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Negotiating the future of political philosophy and practice: Renewal of democracy or technocratic governance

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Abstract

The widespread understanding of Covid-19 as a threat to public (health) security serves as the discursive foundation for the application of emergency measures – both in terms of public health measures as well as in the field of political decision-making procedures. It has led to a strengthening of the role of (medical) experts for policy-making at the expense of formerly established democratic procedures and public debate. It has also increased the notion that information can be either important or antithetical to security – observable for example in the stark increase in journalistic referrals to fact-checkers and the demonization of what has been labeled mal-, dis-, and mis-information. In this article, we first explore, whether this securitization of Covid.19 has led to disruptions in the societal sub-systems of democratic governance and scientific debate. Second, we examine the role of expertocratic and technocratic thinking in the current crisis discourse against the background of both historical and current trends in political philosophy.

1. Introduction

In many societies internationally Covid-19 has come to be understood as a security issue – public health has been securitized. Along with this understanding of the issue, the role of expert-knowledge and expert-guidance for policy-making to steer societies through the crisis have been awarded increased importance. Scientific experts – particularly related to the medical profession but also with other backgrounds such as statistical sciences – have been deemed central to managing the crisis from an early stage on. This process has left us with a shift in the role and relevance of scientific issues and expert knowledge for public life – a type of knowledge that, by its very nature, is somewhat removed from the immediate reach and lived reality of the vast majority of the population. While the crisis has reverberated in many sub-systems of societies internationally, it has proven to be a particular challenge to democratic modes of government. In many democracies, governments have significantly increased their reliance on expert advisory boards to enable at swift executive decision-making which, in many cases, has cut short established institutional democratic processes. Fundamental incisions into personal and democratic freedoms have been authorized in this process in many countries. In response to such challenges, long-term German chancellor Angela Merkel called this situation a "democratic imposition" [demokratische Zumutung] – referring to the imposition this mode of governance poses to democratic forms of governance

(Merkel 2020).

Closely related, securitization of the crisis has also led to the securitization of knowledge and information which have increasingly been divided into legitimate information with the power to increase security on the one hand and "mal-, dis-, and misinformation" which are deemed dangerous to public (health)security on the other. This understanding of the security-relevance of information has called into question fundamental assumptions about the freedom of speech and public (scientific) information. With scientific knowledge now subjected to a security-logic, it becomes a key question whether the processes for deriving at scientific knowledge – including scientific debate – have been negatively affected by this crisis mode.

In this article, I will hence examine whether and in what ways the shift toward expert-knowledge and the securitization of information have led to dislocations and disruptions in the societal sub-systems of democratic governance and science/scientific inquiry. Have democratic and scientific forms of deliberation been cut short? And if so, which other types of knowledge formation have been (partially) substituted for the societal construction of knowledge and truth? While expertocratic and technocratic ways of thinking have gained significant momentum during the still current crisis discourse surrounding Covid-19, problem-solving and decision-making patterns tend to be embedded into a wider framework of thinking and reasoning rather than to be disconnected from the everyday ways of understanding the world and dealing with its problems (see for example Foucault on *epistemes* (1974: 22; 1978:124).[1] Hence, we will explore the way in which expertocratic ways of reasoning relate to the management of Covid as well as to the deeper and broader strands of thinking in which they are embedded – pointing towards a trend in political philosophy. This underlying strand of thinking is embedded in a longer-term development of increasing expert-rule over ever more areas of societal life. Indeed, some modern patterns in political philosophy point towards visions for future technocratic governance as models for replacing democratic forms of governance as we know them today – including around the notion of 'smart cities', 'post-voting', 'post-ownership' and 'post-choice' societies as well as politico-technological innovations which build on the mechanistic understanding (and treatment) of humans and societies as entities that can be guided and manipulated through social engineering.

2. Democracy, Securitization and Expertocracy

The Covid crisis has been highly securitized which has led to a significant deference of political leadership to expert knowledge within its management. This development holds a strong potential for undermining democratic forms of governance. In essence then, democratic practices run the risk of being displaced by both securitization and expertocratic practices. We will analyze these two aspects and their relationship to democratic practices in turn.

2.1 Democracy and Securitization

In order to approach this question, let us first consider some fundamental principles of democratic governance and their relation to securitization, i.e. the process by which an issue

is socially constructed to represent an issue of security.

It is the defining characteristic of democratic governance that those who are ruled rule themselves – or, at the very least – participate in the decisions of how they are being ruled. In the minimalist model of modern Western democracies this is practiced on the one hand via regular elections of representatives who are, at least in principle, to be held accountable for their actions and removed from office at public will. Beyond that, democratic governance is defined by a number of foundational principles, rights and freedoms. The most fundamental of these is the equality of all participants of the democratic polity. This equality pertains to the equality before the law as much as to the equality in relation to the freedom of speech. Theoretical perspectives on democracy from a broad range of persuasions further highlight the importance of treating the political Other as a legitimate political opponent. While Hannah Arendt argues that *the political* itself is a process of rather cooperative argumentation toward finding the common good (Nonhoff 2006: 98–112), Jürgen Habermas normatively argues in favor of communicative rationality as the guiding principle (Habermas 1995: 139–142) and Chantal Mouffe concludes that in any democracy those who present incompatible political wishes and perspectives nevertheless need to see each other as legitimate democratic *opponents* rather than illegitimate political *enemies*. In this analysis, democracy is – beyond all differences – a fundamental common project on which all participants agree and arguments are debated adhering to its basic principles (Mouffe 2013: xii). We find these values reflected in public media codes which consistently demand factual, balanced reporting representing all perspectives without judgement (e.g. Medienstaatsvertrag §3, 20, 59; Royal Charter of the BBC).

Securitization refers to the processes in which particular topics of political relevance gain a meaning of representing security issues in public and political discourse. In contrast to notions of democracy, securitization builds on the formulation of radical negativity – absolute opposites – the formulation of that which negates a particular *interpretation* or *way of being*. It is this negation of a discourse which provides us with a particular understanding of an issue, a collective identity or way of being as being threatened by the Other (Broecker 2022a: 92, 107pp). Securitization theory has been concerned both with questions relating to the reasons why and the manner in which issues are constructed as security issues as well as the (likely) consequences of securitization. While securitization can take many paths and the actors articulating it may do so for very different reasons (Broecker 2022a: 20–1), a number of aspects are of particular importance with regard to securitization more generally and the Covid-19 crisis discourse, in particular:

a) Securitization shifts the understanding of the 'Other' – of the thing, process, person(s) or identities deemed dangerous into an antagonistic relationship vis-à-vis those subjects and objects which are seen as threatened. The Other does not merely express a different opinion but appears as dangerous *by undermining the very manner in which meaning is created within the discourse* on which securitization is built. This danger may be expressed as a direct danger to particular lives but it might just as well be conceived of as a fundamental danger to particular values or ways of life – as has been in the case in the securitization of terrorism and underdevelopment (Broecker 2022a: 85pp, 92pp);

b) In this process, securitization limits and narrows the possibilities in which the particular situation can be dealt with – which types of actions are conceivable in the first place (Langenohl 2019: 47);

c) Finally, the securitization of an issue tends to be used to legitimize the utilization of additional resources to be directed toward the management of the declared security crisis (Buzan et al 1998: 23).

Securitization in its nature of declaring the Other a threat is unable to include that Other (discourse) in the realm of democratic exchange and equality. This may, however, mean different things for the practice of democracy. When securitization is formulated by a counter-hegemonic discourse, that is, by one which is not dominating the social system in question – such as a minority or subaltern group it may very well point to existential threats perceived by this group and demand attention for the plight of these without being able to dominate the public realm to such a degree as to bring democratic practices to a standstill as this group will be unable to ignore other more dominant discourses and necessarily has to negotiate with them. However, when practiced by a hegemonic discourse with access to the means of decision-making and the powers of the state, the radical Othering of securitization may very well lead to a complete exclusion of the subaltern Other (cf. Szymanski 2022, in this issue) when it is deemed to be a threat to objects and subjects constructed in the dominant discourse.[2]

2.2 The securitization of the Covid-19 crisis – undermining democratic processes?

In the context of the securitization of Covid-19 in the collective West,[3] some of the aforementioned fundamental notions of democratic governance of the polity have been severely challenged. The dominant mode of the hegemonic discourse on Covid-19 in the collective West has been and continues to be one of securitization. It is hegemonic in the sense that the interpretation as a security threat has been proclaimed both by heads of states and members of governments as well as state-based health institutions, dominant non-governmental organizations and dominant media outlets. It is hegemonic also in the sense that other interpretations are possible and have been put forward which directly oppose the discourse of securitization (compare Laclau/Mouffe 1985).

Military language, including 'frontline (workers)', 'enemy', 'battles' and 'troops' has become commonplace in referring to Covid-19 and has been accompanied by hitherto unseen emergency measures. To name only a few examples, French President Macron has declared several times since March 2020 to be 'at war' with Covid-19 and has declared a lock-down on the general population (Macron 2020) while former U.S. President Trump defined himself as a "war-time President" two days earlier, arguing that he had to close down the economy "in order to defeat this enemy" (Times 2020), followed by his successor, President Biden, who declared "a full-scale war time effort" to produce vaccines and held "we're in a national emergency" (Bowden 2021). Former Centers for Disease Control (CDC) director Tom Frieden has similarly felt to be at the beginning of a "long war ahead of us" (Frieden 2020). And while Germany's Angela Merkel argued that we "should not yet feel secure" (dpa 2020), Canadian Prime Minister Justin Trudeau found that "the front line is everywhere: in our homes, in our hospitals and care centers, in our grocery stores and pharmacies, at our truck stops and gas stations" (Gerster 2020) while, last but not least United Nations Secretary-General, Antonio Gutiérrez, has argued "we are at war with a virus – and not winning it. …This war needs a war-

time plan to fight it" (UN 2020; see Musu 2020 for further examples).

In tune, medical staff have regularly been referred to as "frontline workers" (Mental Health America; CBS 2022; Bray 2022) or as "soldiers" in the case of New York City Governor Andrew Cuomo (Musu 2020). This political utilization of language has also become commonplace within influential news media which have similarly referred to Covid-19 in terms of a war such as CNN's "Covid-War" in Trump's White House (Howard 2021), while The Washington Post titled "Biden is winning the war against Covid" (Rubin 2022) and *ntv* sees Germany in a "fight" against Covid (ntv 2020). Imagery such as depicting a military convoy transporting coffins have become emblematic in suggesting a crisis situation of war-like extent (Kaltwasser 2022).

