


The 2021 John Gaus Award Lecture: Public Administration and the War Against COVID

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THE GAUS AWARD, THE GAUS LECTURE, AND ITS CHANGING ECOLOGY

I am not sure if surprise, delight, or gratitude best describes my feelings about receiving this great honor. I experienced all of those emotions in full measure. I must begin by sincerely thanking the American Political Science Association (APSA) Public Administration Section for conferring the 2021 John Gaus Award on me and by saying how much it means to me. Looking at the list of previous John Gaus Award winners, I am indeed awed to be included in their number. There are so many names whose work I have deeply admired and others whom I have known quite well. Just three examples are George Frederickson, Vincent Ostrom, and Aaron Wildavsky, all of whom were extraordinarily kind and generous to me and greatly influenced my work. I only wish they were still here so I could thank them for all they did for me. The same is true for other now-departed mentors, including Mary Douglas, Andrew Dunsire, and Bill Mackenzie, to mention only a few.

I first encountered the work of the great John Merriman Gaus more than 50 years ago when I was a young and diffident graduate student in Glasgow, Scotland. I was working on a thesis about the development of betting taxes under the supervision of W. J. M. (Bill) Mackenzie. Like most graduate students then and now, I struggled with the framing of my study, and Bill Mackenzie recommended John Gaus's work (1947, 8–9) to me. Gaus's ecological approach to public administration (i.e., his insistence that public administration must be studied literally from the ground up) made a big impression on me, prompting me to look for the ecological conditions for the tax state. I used it to introduce a key chapter in my first book (Hood 1976, 54), developed it as “habitat” in an analysis of public policy reversals in the 1980s (Hood 1994), and later applied it to an analysis of the prospects for the tax state in the twenty-first century (Hood 2003).

Indeed, the ecology of the Gaus lecture has been notably transformed in the past two years as a result of the COVID pandemic. It customarily was delivered in person at the APSA Annual Meeting and accompanied by a reception that provided a convenient networking opportunity for public-administration academics. However, COVID suddenly changed all that. I would have given much to be in person at the 2021 APSA Annual Meeting venue in Seattle for that momentous day in my professional life. However, in-person attendance was impossible due to the presidential proclamation restricting nonessential travel from countries including the United Kingdom to the United States.

Therefore, my Gaus lecture performance had to be yet another Power-Point presentation delivered on Zoom—at 10 p.m. UK local time from the kitchen table of our two-room apartment in a gritty inner-city area of northwest London next to the Kilburn High Road.

I might add that as another sign of the times, in the past two years, Kilburn High Road has witnessed one of the more extraordinary events since it was remodeled into a standard-issue Roman road nearly two millennia ago, when the Romans ruled most of Britain. This relic of the Roman Empire is still one of the main routes in and out of northwest London. It is a byword for traffic congestion and pollution, usually chock-full of people on the sidewalks and an endless procession of vehicles grinding from stoplight to stoplight, day and night. However, in the last week of March 2020, there were suddenly times when it was possible to walk right down the middle of that road, with no traffic or people in sight—an ominous, eerie feeling in a city with a population of 8 million, roughly the size of New York.

What was happening? Well, the first COVID lockdown was going on—or just getting going, as it turned out. It was a completely new experience for most people; indeed, the word “lockdown” was only just beginning to come into general currency. That first lockdown was part of many large and unexpected changes in everyday life that took globalization to a new level; as COVID spread around the planet, people all over the world (the developed world, anyway) embarked on what was to be a new life of Zoom meetings at their kitchen table. However, along with such changes was a strong element of deglobalization as borders closed, travel stopped, and just-in-time international supply chains broke.

Against the background of that remarkable change in the ecology of both academic and practitioner public administration in the recent past, there could be only one topic for the 2021 John Gaus lecture. It had to offer reflections on the governance, politics, and public administration of COVID, which has been (and, at the time of writing, continues) an episode comparable with major wars in terms of the fiscal impact on the level of accumulated public debt, the numbers of civilian lives lost, and the degree of government intervention into intimate details of everyday social life. What follows, therefore, is not an orthodox research paper but rather a reflection on the COVID experience written from a public-administration perspective, mixing retrospective and prospective observations. What are the historical precedents for the COVID episode? What are the variations in the ways that different states tackled the pandemic? What longer-term legacy effects can such an episode be expected to leave behind in politics and public administration?

