

Procedural Democracy and Electronic Agents

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■ *In recent years, firms offering political campaigning and fundraising services have claimed that artificial intelligence is used to maximize their clients' interests. Numerous news reports suggest that artificial intelligence capacities have influenced high-profile voting events; publications decrying the threat posed to democratic procedures are proliferating. This article takes a skeptical view of such claims, with an argument in six sections. First, the received principles of procedural democracy in relation to voting events are outlined. Second, the kind of services in question are considered. Third, to what extent these services actually involve artificial intelligence is pondered. Fourth, how such technological capacities may bear upon the tenets of procedural democracy are raised. Fifth, it is argued that it is unlikely that those tenets are indeed significantly undermined in practice. And sixth, this article concludes by considering the implications of it being proven that such technological capacities do play a decisive role in voting events.*

After 2016, numerous books with titles like *The People versus Tech* (Bartlett 2018), *How Democracy Ends* (Runciman 2018), *Democracy Hacked* (Moore 2018), and *Data versus Democracy* (Shaffer 2019), to name a few, have been published. Along similar lines, countless media features, reports, documentaries, and so on have appeared. A common concern in these is that technological devices and systems are undermining established democratic procedure. Moreover, it is averred that these capacities are complex enough to be effectively outside the full control or even understanding of those developing and deploying them. Such technology can therefore be considered as incorporating some degree of autonomy and tending toward greater degrees of autonomy — hence dubbed artificial intelligence (AI). The idea is that the capacities of such systems and devices are playing an increasingly intractable part in democratic procedures. The procedures in question bear upon all aspects of legislative and executive functions, but particular attention has focused on voting events. The Brexit referendum and US Presidential elections in 2016 are regarded as watershed events where the anti-democratic roles of such technological capacities are strongly indicated. In a way, they are considered as having arrived as democracy disrupters in 2016 whereas their potential as such had been noted with growing interest earlier, especially in junctures around

subsequent US Presidential elections from 2000 onwards.

This essay offers a somewhat skeptical perspective on such asseverations. I argue below that what such technological capacities add in democratic procedures is perhaps not quite as it is often made out to be. Their part in those procedures, however, may well be revealing in less considered ways. This argument is focused on voting events like elections and referendums.

Voting Events

The word *democracy* is rather heftily normative, that is, is apt to be taken as a priori good, and comes with idealistic preconceptions attached (depending on how *rule of the people* is understood). For the purposes of this essay, the term refers to a set of procedures for governance adopted in most formally democratic countries, and should not be considered in itself good or bad. Democracy theorists have often noted that idealistic preconceptions and received procedural connotations do not gel well, and that other terms for the procedures might be more appropriate (such as *polyarchy* or *oligarchy* or *representative government*). Much inconclusive effort has been devoted to considering procedural adjustments that may come closer to approximating idealistic preconceptions (under the guise of re-democratizing democracy). At best, we can say that the received procedures enjoy a high degree of consensus where they are operative, at least partly because those are conflated with idealistic connotations simply by being named *democracy* — irrespective of whether that is justified.

An important device in the received procedures is voting events, such as: general and regional elections with universal suffrage to appoint direct governance bodies (executive and legislative); parliamentary votes to determine legislation within appointed bodies; and occasionally, referendums with universal suffrage to decide significant one-off legislative moves. Voting events inevitably push majority interests. These are sometimes mistakenly regarded as democratic interests per se, although other received procedures indicate otherwise. Such attendant procedures are designed to allow reasonable parity of interest groups, whether of majorities or minorities. So, the majoritarian thrust of voting events is mitigated in procedure by various means. Those include, most significantly, an independent judiciary and other independent statutory bodies, usually appointed by merit or nomination, and also a significant but low-key part of the executive branch is usually an established bureaucracy, with individuals chosen according to merit. Within legislative bodies, space for nominated appointments is often retained. Nevertheless, the majoritarian thrust of voting events tends to be particularly in the public eye. They play the most obviously effective role in ongoing democratic governance and sometimes a disruptive role in relation to the balance of democratic institutions and

parity of interest groups. This is the salient point to note here: voting events tend to be center stage and, despite mitigating arrangements, they tend to foreground majority interests. Public concerns with upholding or undermining democracy usually allude to voting events. It is in this regard that the role of technology is usually debated.

