

C. Essays

The Metamorphosis of COVID-19: State, Society, Law, Analytics

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1. *Metamorphosis.*

“Of bodies changed and other forms I tell; you Gods, who have yourselves wrought every change, inspire my enterprise and lead my lay in one continuous song from nature’s first remote beginnings to our modern times.”² So Ovid begins his *Metamorphoses*, an epic of not just transformation, but of acceleration,, of revelation, and of the unmasking of things to reveal their essence, especially in the face of stress.³ In the process of transformation the world and its actors, its processes, and its desires (expressed in physical as well as abstract forms) is revealed. *Metamorphoses* in Ovid, then, is as much about revelation as it is about transformation; it is the means by which a thing, a relationship, an object, assumes a truer form under conditions of stress or challenge.

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² Ovid, *Metamorphoses* (A.D. Melville (trans.) Oxford, 1986(c. 14 A.D.)), p. 1. In the original: “In nova fert animus mutatas dicere formas corpora; di, coeptis (nam vos mutastis et illas) adspirate meis primaque ab origine mundi ad mea perpetuum deducite tempora carmen.”

³ The etymology of the word in the English speaking world reveals as well not just its origins in the changing of shape or form, but also the association of this change of shape or form (from the Greek “meta” (change) plus “morphe” (shape or form) but also of that transfiguration by witchcraft or magic, that is with the aid of a divine (immanent or transcendent) power.

This essay, lightly footnoted,⁴ takes that as its organizing theme. In our own time, the COVID-19 pandemic produce metamorphoses. Society—political, moral, economic, cultural—have worked diligently to deny metamorphoses.

The coronavirus pandemic has changed the world and left countless people longing for a pre-pandemic way of life. That desire is likely only further straining our mental health. "Our brains really are very eager to get back to normal, to get back to January 2020," Dr. Gleb Tsipursky, CEO of Disaster Avoidance Experts and author of a book about adapting to "the new abnormal" of COVID-19, told USA TODAY. But that's simply not possible, Tsipursky said.⁵

Essay examines the metamorphoses of COVID-19 on global social orders. It does so from the perspective of the initial encounter with the enormity of the pandemic. The perspective is thus both predictive and historical, and helpful to the reader perhaps precisely because of its way it is situated in both. Only time will reveal the extent of the transformations—like Ovid, the object is to reveal those transformations and to watch as its objects then stagger towards their futures—sometimes both changed and ignorant of the outward manifestation of the changes triggered by COVID-19.

That this is possible suggests the essence of metamorphosis—it merely reveals, it accelerates, it activates—that which was already latent in the object of change, whether that object was an individual or some form of human collective. The greatest tragedy of COVID-19 also serves as its great

⁴ "The essay . . . takes the anti-systematic impulse into its own procedure, and introduces concepts directly. . . . they gain their precision only through their relation to one another," Theodor W. Adorno (Bob Hullot-Kentor, and Frederic Will, (trans), "The Essay as Form" *New German Critique* 32:151-171, 160 (1984; 1954) (it says what is at issue and stops where it feels itself complete—not where nothing is left to say" Ibid., p. 152; The essay silently abandons the illusion that thought can break out of thesis into physis, out of culture into nature." Ibid., p. 159).

⁵ Joel Shannon, "When will things go back to normal? Experts say that's the wrong question amid COVID-19," USA Today (10 October 2020); available [https://www.usatoday.com/story/news/health/2020/10/10/coronavirus-when-return-to-normal-life/5882898002/].

triumph—its power to rip away the decay that marked the bodies of those things transformed to reveal their essence. It is to an examination of the forms and consequences of this stripping away, to the alignment of internal and external, that this essay focuses.