Among many examples, the measures taken in response to the virus, have similarly taken on the shape of emergency responses. Several countries within the European Union have declared various forms of states of emergency including Belgium, France, Hungary and Italy while both Germany and Poland activated public health acts under which additional executive powers are recognized. All of these countries introduced rules by decree to some degree (Binder et al. 2020). The U.S. federal state, Australia as well as several Canadian provinces have similarly declared states of emergency transferring executive decision-making powers to the administration (Laframboise 2022; Massachusetts government 2021; Delgado 2022; Chorley 2022). The measures under these various national laws have included, among many others, "lockdowns" in large parts of the Western world, mask and vaccine mandates, emergency authorizations for Covid-19 vaccines, but also the temporary set-up of military hospitals in several countries (Politico 2020).

This securitization of the virus and the ensuing declaration of measures to protect the population from it have paved the way for the framing of aberrant behavior and the people expressing it as not merely *normatively reprehensible* due to their alleged irresponsibility and lack of solidarity; instead these traits have become *dangerous* within the hegemonic Covid-19 discourse. The World Economic Forum knows: "Science denial became deadly in 2020" and informs readers on how to tackle it (WEF 2021). Questioning the hegemonic discourse – which declares the particular dangerousness of the virus, the virtual impossibility to treat or prevent it (with anything other than the newly developed mRNA substances), the danger of over-extending intensive-care units and finally, the rationality of all fundamental mandated health measures – may lead to unsettling public opinion and ultimately to lower levels of compliance with measures and therefore qualify as a security risk (Barry et al. 2020; Fink 2021; see also Szymanski 2022 in this issue). This sentiment is also expressed in the open letter by scientists, published in the New York Times, calling on large tech corporations to curb mis- and disinformation about the pandemic (Alvarez 2020). Expressions which go against the grain of hegemonic discourse and governmental decrees have become framed as both *unscientific* and (therefore) *dangerous*.

The boundary of inclusion and exclusion has become particularly prominent along the line of *solidarity* and the notion of *responsible subject*(Steinmeier 2020; Fester 2022; Frühauf 2021; Rubner 2021; Menke 2021; Charlton-Dailey 2021; Kaufman 2020). Both, solidarity and the characterization of the responsible subject are primarily related to the acceptance of the hegemonic discourse about Covid-19 and the application of state-mandated measures (Broecker 2022b & c; Costabile 2022). Beyond this, the supposedly unscientific basis of questioning and critiquing these measures has been a dominant discursive feature and

persons expressing them have regularly been referred to as "irrational", "science-deniers", "tin-foil hats", "covidiots" and similarly, extending well beyond the collective West (for example: Head 2021; Harvey 2021). Thus, Fiedler, in the German *Der Tagesspiegel* attests critics the loss of the grip on reality (Fiedler 2020). Persons questioning or critiquing the state-mandated measures or even protesting against these have been dubbed social outcasts in the hegemonic discourse and their arguments bluntly discredited as illegitimate. In this way, the hegemonic discourse constructs itself as holding ultimate truth, denying the legitimacy of critique and questions.

Beyond this, the dangers connected strictly to the pandemic situation have quickly been expanded to attesting (far) right-wing and Nazi-like mindsets, the tendency to believe in conspiracy theories, anti-Semitism, and authoritarian characters to the same group (see for example Fiedler 2020) as well as an anti-capitalist spirit (Ackermann 2020). In this manner, Knut Bauer of the German public media service *SWR* declared those critiquing Covid-19 restrictions (as well as oil and gas policy in 2022) as abusing these arguments for the purpose of abolishing the free and democratic fundamental order installed by the Constitution (Bauer 2022).

Linguistic and non-linguistic practices within the hegemonic discourse have followed accordingly and led to various forms of exclusion, censorship and counter-information campaigns to what is considered medical misinformation both by large tech companies (most importantly: Meta, Google and Facebook but also a whole array of second-tier platforms such as Discord or Twitch along with payment providers such as PayPal and GoFundMe) as well as state and supra-state level actors (youtube 2022; twitter 2021; EU vs. Disinfo; Trusted News Initiative; Gräser 2021; Schreyer 2021; Meyen 2021).

In this sense, the hegemonic discourse has entered onto the path which Chantal Mouffe described as the anti-democratic practice of claiming *ultimate rationality* for itself, thus arguing that any debate with the political opponent becomes unnecessary and even dangerous. Essentially, we argue, this means that democracy itself – democracy's foundational principles – are being declared dangerous and aberrant. This development leaves us with several important challenges: First, it has etched rather sharp lines of inclusion and exclusion into the realm of that which is deemed politically and socially acceptable and thereby has increased the stakes of formulating counter-hegemonic perspectives or even mere questions. Second, it has severly weakened the mechanism of conflict resolution inherent in democratic principles by disallowing the voicing of different perspectives and the negotiation between them. Indeed, we have seen the deepening of rifts between persons adhering to the hegemonic discourse and those adhering to counter-hegemonic discourses, criticizing the mandated measures or vaccination policies of their respective states. This process has led to waves of protest and highly emotionalized exchanges between both groups. The securitization within the hegemonic discourse has been met with a counter-securitization among anti-hegemonic discourses which construct the measures themselves as the central security risk to society (Broecker 2022c). This begs the question whether the consequences of undermining democratic practices may be more dire in their ripple effects on all societal sub-systems than is taken into account within the narrow discussions on the Covid-19 crisis. It also begs the question whether this is a price we are willing to pay as societies.

2.3 The Securitization of Covid-19 – Rise of the Expert

As mentioned, the securitization of Covid has also led to the rising importance of experts to manage and alleviate the crisis situation. This becomes immediately obvious when we consider the role that 'the science' has played since early 2020. Beyond a general increase of importance of (medical) scientists, media and government communication as well as social network exchanges have begun to report on the intricacies of the different fields of medical expertise relating to the control of infectious diseases, including epidemiology, infectiology, virology, vaccinology, public health expertise, hygiene expertise but also biochemistry and related fields. We have also witnessed the rise of 'Covid experts', usually originating from one of these fields. Some of these experts, hitherto largely unknown to the general public, have experienced a drastically increased media presence and demand during this time period (compare for example Garde 2021; Univ. of Maryland; Institute of Healthcare, Policy & Innovation; Rannow/ Sagener 2020). Additionally, various countries have set up expert councils to guide governments through the pandemic.

3. Democracy, Expertocracy and Technocracy

Let us first define, in very broad terms, the notions of expertocracy and the closely related technocracy. *Expertocracy* describes a type of political system or a set of practices of political rule which relies to a significant degree on the perspectives of experts in particular fields and uses their expertise to justify policy choices.

The related concept of *technocracy* has been used with a narrower and a wider meaning in mind. The narrower understanding may be described as an escalation of the reliance on experts and essentially relates to a political system in which the government itself or central aspects and departments are led by technocrats – experts in their respective fields – not predominantly affiliated with any one political party or perspective and neither voted in nor directly answerable to the public political process (McDonnell 2014: 656–7; Berndt 1982). Such technocrats may originate from the field of the natural sciences and engineering but could also be bureaucratic experts. In this sense, the term refers to a form of governance and "re-organiziation of society based on the findings of technologists and engineers" and argues for leaving decisions to those most qualified to make them (dictionary.com; Burris 1993: 2; Wood 2022).

A recent example for this would be the ECB-banker and Goldman-Sachs-manager Mario Draghi, who in February 2021 was explicitly tasked by Italy's President Mattarella to form a technocratic government ("un governo tecnico sostenuto dalla maggioranza dei partiti e affidato a dei 'tecnici'") (Post 2021). In some way, this repeated earlier phases in 2011 during which both the Italian and Greek government were explicitly directed in a technocratic fashion (Reuters 2011; The Economist 2011; BBC 2011).

A broader understanding of technocracy is introduced by Neil Postman, when he argues that a technocracy – or in its radicalized form, *technopoly* – does not refer to an isolated form of government but describes a society whose social, political and cultural aspects have been permeated by the deference to technical invention, the goal of efficiency and the related belief in technical elites as ablest persons to direct such a society (Postman 1993: 41, 58). He shows that scientific inventions first revolutionized the modern work-place (most

dominantly with the onset of Taylorism) and reconstrued the worker from that of an acting and thinking subject to being part of a larger machinery which – in the interest of efficiency – had to run smoothly (51). This, he argues "is crucial because it led to the idea that technique can do our thinking for us, which is among the basic principles of Technopoly" (52). We want to direct our attention to two related aspects which Postman argues follow from the technocratic re-structuring of society. First, technocratic thinking has, in the early 20th century, been expanded to conceptualizing first the economy and, by the 1930s, all of society as systems or machines that could and should be technically controlled and directed by experts so as to ensure their smooth and efficient functioning – a notion which was enhanced by the rise of behaviorism and ultimately led to notions and legitimization of *social engineering* (White 2020; Cole 2022; Postman 1992: 52). Second, he argues that technocracy and technopoly in particular, create subjects who are faced with an information overflow while having lost any reference framework by which they might be able to judge the scientific and technical information they are presented with (52). This shift occurs because a) as traditional forms of knowledge and values compete with technocracy, they become increasingly irrelevant in technocratic societies and humans are left without a cultural or spiritual framework of reference concerning who they are and what might count as knowledge (58). Beyond this, individuals are also unable to have an overview over the foundational knowledge of the proliferating scientific and technical fields within which information is produced and which may prove relevant for their own life. In this sense, "the ways of technology like the ways of God, are awesome and mysterious" (58). As a result, the management of information becomes a primary task within technocratic society (58-67).

While technocratic ideas have historically often been elaborated with utopian aims in mind, they cannot escape the automatism by which the human being and society as a whole become subordinate parts to mechanistic processes, to be fine-tuned by technical means and towards technical ends of efficiency and to be managed by experts from without – a notion of absolute estrangement (cf. Ellul 1964; Marcuse 1964; Popp Bermann 2022). The focus on technocratic processes and technical solutions along with the goal of efficiency replacing other aims is closely related to capitalist processes which inherently aim for an ever-increasing level of productivity and return on investment – in other words: economic efficiency. In a sense then, technocracy is the ideology that underpins capitalism. Both point toward the ever-increasing centralization of control over vital societal and economic processes in fewer hands. Erich Fromm outlines how this economic notion has also encompassed our understanding of the human being and human relations:

"modern capitalism needs people who work together in large numbers without frictions, who consume more and more, whose taste is, however, standardized, easy to manipulate and to predict. Modern capitalism needs people who feel free and independent but who are nevertheless ready to follow orders, to do what one expects of them, to integrate seamlessly into the social machine, who allow themselves to be guided without violence, led without a leader and directed without a goal – with only one exception: never to be idle, to function and to press on. What is the result? The modern human is estranged from herself as much as from others and from nature. He has become a commodity, experiences himself as a capital investment which has to yield a maximum of profit under the given circumstances" (Fromm 1979: 116, translated by author).