COVID AND PUBLIC ADMINISTRATION IN HISTORICAL PERSPECTIVE: STYLES OF INTERVENTION AND LEGACY EFFECTS

Addressing epidemic disease among animals, people, or both is a long-standing function of the state. It involves a type of classic “public bad” the spillover effects of which challenge simple doctrines of liberalism and which often is associated with draconian intervention measures—even in regimes not normally classed as authoritarian. For example, in my own country, nearly 45,000 cattle were compulsorily slaughtered in Great Britain in 2019 as part of government measures to control bovine tuberculosis (Uberoi 2019). Indeed, 30 years ago when the bovine spongiform encephalitis (BSE), or “mad-cow disease,” epidemic was at its height, the British cabinet in desperation at one point seriously discussed the possibility of killing all 12 million cattle in the United Kingdom; as it was, more than 3 million were killed (Beck, Kewell, and Asenova 2007). From leprosy and typhoid to HIV/AIDS, BSE/Creutzfeldt-Jakob Disease, severe acute respiratory syndrome, and Ebola, disease control has challenged state capacity in every age.

In terms of the human death toll to date, as a pandemic, COVID is huge compared to many of these other examples. However, it is far smaller than HIV/AIDS and the so-called Spanish flu (A/H1N1) pandemic, which began toward the end of World War I and is estimated to have had a death toll 10 times greater than COVID to date—even though its severity was underplayed by governments for political reasons at the time (Killingray and Phillips 2003).

Indeed, for those seeking historical antecedents and analogies, there is a rich historical literature on the subject of government and disease. One notable contribution is Baldwin’s (1999) remarkable *Contagion and the State in Europe 1830–1930*, which describes what happened in four European states (i.e., France, Sweden, Britain, and the German states, later unified into the German Empire) that were exposed to three types of mass-killer disease (i.e., cholera, smallpox, and syphilis) from 1830 to 1930. In this careful and nuanced study published two decades after the first recorded instances of the HIV/AIDS virus, Baldwin posed two basic questions applicable to COVID today.

The first question concerns how governments approach epidemics—what mixture of policy tools or instruments they use to suppress, mitigate, or manage the threat; how common or variable those approaches are; and what accounts for variations in response to the same disease in different political systems. For instance, Baldwin (1999, 261) noted that Sweden introduced general compulsion for vaccination in 1816, fairly soon after vaccination emerged as an effective prophylactic for smallpox; Prussia did not do so until more than a half-century later, under the 1874 Imperial Law for unified Germany. Other countries opted instead for indirect or selective compulsion—for example, in making vaccination a condition for an appointment to the military or civil service or for admission to school. This requirement raised issues similar to the current hotly contested debates over COVID “vaccine-passport” schemes for entry to specific jobs or places as an alternative to general lockdowns. The intellectual task prompted by Baldwin’s first question is describing and tracking commonalities and variations in policy responses over time and place to explore how far those responses are explicable as the result of different worldviews or ideologies in contrast to more technical or

objective features (e.g., geographical position in the world’s major virus-transmission routes).

Baldwin’s second question concerns how states and their politics in turn were shaped by their experience in coping with disease and by how they were exposed to contagion. How did this experience shape later developments and the operation of states through administrative path-dependency—routines that were adapted to address subsequent disease outbreaks, such as Sweden’s nineteenth-century compulsory-treatment approach to syphilis that reemerged a century later in the era of HIV/AIDS?

For the current war against COVID, there already are high-level research efforts to track policies and responses around the world. An example is the excellent *Our World in Data* coronavirus website (see <https://ourworldindata.org/coronavirus>) that tracks the incidence of infections, testing, vaccination, mortality, and government policies. Its account of these policies includes travel restrictions, school and workplace closures, cancellations of public facilities and gatherings, stay-at-home restrictions, face-covering requirements, public-information campaigns, and an overall “government stringency index.”