The essay is divided into four sections. Section 2 first considers COVID-19 as the virus of societal acceleration. That is of the way that COVID-19 accelerates trajectories already present and latent in collective bodies (and as well in the bodies of individuals within their own family collectives). Section 3 then considers the transformation of origin stories. The transformation of the story of the origins of COVID-19 align with the transformations of the relations between China and the US and between China and the international community. And these are not without consequence.⁶ Origins point to culpability, and the culpable might be held accountable.⁷ Section 4 then examines the moral transformation accelerated by pandemic. The focus here is on sacrifice—the sacrifice of the aged by the healthy, the sacrifice of the poor by those with greater means, and the sacrifice of women’s autonomy. Section 5 then considers the transformation of law. The science of law has been overcome by that of the science of data, of psychology, and of prediction. And with that transformation, an even greater transformation of the autonomy of the individual before the state. Where individuals were once assumed to be autonomous actors capable of adhering and culpable for lapses in conforming behavior to commands, now they are understood as the aggregation of the sum of their actions, actions which can be

⁶ See, e.g., James D. Schultz and Sean Carter, “China needs to be held accountable for Covid-19’s destruction,” CNN Opinion (20 June 2020); available [https://www.cnn.com/2020/06/20/opinions/china-needs-to-be-held-accountable-for-covid-19s-destruction/index.html] (“That the Chinese government has significant culpability for the global spread of Covid-19 and needs to be held accountable for its misconduct should not be a partisan issue. We already know that the Associated Press has reported the Chinese government concealed critical facts about the emergence of the virus; that local officials silenced voices of warning; and that as a result, actions of Chinese officials most likely deprived the world early on of critical information about the virus’ transmissibility and lethality.”).

⁷ Riley Walters and Dean Chang, “How to Hold China Accountable for COVID19,” Heritage Foundation (21 April 2020); available [https://www.heritage.org/asia/commentary/how-hold-china-accountable-covid-19].

predicted and nudged through rewards and punishment.⁸ Entities, in turn, build policy by incarnating the aggregated mass of human behaviors within a community. Law is transformed into simulation even as the individual is transfigured as the incarnation of the sum of the data she generates.

The essay ends with a brief consideration in Section 6, *Metamorphoses*, of the consequences of these transformations. “What was before is left behind; what never was is now; and every passing moment is renewed.”⁹ It is not law or politics (much less economics) that drives COVID-19; it is COVID-19 that drives masters of these fields and the shaping of these tools. In that driving COVID-19 transforms both form and object to suit an emerging era. That idea of metamorphosis is not based on the notion that COVID-19 has transformed the societal order into something else—rather the thesis of this essay is that COVID-19 has stripped away pre-pandemic pretensions and has made it possible for societal order to transform into itself—its more accurate representation of itself.

2. *The COVID-19 Accelerator Effect.*¹⁰

Plague accelerates even as it transforms.¹¹ There is no magic to plague; it operates in the environment in which it appears, and is both constrained by that environment (technology, societal taboos, hygiene and the like) and provides it with the openings through which rising societal contradictions, of its discontents,¹² might be resolved or the

⁸ B.F. Skinner, *Beyond Freedom and Dignity* (NY: Alfred A. Knopf, 1971) (“As a science of behavior adopts the strategy of physics and biology, the autonomous agent to which behavior has traditionally been attributed is replaced by the environment—the environment in which the species evolved and in which the species the behavior of the individual is shaped and maintained.” *Ibid.*, p. 185). .

⁹ Ovid, *Metamorphoses* (A.D. Melville (trans.) Oxford, 1986(c. 14 A.D.)), p. 357 (The Doctrines of Pythagoras”).

¹⁰ This section was originally published as “Will COVID-19 infect the world order?: Payman Yazdani Interviews Larry Catá Backer,” *Mehr News Agency* (15 April 2020); available [https://en.mehrnews.com/news/157620/Will-COVID-19-infect-the-world-order].

¹¹ For the classic exposition, see, William H. McNeill, *Plagues and Peoples* (NY: Anchor Doubleday, 1977)

¹² David A. Westbrook, *City of Gold: An Apology for Global Capitalism in a Time of Discontent* (NY: Routledge, 2004).

level of their intensity advanced. One sees both in the wake of COVID-19.

A. Considering the Effects of COVID-19 on the contemporary (pre-2020) World Order.

First, it is important to underline that there WILL be effects on the current world order. That is an important premise because it was not at all necessary, nor was it necessarily predictable at the start of the pandemic. Thus, the first step in answering this question is to answer the question on which it must be based: have the influential elements with responsibility for the maintenance of the world order determined that the COVID-19 pandemic MUST produce effects. The answer to that question has become clear by the middle of April 2020—the COVID-19 pandemic must produce effects on a world order that, in retrospect will be understood, at the end of 2019, as a world order ready for change but unable to move by reason of inertia. In effect, then, COVID-19 will have effects on the world order precisely because those with the power to shape the narratives on the basis of which mass society understands and responds to the world have given that signification to the pandemic itself. Was it necessary to invest the pandemic with this change power? –NO! But does that matter anymore?—again NO!