There are some generally accepted minimum tenets to ensure a fair voting event, usually enjoined by legal and regulatory notice. The process of the voting event would be managed and regulated by an independent and disinterested body (an Election Commission). The vote of each voter would be given equal weight. Voters would have sufficient notice to consider the pros and cons of their choices. Voters wouldn't be coerced or deliberately misled in exercising their suffrage (as covered by undue influence rules). Information that may be relevant to voters in making their choices should be in the public domain. To what extent voters consult such information is not the issue, but it should be, so to speak, out there and freely accessible. The equipment used for casting and counting votes should not be compromised. According to context and experience, other tenets may be added to these.

Services

The technological capacities that putatively bear upon voting events principally concern two related areas: fund raising and campaigning. I focus on the latter here. The capacities in question are generally understood as involving data mining and targeted message delivery, and the technological means are generalizable as involving databases and electronic agents (following the legal definition in the Uniform Electronic Transactions Act (UETA) [1999], section 2,6, principally with a tool function but tending toward some level of autonomy). A simple model situation whereby these technological capacities may be deployed is as follows. One of two contending parties *A* and *B* seeking a majority in a voting event employs a company with access to the means and experience of those technological capacities to enable his or her success — let's say that is *A*. The company then does the following to encourage a majority vote for *A*.

Arrange access to, and integration of, diverse databases to elicit voter profiles that may indicate the inclination of cohorts or individual voters to choose *A* or *B*, to form a database of specific relevance for this campaign. Three kinds of data are principally involved: voter identity (age, sex, location, ethnicity, education, income); directly relevant data on voter behavior in voting events (from membership records, surveys, polls); and indirectly relevant data on voters' social habits and preferences (details of financial history, consumer preferences, media engagement, social networking records, and so forth). Accessing a range of databases with this information involves agreements between different service providers or

is helped by the company becoming the dominant service provider for different kinds of data accruing services. Integrating these diverse databases entails embedding a standardized vocabulary and organization system across them (such as the SKOL System¹). That also enables processing up-to-date and accruing data and being able to track those against recent and heritage data, which is naturally important for any campaign targeting an imminent voting event. Around 2005 to 2006, for the sector to which the company belongs, setting open standards and software interoperability were the big challenges; as of this writing, they are significantly less so.

Use electronic agents to analyze this data and elicit voter profiles pertinent to the campaign period, mainly of these sorts: confirmed voters for *A* or *B*, likely to vote for *A* but may swing to *B*; likely to vote for *B* but may swing to *A*; undecided; unlikely to vote. The amenability of databases and capacities of the electronic agent would determine how graded these profiles are, whether according to cohorts or possibly down to individuals. The more finely graded profiles (to the level of individuals) usually depend upon the indirectly relevant data. The electronic agent may develop rule-of-thumb policies to make finer distinctions in the process of crunching the indirectly relevant data, perhaps drawing upon or developing relevance indicators (to determine who might influence others in a cohort or network, what ideological attitudes may be revealed in consuming habits, and so forth).

For the targeted message delivery, the company would typically program electronic agents to focus intensively on swing voters and undecided voters and lightly on confirmed voters. The messages would be designed to be affirmative for confirmed voters of *A*, persuasive in favor of *A* for swing voters and for the undecided with appropriate levels of intensity. The intensity of targeted delivery may also be customized according to the level of influence of an individual within a cohort or network. For the case in point, that would mean focusing on influential voters who may effectively be drawn into informally campaigning for *A*. The kind of message that is targeted may be direct (positive messaging of *A*'s manifesto, slogans, views, and so forth; negative messaging of *B*'s). The message may also be indirect, including trying to influence voters by using third-party material that does not appear to come from a party interested in the voting event (for example, highlighting items favoring *A*'s views through social networks such that they dominate for particular media settings or user profiles). How far the message content can be customized to the targeted point of delivery depends upon the capacities of the electronic agent. Ideally, the electronic agents operating message delivery could learn to negotiate appropriate pathways so that messages become individually addressable. That means electronic agents may work through large ranges of specific voter profiles, selecting or customizing specific messages favoring *A* for specific voters

along the way, and then determining the best pathway for the specific voter and the customized message to meet.

