead to centralisation of power, which will gradually transform the democracy into an (at least informational) autocracy. This is paradoxical and poses the problem of the optimal distribution of information.

However, a distribution avoiding centralisation of power must face a problem similar to that suggested and discussed further by Green (1983): an economically rational individual reaps a greater benefit, i.e. the efficacy of his or her vote within a smaller population. It seems, therefore, that rational agents tend to not participate in public elections in a democracy and would rather aim at penetrating the smaller circles of powerful or better-informed decision-makers. Such rational agents may effectively foil decentralisation of power. Presumably, if anything could convince these agents to participate in public elections, it would be a non-democratic party (or media) which led them to believe that, through corrupting themselves, they would penetrate smaller circles of powerful or better-informed decision-makers.

Therefore, since ID, GA and winning the information war by means of the ideal of objective media seem impossible, some true information in democracies should

---

5 Generally, we are likely to observe such a transformation if power is centralised in a small ‘winning coalition’ (Bueno de Mesquita et al. 2003).
be restricted (or distorted, or selectively presented) to the degree similar to that of informational autocracies, assuming that economic powers are equal in the information war between a democracy and an (informational) autocracy. This restriction can be in fact called the optimalisation of distribution of information by e.g. surveillance-based assigning the loyalty of an individual to the degree of information secrecy for which the individual may be eligible. However, the loyalty of economically rational individuals is dynamic because these individuals seek greater power in smaller coalitions. In other words, economically rational individuals, those who are inside as well as those who are outside of a small coalition, behave in a manner that serves rather a small community than a relatively larger one (e.g., a country with public elections, an intelligence agency). This leads to the necessity of more surveillance if the larger community has to be preserved. If that community is a democracy, then this further blurs the boundaries between democracies and informational autocracies. And if one claims that the solution here is moral enhancement, then this also poses the question of reconciling moral enhancement with democratic values like freedom.

**Bibliography**

AAMODT, M. G., CUSTER, H. (2006): Who can best catch a liar? A meta-analysis of individual differences in detecting deception. *Forensic Examiner* 15, 6 – 11.

BOND, C. F. Jr., DePAULO, B. M. (2008): Individual differences in judging deception: Accuracy and bias. *Psychological Bulletin* 134, 477 – 492.

BUENO DE MESQUITA, B., SMITH, A., SIVERSON, R. M., MORROW, J. D. (2003): *The Logic of Political Survival*. Cambridge: MIT Press.

CHEN, P., PRUYSERS, S., BLAIS, J. (2020): The dark side of politics: Participation and the dark triad. *Political Studies* 69, 577 – 601.

DEUTCHMAN, P., SULLIVAN, J. (2018): The Dark Triad and framing effects predict selfish behavior in a one-shot Prisoner's Dilemma. *PLoS ONE* 13. DOI: https://doi.org/10.1371/journal.pone.0203891

GREEN, L. (1983): Dictators and democracies. *Analysis* 43, (58 – 59).

GURIEV, S., TREISMAN, D. (2020): A theory of informational autocracy. *Journal of Public Economics* 186. DOI: https://doi.org/10.1016/j.jpubeco.2020.104158

JONES, H. M. (1973): Censorship, state secrets and participatory democracy. *Analysis* 33, (143 – 144).

MALESZA, M. (2018): The effects of the Dark Triad traits in prisoner’s dilemma game. *Current Psychology* 39, 1055 – 1062.

MALESZA, M. (2020): Grandiose narcissism and vulnerable narcissism in prisoner’s dilemma

McMULLEN, W. A. (1972): Censorship and participatory democracy: a paradox. *Analysis* 32, 207 – 208.
RUCKER, D. D., PRATKANIS, A. R. (2001): Projection as an interpersonal influence tactic: The effects of the pot calling the kettle black. *Personality and Social Psychology Bulletin* 27, 1494 – 1507.

VOSOUGHII, S., ROY, D., Aral. S. (2018): The spread of true and false news online. *Science* 359, 1146 – 1151.

WOOD, T., PORTER, E. (2019): The elusive backfire effect: Mass attitudes’ steadfast factual adherence. *Political Behavior* 41, 135 – 163.

Gabriel Bednarz  
Jagiellonian University  
Institute of Philosophy  
Grodzka 52  
31-044 Kraków  
Poland  
e-mail: gabriel_bednarz@wp.pl  
ORCID ID: http://orcid.org/0000-0003-4100-5927