The pattern of responses tracked by this analysis links to several important issues for those looking at it from a public administration and political science perspective. How do the health outcomes reported in *Our World in Data* relate to features of government (e.g., levels of centralization and perceived corruption or authoritarianism in the various comparative quality-of-governance rankings) and the types of policy instruments employed? Do the most lavish spenders achieve the best health outcomes or is efficacy more subtle than that? How does the electoral success (or otherwise) of incumbents relate to performance on those indicators? What political challenges are involved in handling COVID episodes while they continue as an acute threat—for example, in response to noncompliance and organized resistance to restrictions and obligations? Moreover, what political challenges can be expected in the probable aftermath in which governments grapple with public debt at post-twentieth-century world-war levels, as well as recriminations about how COVID was handled in the past and sharply conflicting visions of what the post-COVID political future should be? This article is not the place for a systematic or definitive answer to those questions, but at least some of the issues can be identified.

COVID DECISION MAKING: DASHBOARD GOVERNMENT, RISK AND BLAME MANAGEMENT

The battle against a newly emerging pandemic such as COVID resembles warfare in that “the simplest things become difficult” (Clausewitz 1968, book 1, chap. 7) when top decision makers, frontline responders, and other coping forces are themselves disabled by the emergency that they are intended to manage. It is difficult to specify a stable response strategy or set of targets when a disease is mutating, knowledge about it keeps changing, the environment alters, and weak links are successively being exposed in interconnected systems (e.g., supply, energy, and food production). Furthermore, different policy goals clash with one another as governments aim to limit or reduce infection (or even to eliminate the virus altogether, as in China). Perhaps the sharpest clash of policy goals is that of avoiding healthcare system collapse on the one hand and, on the other hand, keeping the economy going to an extent sufficient to avoid mass destitution.

The difficult choices do not end there. Other balancing issues concern whether governments should follow or try to lead public opinion and what the priorities are when protecting physical health conflicts with protecting mental health (e.g., over lockdown requirements).

This type of environment makes *resilience* (i.e., endurance in an unstable context) and the associated qualities of reliability, adaptivity, and robustness the dominant consideration in public policy and management (Hood and Jackson 1990, 14). These conditions do not readily lend themselves to the vision of arms-length government by discrete agencies pursuing separate and relatively stable objectives expressed in quasi-contractual terms—which provided much of the inspiration for the New Public Management approach of the 1980s and 1990s. Rather, these conditions tend to elicit a war-room style that can be called “dashboard government.” This style comprises decision making and coordination within executive government through frequent or semicontinuous conversation among decision makers, heads of different government agencies, and various scientific experts about policy settings, set against a background of high-consequence numbers that change in real time. However, in contrast to wartime conditions, many of those key Covid policy numbers—notably the rates of infection, testing, mortality, vaccination, and hospitalization—have been in the public domain (albeit with degrees of error that can be challenging to interpret).

Dashboard government in this sense is not new, either in theory or practice. More than 55 years ago, Beer (1966) described the cybernetic logic of data-rich governance with high-variety feedback systems, inspired in that case by the contribution of operational research and similar analyses to military developments in World War II. In a similar vein, Dunsire (1978, 1996) coined the term “collibration” (meaning the ability to balance contradictory maximands) and saw such balancing as a—arguably *the*—key method of controlling complex bureaucracies in modern societies. This method of control more closely resembles the

authorities in conditions when blame is difficult to shift by tactics such as delegation of responsibility to autonomous entities, “automatic government” through reliance on nondiscretionary formulae (Weaver 1988), or inertia politics through persistence with inherited measures enacted by other actors (Rose and Karran 1987). These alternative approaches do not seem to offer more than limited scope for blame management over the handling of a new pandemic with once-in-a-century proportions. What arguably is the other main alternative for political blame sharing—grand (i.e., all-party) coalitions of one type or another—has been a surprisingly rare response to COVID to date, paralleling previous patterns over fiscal squeezes and welfare cutbacks (Pierson 1994).

HANDLING COVID: IMPLEMENTATION TOOLS

At least across the developed world, biomedical responses to COVID have included assembling medical and other personnel to test, track, and treat individuals in high volumes along with a set of facilities, equipment, vaccines, and legal powers. Such a task would be a difficult logistical operation at any time and has been made even more challenging by a combination of time pressure, global shortages of necessary materials, and concerns about limiting the exposure of workers and their families to infection.