3.1 Critique of Expertocracy

Perhaps the most discussed type of critiques of the reliance on experts and, in its extreme, the notion of technocracy, is that it hides the political nature of decisions (Buckley 2018; Rees 2019; Aggestam 2018; Flinders/Wood 2014) while insulating technocratic elites from democratic oversight and control (cf. Best 2018). In a very fundamental critique, Habermas' concept of communicative rationality as opposed to instrumental rationality picks up on the dangers of technical rationality employed as an end in itself without democratic debate on the aims and goals for which technical solutions should be utilized (Habermas 1995: 489–518). A second type of critique argues that technocracy, while purportedly allowing those best-suited to make particular decisions to govern, it is in fact not as effective in identifying and resolving problems as its proponents argue and less effective than democratic principles because they structurally exclude a multiplicity of perspectives (Anderson 2012; Mathijs/Blyth 2018; Butorovic 2010). C.S. Lewis articulated a similar, two-fold critique of technocracy as first the utilization of science to justify political decisions and second (the potentially resulting) the subordination of the political under the scientific inquiry:

> "I dread government in the name of science. That is how tyrannies come in. In every age the men who want us under their thumb, if they have any sense, will put forward the particular pretension which the hopes and fears of that age render most potent. They 'cash in'. It has been magic, it has been Christianity. Now, it will certainly be science. […] The new oligarchy must more and more base its claim to plan us on its claim to knowledge… This means they must increasingly rely on the advice of scientists, till in the end the politicians proper become merely the scientist's puppets" (Lewis 1970: 311–12).

Ivan Illich's Critique of Expertocracy

Illich's critique of the rule of experts extends well beyond the above-mentioned classical points in the sense that he criticizes not only the effects of expert rule onto a particular political system (such as democracy) but rather onto the systemic aspects of society as a whole and onto each individual person within it.

Centrally, he argues that the rise of experts represents a de-skilling and disenfranchising of populations and societies. He argues that experts arise as competencies, entire areas of social, political and cultural life are taken out of the realm of laypersons and social contexts and turned into the sole prerogative of particular expert groups – thus creating dependencies on said experts (1977: 8). Such experts may belong to the areas of education, health, lifestyle, caregiving, mental health or development and include practices of birthing clinics – which remove the competencies and skills of facilitating births from local social bonds, legal professions – which remove (among many others) the legal permission to divorce couples, or coroners – removing the competence to decide who may be buried by whom in what way, to name only a few (1977: 9, 16).

Illich secondly argues that experts have moved into a societal position a) of creating the perceived needs and indeed educate people to perceive hitherto absent needs and wishes (including through education) which may then be filled by them:

> „We have to accept the fact that special associations which today hold power over the creation, allocation and satisfaction of needs, form a new cartel" (1977: 14, transl. by author).

He continues to argue that:

> „as trustee of morality, [the expert] acts in the role of the priest [...] He awakens the need for his mediation between the stupid-born human being and the kingdom of heaven of socially functional education" (1977: 18, transl. by author).

Illich subsumes many seemingly emancipatory projects under this framework and argues that:

> "[s]ince the ‚War Against Poverty', peace too, is on the war-path. Today, all industrial societies are constantly in the state of total mobilization. At every moment some type of organizational preparations against some type of public emergency are being made, every day new strategies for advancement are being formulated in all sectors of society; the battlefields of health, education and the welfare state fought over by the warriors for equal opportunity, are strewn with victims and ruins; every day, in the struggle against constantly new-found ills, the civil rights and liberties of citizens get suspended; every year, new fringe groups are being discovered who need to be protected from some new type of illness, saved from some new type of uncertainty. All of these 'basic needs' invented and decreed by all the expert associations, allegedly lead to one aim – the need to fight off evil" (1977: 10-11, transl. by author).

But beyond that, he argues, that experts have been moved into a position from where they hold the resources to mandate what is right or wrong:

> "The academic experts tell you what you need. They demand the authority to dictate to you. They do not only propagate what is good but they also decide what is right." (1977: 15, transl. by author).

As a result, he argues that while expert rule may be a form of "governance for the people, however [it] never [is] governance by the people" (1977: 19, 20).

He continues this line of reasoning in arguing that expert knowledge, as used in courts of law, can itself infringe upon the basic democratic principle of disallowing hear-say arguments from such judgements in the sense that neither judges nor the public have the ability to verify the information provided ,while experts offer what may be their or a generalized opinion within their field. He argues:

> „In legislation as in the court of law, the basic principle which excludes hear-say is de-facto suspended in favor of the opinions and convictions of the members of these self-declared elites. [...] The type of expert which dominates today does not offer the court of law factual evidence or proof but merely the opinion of her expert-colleagues. With this she suspends the principle which prohibits hear-say from testimony and undermines the fundamentals of the law. This however, inevitably leads to the abolition of democratic checks and balances" (1977: 20, transl. by author)

3.2 Democracy and the appraisal of experts during Covid-19

On this basis, let us now briefly consider the manner in which these critiques relate to the relationship between democracy and the reliance on experts within the Covid crisis discourse.

First, it is noteworthy that within the Covid-19 crisis discourse in Western states, we have not experienced technocratic forms of governance in the sense of unelected state- or department- leadership making binding decisions. Rather, elected politicians have formulated policy responses relying on experts, predominantly from within the medical field. These decision-making procedures have, however, in several case (including that of Germany) severely differed from the norms of parliamentary debate and inclusion. Beyond that, we find a substantial rise of the technological means by which the crisis and thus societies in crisis are being managed. These include PCR- and antigen-tests, quarantine

regimes, prescribed wearing of face-masks, ventilation systems, disinfection protocols, novel vaccine technology, phone applications designed to register, track and manage the access and locations of persons as well as passports regulating the movement across borders according to new health-related standards.

Second, as we have seen in the previous section, fundamental processes of demarcating socio-politically permissible perspectives onto the situation and organizing inclusion and exclusion have been created with a reliance on 'following the science', and thus deeming 'rationality' as such to be located on the side of the hegemonic discourse. While the relevance of expert knowledge and its contribution to decision-making processes during a potential health emergency is immediately obvious, one central issue stands to be considered in particular: The democratic freedom of expression is *not supposed* to be bound by scientific findings. Rather, religious, emotional, and personal perspectives are protected by the democratic freedom of expression and enshrined in the various constitutions and legal frameworks in democracies. While informal behavior has certainly differed in some topic areas, formal boundaries to this freedom of expression had, up to the beginning of the current crisis discourse, been placed only onto very limited and specific types of speech, such as those which incite hatred, violence or lawless action or are defamatory (Cohen 2009; Hong 2020). In the current situation, however, we find rather explicit censoring of deviant opinions not merely by large tech companies and social media platforms but also through state-mandated channels (see above).[4] While we would argue that we have not experienced a technocratic form of governance, advances in both censorship and delegitimizing positions which are perceived to be unscientific by the hegemonic discourse do represent a further step into the direction of technocracy. With Illich, one might argue that freedom of expression is increasingly formulated as one of the areas or competencies to be removed from society and the individual and placed into the hands and expertise of scientific experts. In a particularly crass example, Frank Ulrich Montgomery, chairperson of the *World Medical Association*, expressed the sentiment that institutionalized aspects of democracy had to be placed second to (his) expert knowledge: After judges in Niedersachen, Germany had declared the access-restrictions to retail markets only for vaccinated and recovered persons to be illegal, he expressed his annoyance at the fact that 'little judges' (even adding the derogatory diminutive to the phrase in the original German expression) had taken it upon themselves to overrule this restriction. There were, he argued, "situations in which the right thing to do is to consider the right to freedom as less important than the right to physical health [...] and we are in such a situation" – thus infringing even upon the field of other expert traits (Bubrowski 2021, BR 2021). While this behavior received a distancing letter from the German medical association [deutsche Ärztekammer] for failing to respect the authority of the courts, it does go some way to demonstrate that these norms are at times put into question by leading experts.

Third, the heavy (rhetorical) reliance on experts and expert knowledge has indeed had the effect of sidelining the political dimension of reactions to the pandemic. Language has regularly been employed to depoliticize decision-making, creating the impression that it had been without any viable alternative. This has become particularly evident in the two expressions used globally in one version or the other: *Trust science!* And: *The effects of the pandemic,* leading even to substantial number of fashion items reproducing this call to arms (Fauci 2020; Marches for Science; De Ciccio 2021; Mandavalli 2021; Biden 2021a; Thomm

2020; Bromme 2022). Whereas the former creates the impression that at every turn, there has been only one enlightened and rational choice of direction and action, the second type of expression deepens this by implying that all medical, social, economic, educational and other effects both locally and globally bear no connection to political decision-making but are rather direct and self-evident outcomes of the presence of the Covid-19 virus. Indeed, criticism of the sidelining of various fields of expertise and insight into the (potential) negative effects of various mandated measures have been voiced in counter-hegemonic discourses but have not, so far, taken a prominent position in the hegemonic public discourse (for an overview see Broecker 2022b/c). Following two-and-a-half years of this rhetoric, late summer of 2022 has witnessed a limited number of critiques of negative effects of lockdown measures as well as arguments that a large number of excess deaths (in the UK) cannot be allocated to Covid-19 and may potentially be the consequence of one of the anti-Covid measures (Rothwell 2020; May 2022; Mayer 2022).

The inherently political decision involved in technical solutions – which questions we ask, what scientific knowledge we engage and how we act upon it have thus indeed largely been deflected by a mirror of 'the science'. Concretely this relates to *how* we protect (all) life, *which types of suffering* and *consequence* count in the overall mix and *how much*societies are willing to sacrifice for these, as matters of negotiation that can never escape being value- and judgement-laden. Beyond the named challenges of what we do with the *results* of scientific inquiry, the understanding of 'science' underlying this interpretation is itself pre-political – as it is being constructed as an entity *outside of the social, political and economic processes of its production* – as if it were a factum outside of and independent from society. Yet, we are obviously faced with the difficulty that persons, institutions and processes *within* society *define* what (legitimate) science is; *practice* it and *are entangled* in webs of what is possible and feasible for them to study: which *issues*, *questions* and *methods* receive funding, what results will be published where and *by whom* and what ultimately gets defined as public *knowledge* can never be divorced from a society's structures and mechanisms of power. It is, therefore, an illusion to assume that any such choice could be apolitical, merely based on pre-existing values, shared goals or even scientific facts. Arguing that it could, is to replace an understanding of politics with the mere administration and implementation of technical knowledge that even an algorithm could perform – technocracy. Yet, computer programs too, are just that – programmed – set up with particular parameters which can thus be used to *create the impression* but can never *actually* escape the political decision-making which informs them.