Second, with the decision to invest the pandemic with this significance—that it must necessarily have an effect on the world order—the principal question comes into better focus. That question goes to the direction of the changes to the current world order that may emerge. Again—the effects and the direction cannot be understood as “natural” in the sense that there is an organic connection between the existence of pandemic and the vectors of change that it produces. The opposite is true. The changes to the world order triggered by the pandemic will reflect the application of rival ideologies through which the great powers see the world.

For Marxist-Leninist States, like China, the pandemic and their struggle against it proves and was crafted to exhibit, the virility and power of the Chinese political-economic model to

meet and overcome the COVID-19 challenge.¹³ That, vindication, in turn, will likely enhance the possibility for the emergence of a more visible new Communist international around the principles (now internationalized) of the Chinese Marxist Leninist system with application first within developing states participating in the Belt and Road Initiative, and thereafter (again modified to suit context) in other states. The result, under a best-case scenario, will be the emergence of a new approach to international ordering grounded on the Chinese vision with the transnational application.

For liberal democratic states, the same is also true. Here the pandemic is also both a “test” and a “portal” through which the fundamental principles of the political economic order are tested, modified and from which they will emerge stronger.¹⁴ In these cases, there will likely emerge two variations reflecting the ancient fissures between the old Roman world (the EU) and its northern frontier (now under the leadership of the US as its most perfected vanguard force). Where the Chinese system will emphasize centralization, planning, and the superiority of the political sector, the liberal democratic versions will emphasize decentralization, markets (private power), and the superiority of the economic and societal sectors.

Thus, the effects of COVID-19 will not be revolutionary in the sense of abandoning old systems. Rather it will accelerate tendencies already well observed. It will also further refine a tendency toward differentiation (and choice) rather than toward convergence. But again, these dominant ideologies invested the pandemic with a very specific signification—and an ancient one: it was a test (which could be rationalized in religious or secular “scientific” terms). That test was meant to prove the value of the system tested. But it was also meant to serve as a furnace within which the weakness of those systems might be burned away, leaving only the strong core from which the system could emerge changed and re-invigorated. But

¹³ “Key advantages of the Chinese system overcoming COVID-19,” CGTN (27 April 2020); available [https://news.cgtn.com/news/2020-04-27/Key-advantages-of-the-Chinese-system-overcoming-COVID-19-Q2jY4DjrB6/index.html].

¹⁴ Yaroslav Trofimov, “Democracy, Dictatorship, Disease: The West Takes Its Turn With Coronavirus,” *The Wall Street Journal* (8 March 2020); available [https://www.wsj.com/articles/democracy-dictatorship-disease-the-west-takes-its-turn-with-coronavirus-11583701472].

changed in ways that will hyper emphasize some of its organizing principles (described above) and scorch away the rest.

It is in that context that one can consider the effects on globalization. Many members of the intellectual sector who produce analysis for a living, as well as the planning sectors of governmental organs, are now obsessed with what they might (mis)interpret as the rise (again) of the state. And yet a closer view of “pandemic effects” might suggest that something else is at work here. Consider the focus on the way in which states “take control” through the re-invigoration of borders. But borders have always been a key element of economic globalization. Global production, itself grounded in the organization of segments, require that those segments be policed and protected. Economic globalization could not have existed in its current forms if it did not maintain these compartments that then could be used to segregate and contain risk.

States, then, within the global order, were meant to work like watertight compartments on a 20th century ship. That sealing off was usually protected with respect to goods, investment, and the direct projection of state power abroad through a series of barriers built in as exceptions to open trade. It applied as well to the free movement of people, with respect to which their double capacity—as labor inputs in production and as autonomous bearers of political power, complicated the management of their movement.¹⁵ The danger for globalization with respect to the state was that the compartments could not be sealed off when necessary. That, in part, was one of the reasons that migration erupted as a crisis in the 21st century. At least with respect to that, the state system operated more like the compartments on the Titanic than as wholly self-contained units (with the possible exception of North Korea).¹⁶

Thus understood, the role of the state—as cogs in translational orders—emerges more clearly. Pandemic was precisely the moment with the protection of global production required the state to use its police power and its borders. But at

¹⁵ Ruth Rubio-Marín, *Immigration as a Democratic Challenge: Citizenship and Inclusion in Germany and the United States* (Cambridge, 2000).