However, handling the pandemic in most cases has surpassed that biomedical response, involving policy resets and changes in delivery across the entire range of policy and public services, from the operation of nursery schools to border controls, justice systems, and prisons. Indeed, COVID responses not only span policy domains but, in most developed countries, also have brought into play the entire range of government’s implementation tools, for instance, in terms of the different organizational forms available (Saloman and Elliott 2002) and more generic forms of intervention, such as “carrots, sticks, and sermons” (Bernelmans-Videc, Rist, and Vedung 1998).

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working of a nervous system (i.e., by selectively suppressing contradictory pressures) than the operation of a thermostat. In principle, it makes fewer demands on the controllers’ cognitive rationality without violating Ashby’s (1956) “law of requisite variety” (i.e., the idea that variety in a cybernetic sense can be controlled only by equivalent variety). Similar ideas about selective suppression of adversarial rationality and knowledge appeared in the risk-management literature of the 1990s and 2000s (e.g., Hood 1996).

In contrast to these relatively technocratic- and engineering-style approaches, dashboard government also can be viewed through the more obviously political science lens of credit claiming and blame avoidance (Hood 2011; Weaver 1986). From that perspective, dashboard government presents opportunities to incumbent political leaders and parties to share blame with other

Table 1 illustrates this point by characterizing government responses to COVID in terms of my four-part typology consisting of “nodality,” “authority,” “treasure,” and “organization” —a scheme originally developed at the University of Bielefeld in Germany almost 40 years ago (Hood 1983) and later adapted with Helen Margetts for developments in the digital age (Hood and Margetts 2007). The four elements denote basic resources that governments can draw on to implement their chosen policies—namely, by the type of information they send and pick up by their various legal, official, and semi-official acts; by their dealings in money or equivalents; and by the physical operations or various treatments that they can perform. As shown in table 1, applications of all four types can be observed in responses to COVID, but each policy tool has limits and governments vary in their ability to deploy them.

Table 1

COVID and Four Basic Instruments of Government: How Effective Organization Matters

Policy Tool or Instrument	Key Feature	Application to COVID or Equivalent	Limits	Implications/Comments
Nodality	Government's place in information networks	Provision of credible information and partnering in information sharing across society	Extent of public willingness to share information with government	Governments with high legitimacy and/or skill in inserting themselves into digital networks are most likely to be able to put stress on nodality as a tool
Authority	Government's effective ability to permit, prohibit, command, and punish	Official requirements and constraints over issues such as PPE, social distance, hygiene, and isolation	Extent of public disposition to comply with laws, regulations, guidelines, and standards	Governments in united societies with high levels of citizen compliance (voluntary or otherwise) are most likely to be able to put stress on authority as a tool
Treasure	Government's use of cash or equivalent resources to shape behavior	Government subsidies such as furlough payments and commissions to provide goods and services	Extent of government fiscal power to borrow, tax, attract aid, and print money	Governments with ready access to easily-tapped sources of revenue in higher-income societies have the greatest ability to put stress on treasure as a tool
Organization or Treatment	Government's ability to shape behavior by logistical operations or production activity	Direct/indirect construction or operation of facilities such as testing and vaccination units and emergency hospitals	Extent of government ability to mobilize, deliver, process, and produce	Governments with the highest managerial competence are most likely to be able to put stress on organization as a tool

First, *nodality*—the extent to which government is effectively linked into social-information networks—depends at minimum on government (literally or metaphorically) using the same language or languages as the rest of society. That condition is rarely met in full and, in some societies, there is a dramatic gulf between the two (e.g., in those African countries the governments of which operate in inherited colonial languages such as French and English rather than the languages spoken on the street). In these circumstances, there are obvious challenges for a government's ability to convey key messages at a basic level, much less more elaborate applications of nodality, such as tracing contacts and movements by linking to social networks.