Where democracy is based on the equality of all its subjects and on the constant exchange and struggle between different values, wishes, preferences and perspectives, the securitization of public health holds the potential of turning basic principles of democracy and indeed human equality on their heads. While I do not know whether he would agree, these consequences appear to me to be closely related to the notion of political auto-immune reactions of a political system attacking itself as outlined by Mark Neocleous in this issue. In any case, the democratic sub-system is being damaged when expert-decisions infringe upon its fundamental rules and principles.

4. Experts and the legitimization of political systems

Ivan Illich has provided us with a second profound critique in the discussion of experts – namely, the relation between experts and the legitimization and justification of the state and its elites. Fundamentally, Illich argues that who counts as an expert in modern societies depends on their accreditation by the state. At the same time, their expertise stabilizes structures of the political elite by offering legitimization to political action and creating a sense of objectivity and necessity:

> „the specialist-guild, however, derives – as does priesthood – their power from the concessions of an elite whose interests they support in turn. The special privilege of the experts to be able to dictate to others what is right for them and what they hence need, is the source of the prestige and power they enjoy in industrial states. This type of power by experts could, of course, only develop within a society in which belonging to the elite is itself legitimized, if not gained, through expert status: a society in which the ruling elites are attributed the ability to define objectively what is lack and how it is to be judged morally". Further "the societal autonomy of experts and their autonomy to define the needs of society are logically forms of oligarchy in a political culture in which material ownership has been replaced by knowledge-certificates as issued by schools" (1977: 16, transl. by author).

Beyond the notion of depoliticization transported by the apolitical notion of the expert and hence of knowledge itself, we find here a critique of the circular dependencies of the allocation of knowledge and power at the very basis of society.

4.1 Expertocracy, Technocracy and the Covid regime. Where are we? – The sub-systems of science and media

With this background in mind, let us consider how the historical proximity between experts and state has played out during the concrete case of the Covid crisis discourse. This implies that we need to consider *the way in which* scientific findings have been used and employed politically. Beyond that, it also implies that we analyze whether the general political securitization of Covid may have impacted upon the scientific process of deriving at common knowledge about the crisis.

At the intersection between politics and science it stands out that a relatively small number of scientists have been disproportionately present in political and media-based representations of the crisis and have been elevated to the position of ultimate experts. Beyond that, a clear trend has been observable which shows that a hegemonic crisis discourse based on securitization has formed which has sidelined scientific voices whose findings supported counter-hegemonic constructions of Covid and the securitization surrounding it.

A (non-exhaustive) list of examples of this trend for the German public sphere might include the following: Germany has seen the overwhelming dominance both in terms of political advisory capacities and media-based representations of a handful of scientists, including Christian Drosten who, beyond his positions as director of the Institute of Virology at the Charité, was also afforded a primary position in advising the governmental health politics as well as an exclusive weekly pandemic podcast on public broadcaster NDR – a public service radio channel; Karl Lauterbach, beside having been dominant in media appearances since the beginning of the pandemic, gained the position of Minister of Health in the newly elected government in 2021. Other experts, who voiced pronouncedly critical perspectives

toward the hegemonic discourse, on the other hand, have been demonized by and otherwise excluded from the public discourse. A non-exhaustive list includes Sucharit Bhakdi (prof. em. for medical microbiology, formerly head of the Institute for medical microbiology and hygiene, Univ. Mainz) who found his access to the university facilities restricted, his university email address cancelled and a public distancing letter from the University of Kiel, his former employer, after having voiced counter-hegemonic perspectives on the virus and the public health measures in an open letter to chancellor Merkel – later followed by critique of the newly-developed mRNA substances (Univ. Kiel 2020); Wolfgang Wodarg (medical doctor for internal, social and environmental medicine, formerly delegate of the European Union for security, medicine and public health); Andreas Sönnichsen (medical doctor and formerly chair of the German Association for Evidence-based Medicine) and Ulrike Kämmerer (prof. for human biology, immunology and cell biology).

The discourse inside the United States presents a similar picture: While public health policy is largely influenced by selected experts like NIAID's Anthony Fauci, the CDC's director Rochelle Wallensky and frequently televised news show guests like Planned Parenthood's President Leana Wen, numerous scientists, health care professionals, statisticians and even former pharma executives are relegated to the sidelines or worse. Among them is the already mentioned John Ioannidis, who tried to submit a paper on vaccine efficacy to pre-print servers in December 2020 and was denied publication on the grounds of "dealing with a sensitive public health issue" (medRxiv) and – even more bizarre – "having determined that your article does not contain sufficient original or substantive scholarly research" (arXiv). By the time it did get published by *npj Vaccines*, Nature's vaccine journal, Ioannidis argues, "many public health authorities in many countries had fallen headlong in the trap of believing that people who get vaccinated will not transmit and vaccines all alone were enough to halt the epidemic waves. The consequences were grave. In most developed countries, despite vaccination in 2021, excess deaths were higher in 2021 than in 2020" (Ioannidis/ Prasad 2022). Other credentialed experts with similar experiences include Peter McCollough (cardiologist and editor of two leading journals), Robert Malone (inventor of and multiple patent holder for the mRNA vaccination technology), Jay Bhattacharya (professor of medicine at Stanford), Martin Kulldorf (professor of medicine and bio-statistician at Harvard Medical School), Sunetra Gupta (professor of theoretical epidemiology at Oxford), Peter Doshi (editor of the British Medical Journal), Pierre Kory (critical care service chief at UW Health University Hospital and founder of the *Covid Care Alliance*) and Mike Yeadon (previous chief scientist and vice-president of the allergy and respiratory research division of Pfizer). A similar discourse formation is observable in many other countries, among them Canada, for which only Byram Bridle (Associate Professor of Viral Immunology at the University of Guelph in Ontario) and Roger Hodkinson (pathologist and Fellow of the College of American Pathologists and the Royal College of Physicians and Surgeons of Canada) shall be mentioned for brevity.

In what follows, we will now consider some examples which indicate that the politicized and securitized nature of the hegemonic Covid-19 discourse has, on several occasions, led to the breakdown of the scientific process and which point toward an exclusion of counter-hegemonic perspectives from the scientific process. These examples also demonstrate that in several major instances, both the political and mediated discourses have excluded relevant scientific findings and questions from public debate, thus actively constructing assumptions about current scientific knowledge, presenting it as far more homogenous than it actually is.

It is not the place or expertise of this paper to comment on the scientific content of the articles and debates in question. Rather, we will focus on the manner in which procedures of scientific engagement have taken place. Further, such discussions can only be anecdotal. While they may point to a larger issue, it is impossible, in the framework of this essay, to assess the exact extent of the problem.

The *Great Barrington Declaration* deserves a first mention in this line of expositions as it has been the largest engagement of its type during the Covid-19-era. On 4 October 2020, three medical professors, Martin Kulldorff (Harvard University), Sunetra Gupta (Oxford University) and Jay Bhattacharia (Stanford University) published the *Great Barrington Declaration* in which they argued that lockdowns would have strongly negative effects on public health outweighing any potential benefits. They also argued that a focus on herd immunity would be important for public health. Today, the online presence of the *Declaration* names 15 800 medical and public health scientists as well as 47 000 medical practitioners amongst its signatories (Great Barrington Declaration). Despite the fact that the *Declaration* gained substantial numbers of signatories from the medical field rather quickly, it has received hardly any serious discussion in leading media outlets or political debates internationally. Beyond this, the publication of email contact between Anthony Fauci, head of the U.S. *Centers for Disease Control* (CDC), Francis Collins, director of the *National Institute for Health* (NIH) and others clearly expresses the will to subdue these voices in the public debate without any intent to examine or take seriously its scientific content. In this manner Collins writes

> *"This proposal from three fringe epidemiologists who met with the Secretary seems to be getting a lot of attention – and even a co-signature from Nobel Prize winner Mike Leavitt at Stanford. There needs to be a quick and devastating published take down of its premises. I don't see anything like that yet – is it under way?".*

In the following week Fauci shared a number of articles attacking the *Declaration*, among them one by *The Nation*'s Gregg Gonsalves, titled: "Focused Protection, Herd Immunity, and Other Deadly Delusions" – for which Gonsalves later thanked Collins in an email. On 15 October, Fauci again attacked the *Declaration* on *ABC News* and the following day sent an email to White House Coronavirus Response Coordinator, Deborah Birx, reporting that

> *"[o]ver the past week I have come out very strongly publicly against the 'Great Barrington Declaration'"*(Sacca 2021).

In their analysis of this episode more than a year later, the *Wall Street Journal* comes to the conclusion, that

> *"[I]n the panic over the virus, these two voices of science used their authority to stigmatize dissenters and crush debate. A week after his email, Dr. Collins spoke to the Washington Post about the Great Barrington Declaration. "This is a fringe component of epidemiology," he said. "This is not mainstream science. It's dangerous." His message spread and the alternative strategy was dismissed in most precincts" (WSJ 2021).*

At the time, Jay Bhattacharia commented on the experience on twitter:

> "So now I know what it feels like to be the subject of a propaganda attack by my own government. Discussion and engagement would have been a better path."

And Martin Kulldorf adds:

> "A year ago, @NIHDirector Francis Collins asked Fauci to do a 'devastating published take down' of the Great Barrington Declaration. A public debate would have been better. Invitation still open"

(Sacca 2021).