¹⁶ “Titanic Construction: Building the “Unsinkable” Ship,” History on the Net; available [<https://www.historyonthenet.com/the-titanic-construction>].

the same time, the pandemic drew much more clearly the difference between the state as an agent for the protection of the free movement of goods, capital, and investment (even where those might be divided among the big three emerging globalist empires) on the one hand, and the use of the state as the custodian of their respective human capital. While trade was affected (and sometimes severely) the organization of trade at its foundation was not. It will be re-arranged of course. That is the primary effect of the pandemic on globalization. But more importantly, it will be used (its principal significs) to reposition the state as the shepherd of human capital corralled and to be utilized within their respective pens. These pens, once known as states, now serve an additional and important purpose not for the greater glory of the state necessarily but rather as the middle managers of global production. Of course, the other effect of the pandemic will be to make clearer the differentiation in the character of that role between apex states, and those below them. It will be to their organization around vertically differentiated global production chains arranged around the new imperial centers, and the rules created to facilitate trade between these centers, that will likely mark the core transformations that the pandemic will leave in its wake.

B. COVID-19 and the Crisis of the Liberal Democratic Order.

Any approach to issues of “crisis” or “challenge” of the liberal democratic order is more usefully understood as a function of the larger movements exposed by the COVID-19 pandemic. At its simplest, the answer must be that any event of severe stress—like pandemic—will likely reveal the weaknesses (as well as the strengths) or dominant systems that order political-economic-societal life within vertically arranged hierarchies in which some elements are privileged, and others survive as they can. But that answer applies equally to all systems, not just liberal democratic systems. And, indeed, the pandemic illustrates, for those who care to observe, the way that the stress it produces reveals both strength and weakness in all systems.

However, it is important to look more closely at the way that the stress of pandemic might reveal deficiencies in powerful or powerfully influential systems. By 2019, it had become a cliché among important political sectors and the

intelligentsia that provided the foundations for their conclusions, that the post-1945 liberal democratic order and its manifestation in contemporary constitutional orders and the international framework of principles on which it was supposed to be based (or at least reflect) was either broken or in need of reform.¹⁷ Those at the margins of that discussion (Marxist-Leninist theorists, theocratic political-moral orders, so-called Third World and development oriented theorists) of course profited from that internal discussion.¹⁸ While many took that as a sign of the weakness of the system, for others, me included, it suggested an underlying strength. It suggested that the system was still quite “alive” in the sense that it was still the central element of the ordering of reality around which political-economic-societal systems could be ordered.

Enter the pandemic.¹⁹ An extraordinary entrance to be sure—in six months or so it has managed to sweep away much of the veiling behind which these discussions and battles for control of the “heart” of the system were taking place. And among those in the midst of the battling, it provided the signal—the sign—that they chose to interpret as permission to accelerate their move to seek control of the ordering norms of the system. It is in this sense that one might usefully understand the all too real view among virtually everyone about the deficiencies of the liberal democratic system as well as the way in which the pandemic provided the excuse necessary to reveal more publicly what was already well contested within the highest levels of the leadership of that system.

But it does not suggest the sort of fundamental deficiencies that might imperil the system. The opposite, I think, is true. In that light, the deficiencies must be understood within context. And that context can be divided into two parts. One context would examine the deficiencies of the liberal democratic order from the perspective and through the lens of the ordering

¹⁷ E.g. Peter S. Goodman, “The Post-World War II Order Is Under Assault From the Powers That Built It,” *The New York Times* (26 March 2018); available [https://www.nytimes.com/2018/03/26/business/nato-european-union.html].

¹⁸ E.g., Charles Gore, “The Rise and Fall of the Washington Consensus as a Paradigm for Developing Countries,” *World Development* 28(5):789-804 (2000).