How such technology bears upon voting events now enjoys a high level of public scrutiny. If the company above were replaced by Cambridge Analytica²/Aggregate IQ³/SCL,⁴ immediate recognition of intensively reported activities that flesh out the above outline would follow. These activities were detailed in numerous governmental reports, media features, technical articles, and books. The above-named companies (Cambridge Analytica and SCL now closed) are but a mote in a business sector where numerous companies operate. In fact, because this process is essentially the same as that for any digital marketing campaign, in principle almost any company offering product marketing and consumer behavior modification services could be drawn into it. To name a few of the hundreds specializing explicitly thus in the US and UK political sphere, there are: Aristotle International,⁵ Blue State,⁶ Capitol Advantage,⁷ Convio,⁸ Democracy in Action,⁹ DCS Congressional,¹⁰ Media Mezcla,¹¹ NGP VAN,¹² Plus Three,¹³ The Whitehouse Consultancy,¹⁴ The Campaign Company,¹⁵ and Political Intelligence.¹⁶ Their websites, designed to court potential clients, are informative, and offer nuance in contemplating the process sketched above.

A quick pause on the notorious activities of Cambridge Analytica — less successfully in 2015 for Ted Cruz's presidential campaign in the USA (see Kroll 2018) and seemingly more successfully in 2016 for the Leave campaign in the UK Brexit Referendum (see Information Commissioner's Office [ICO, UK] 2018) — may convey a crisper sense of how such services work. The company's plan was to design the outcome of voting events by targeted messaging of voters with both negative and positive content, to obtain the majority result that their clients commissioned. To this end, they set about obtaining OCEAN¹⁷ psychographs for large pools of voters by trawling through their Facebook accounts and tracking their likes and "reads," and linking those to many other data points in existing databases (to do with identity, location, cohort, age, and voting history). First this was done by an academic for a focus group with the informed consent of account-holders and Facebook, and then by the company for all account-holders featuring in a given voting constituency without their informed consent and, possibly, with the tacit knowledge of Facebook. To obtain the psychographic profiles of this huge database and design and deliver the messages to bomb voters — usually messages that seem to appear from indirect third-party sources — most likely little more than Linear Regression and Discriminant Analysis was needed. The scandal that closed Cambridge Analytica arose due to the use of data without informed consent for mainly the Brexit Referendum. Here explanations for a very marginal majority in a deeply divisive voting event homed in on the possibility that AI rather than voters had

determined the outcome. Whether indeed Cambridge Analytica had achieved that result with its technological capacities and, if so, precisely how, were very little discussed. The claim made by whistleblowers with the company's signaling of complicity in an environment rife with suspicion were all that was needed for the scandal to ripen and fester.

Is AI at Work?

This argument is about the consequences of certain ostensible technological capacities acting within the field of voting events and is not about what precisely those capacities consist of. Many of the firms selling services based on such capacities promote them as AI, and media and academic commentators frequently maintain that these are indeed AI capacities. For instance, it has been argued at some length that tools like Facebook for Politics must be considered as artificial persons that co-opt other artificial persons to achieve an intentional directive (Kane 2019: 77). However, to what extent such claims and assertions are justified in terms of what those capacities actually are, is questionable. That publicity and commentary deploys the buzzword *AI* does not mean that there is a definably AI electronic agent involved — that the electronic agents are indeed agents. If we take it as a rule of thumb, for instance, that we should only regard as AI a system capable of making policies with no human intervention to realize an outcome given relevant training data — then, by this rule of thumb, I suspect very little that is promoted as AI actually qualifies as such.

In general, those providing services for voting events give very little concrete information on how they get the results their clients want: The naming of AI serves more a publicity than an informational purpose. It may be reasonably suspected, as I have suggested already, that the techniques in use are the same as those in digital marketing. Much of what is offered and paid for is no more than sophisticated data analytics, probably using some set of R software packages¹⁸ and Tidyverse¹⁹ tools. These allow for data visualizations, modeling, and transformations that guide all-too-human interventions in publicity interfaces. The source of the data are often platforms with large-scale user profiles: Facebook, Google, Snapchat, Instagram, YouTube, Twitter, LinkedIn, WhatsApp, and so forth. The machine-learning algorithms used to elicit and analyze the data, and then to deliver the policy determined by humans, seldom go beyond processing target variables — which usually take the form of tracking self-declared likes and reads according to consumer constituencies. Many specialist political campaigning and fundraising firms stick to supervised techniques of regression and classification.