In a second case study, we can observe the general lack of public and scientific attention paid to the external peer review and call to retract the Corman-Landt-Drosten et al. paper in which the procedure for detecting the presence of 2019-nCov virus via RT-PCR tests in humans had been established and which has been used as a basis for all subsequent PCR-tests (Corman, Landt et al 2020). The review has been sent to the publishing journal *Eurosurveillance* on 7 Nov., 2020. Authored by 22 scientists in relevant fields as well as medical doctors, the paper argues that "10 major scientific flaws at the molecular and methodological level" had been found within the testing procedure and hence calls for a retraction of the article (Corman/ Drosten 2020; Borger et al 2020a/b). In a reply, the journal answered only to some of the procedural issues of the review and publication process involved. With regard to the scientific difficulties raised by the review paper, however, the journal merely states that:

> *"The detailed allegations with respect to scientific flaws in the Corman et al. article were reviewed by a group of five laboratory experts. These comments were made available to the Eurosurveillance associate editors, except for those who were co-authors of the paper. The consulted experts confirmed that the Corman et al. article was scientifically adequate for its purpose and for the limited data and material available at this early stage in the COVID-19 pandemic. Any laboratory deciding to use the primers and protocol suggested in this article would ascertain the assay for its fitness for purpose and compliance with local quality and accreditation requirements"*(Borger et al 2020a).

This does not amount to a response which addresses the scientific concerns raised in the review paper either by offering an explanation much less invalidate the arguments made therein or by otherwise engaging in scientific debate. No such reply appears to have been made until this day, counter to what would be expected within a rigorous scientific process and with view to the importance of the issue at hand. Further, there has been no significant discussion of these findings and critiques within the communication of political decision-making or public media.

The academic journal *Medical Hypotheses*, on the other hand, retracted the peer-reviewed study "Facemasks in the COVID-19 era: A health hypothesis" by Dr. Baruch Vainshelboim in which he questions the utility of face masks in blocking viral infections. The first of several explanative arguments for this retraction is that

> "a broader review of existing scientific evidence clearly shows that approved masks with correct certification, and worn in compliance with guidelines, are an effective prevention of COVID-19 transmission" (Med. Hypotheses 2021).

While this may be the case, scientific debate is dependent upon findings which expand and/or contradict existing findings and the argument itself does not disqualify the findings of the study. Rather, this pattern of argumentation points toward a pre-existing orthodoxy as the decisive factor for the retraction rather than the consideration of concrete findings (Jones 2021). Beyond this, the orthodoxy itself is placed into question by scholars citing multiple studies arguing the opposite (Meehan 2020).

The assumption that *asymptomatic infections and transmission* exist – that is, the notion that persons carrying the Sars-Cov-2 virus but exhibiting no symptoms of disease could transfer the virus – has been based on a letter (not a scientific article) published in the *New England Journal of Medicine (NEJM)*on 30 Jan., 2020. This assumption has been disproven by 3 Feb., 2020 based on the data of the German *Robert Koch Institute* and published in the journal

*Science*which show that the one person the assumption was based on, had not been contacted to inquire whether symptoms had occurred or medication been taken by her – as both did (Rothe/ Drosten 2020; Kupferschmidt 2020; for further detail see Kaltwasser 2022, Jan 30/Feb 3 2020). Neither a retraction nor correction of the original statements of the letter have taken place – with the letter still available on the website at the time of writing (July 2022). Co-author of the letter, Christian Drosten, who has been instrumental in advising Germany's governmental response, stated:

> "I feel bad about how this went, but I don't think anybody is at fault here [...]. Apparently, the woman could not be reached at first and people felt this had to be communicated quickly" (ibid.).

The original faulty observations made in the letter have been instrumental in justifying the utility of public health measures that built on the assumption that asymptomatic infectiousness exists – including lock-downs, social distancing as well as the wearing of face-masks and testing of persons without symptoms of infection. It would hence have been an extremely important aspect of the scientific debate and the public communication of scientific debate to note that the original observations had been faulty.

In September 2020, John Ioannidis, Prof. of medicine, epidemiology and population health and by courtesy of statistics and of biomedical data science, among the most cited scientists in his field, published a peer reviewed meta study (thought of as the most reliable type of study) in the *Bulletin of the World Health Organization*, which included the results of 61 other studies and found a median Covid-19 infections fatality rate of 0.23% (Ioannidis 2021). Despite the importance and relative weight of this finding, it has been grossly underreported in public media and has not had an altering effect on political reactions. To the contrary, large media outlets have repeatedly accused those who compared the infection fatality rate of Covid-19 to that of seasonal flu epidemics of downplaying the danger of the virus. This contrasts particularly starkly with the media coverage of the early computer-based model by the Imperial College of London predicting 510.000 deaths in the UK to Covid-19 if no additional health measures were applied pandemic and judging the SARS-Cov-2 virus to be the most dangerous respiratory virus since the 1918 Spanish flue (H1N1) (Ferguson 2020; Dyne 2020). Even under favorable conditions, the study argues that hospitalization needs would likely be 8-fold in comparison to available hospital capacities in the UK and U.S. (ibid.).

Another case which warrants attention both with regard to the reaction of the scientific community as well as public responses relates to the following pathological study. Prof. Arne Burkhardt and Walter Lang, both retired pathologists, analyzed tissue samples from 10 autopsies of previously healthy persons who died shortly after a Covid-19 vaccination and presented their findings at the *pathologists' press conference*on Sept. 20, 2021 (Burkhardt 2021). They argued that for five out of ten the post-mortem persons it was *very likely* and for two out of the ten *likely* to have died from the vaccination and that further investigation was necessary (Burkhardt/ Lang 2021). The *Federal Association of German Pathologists* argues that the findings are not sufficiently proven nor presented in a fashion that would warrant commenting upon (Bundesverband dt. Pathologen 2021). *The German Society for Pathology*, similarly distances itself from the findings and argues that they were not scientifically founded and that the responsibility for determining post-vaccine injuries and deaths lay with the *Paul-Ehrlich-Institute* (Deutsche Gesellschaft für Pathologie 2021). On both instances it remains questionable whether such statements can be made on the basis of a presentation given at a press conference and without access to the actual study and its detailed design and

whether they are warranted without inquiring into both with the author first. Secondly, it stands out that dominant media outlets were quick to take sides and judge the scientific basis and merit of the findings in a context of dispute between different scientists in the field of pathology. It remains unclear on what basis these media outlets have used the presentation and the dispute about it to judge one expert-perspective as unscientific while the counter-perspective is taken both as scientifically correct and debunking false information. In several instances, dominant media outlets have taken explicit sides in this dispute rather than merely presenting the different perspectives in their contexts, asking the authors for clarifications, demanding further investigation of the issue or enabling a constructive debate between the different sides themselves in order to clarify (and then potentially dismiss) its scientific merit. The Bavarian Broadcasting fact-checker (*Faktenfuchs*), a public service media, for instance, declares the perspective that the Covid-19 vaccination could lead to severe side-effects including death, a "false narrative" offering a "supposedly scientific spin on the familiar narrative of vaccine harms" (Dilger 2021). The article opens with various ad-hominem attacks which are unrelated to the actual content of the presentation given by Burkhardt/Lang. It further argues that the presented findings were unable to prove that the deaths were caused by the Covid-19 vaccine. Since this imposes the interpretation that the authors had claimed for it to be so, it can be judged as a strawman fallacy – disproving something that had not been claimed. Offering the perspectives of two further pathologists, it is argued that the findings in question are shown to be unscientific and false (ibid.). *ZDF frontal* (also a public service medium) similarly argues that Burkhardt/Lang had presented "no scientific proof. But he, nevertheless, continues to spread his theses" – again referring to the perspective of one other scientist, Prof. Baretton (Frontal 21, 2022). *Correctiv.org* similarly cites scientific opinions (albeit without any detail), to have argued the findings to be unscientific (Bau 2021). Burkhardt has responded to these accusations arguing that he has worked within the common methods and procedures of the field (Sanning 2022). Where any question with regard to such serious allegations concerning the safety of the emergency authorized vaccination is raised, the democratic mandate of the fourth estate (media) mandate the provision of information to the public and one would expect demands for further and critical investigations to either prove or disprove them. To the contrary, media have been quick to delegitimize the preliminary findings rather than demand further investigation (Schneider 2021; Fakenfuchs 2021).

In a similar manner, Dr. Pürner, medical doctor and epidemiologist has been removed as the head of a local public health department in Bavaria, Germany, and has been transferred and degraded in position, after having made several statements critical of public health measures (Berliner Zeitung 2020). An open letter signed by 130 medical doctors to the Bavarian state government interprets this decision as an attempt to silence critical scientific voices within public administration and demands an open and public debate of the issues in question as well as the re-instatement of Dr. Pürner in his former position (Rabe/ Hirte 2020). In Austria several school physicians were similarly threatened with being dismissed from their positions for having signed a letter to Austria's medical association which included questions regarding the Covid-19 vaccines as well as the demand for the resignation of the association's president (ORF 2021).

A further insightful example of in- and excluding practices within the hegemonic discourse is the case of a controversy surrounding a publication by Christoph Kuhbandner, a

professor for psychology. Kuhbandner published a study which found a statistical correlation between Covid-19 vaccination and numbers of death in Germany (Kuhbandner 2022a). In response, the *Leibniz Institute for Economic Research*and the *Harding Center for Risk Analysis* published a critique of the study, in their publication series polemically termed "dis-statistics of the month" [Die Unstatistik des Monats], arguing that Kuhbandner's study was statistically faulty on several levels and that the correlation he had found did not constitute a causality – calling it a "non-sense correlation" (Bauer/ Schüller 2022). 55 scientists then formulated a replique to the *Leibniz Institute for Economic Research*, outlining flaws in the critique of the original article (Argawal et al 2022). The points included, amongst others, that the central argument of the original article had been mis-construed since it had not been argued that a causality existed – merely a strong correlation had been claimed and that such correlations are customarily used as strong warning signals in pharmacovigilance. They further argued that the attribution of this relationship as a "non-sense correlation" was faulty, as well since counter to the critique, the original paper had explicitly controlled for other variables. Due to the various faults in argumentation, the 55 authors call for a retraction of the critique.[5] In terms of the scientific exchange, it is notable that the controversy about such a fundamentally important issue has not been continued on a scientific level. According to *multipolar*, an online news outlet critical of the hegemonic Covid-19 narrative, the authors of the original critique, one of whom holds the additional position of chairman of the scientific advisory council to the *German Federal Office for Statistics* retracted their critique but simultaneously published a statement denying to have claimed that a causal relationship existed between the Covid-19 vaccines and the number of deaths while this does indeed appear to be their main critique in the original statement. They further argue that it was Kuhbandner's task to disprove their accusations and denying that any such attempt had been made at this point in time. Kuhbandner, however, argues to have replied via published mail contact in addition to other published replies (Schreyer 2022b). While it is not the place of the present article to judge the scientific findings of either side, it becomes apparent that several rules of scientific communication are violated a) in the claim not to have argued something that clearly has been the center of one's argument and b) arguing that no attempt at a reply has taken place when clearly it has – both in public and, apparently, in private communication. Rather than a genuine attempt at clarifying the scientific basis and merit of the argument this exchange exhibits an interest in fortifying pre-conceived notions of right and wrong. It further appears that follow-up communication and broader scientific debate over the concrete methodology and findings of a study with such potentially alarming effects would be necessary within a well-functioning scientific process. On a second layer, the media communication around this case has shown a similar one-sidedness. The largely state-financed public service Bavarian Broadcasting Institution [Bayerischer Rundfunk], for instance, quotes the thesis of the non-sense correlation in a one-sided manner, offering no information on critical perspectives, instead continuing with an ad hominem campaign questioning the credibility of the author through a guilt-by-association argumentation (a classical failure of logic and scientific practices) finally misleadingly referring to an article in a peer-reviewed academic journal as a "commentary" (Rubner 2022; see also Kagermeier 2022; Kuhbandner 2022 a/b).