¹⁹ Yen-Chin Liu, Rei-Lin Kuo, and Shin-Ru Shih, “COVID-19: The First Documented Coronavirus Pandemic in History,” *Biomedical Journal* 43(4):328-333 (2020).

principles of political-economic-moral systems fundamentally incompatible with those of the liberal democratic order. For this perspective there can be nothing but deficiency precisely because the making of meaning with respect to the most fundamental objects of social ordering are impossible to reconcile. They simply cannot see the same thing in the same way. From this perspective it is true, as the question suggests, that the pandemic highlights all of the critical failings of the democratic order—the hijacking public policy by private institutions, the sovereignty eroding effect of markets on policy, the inefficiencies of public organs subject to multiple layers of consultation and fractures of authority, and the paralysis inherent in systems in which power is both sharply held and the success of its execution widely dispersed.

In contrast to this outsider perspective analysis, an insider perspective might yield a different analysis. The insider perspective would examine the deficiencies of the liberal democratic order from one of two distinct analytical positions. The first would take as a given the soundness of the fundamental organizational principles of that order and focus instead on the deficiencies of its implementation. Those deficiencies might derive from system failures (e.g., the political institutions ought to be reformed to correctly reflect principle, or the law must be enforced in accordance with a correct application of principle, etc.). The second would focus on the need to reform or further develop but not reject) the fundamental ordering principles themselves. In the context of pandemic these might center on the division of authority between different levels of government, to the division of authority within a political institution. In the United States this translated into furious debates about the way that American federalism impeded or advanced the fight against the pandemic. But they might also center on the substance of the principles themselves—and these may then create a discursive space around corruption (e.g., should the state provide support for business or to working people? How should medical resources be rationed? To what extent may the state or private actors mandate personal behavior among the masses? And the like).

In the international sphere, these deficiencies are marked by the borderlands between public and private sectors which are evident in the organization of global production. Thus, for example, the need to impose a responsibility on

multinational enterprises for the effects of economic decisions taken in consequence of the pandemic that cause severe harm to local economies down their production chains. This has been particularly apparent in the context of the production of garments in which decisions taken by large Western multinational firms might severely affect the economic viability of states like Bangladesh.

Taken from this perspective, the usual reporting about winners and losers is stripped of much actual significance. The pandemic has not produced a list of winners and losers along the conflict binaries that were popular before the pandemic: the state versus the private sector; bureaucracy and planning versus the market; liberal democracy versus Marxist-Leninism; China versus the United States, etc. Much more interesting is the way that the intelligentsia and the political classes they serve have sought to develop a discourse around the pandemic that its critical signification is the way that it will decide or change the contours of battles for global leadership.²⁰

This is the sort of material one feeds mass opinion for the purpose of the propaganda wars that are an integral part of inter-systemic competition. They are important for the fury with which they are pursued, and their ability to sway common understanding. But they have very little to do with the actual movement of dominance under conditions in which no one system has emerged spotlessly triumphant. If the pandemic shows the world anything, it is that all systems under stress will have to change in light of their failures and will need to exploit those areas which showed each at their best.²¹

From that, the battles for control of global narrative, of leadership, and the like, will continue even as the character of the combatants necessarily changes. But those changes, again to underline the opening perspective, has little to do with the virus itself—it has everything to do with the way that people invest

²⁰ “The U.S.-China battle to control COVID-19 narrative — and blame,” PBS (22 April 2020); available [<https://www.pbs.org/newshour/show/the-u-s-china-battle-to-control-covid-19-narrative-and-blame>].

²¹ Jack Patrick Lewis, “New Zealand: A Model COVID-19 Response,” *Wickedlocal.com* “31 October 2020); available [<https://www.wickedlocal.com/story/country-gazette/2020/10/31/opinionlewis-new-zealand-model-covid-19-response/114595756/>].

these actions with meaning, and the extent to which such meaning is widely embraced. No magic here; and there is no organic progress toward triumph of one or another of the camps; it is all strategy, and work, and discipline, however those can be advanced within the rules of the respective “operating systems” of these actors.

C. The Character of the Post-Pandemic Global Order

At last, we come to the most profound question, but also the one that may be easiest to answer—at least in general terms. The changes suggested above are both broad and fundamental. They will likely produce structural and fundamental changes. While it is far too early to provide much detail, the changes may be sketched in broad outline.

First, the fundamental relationship between the individual and governing institutions will change in profound and quite noticeable ways. While it is likely that the discourse of personal liberty and of individual autonomy will not change in the short term, the application of those principles will change. The broad outlines of those changes are already apparent. The first cluster of changes revolve around the power to monitor. Surveillance will become central to the organization of society and the understanding of privacy will change to suit the need. This does not mean that there will not be opposition, indeed there will be, but that it is likely that the opposition will have an effect only at the margins.