In digital marketing, *reinforcement learning* is used to personalize and design gradations of advertisements for targeted delivery to consumers; this is easily transferable to attempts at designing voter choice in campaigns for voting events. A reinforcement

learning policy optimizing rewards in the form of, say, *yes* rather than *no* polling declarations with regard for multivariate features of voter constituencies is akin to using electronic agents to direct a diverse and complex consumer market to buy, for instance, avocados instead of cucumbers. Similarly, *inverse reinforcement learning*, used in digital marketing to predict consumer behavior, could just as well be used to predict voter behavior, and, for that matter, an apprenticeship algorithm may be used to emulate influencer features to capture a following. These naturally involve greater machine autonomy and lower human intervention. However, modeling a consumer market or a voter pool as following a Markov decision process is probably already quite a strong human intervention, justifiable only after the fact if predictions are reasonably functional.

As was observed, it is difficult to say to what degree autonomous electronic agents are deployed in the field of voting events, and to what extent it is human intervention using tools that does the trick. Nor does it matter, so long as the declaration of using AI is made vociferously enough in the public political sphere. So long as it appears that campaigning service providers satisfy their political clients and claim to use AI, and that claim is accepted by clients and believed by observers, that's all that matters. In the circuit of *appearing-claiming-accepting-believing* that AI is at work in voting events, the idea acquires its own reality, and it seems electronic agents are infiltrating the *democratic* (specifically, those acknowledged as possessing democratic rights). These arguments follow from that state of affairs.

Concerns

Concerns about data mining and targeted message delivery by electronic agents undermining democratic procedure often refer to the tenets underpinning fair voting events mentioned above. The main points are as follows.

The overarching concern is that the regulatory role played by Election Commissions to ensure fair play might be compromised. In other words, the tenet of procedural management by an independent and disinterested body might become ineffective because it may not have powers to serve its function to the fullest scope in relation to such activities. There are two sides to this. On the one hand, the role played by commercial companies commissioned to campaign is thus relatively opaque. Unless directly commissioned by or declared to be aligned with those contending in voting events, disclosure of such commercial activities may not be legally required. Even if legally enjoined, they cannot be realistically policed. Those activities would then remain covert and unregulated. On the other hand, the determinations made by electronic agents through data mining are imperfectly understood and controlled even by the companies and other parties employing them. So, this is not merely a matter of disclosure and

consequent regulation, but of understanding what to regulate, why, and how. This overarching concern with regulation spins out into anxiety about other tenets governing fair conduct of a voting event. Legislative moves to address this area typically encompass a range of concerns (see, for instance, Council of Europe 2018; European Parliament 2019; Electoral Commission UK 2018; ICO [UK] 2018).

One of the issues foregrounded in, for instance, the part played by Cambridge Analytica in Brexit and other voting events concerned the use of voters' personal data without their consent. Data mining without consent is a wider issue than the one this essay addresses. That is, it is not specific to the kind of political campaigning for voting events outlined above but relevant to any kind of surveillance, marketing, or lobbying operation. If addressed by regulators, it can't be realistically done exclusively for the political sphere and for no other. In itself, the concept of consent for data use is a gray area. Legislation usually pragmatically focuses on formal consent (for example, in EU Parliament [GDPR] 2016). There is a wide gap between formal consent (persons formally indicating that they freely consent) and informed consent (persons choosing to give, or not give, consent after understanding how their data may be used). It is difficult to feel convinced that where accessing a necessary service is made conditional to formal consent while using that service, or made conditional to a complex consent-informing process, that consent is meaningful — such consent may not be consent at all, but coercion labeled as consent. So, legislation can ensure formal consent without significantly disturbing the use of data mining by electronic agents as outlined earlier. The issue, then, is perhaps not so much that voters' data may be exploited without their knowledge, but that data can be exploited with their knowledge. Formal consent may be routinized to such an extent that those giving consent don't really consider the implications of consenting, or don't care about them. At present, public attitude surveys suggest that such consent is considered more important for political campaigns than product marketing or social networking (see Furnham 2019: 53; Westbrook et al. 2019: 48), but not by much.