On 2 November 2021, *the British Medical Journal* (BMJ) has published an article summarizing accusations made by a supervisor of the Pfizer trial undertaken through the

company *Ventavia* who has argued that severe shortcomings in the quality of the trial had become obvious, including the unblinding of the supposedly double-blind study (Thacker 2021; Fisken 2021). The trial has formed the basis for the emergency authorizations of the Pfizer/BioNtech products. These rather serious accusations and potential shortcomings underlying the emergency authorization of a medical substance of an entirely new vaccination technology has received hardly any mention within the hegemonic discourse. CNN for instance, has published several articles in the week from 2-10 November 2021 regarding the CDC Covid-19 vaccine authorization for children 5-11, urging readers to vaccinate their children against Covid-19, while failing to mention the study entirely (for example: CNN 2021a, b, c). Facebook, to the contrary has been quick to label the study as containing false information which has caused the BMJ to contact Mark Zuckerberg in a public letter (BMJ 2021b).

Similarly, dominant media outlets have not reported on the number of potential adverse reactions, including death, listed on the various international adverse reaction databases, including the U.S. *Vaccine Adverse Events Reporting System* (VAERS), the *European Medicines Agency* (EMA) and the *British Yellow Card System.* To the contrary, claims that such adverse events may be taking place at an alarmingly high rate have regularly been labeled false or misleading information. It has been argued, for instance, that the databases could not claim proof of causality but rather only supplied *potential* cases of adverse reactions. This is surprising and the ridicule for those who critique this policy stand out particularly starkly since the same databases have been used as warning signals in the past and it had previously been common practice to withdraw drugs with a count of 50 or less potentially associated cases of death or severe side effects (Sencer/ Millar 2006; Schmeck 1976). While the causality is indeed not clearly established in the cases appearing in the databases, hardly any critical reflection of these indicators has taken place and major Western media outlets have rather homogenously followed government lines in claiming that these numbers held no relevance for critical reflection or investigation (Paal 2021). A growing number of scientists within the relevant fields of research, including highly credentialed cardiologist Peter McCullough, have voiced their serious concern regarding heavy side-effects, including death, to the Covid-19 vaccine injections. Despite having expressed these concerns on various small news outlets as well as having testified to the U.S. Congress in the matter, McCullough has not found his perspective debated or reflected in relevant political decision-making procedures or major media outlets (with the exception of FOX News).

The public ridiculing, defamation and exclusion (predominantly targeting personal rather than scientific arguments) of several highly accomplished medical doctors and researchers in relevant fields who had presented views in sharp differentiation from those of the hegemonic discourse, constitutes another such case. Dominant media outlets, rather than critically questioning the positions of both those scientists conforming with the state-based narrative and proposed solutions as well as those critical of it, have taken sides at a very early stage, effectively declaring a substantial number of experts to be non-experts or voicing illegitimate positions.

While this is far from an exhaustive list, it demonstrates that the crisis discourse has seen serious shortcomings both within the scientific sub-system as well as in the sub-system of media and public communication. As mentioned previously, this article can only provide anecdotal evidence, it becomes obvious that under these circumstances it is difficult to

decide, what the dominant perspectives within the relevant fields may really be and these examples illustrate that the communication of scientific findings has been rather one-sided, thus creating a distorted notion of what constituted the state of scientific insights and debates with regard to central aspects of the discourse.

4.2 Conclusions on technocracy during the Covid Crisis Discourse

The insight generated by these case studies suggests that rather than conforming to a technocratic model in the sense of elected politicians following what the current status quo of scientific inquiry and technological possibility permits, we find ourselves in a situation in which scientific results appear to be used rather selectively and filtered through the admission of expert status for policy advice and by the major media outlets, constructing what counts as 'the science' in the hegemonic public discourse. In this process, not only does the allocation of expert status in several cases appear to be politically motivated, it also does not follow typical scientific merits – with several of the most cited and hitherto influential scholars of their fields along with their peer-reviewed studies regularly not included in advisory processes. The prediction by C.S. Lewis that politicians were to become "merely the scientists puppets" (Lewis 1970: 311–12) can thus not be confirmed in the manner he likely intended. We do, however, find the rise of the general deference to science – as knowledge – as he predicted. In this manner, Ivan Illich's central critique is confirmed, which holds that political decision-making is being legitimized by experts and scientific findings while the experts themselves are legitimized through the very system they thus help to stabilize: A recursive process in which the Political, referring to the struggle for discursive hegemony over knowledge, becomes self-referential.

Two cases in point may be taken from the German discourse in which two different expert bodies, put in place to advise political decision-making, have been declared rather irrelevant or even their incompetence insinuated when their findings disagreed with the preferred political line. This applies first to the findings of the so-called Expert Council (Bundesregierung 2021) which had been put in place in Dec. 2021 to evaluate the effectiveness of pandemic measures installed by two subsequent governments, when it found on July 1, 2022 that besides lacking data to formulate definite conclusions, the measures taken fundamentally lacked in efficiency. This *modus operandi* is illustrated well in the characterization of the government's dismissive reaction to the inconvenient expertise in the German newspaper *Die Welt*: "Ministers Karl Lauterbach (SPD) and Marco Buschmann (FDP) have flouted the recommendations and assessments of their own experts with their draft of the new Infection Protection Act. […] Members from both official institutions are now chastising the draft law - both the concept and its communication contradict their recommendations. This makes it clear: the draft Infection Protection Act and the Corona strategy for the fall season bears all the hallmarks of a decision [making process] resistant to consultation" (Bodderas et al 2022, transl. by author). A second similar case has been the *Permanent Commission on Vaccinations* [Ständige Impfkommission] which had previously been of prime importance in justifying the emergency authorizations. When it did not authorize the vaccination of young children, while EMA had done so (July 1, 2021), it was not only heavily criticized by government officials and pressured by the media to change its position (Fuchs 2021, ntv 2021b, Nößler 2021) but also degraded to being merely a 'voluntary

association' [ehrenamtlicher Verein] in the argumentation of Bavarian Prime Minister, Marcus Söder (cf. Focus 2021). The former German Minister of Health has similarly critiqued that recommendations by political actors concerning vaccination were publicly questioned because the STIKO had not yet given its scientifically argued recommendation – to him a sign that the scientific process in the institution was too slow (*Apotheke adhoc* 2021). Of course, positions defending the freedom of the scientific process have also been present. This nevertheless shows that the scientific process has been subordinated to political will in many cases.

In the context of this rather stark division between the right type of scientific perspectives and those which have tended to be ostracized, notions of grandeur by individual scientists have found expression. In a particularly stark incidence, Anthony Faucy has argued: "they're really criticizing science, because *I represent science*. That's dangerous" (Hochman 2021), while ironically conflating the belief in science with the "belief in authorities" (Al-Arshani 2020). Prof. Christian Drosten, not far behind, argued there were also medical doctors and professors who „under the cover of a scientific engagement, propagate information that simply is not well-founded [...] who tell just any non-sense but who are met with credulity due to their academic qualifications" but who in reality had other areas of expertise (Drosten Podcast 2020, transl. by author; Gäbler 2020). While the general line of this argument may be sensible, Drosten draws an extremely narrow line, arguing essentially that only scientists with his own profile – having researched SarsCov viruses – should be listened to and has subsequently called renowned colleagues in the field of bio-statistics, epidemiology, bio-medicine and public health "pseudo-experts" (FOS 2021; Drosten 2021). While not arguing that he himself was 'science', these statements come very close to arguing that he represents the science of the pandemic. Both actors, in effect, leave basic scientific principles behind in these statements, while postulating for themselves special positions in the discourse by definition, expanding upon a fundamental dislocation within the societal sub-system of science.

Melissa Flemming, UN Under-Secretary-General for Global Communications, albeit on a different topic, has voiced a similar perspective and has similarly outlined how her organization has tackled what she perceives as misinformation by partnering with tech companies to have UN resources dominate results in search engines:

> "We partnered with Google for example, if you Google 'climate change' you will at the top of your search you will get all kind of UN resources. We started this partnership when we were shocked to see that when we Googled 'climate change' we were getting incredibly distorted information right at the top. So we are becoming much more proactive. We own 'the science' and we think that the world [...] should know it, and the platforms themselves also do, but again it's a huge challenge [...] I think all sectors of society need to be very active in" (Flemming 2022).

In a particularly interesting move, the scientific magazine *Nature* has recently brought this combination between scientific insights and political accreditation to fruition when arguing that information, even if true according to scientific standards, should not necessarily be made available to the public if its contents could be used "for undermining the human rights of specific groups" (Nature 2022; see also Weinstein 2022).[6] While it is of course true that scientific methods can and have in the past been employed to justify disadvantaging or even persecuting social groups, the line of argumentation present here seeks to include political decision-making processes and considerations into the scientific process and the publication

and visibility of scientific findings, thus removing them from the process of scientific and public debate. It opens, of course the question which type of use ought to count as "unintended purposes" or to "threaten public health" (1029, 1030) to political calculations. In effect then, we find traits in which what counts as 'science' or 'scientific' is being defined along what suits (proponents of) the hegemonic discourse.

Looking forward, this bears severe potential consequences for the understanding of science in the medium to longer-term. As Wittgenstein famously outlined in his *Philosophical Investigations*, the meaning of a term is best understood as *the socially shared rules and conventions based on which it can be used to express thoughts, communicate intentions* (and one might add: *to refer to things*). Should the way in which the term *science* is used within the hegemonic discourse and within the scientific community itself continue to shift in the manner outlined above – that is, science as something that one can and ought to *believe in* while scientific practices and inquiries countering the hegemonic discourse are considered *dangerous* and thus *illegitimate* – the understanding and indeed the meaning of *science*, that which it communicates, also changes. The new way of utilizing the term hence starts a process of altering the meaning of the term 'science' toward a more technocratic, authoritarian and explicitly ideological understanding, while on the other hand profiting from the traditional understanding of the term rooted in enlightenment principles and their usefulness for knowledge creation which – up until now – was the source of its authority.