Second, the same is true for the extent to which governments possess *authority* in the sense of the ability to forbid, permit, or require—that is, the exercise of the “public power” of the state, going beyond obligations that can be imposed through civil law (i.e., in contracts, wills, and the like). Possession of that power is a defining legal feature of the state, but the efficacy of this instrument obviously depends on not only official enactments but also the degree of “compliance culture” in the society or in key groups within it.

Thaler and Sunstein's (2008) famous “nudge” approach to governance through low-cost and minimal interventions to frame choice architecture offers, in principle, an alternative or supplement to heavy-handed uses of authority. It certainly has had a part in COVID responses, with behavioral scientists contributing to governments' deliberations on policy. However, nudge responses are defined by Thaler and Sunstein as low-cost, minimal interventions that do not restrict options or change economic incentives. Many state responses to COVID have gone beyond that libertarian approach to resemble something more like a powerful shove than a gentle nudge. Examples include the imposition of formal restraints on where to go (e.g., travel bans, sequestration, and self-isolation requirements), what to wear (e.g., face masks and personal protective equipment), what to do (e.g., compulsory closure of schools, businesses, and places of worship), who to see or even live with (e.g., restrictions on household mixing), and how to relate to

others in public (e.g., social distancing). An emblematic example of the authority approach is the *attestation de déplacement* forms that people in France have been obliged to fill out during lockdowns, even for the briefest departure from home to walk their dogs.

Third, the amount of *treasure* at a government's command (i.e., access to money or equivalents) is what determines its ability to purchase any type of supplies and services and to go beyond nudge to provide material incentives to shape behavior in the form of cash or near substitutes (e.g., vouchers, pledges, and tax credits). Governments have dug deep into their treasuries in response to COVID, mainly to fund high-cost subsidies and health measures in the same way that the United States funded its post-9/11 wars—namely, by borrowing on an immense scale. Indeed, the UK government used “treasure” not only to underpin lockdown requirements (i.e., by compensating employers for keeping their staff on furlough when unable to work, at a cost of about \$100 billion in 2020–2021) but also to induce people to come out of lockdown. For example, the government paid “Eat Out to Help Out” subsidies of café and restaurant bills up to a certain amount on specified weekdays in August 2020 as a stimulus to the hard-hit hospitality sector.

Fourth, *organization* or treatment reflects a government's own logistical capacity to mount operations involving some type of physical production or control, whether undertaken alone or in combination with other actors. Within the military, this type of capacity is provided by specialties such as engineering and logistics (i.e., the all-important ability to move objects and people around the earth's surface to align with battle plans). Indeed, the UK government used the military as part of its COVID responses—for example, to build emergency “Nightingale” hospitals for COVID victims early in the pandemic and later for tasks such as distribution of supplies impacted by shortages of fuel-tanker drivers. Other COVID responses drawing on a government's capacity for “organization” or treatment in that sense include the provision and operation of quarantine, testing, and vaccination centers and the operation of internal and external border controls.

The deployment of this entire array of government policy instruments in the COVID pandemic raises issues familiar to policy-implementation studies. Commonly, it is the way that policy instruments work together in combination—or not—that matters for policy outcomes. For instance, because “no contemporary tyrant...can govern by mere fiat” (Meisel 1966, 203), the level of compliance with authority (e.g., obligations to self-isolate) is likely dependent on what other policy instruments are in play (e.g., treasure in the form of financial compensation for those unable to work).

Similarly, the public response to the provision of medical staff and facilities such as testing and vaccination is likely to be enhanced by a government’s ability to use nodality to link effectively with informal social networks. These are “soft” social factors the critical importance of which is shown by studies including Franklin’s (2019) research into the handling of the 2014 Ebola epidemic in Liberia and Sierra Leone. The Chinese government’s legendary tracking and tracing system—that is, linking QR code touch-in systems for smartphones as people enter apartment buildings, shops, workplaces, and public transportation and combining that information with geographical-location data to identify exposure to infection—represents a striking combination of nodality and authority. The nodality comes from the state’s links to mobile-phone networks, which also is reflected in similar apps in other countries. However, in the Chinese case, that element is combined with authority in the form of compulsion to register the purchase of every SIM card to a single individual, who must produce identity documents to obtain the card. It is this combination of the two instruments that determines the result. Finer (1950, 18) long ago put coordination first in a list of “problems” in executive government; it perhaps could equally be said that the importance of an effective combination of different policy instruments across government is highlighted by the challenge of the COVID pandemic.