The activities of, for instance, Cambridge Analytica also caused unease in suggesting that misinformation (I include fake news, trolling, blocking, and so on, in that) could be spread through targeted message delivery of the sort outlined above on a hitherto unprecedented scale. This turn bears upon the tenet of voters not being coerced or deliberately misled or not being subjected to undue influence. Effective spread of misinformation could occur because, as observed already, the parts played by the companies providing technological campaigning services, and the precise working of electronic agents, are both vaguely understood. Moreover, adroit usage of indirectly relevant data and third-party messages is implicitly a challenge to policing. And further, the

degree of penetration of message targeting and message customization — to the extent of being individually addressable — exacerbates challenges to policing and regulation. Therefore, it is suspected that existing legal provisions to prevent undue influence on voters during campaigns may no longer be effective against such sophisticated capacities. On the one hand, it is possible that conventional kinds of misinformation can now be propagated in ways that evade policing more effectively than heretofore. On the other hand, it is also possible that new kinds of misinformation are being propagated that are not covered by the legislation.

Aside from exacerbating the effect of misinformation, the processes of data mining and targeted message delivery by electronic agents stir unease on another count, connected to another tenet of fair voting events. The tenet in question is that information relevant to voters for making their choices should be in the public domain. To what extent voters consult such information is not the issue, but it should be out there and freely accessible. If some cohort of, or even as individual, voter(s) are systematically contained into niches to receive customized messages encouraging them to vote one way rather than another, then arguably their access to the range and diversity of messages in the public domain is effectively curtailed. Also, the message they receive then cannot be considered as actually being out there, because other cohorts of voters are designedly not exposed to them. The critical issue here is whether the targeted voters can be said to have chosen to curtail themselves, which would be legitimate, or whether they can be regarded as being unwittingly contained, which would undermine the tenet.

The technologically enabled campaigning process I outlined may also have a broader bearing on procedural democracy, that is, beyond the voting event itself. This is a more abstract point and less debated than issues of consent and misinformation. The parts played by electronic agents — especially insofar as their policy-setting capacities are concerned — are necessarily primed to a straightforward goal: encouraging a majority for a contender in the voting event. The technologically enabled campaigning process then makes all aspects of procedural democracy secondary to the majoritarian thrust of voting events. However, procedural democracy, as sketched out above, is very largely about mitigating the pitfalls of majoritarianism — by an independent judiciary; meritocratic bureaucracy; nominated bodies; and institutions to protect minority interests and maintain parity of diverse interests. The tenor of targeted message delivery by electronic events could reasonably push a majoritarian appeal by working against those mitigating arrangements, because that is its purpose. Messages friendly to a majority appeal but hostile to, for instance, the independence of the judiciary could be foregrounded in this process. Such messages may not be under the uncertain purview of regulation of misinformation or coercion; they could

simply be legally unexceptional statements of opinion. If populism is understood as seeking legitimacy by majority at the expense of political reasoning (an argument made in Gupta and Tu 2020: Chs. 30 and 31), then the campaigning process in question here might have a particular consanguinity with populism (some of the contributions to Engesser, Fawzi, and Larsson [2017] are informative here).

An argument of some tangential interest here contends that technological capacities may variously deepen or widen democracy. This is not especially relevant to data mining and targeted message delivery by electronic agents, but does have a broader bearing on the last point — on the functioning of procedural democracy and particular voting events. This argument focuses optimistically on the impact of social networking upon the participation of electorates in democratic procedures, especially voting events. Some expectations are also pinned on the possibility that social networking and other digital communications and internet facilities contribute to the education of voters and thus their ability to make informed choices. Occasionally, it has also been averred that data mining could be used to inform voters of candidates' records before voting events with salutary effect (see Bonica 2016). However, researchers seeking empirical evidence of increased political participation (see Boulianne 2015, 2017) or of salutary educational effects (see Seabrook, Dyke, and Lascher Jr. 2014) have been inconclusive or doubtful.

Doubts

These concerns about the effects of technologically aided campaigning on voting events particularly, and on procedural democracy generally, are all in the region of suspicion. Those methods are certainly being used to try and predetermine the outcomes of voting events and it is suspected that they might be affecting outcomes, but it is very far from proven that they have. So, circumspection is advisable in emphasizing their significance or seeking explanations of outcomes with reference to them. The following considerations are germane.