5. Underlying patterns of technocracy in political philosophy

As argued, such behavioral patterns are not likely to occur in a vacuum but rather as part of broader patterns of thinking and acting. Let us hence consider and locate the shape and development of technocratic and expertocratic trends of thinking in current political philosophy and practice: How does this development relate to broader patterns of thinking?

5.1 Political philosophy

The question of technocracy – in relation to the use of technology – but particularly in relation to the leadership of a few particularly 'qualified' persons is not a new one. In this sense, Plato's philosopher kings could be interpreted as an ancient version of this debate, although with a focus on the ethical virtues of those in power. In the 20th century, the controversy between Lippmann and Bernays on the one side and Dewey on the other, similarly centered on this question with Lippmann and Bernays arguing that the majority of the population was unable to understand the complex environment around themselves, let alone formulate rational decisions within the context and hence needed to be guided by those more able. In this manner, Lippmann argued that "a specialized class whose interests reach beyond the locality" and who are able to guide the public decision-making were needed to "manufacture consent" (Lippmann 1922: 273) while Bernays similarly argued in favor of a "benign elite". Dewey on the other hand held that while there were serious challenges embedded in democratic governance, these should be alleviated through better provision of education and information while he regarded democratic processes as reflecting the core of human life that should be upheld and deepened (Dewey 1916, 1929).

More recently, this debate has been taken up again, amongst others, by Jason Brennan, Professor of Strategy, Economics, Ethics, and Public Policy Georgetown University. In his book *Against Democracy*(2016), he argues that democracy – far from being the most virtuous and self-explanatory form of government – democracy should be seen as only a tool to effect good governance. It holds instrumental rather than intrinsic value (11). When it fails, he sees no intrinsic value to it since democracy often effectively results in the rule of irrational and ignorant people imposing decisions on other "innocent people" (8, 9). Brennan argues that many people are either apathetic and ignorant in political matters or too emotional with a tendency to hold on to fixed world views – both groups of people are not, in his mind, well-suited to participate in decision-making. Those well-suited, on the other hand, are the few scientifically and rationally inclined (assumedly including himself) who are interested in politics but on the whole dispassionate (4-6). For most of us, he argues democracy "turns us into civic enemies who have grounds to hate one another" (8). The right to vote should hence also not be automatically given to all citizens but should be earned (8). He hence discusses and advocates alternative forms of epistocracy – the "right to competent government" and the "rule of the knowers" (140ff.; 204ff.). Brennan's work is telling in that it divorces the ethical equality of all humans from its translation into equal rights to shape political decision-making of the community. Hence, he cannot find any intrinsic value in democratic – that is *equal* – exchanges between humans. His writing is further based on the presupposition that there are objective or neutral forms and results of good governance and politics more generally – to which some apparently are privy while others are not and which themselves do not need to be democratically justified. His work directly reflects core technocratic ways of thinking about politics. Further, it is interesting that, published by Princeton University Press, the book has received several rather positive reviews in leading journals (Wikipedia *Against Democracy*).

The book *Nudge – Improving Decisions on Health, Wealth and Happiness*(2008) by Richard Thaler and Cass Sunstein has been influential on the increasing literature in the field of behavioral economics. The authors outline strategies which they subsume under the concept of *libertarian paternalism* – a concept whose positive attributes they defend (5). Their argument is built on the increasingly mainstream acknowledgement that humans are not, in fact, predominantly rational beings – *homo economicus* – but rather are regularly led by emotions, social factors and pre-existing believe systems (19, 25-37). Where rational choice cannot be expected to be the main driver of behavior, public policy, they argue, may help the public along in making good decisions. In a nutshell, nudges refer to the maintenance of choices for the individual while decisions are influenced by the manner in which these choices are being presented. *Choice architecture,* to them, includes various potential aspects such as location and visibility of products, incentive structures for business and market structures, the creation of default options (for example in health care or financial retirement plans), leading by example, but also the leveraging of social norms. They support the paternalist aspect of their approach by arguing that "it is legitimate for choice architects to try and influence people's behavior in order to make their lives longer, healthier, and happier" (5). Again, we find central aspects of the technocratic way of thinking as the authors effectively argue that there are people who know better than others what is 'objectively' good or even desirable for members of the public at large (resulting even in 'happiness'). Influencing people's behavior without their knowledge is justified as it is in the person's own

best interest. The ideas expressed not only in this book but by an entire research strand arguing in this fashion is, one might add, not far removed from notions of the vanguard class who have the right but also the duty to guide others to their 'true' interests.

Maybe the most pointed expression of this paternalistic view can be found in Hermann Grefs contribution to the St. Petersburg Economic Forum in 2012. In response to the idea of a self-organizing society Gref replied: "You are saying terrible things. You propose to transfer power, in fact, to the hands of the population." He expressed concern that as soon as "people understand the basis of their self – to manage them, manipulate them, it will become extremely difficult. […] How to live, how to manage such a society, where everyone has the opportunity to judge directly, to receive unprepared information, not through government-trained analysts, political scientists and huge machines of the mass media, which are sort of independent, but in fact, we understand that all the media is busy preserving the strata?" The most serious problem of all, though, is to Gref: "If every person can participate directly in management, what do we manage?" (Gref 2012).

Central ideas of this concept have been taken up in the political arena. One of the most prominent cases in point being the *Behavioral Insights Team* of the UK government founded in 2010 and bought by the private corporation *NESTA* in 2014 (Behavioral Insight Team 2022). In charge of the UK House of Lords Inquiry committee into behavior change, Baroness Julia Neuberger, however, found that nudging was not sufficiently potent to change behavior in "the big society" and that behavioral changes really demand timeframes of about 25 years (The Guardian 2011). This appears to imply a much more profound ambition for the scope of changes – including cultural aspects of behavior rather than merely individual choices for action.

Several universities have similarly created professorships and entire departments for study of public behavior such as the University of Central London's *Center for Behavioural Change* whose mission statement is: Harnessing cross-disciplinary expertise to address social, health and environmental challenges (UCL 2022).

As one of the examples of the direction into which political philosophy is moving at the intersection between technocratic thinking and behavioral economics, let us briefly consider the thought of Yuval Noah Harari. While not the only thinker to venture into the effects of an increasingly technologized and digitalized future, his work has received substantial attention both academically as well as by large tech corporations and business fora over the past decade and may hence offer some insight as to the state of discussion in the field. Harari's thinking is particularly interesting because he, on the one hand, warns against the potentials for misuse and dangers of increasing reliance on smart technologies in dystopian visions, while at the same time deems their development to be both inescapable and potentially beneficial. His utopian ideas (while less clearly developed) similarly involve the development of the same technology. It is not always entirely clear, where he draws the line between dystopian and utopian visions.

Harari essentially predicts and theorizes a shift in the way technology will change human life, interaction, economic relations and jobs. He predicts that with the help of 'advances' in the field of artificial intelligence (AI), robotics, further digitalization and the increasing relevance of big data, technology is likely to displace an ever-increasing number of people from their professions. He outlines that humans sense this development, commenting:

> *"and they are correct in thinking: The future doesn't need me"* (Harari 2022),

explaining that to some degree, this is already a reality:

> *"If you go back to the middle of the 20th century… you think about building the future, then your building materials are those millions of people who are working hard in the factories, in the farms, the soldiers… you need them. You don't have any kind of future without them. And now fast forward to the early 21st century when we just don't need the vast majority of the population. … because the future is about developing more and more sophisticated technology like AI and bio-engineering. Most people don't contribute anything to that except maybe for their data. And whatever people are still doing which is useful, this technology will increasingly make redundant and will be able to replace these people"* (Harari 2022).

In this dystopian vision, 'the economy' is portrayed as an end in itself, while humans are merely parts in the machine which may just as well be replaced with better-performing technology and are bereft of any meaning or dignity in and of themselves. Harari does not answer the question who this 'you' is that doesn't need the masses of the people anymore. He further outlines that new technologies hold the power a) to turn humans into "hackable animals" – a scenario in which those who hold access to big data essentially have "the ability to know us better than we know ourselves" including through technology that will measure blood pressure, brain activity and emotions (Harari 2022). These enhanced capabilities, he predicts, will go hand in hand with a much-increased ability for surveilling and controlling of human minds and bodies – potentially to the point where AI decides upon all major processes of economic and political life based on data-sets so complex that humans will no longer be able to understand or question them effectively (Harari 2020).[7]

Even further, he predicts that:

> *"we will soon have the power to re-engineer our bodies and brains whether it is with genetic engineering or by directly connecting brains to computers or by creating completely non-organic entities…artificial intelligence. And these technologies are developing at break-neck speed"* (Harari 2021).

Hence,

> *"in the coming decades AI and bio-technology will give us God-like abilities to reengineer life and even to create completely new life forms. After 4 billion years of organic life shaped by natural selection we are about to enter a new era of inorganic life shaped by intelligent design. Our intelligent design is going to be the new driving force of the evolution of life"* (Harari 2020).

In statements like these, he expresses the idea that human technology holds the potential to surpass all that has developed on Earth so far in a, quite literally, almighty fashion (one of the many moments in his talks in which it is hard to discern his vision of dystopia from utopia). Harari's work portrays a mixture between the presupposition that the technological developments and applications cannot be stopped and, one might say, have taken on a life of themselves. In parallel, he warns of potential dystopian results but highlights that these developments, if coupled with human reflection and global cooperation may be used for "good". The dystopian vision is one in which he portrays a potential will to control by governments and large tech corporations over populations along with a development in which those populations not needed for their productive work or their data would become systemically 'useless' (Harari 2022). Even within the utopian perspectives, including the provision of the "best and cheapest healthcare in the world", he envisions the enhancement of technological aspects in every-day life, including AI decision-making – which essentially take agency from humans. Within this context, he advances the necessity for humans to think about "how we want to live" and "who defines the goal" and how – asking us to make

conscious decisions on which parts of life we want to "outsource" to technology and AI (Harari 2022). There is never, however, a real questioning whether technologies for the hacking of humans and the modification of their behavior should or could be abandoned altogether for normative reasons.