This discussion has been somewhat technocratic in tone, but the choice of policy instruments is rarely, if ever, a purely technical matter. Politics and culture also shape those choices. Indeed, in his historical comparison of four European states addressing contagion, Baldwin (1999) took as his point of departure the work of the eminent medical historian, Erwin Ackerknecht. Ackerknecht (1948) meticulously traced nineteenth-century European scientific debates between “contagionists” and anti-contagionists, focusing on three mass-killer diseases of that time (i.e., plague, yellow fever, and cholera). Contagionist theories of the origins of those diseases supported “quarantinism” (i.e., state efforts intended to stop the spread of disease by identifying and isolating human carriers in some way), whereas anti-contagionists perceived “filth” to be responsible for the spread of these diseases. This latter view supported more environmental approaches to the problem, focusing on changes such as improving housing conditions and constructing urban sewers and parkland cemeteries to reduce risks posed by contaminated water and unsanitary burial grounds. Ackerknecht showed that politics and economics were intertwined with scientific debates over these issues, in that contagionist theories of the spread of the “big three” killers tended to serve landowning interests and were advanced mostly by physicians in high positions in the military and the civil service. By contrast, the anti-contagionist position supported

other commercial interests, and most of the leading scientists and physicians who advanced it were radicals and liberals from middle-class backgrounds who explicitly used political and economic arguments in attacking quarantinism. Both sides relied on observation rather than experimental data, with each side choosing “a set of more or less true facts that confirmed their theory, leaving out another set of equally true, but incompatible facts” for their opponents to present as proof of their rival theory (Ackerknecht 1948). There are parallels with the policy debates about COVID that necessarily were based on limited observations of developments when systematic experimental data were not available.

Ackerknecht’s analysis of those nineteenth-century debates is intriguing in the way that it links etiology, prophylaxis, and politics. However, Baldwin’s (1999) study of four European states tackling three diseases did not reveal a simple pattern in which the more liberal states of that time invariably followed an anti-quarantinist path whereas those of a more authoritarian type espoused quarantinism. One complication that Baldwin noted is that the balance of quarantinism relative to environmentalism may reflect level of development as much as political ideology or outlook. Insofar as “liberal” responses depend heavily on treasure and organization, less-developed countries by definition have less capacity to deploy those instruments—whatever the political bias of their government may be. In such conditions, reliance on authority as a policy tool in pursuit of quarantinist efforts to break chains of infection may reflect simply a lack of practical alternatives.

Another complication is the question of where reliance on vaccination and testing is to be placed on the spectrum of authoritarianism or liberalism. Vaccination in particular cuts across quarantinist and environmental approaches to limiting contagion and appears to depend on the degree of formal or *de facto* compulsion involved in vaccination. After all, simply providing testing and vaccination facilities and opportunities, on a “take-it-or-leave-it” basis, in principle offers choice without compulsion in the “nudge” style. Furthermore, government can encourage, advise, or nudge in favor of vaccination without making it obligatory. The question is, at what point does vaccination or testing become compulsory in practice: when people cannot work in their chosen profession without it, cannot access educational facilities, and cannot legally cross borders? Moreover, current government responses to COVID do not readily seem to fit a pattern in which liberal democracies emphasize individual choice and environmental measures and in which more authoritarian states put more stress on compulsion and quarantinism. Some states that ordinarily score clearly as liberal democracies (e.g., New Zealand and Australia) have emphasized quarantinist approaches, with border closures, lockdowns, and isolation requirements intended to eliminate the virus, with strong support of public opinion. In the group of states ordinarily considered more authoritarian, there is a striking difference between (for example) the relatively *laissez-faire* approach of Brazil’s federal government under Jair Bolsonaro regarding matters such as social distancing and lockdowns and—in a very different type of authoritarian state—China’s zero-COVID policy approach accompanied by centralized quarantine, restrictions on travel, mass testing, and strict localized lockdowns triggered by low infection levels, in addition to tracking and tracing machinery.