In a sense this ought to come as a surprise to no one. All systems have embraced, some with enthusiasm, cultures of compliance and accountability for business and economic conduct.²² It is only a small step to transpose these now muscular cultural expectation around accountability to the individual. The framework around which accountability is driven is monitoring and reporting. It is grounded in data harvesting and in judgment manifested through data analytics. The rationale will be based on the protection of the individual, first; and then on the protection of society from individuals

²² As a small example, consider the American Law Institute’s project for a “Principles of the Law, Compliance, Risk Management, and Enforcement.” See American Law Institute, *Principles of the Law, Compliance, Risk Management, and Enforcement*, Tentative Draft No. 1 (Philadelphia, ALI, 2019).

whose conduct have (they always have) spillover effects. It will be difficult to resist this trajectory made more compelling in the shadow of pandemic. But surveillance will not mean merely the burden of being observed. As suggested above, it also implies the duty to account and to submit to systems of accountability. One sees this already in the systems developed in Israel and then Russia designed to track targeted individuals and then to warn others who might be exposed to them. It is seen in the way that Taiwan and South Korea have aligned their information systems for the purpose of surveillance with specific objectives (public health in this case) in mind. Even in the United States, the recent exposure of the way that large internet platforms (Google for example) to track people and to use that in the service of the police power in a crisis reveals the extent to which such surveillance is already normalized. Its rationalization remains at the earliest stages of development.

Second, the scope of governmental authority will likely change. It is difficult, though to predict the direction of that change and it is likely to be highly contextual. Part will depend on the way in which a system disperses power between its public and private organs. But the character of that power will change as well. There will likely be an acceleration of the trend, already quite evident in most systems of moving away from the increasingly primitive view of government as actually managed by high (sometimes elected) officials in which the issues revolve around the exercise of sovereign executive, legislative and judicial power (however arranged) to a system that is centered on administration by managers.

The bureaucratization²³ of all aspects of life actually signals the movement of power from the political to the managerial elements of institutions. The pandemic revealed in all its majesty that the state and its principles are captive to the administrator, to the technician, to the field expert, and to those who design and operate systems that connect policy to implementation. States that expose that connection tend to do well; states that seek to suppress this trajectory by muzzling or sidelining their technocrats often find themselves criticized and their efforts undermined.

²³ Cf., Henry Jacoby, *The Bureaucratization of the World* ((Evelyn Kanes (trans), University of California Press, 1973) ; S.N. Eisenstadt, "Bureaucracy and Bureaucratization," *Current Sociology* 7(2):99-124 (1958).

Third, the nature of borders will change. As mentioned in more detail above, borders will indeed matter more for the control of people. At the same time, they will matter less for the organization of economic activity. At the same time, the nature of the porosity for economic activity will depend on the alignment of particular states within clusters of states organized around a vanguard state. The result, of course, is a fundamental reorganization of globalization. But this is unpalatable. So, expect that these changes will occur without much comment. Expect as well that those at the forefront of change will reject any notion that they are changing anything. And expect as well that eventually the principles of globalization will be re-interpreted to provide the discursive basis for legitimating the new global organization of economic activity.

Fourth, few people speak to international financial institutions and their role in the post COVID-19 world. That is a pity. Largely left behind, perhaps as a matter of policy, perhaps because their bureaucratic girth makes nimble movement difficult, it is possible that the role of IFIs will be changed. On the one hand, in the middle term public IFIs may become a useful tool for the implementation of normalized expectations for national shepherding of their populations to ensure maximum productivity (and thus maximum contribution, in the aggregate, to collective wealth). Loan conditionality, technical assistance and the like, the now ancient tools of international financial institution (IFI) management of states can be used to those ends.²⁴ But that requires consensus about what exactly is to be expected of states. That latter project will likely provide a window in the contests for global control of narrative among the US-China-EU with second order powers working furiously at the margins. Irrespective of the way that it is resolved, the application of the fundamental principles of animal husbandry through the language of rights will likely grow.