Independently from the normative stand-points of researchers, we find a strong surge of interests in expertocratic and technocratic ways of thinking about political philosophy and political practice.

5.2 Policy Planning (Documents)

The expertocratic and technocratic way of imagining the organization of political, social and economic life has further taken hold in more or less concrete policy planning documents and planning procedures. We will briefly exemplify this tendency using three current examples which stand in for a much larger body of policy advising literature.

The **Smart Cities Charta** is a document produced by the German Ministry for the Environment and Construction (Bundesamt für Bauwesen und Raumordnung 2017).Authored by the *Smart Cities Concept Group* the paper brings together input from external researchers as well as discussions among a number of policy planning personnel to elaborate avenues, potentials and dangers (worst and best case scenarios) of the increasing utilization of big data and technologization for society. Digitalization and the accumulation of data for public infrastructures and governance are overall presented as both necessary and inescapable. The dominant aim is one of efficiency in supporting existing political and economic aims (cf. 46). In all visions, data is being used to generate accumulated and centralized knowledge about a) the behavior of large groups of people and to b) render it useable for influencing public behavior. While different best and worst case scenarios are being considered concerning the effects of digitalization and increasingly technological changes for governance, public policy and the socio-political effects, these scenarios range between the public institutions not having been fast enough in adapting and creating their own solutions – hence being over-powered by private tech companies which gain monopoly over big data and, on the other hand, futuristic notions of increasing communication and participation through digital and, for example, hologram technologies (53, 69, 70). The discussion group concludes that public-private partnerships would be helpful and necessary for data generation and structuration and in several places deliberates the conditions under which publicly generated data might be sold to private actors (46, 47).

While some of the group discussion findings do point to potential dangers for democratic structures, other individual contributions included in the publication do point – with the purported aim of efficiency – to the use of technologies that describes the limitation or even abortion of democratic processes as we know them and which point to a significant level of centralized control over data and the guiding of public behavior based on these. In this manner, Mokka suggests that a 'super resource efficient society' integrated with a 'post-owenership society' would generate near perfect use of space, cars and machines while the data available about behavior and thus preferences might well lead to a 'post-choice' (the best available choice will always be suggested), 'post-market' and 'post-voting society' (42, 43).

Schüller, in her contribution similarly discusses how the accumulation of data needs to be transformed into information that can be utilized to create the 'power to act' [Handlungsmacht] for influencing and guiding of public behavior including the management of traffic, the movement of large groups of persons but also housing markets and other aspects of similar life (49, 49-51).

Mindspace – influencing behavior through public policy is the first publication by the *Mindspace Project* and co-authorized by the *UK Cabinet Office* and the private think-tank *Institute for Government* (Dolan et al 2010). Between 2010-2022 further analyses have been authored within the *Mindspace Project* (UK Institute for Government). The analysis of the authors is premised on the assumption that "Influencing behaviour is central to public policy. Recently, there have been major advances in understanding the influences on our behaviours, and government needs to take notice of them" (7). It continues by outlining nine central mechanisms by which individual and collective behavior can effectively be changed through applying "the soft touch of policy rather than its heavy hand" (13), active government guidelines, regulations and rules, that is. In effect, the report advocates and outlines how behavioral changes can be made without primarily engaging and relying on the conscious reflection – and hence also the choices made – by voting subjects. By tailoring the type and way in which information is made available and through changing aspects of the environment (social, market etc.) the report advises that policy-making should focus less on the reflective mechanisms of thinking and choosing which often lead to sub-optimal behavioral outcomes and instead to focus more strongly on the "more automatic processes of judgment and influence" which allows to "changing behaviour without changing minds" (14). Effectively, this advice to government formulation of policies, for which as the report assures us there was a "real appetite" among senior civil servants, is premised on the notion that a) there are experts external to the democratic process which possess the knowledge and ability to formulate what is best for the social whole and that b) it is legitimate to actively circumvent the conscious choice and debate on which democratic thinking is based and to use tools of psychological manipulation to effect the wished for policy outcomes.

A further policy advice paper by the British *Behavioural Insights Team*: **Net Zero: principles for successful behaviour change initiatives** (Londakova et al 2021) is similarly based on the notion that "to govern is to regulate behaviour" and that "this means that the scope of research on government behaviour change initiatives is very large indeed, as it in fact overlaps with the question of good government" (14). It similarly continues to outline that "cognitive and social psychology research which reveals much of our decision- making to be non-conscious and rooted in automatic responses to cues in our social and physical environment" (16). The paper continues to outline how both individual and group behavior may be modified using various tools which do not involve the conscious reflection or choice by the subjects involved, including changes to the environment through intervening in market processes, leading by example, rendering the preferred behavior the default option from which individuals have to actively opt-out, choosing the right timing (associated with introducing changes in times of larger (personal) moments of change), leveraging social norms by utilizing the social nature of humans as well as their tendency to conform with group behavior but also "not to be used carelessly" tactics of naming and shaming (31, 24-31).

6. Conclusion

This exposé has shown that securitization of Covid-19 has been a dominant feature in many societies of the collective West and has had severe effects on the social integrity and political processes of these societies. In particular, it has shown that the expertocratic and technocratic impulses have been strengthened in the ways of thinking about and the handling of the crisis. This has led to ruptures in several societal sub-systems. Beyond the process of *democratic* exchange, the effects of the securitization of Covid-19 have also reverberated into the field of *scientific* inquiry into the crisis and the *media*communication of scientific findings. By extension, it carries potential relevance for the very notion of science.

First, this has been discussed by demonstrating the exclusion of academic and scientific voices from the scientific discourse based not on the scientific merits of the findings. Rather, particular positions which have been deemed unlikely and dangerous at an early stage and the persons expressing them have at times been excluded from the scientific discourse in various manners. A second important aspect in relation to the scientific basis of political decision-making is the extent to which different scientific perspectives enter into the space of public awareness and shape the hegemonic discourse on what constitutes 'the science' at any one point. I argue that the reception and public communication has been rather partial and has tended to confirm patterns of the hegemonic discourse to the exclusion of discussing counter-hegemonic scientific findings, questions and debates. It is impossible, at this stage, to classify the degree to which these patterns have taken place. Nevertheless, a treatment of examples of this type of effects illustrates that it has been occurring to a relevant degree. Since such observations can only be approximations, more extensive studies of these issues would be helpful to assess more clearly the extent to which this has taken place and identify potential exceptions.

I have argued that the type of reaction we are observing within this particular crisis discourse has long been foreshadowed within fundamental patterns of political thinking and economic organization in Western societies. Technocratic ways of thinking are deeply embedded in Western modernity and the structures and practices of capitalism through notions of progress and efficiency. The clash between technocratic ways of thinking and the basics of democracy have been debated at least since the early 20th century. Nevertheless, the former has gained new impetus over the past decades with the increasing interweaving of technocratic ideas and strategies of behavioral economics in public policy. The practices of the pandemic have, however, led to a crescendo in this respect, with policy interventions formed on this basis having become more openly visible and intervening more directly into the structures of everyday life than they did before the crisis. The crisis offers a platform on which post-democratic and technocratic ideas on the national and international level are expressed, multiplied and become seemingly acceptable as visions for the political modus operandi.

In effect, as societies we are faced with the question of how we want our social and political future to develop. This becomes particularly important as the fundamental crisis discourse and the securitization increase the pressures on democratic forms of deliberation and the temptation to engage in and accept technocratic and exclusionary ideas and practices of politics. I hence suggest that both the empirical background of this field as well as the underlying normative foundations of it, should be studied in future issues of this journal.

[1] "The fundamental codes of a culture--those governing its language, its schemas of perception, its exchanges, its techniques, its values, the hierarchy of its practices--establish for every man, from the very first, the empirical orders with which he will be dealing and within which he will be at home." (1974: 22); "define an episteme [...] as strategic dispositive which allows us to filter out that which not within a scientific theory but within a field allows us to filter out those which could be acceptable and of which we could say: this is true and this is false. The episteme is the dispositive which allows not to differentiate true from false but that which is scientifically qualifiable from that which is not scientifically qualifiable" (1978: 124, transl. by author).

[2] Particularly interesting cases for further attention may be those in which previously subaltern movements gain influence over the hegemonic discourse.

[3] The term collective West here refers to a political rather than geographic affiliation, including the states of Western and Central Europe, the U.S., Canada but also a number of countries which are politically closely aligned with the afore-mentioned, such as Australia and several states of the Asia-Pacific region. While securitization has also taken place in other countries these will not be the focal point of this essay.

[4] While its proponents might argue that this restriction of democratic freedoms is based on the principle of equality – the equal care for the life of all of its members, we here find a reversal of the logic as it had been understood and practiced previously. Equality has been related to the equal right to participate in society its debates and decision-making processes. The alternative reading would imply the understanding of a right to equal outcomes for each individual.

[5] "We, the signatories, are irritated that the renowned series "Unstatistics of the Month" publishes such a poorly researched and technically questionable text, which furthermore blatantly misinforms the public about an existing safety signal regarding possible side effects of COVID vaccinations. Therefore, we hereby call upon the Leibniz Institute for Economic Research and the Harding Center for Risk Competence, respectively, to immediately withdraw this article and publish a clarification. Such frivolous publications hinder good scientific practice in the development of safe medicines, which, as the history of pharmacovigilance shows, can endanger the health and lives of numerous people as well as contribute to growing vaccine skepticism in the population."

[6] "Although academic freedom is fundamental, it is not unbounded. ...Yet, people can be harmed indirectly. For example, research may — inadvertently — stigmatize individuals or human groups. It may be discriminatory, racist, sexist, ableist or homophobic. It may provide justification for undermining the human rights of specific groups, simply because of their social characteristics" (1029); "Harms can also arise indirectly, as a result of the publication of a research project or a piece of scholarly communication – for instance, ... potential use of the results of research for unintended purposes (e.g., public policies that undermine human rights or misuse of information to threaten public health) (1030).

[7] "The ability to hack humans, might undermine the very meaning of human freedom. Because as humans will rely on AI to make more decisions for us, authority will shift from humans to algorithms. And this is already happening. Already today billions of people trust the facebook algorithm to tell us what is new, the google algorithm tells us what is true Netflix tell us what to watch and the amazon and Alibaba algorithm tell us what to buy. In the not so distant future, similar algorithms might tell us where to work and whom to marry and also decide whether to hire us for a job whether to give us a loan and whether the central bank should raise the interest rate. And when you ask why we didn't get the loan or why the bank didn't raise interest rate... the answer will always be the same: because the computer says no" (Harari 2020).

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