LEGACY EFFECTS: HOW MIGHT COVID RESHAPE THE STATE?

The second main question posed by Baldwin's (1999) study concerns what the experience of dealing with contagious and infectious disease leaves behind and how it may shape politics and the operating style of states dealing with subsequent epidemics or similar policy challenges. For COVID, table 2 presents three possible effects that the experience of handling this disease may have on today's states.

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First are *encores and carryovers*. The COVID-handling experience can be expected to carry over into government and politics post-COVID in several ways, most clearly if another major pandemic follows closely after COVID, but possibly also in the event of other high-stakes problems or catastrophes involving complex modeling, data analysis, and uncertainty about the science combined with drastic applications of the government policy toolset. Beyond that, it seems likely that the political, bureaucratic, and scientific actors who are perceived to have had a "good COVID" will use their reputations, networks, and operating styles in the handling of future challenges.

In principle, also, the dashboard government element of COVID responses could be replicated in response to non-pandemic issues such as climate and CO₂ policy. A possible parallel can be drawn with the development of program budgeting—notably, the US federal government's Planning, Programming, and Budgeting System (PPBS), which apparently originated in the War Production Board's Controlled Material Plan during World War II (Hirsch 1966, 259). However, as the fate of the peacetime PPBS illustrates, when circumstances change and there is no longer an exclusive focus on one overriding goal (e.g., military victory or taming a pandemic), addressing major issues that are chronic but not acute in the same way may call for different

operating methods—and people—in government. People of "push and go"—a term coined in 1915 by UK Minister of Munitions David Lloyd George to refer to able young business executives that he brought into government to find ways to accelerate the supply of military materiel for the Western Front in the early days of World War I—who specialize in cutting bureaucratic corners and bypassing procedural constraints may be less successful in grappling with postcrisis conditions.

A second inevitable legacy of the COVID episode noted in table 2 is *blame and credit*, expressed through the ballot box, opinion polls, media, litigation, and forensic investigations. Parallels again can be drawn to the conduct of warfare in that credit and blame opportunities are likely to arise not only over the handling of the pandemic—for instance, avoidable deaths caused by moving patients with COVID from hospitals to care homes early in the pandemic to free up hospital beds and avoidable deaths of medical staff caused by lack of adequate protective clothing—but also over expectations or promises made about the post-COVID world. Like the twentieth-century world wars, the COVID pandemic has produced various and conflicting visions of where government and public policy should proceed afterwards, ranging from returning to the "old normal" as far and as fast as possible to various conceptions of what a "new normal" should look like.

As previously discussed, grand, all-party-coalition approaches to sharing blame over the handling of COVID have not been widespread. Some incumbents have come to grief (e.g., Yoshihide Suga, the Japanese prime minister who announced his intention to stand down after record low approval ratings for holding the Tokyo Olympic Games during the pandemic in 2021) whereas others gained credit for their handling of COVID (e.g., notably Jacinda Ardern's Labour Party in New Zealand and her landslide

Table 2

Legacies: Three Types of Possible Post-COVID After Effects

Possible Legacy Effect	Specifics	Comments
Encores and Carryovers	Dashboard-government policy style (involving tradeoffs made in or around high policy forums against uncertain and changing target numbers); some policy-entrepreneurial "good war" careers and reputations (as well as failures) likely to affect post-COVID careers; likely recurrence of specific policy routines such as lockdowns and tracking systems	Obvious potential carryover to other policy applications involving changes in mass behavior, such as CO ₂ reduction/removal programs. However, what works in sudden emergency conditions (with palpable risks of collapse of health care provision) does not always fit other contexts, and the same is true for "fighting the last war" policy responses
Blame and Credit	Incumbents versus challengers; clashing policy worldviews; poster children and awful warnings; likely war of the narratives in official histories or inquiries	To date, surprisingly few official "grand-coalition" responses to sharing COVID blame; more reliance on blame shifting or sharing with experts
Debt and Fiscal Stress	A likely debt mountain of post-World War I/II proportions; the likely extent of a post-COVID budgetary "peace dividend" is uncertain; tricky post-emergency tax policy and execution issues, given fairly limited innovation in tax structure during the crisis	Historically, postwar debt politics has been variable (e.g., World War I, World War II, post-9/11 wars—which will post-COVID debt politics most resemble?); the politics of debt default or forgiveness is likely to recur, with extra complications if states such as the United Kingdom break up

reelection in 2020). Moreover, opposition parties have had to tread cautiously, criticizing incumbents for incompetence while avoiding the countercharge of negativity and of undermining governments in their efforts to defeat the pandemic.