²⁴ E.g., International Monetary Fund, "IMF Conditionality," Factsheet (30 March 2020); available [https://www.imf.org/en/About/Factsheets/Sheets/2016/08/02/21/28/IMF-Conditionality]; Lee Mizell, *Conditionality in Practice: Emerging Lessons for Public Investment* (Paris: OECD, 2017); available [https://www.oecd.org/cfe/regionaldevelopment/Mizell_Conditionalities_Emerging-lessons-for-public-investment.pdf].

Fifth, the discourse of migration, as well as its management, are likely to change. One of the peculiar consequences of the pandemic, already much noted, has been the way that states, without much resistance, were able to reconstitute their borders for the protection of their populations. But borders are tools with a rich palette of uses—even if only directed against people. While it is unlikely that the discourse of migration will change much in the short term, it is possible that the management of migration—especially where it can be reconstituted as the movement of peoples (collective movement) rather than the product of individual circumstances—may begin to assume a different form, and one that is more restrictive. At the same time, this broader movement will be masked by wide variations among states, given their national challenges. More interesting will be the extent to which migration becomes a challenge more among states with vulnerable populations, than of migration between the periphery and the “metropolis.”

Sixth, the nature of the police power will likely change as well. It is likely that the future of power will be shaped as much by models based on data analytics, as it will be founded on the application of principles and human judgment. Machine learning and modelling has driven the response to COVID-19 irrespective of the political-economic or moral model to which the responding state adheres. The human factors has been disappearing from the development of approaches to protecting the human factor in societal organization. One speaks here to “at risk” populations, to the science of transmission, to predictive analytics. One speaks here to the use of analysis to align health, sustainability, economic and political consequences in ways that maximize the objectives of those applying the analytics. One sees, in the end, the emerge of automated management as the principal consequence and effect of the pandemic on the way in which the global order is conceived and managed. In the future it is as likely that contests for power will be between distinctive approaches to data analytics, and the effectiveness of the algorithms used to provide incentives and punishments than it will be about the underlying principles around which society—even global society—is ordered.

3. *Origin Stories and Control of the Narrative of COVID-19.*

A. COVID-19 Meaning Making—the Contest Over Control of COVID-19 Origin Stories and Its Consequences.

Origin stories²⁵ have always been important in the organization and disciplining of human society. Their object was in large measure to “inculcate belief; and in salient instances their effectiveness was such that they determined the form and content of the most profound personal experiences.”²⁶ In many cases they serve to construct and differentiate one community from another. In the process they also can be absorbed, and so absorbed incorporated in distinguishing myth making; they serve as the shaping force of civilization as lived experience conscious of the lived experiences of others.”²⁷ They also tend to embed the core founding ideological premises that define a society as autonomous and distinguishable from another. In periods of great convergence--which was the essential marker of globalization in its first phase (1945-2016)--such origin stories diminish in importance as a border of autonomy and serve more as a distinguishing element of “voice” by a community participating in the greater communities of peoples all engaged in the development of common positions and consensus.²⁸

Conversely, where fracture becomes a political or cultural ideal, origin stories become a critical element in enhancing detachment. That detachment is inherent in a political project that is grounded on enhancing the identity between communal autonomy (peoplehood) and the erection of borders. This is the positive and normative objective of origin stories. These are almost always bound up in stories of the creation of the world--with world understood as the space

²⁵ See, e.g., David Christian, *Origin Story: A Big History of Everything* (NY: Little, Brown Spark, 2018); Joanne H. Wright, *Origin Stories in Political Thought: Discourses on Gender, Power, and Citizenship* (University of Toronto Press, 2004); David M. Engel, “Origin Myths: Narratives of Authority, Resistance, Disability, and Law,” *Law and Society Review* 27:785-826 (1993).

²⁶ Joseph Campbell, *The Masks of God: Creative Mythology* (Penguin 1968) p. 85.

²⁷ Oswald Spengler, *The Decline of the West* (NY: Alfred A. Knopf, 1928) Vol. II, p. 78.

²⁸ But *ibid.*, Vol. II, p. 55 (“it is not products that ‘influence’, but creators that ‘absorb.’”).

within which a self-referencing community comes to know itself and its place within the space allotted to it.

As important, origin stories might also serve as part of a moral project, or they serve to develop not just the identity of the community (as the "other" in a world of communities) but to situate that "otherness" within a spectrum of moral values in which the community itself is identified with the incarnation of the "good" the goodness of which can be measured against the incarnation of its opposite. The remnants of post Temple Jewish communities as the bad end of the moral spectrum in which the community of Christians occupied the idealized space of the good at the time both were competing around the Mediterranean for control of the narrative of the "true" post-Temple Jewish faith, is an excellent example.