Explanations are usually sought for the outcomes of voting events when those present narrow margins for the majority, when strongly held expectations (perhaps citing opinion polls) are unrealized, or when some irregularity in processing votes is suspected. Such explanations necessarily entail retrospective reconstruction. With hindsight, factors that were not taken into account before the voting event or which are imperfectly understood are held up to explain a marginal difference or unexpected outcome. At present the part played by data mining and targeted message delivery by electronic agents score particularly high as both unanticipated and hazily understood factors. As observed earlier, the very fact that these are suspected, rather than being known, to play a role foregrounds them as explanatory factors in such circumstances. That these methods pose

a challenge to regulation and policing and are yet being contemplated by legislators seem to heighten their explanatory verve. Explanations with hindsight, however, suffer from a necessary shortcoming: It is impossible to say whether the result would have been different (and if so in what respect) if this or any other factor were removed from the picture. There is no way of confirming which factor proved decisive after the fact. After all, each voting event is a unique event (even re-runs), and there are no robust social laboratory conditions to test and confirm the weight of one factor against others or the efficacy of any one, particular, factor.

There are, moreover, good arguments for being skeptical about overplaying the part played by electronic agents or even just reckoning them as significant at all. The rubric of explanatory frameworks citing them are weak. There are two principal dimensions to this. First, such explanations tend to structure the field of political communications in dyadic, and monodirectional, ways: from leaders to followers, from influencers to influenced, message to impact, producers to consumers, input and output, active suggestion and passive reception, and so forth. For any range of context-specific social communications, not to speak of more or less formal exchanges surrounding voting events, this structure recommends extreme reductions of complexity. Second, there is an obvious tension between the alleged intractability of how electronic agents work and the claimed ability of campaign service-providers to deliver the majorities they promise. The tendency to put some aspect of the process outside explanation by pointing to the seeming autonomy of electronic agents — by simply labeling them *AI* — is naturally against the very nature of explanation itself. The main objective of pointing to it seems to be to depoliticize procedural democracy or to obscure the part played by some political agencies therein.

With a longer historical view of voting events, stretching before the brave new world of *AI* anxiety, the claims made on behalf of electronic agents become even less persuasive. An overdetermined focus on electronic agents in voting events seems to distract from the complex range of ways in which crises of procedural democracy have been understood since at least the 1930s. One of the early studies exploring the matter (Callender 1933) had considered — among other factors — funding mechanisms, political party loyalties, bosses, media, legal vagaries, experts, constitutional provisions, majorities, bureaucracies, as all possible factors in undermining democratic procedure. Most of those arguments remain valid. I have come across no study demonstrating that the outcomes of voting events have become either more or less predictable with the introduction of sophisticated data mining and targeted message delivery. The prevailing understanding of how these processes work suggests a scaling-up and deeper penetration of conventional propaganda strategies, such as: voter surveying to inform campaigns; telephone or letter



Courtesy: sdecoret, iStock

messaging; door-to-door campaigning; smear campaigning; uncivil tactics (for example, playing the race card); feeding confirmation biases; or covert incentivizing. It is questionable whether technologically enhancing these leads to much more than they have always achieved. A useful article considering the propaganda model of Herman and Chomsky (1988) in the current digital environment (Fuchs 2018) mainly finds that the environment itself needs to be more carefully considered in terms of its ideological underpinnings and power structures than it has been thus far. Insofar as contending candidates in voting events go, it is difficult to argue that electronic agents would necessarily skew the playing field one way or another simply by being deployed. After all, in principle all sides have access to the same methods. The advantages to one or the other candidate in taking recourse to these are arguably no greater or lesser than due to disparities in, for instance, campaign funding.

Skepticism about the hype surrounding data mining and targeted message delivery could also arise because of the commercial interests served by such hype. I am not referring here to the upbeat motivational market-speak that such service providing companies — as observed earlier, a substantial

business sector — very naturally put out. Much of that consists of claims made in the name of normative democracy: for example, Aristotle International goes with the logo *We power democracy*, Facebook for politics with *Learn. Engage. Make an Impact*, Blue State Digital with *Believe in the power of the people*. I mean the sort of hype that comes from the cognoscenti who fear for democracy and are outraged by what such devices and systems are doing to voting events and the *demos*. This is peculiarly an area in which bad publicity is better publicity than good publicity. It is analogous to an assassin causing a public outcry for killing high-profile targets and evading investigators; someone seeking to contract an assassination might be quite interested in making him a lucrative offer. The anxious and outraged defenders of democracy may well be (hopefully unwittingly) serving the commercial interests of the business sector in question. There has probably been no better publicity for rivals than the media outcry about the activities of Cambridge Analytica following the Brexit referendum.