Such inhibitions can be expected to disappear post-COVID, when pressure is more likely to increase for forensic inquiries, litigation, claims for compensation over avoidable deaths, and disappointment over post-COVID conditions (e.g., tax levels).

The question that arises is whether or how much tolerance of higher taxes to support higher government spending can be expected in the post-COVID world.

In 1948, responding to criticism about high-level deals struck among the allied leaders in World War II to redraw the borders of Poland, the United Kingdom's wartime leader, Winston Churchill (by then in opposition), famously remarked that it would be best "to leave the past to history, especially as I propose to write that history myself" (House of Commons Debates 1948). However, that approach to handling blame is not always available.

A third post-COVID legacy issue for governments, overlapping with that of blame and credit, is the management of *debt and fiscal stress*. If, as Benjamin Franklin said, nothing in life is certain but death and taxes, one wholly predictable feature of government post-(peak) COVID is that it will operate with public debt at post-twentieth-century world-war levels. The question then arises about how that debt is to be managed, with what effect on taxes and public spending, and which of the post-twentieth-century world-war experiences the fiscal aftermath of COVID is more likely to resemble. Without venturing into technical economic issues, three comments can be made from a public-administration and political-science perspective.

First, in contrast to Adam Smith's expectation that levels of government spending normally decline sharply after wars, Peacock and Wiseman (1961) observed a peak-and-rising-plateau pattern in the United Kingdom. Spending declined from its wartime peaks after each of the two twentieth-century world wars but remained higher than the pre-war levels mainly as a result of extensions of the welfare state (they summarized the pattern as meaning "it is harder to get the saddle on the horse than to keep it there"). The question then arises about whether the post-COVID public-spending pattern will resemble more closely the aftermath of the eighteenth-century wars on which Adam Smith based his observations or the twentieth-century wars observed by Peacock and Wiseman (1961).

Second, after both of the twentieth-century wars in the United Kingdom, influential economists such as Maynard Keynes argued that taxes needed to be kept high, in part to pay for ambitious postwar reconstruction efforts. However, in both cases, the voters decided otherwise by electoral choices in support of tax reductions, which in turn meant recurring efforts to squeeze public spending or restrain its growth relative to GDP (Hood and Himaz 2017). The question that arises is whether or how much tolerance of higher taxes to support higher government spending can be expected in the post-COVID world. Most of the revenue in many developed countries currently comes from a small number of mass taxes

(i.e., income taxes, social security taxes, and sales taxes), all of which inevitably impact middle-income voters, and tax innovation presents a long-term twenty-first-century challenge (Hood 2003).

How much scope there is for higher expenditure given those tax challenges depends on a third question: How much of that COVID debt incurred by governments will actually turn out to be repaid and on what terms? After all, the fiscal aftermath of World War I included substantial debt forgiveness in the form of greatly

extended maturity dates in the 1920s. Those changes were followed by the 1934 general default on war-related debt by France, Greece, and Italy—amounting to 36%, 43%, and 52%, respectively, of 1934 GDP (Reinhart and Trebesch 2014)—against a background of trade wars, currency pressures, and a deep global recession.

CONCLUDING REMARKS

The COVID pandemic represents a change in the ecology of public administration that is testing systems of governance around the world and calling into play the entire range of policy-implementation tools. Whether the style of dashboard government for the COVID pandemic survives likely will depend on whether COVID is followed or accompanied by further acute threats to social resilience. In terms of blame and credit, it already has played a part in election outcomes, with some incumbents benefiting and others being damaged by their handling of COVID—although, arguably, much of the post-COVID blame game has yet to begin. However, given the way that COVID responses have been financed to date—mostly by debt, not much in taxes—a fiscal squeeze on the tax and/or spending side appears to be a certainty for the 2020s. ■

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