What If

But, we may ask ourselves, what if all these skeptical arguments are misplaced? It is possible that

despite these doubts, campaigning electronic agents are actually as effective as they are suspected of and promoted as being. Perhaps they are increasingly determining the outcomes of voting events. If that conclusively turns out to be so, then there are some implications for our understanding of received democratic procedures to be considered.

Under those circumstances, procedural democracy and business interests would have to be understood as not merely acting in sync — we don't just have "a marriage of politics and commerce" (Chester and Montgomery 2017: 2–3) — but in terms of procedural democracy being a form of business and not much else. This argument would focus on the political standing of companies offering technologically enhanced campaigning. The point is that they don't in themselves have any necessary political standing that is relevant to the voting event. Of course, some may choose to politically align themselves with one contender or another. If one consults, for instance, the listings of full campaign service firms in the USA on the website Campaigns & Elections,²⁰ some firms list themselves as Democrat or Republican, others as Non-Partisan or International. But where party alignment is acknowledged, that's either a voluntary limitation or a niche advantage for a business operation; the technological means are in themselves indifferent to political affiliation. They could be brought to bear upon whatever alignment serves business interests irrespective of politics — that is, insofar as politics is not conditional to serving business interests. So, they must be understood as politically indifferent interlopers in voting events who nevertheless determine the outcomes of political events. In those circumstances, the political arena of procedural democracy is little more than a market; political parties and contenders in elections are clients; campaigning is a business process; the voting event is a product-testing event; and the majority vote is a commodity. It is not quite clear whether the *demos* exist in an understandable sense except as a product-testing space, a very large focus group. The procedural democratic arrangements to mitigate majoritarianism (parliament, judiciary) could be thought of as devoted to business regulation. Because voting events in this way decide the appointments of governments at various levels and also work through interim legislative processes, it becomes unclear where politics is definably outside the commercial interests of politically indifferent actors.

If data mining and targeted message delivery by electronic agents is shown as delivering decisive results in voting events, received conceptions of the voter in procedural democracy would need to change. The current ideal conception is that each voter would freely and voluntarily make informed choices from options on offer in the voting event, with a combination of individual and collective interests in mind. This ideal conception underpins procedures dependent upon universal suffrage and the tenets of fair voting events mentioned earlier. The real practice of voting may

be compromised in various ways; nevertheless, it is accepted that with reasonable and transparent regulatory oversight, this conception of the voter holds in an aggregate way. If it can be unambiguously demonstrated that voters can be repeatedly and predictably swayed one way or another by a nonpolitical agency, then that understanding of the voter is fundamentally undermined. Insofar as the kind of technology in question here goes, two alternative views become plausible then: that voters have always been predictably suggestible, and now robust means to demonstrate and manipulate that proclivity have been developed; and alternatively, that voters have been integrated recently into a large technostucture and mode of social organization that has made them more suggestible than before by such means. For instance, relatively recent developments in digital connectivity and social networks have guided all voters toward putting their data selves out there, both voluntarily and involuntarily, as a necessity of normal social life. This circumstance makes their self-determination as voters making informed choices, gauging individual and collective interests, largely meaningless. Their data selves (composite mappings of all aspects of voters' histories and habits), largely liberated from their control, can be used as proxies by electronic agents to maneuver their voting behavior despite themselves. If such views find wide consensus, it would be a matter of time before some significant changes to procedural democracy — or polyarchy or oligarchy or representative government — are proposed. It might come to be considered that voting events are less effective for the purposes of procedural democracy than some other mode of ascertaining the assent of the people. Perhaps electronic agents at work among voters' data selves could be called upon in some way to make that determination instead, with open consensus.

In this last point lies a dangerous can of worms waiting for the can-opener to be wielded by any agency that perceives some advantage to doing so. It still seems a fantastical possibility; it is nevertheless a logical possibility if preconceptions about the effectiveness of campaigning electronic agents gain ground. Perhaps such preconceptions do not even need demonstrating in a scientifically valid manner. Possibly they just need to be hammered home through data mining and targeted message delivery by electronic agents.

Notes

1. www.crunchbase.com/organization/skol-system
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14. www.whitehouseconsulting.co.uk
15. www.thecampaigncompany.co.uk
16. www.political-intelligence.com
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