Origin stories of both types continue to serve politics in the 21st century (though the stakes are far more pathetic and they tend to resemble the court intrigues of Ming era eunuch politics, or those of the Ancien Regime aristocratic court). Especially potent are those origin stories that serve a moral purpose--that is that reinforce the notion of the "goodness" of a community measured against the "evil" of another. It appears that the officials who occupy middling positions within the self-reflexive bureaucracies of powerful states appear unable to resist the temptation to use origin stories--especially origin stories with a moral element--in the hurley burley of political competition in the middle of a global crisis.

The recent distraction, coming in equal measure from Beijing and Washington, and fanned by the hangers on (academic, press, and others) who seek personal advantage through the deployment of these cultural tropes irrespective of the greater damage they may do to their respective governments and without a care for the way they betray the fundamental political principles of their respective systems, have taken up a certain substantial amount of time from the primary task of meeting the threat posed by the COVID-19 pandemic.

One does not here refer to the childish diversion of the origins name of the disease with respect to which no more space

than this is wasted.²⁹ Rather I speak to the much more potent, and derivative, battle that followed the conflict over "names" and evolving as if taken from the text of a third rate novella, of the assertion that COVID-19 was manufactured either in a Chinese or a US lab, and from there released onto the world.³⁰ Here one has a powerful example of a morally driven origin story, the object of which is to buttress the unstated but underlying notion that two distinct communities exist, and that in nice Manichean style, one represents (and defines the "good" and the other--not so much. Here one references the origins of COVID-19 as a metaphor for the moral condition of the two societies.

²⁹ See, e.g., Lily Kuo, "Trump Spars Anger by Calling Coronavirus the 'Chinese Virus,'" *The Guardian* (17 March 2020); available [<https://www.theguardian.com/world/2020/mar/17/trump-calls-covid-19-the-chinese-virus-as-rift-with-coronavirus-beijing-escalates>]; Sally Satel, "Inside the Controversy Over the 'Chinese Virus,'" *National Review* (23 March 2020); available [<https://www.nationalreview.com/2020/03/inside-the-controversy-over-the-chinese-virus/>]; David Brennan, "China Responds to Trump 'Chinese Virus' Tweet, Urges America to Stop This 'Despicable Practice'," *Newsweek* (17 March 2020); available [<https://www.newsweek.com/china-responds-donald-trump-chinese-virus-tweet-urges-america-stop-despicable-practice-1492674>].

³⁰ See, e.g., Henry Austin and Alexander Smith, "Coronavirus: Chinese official suggests U.S. Army to blame for outbreak: 'It might be U.S. army who brought the epidemic to Wuhan,'" tweeted Zhao Lijian. "Be transparent! Make public your data! U.S. owe us an explanation!," *NBC News* (13 March 2020); available [<https://www.nbcnews.com/news/world/coronavirus-chinese-official-suggests-u-s-army-blame-outbreak-n1157826>]; Ben Westcott and Steven Jiang, "Chinese diplomat promotes conspiracy theory that US military brought coronavirus to Wuhan," *CNN* (13 March 2020); available [<https://www.cnn.com/2020/03/13/asia/china-coronavirus-us-lijian-zhao-intl-hnk/index.html>]; Molly Stellino, "Fact check: Coronavirus not man-made or engineered but its origin remains unclear," *USA Today* (21 March 2020); available [<https://www.usatoday.com/story/news/factcheck/2020/03/21/fact-check-did-coronavirus-originate-chinese-laboratory/2881150001/>]; Matt Shulman, "Judicial Watch Founder Sues Chinese Gov't Over 'Bioweapon' COVID-19," *TPM* (18 March 2020); available [<https://talkingpointsmemo.com/news/judicial-watch-freedom-watch-larry-klayman-lawsuit-china-covid-19-coronavirus-bioweapon-wuhan-lab>]; but see Jon Cohen, "Scientists 'strongly condemn' rumors and conspiracy theories about origin of coronavirus outbreak," *Science* (19 Feb. 2020); available [<https://www.sciencemag.org/news/2020/02/scientists-strongly-condemn-rumors-and-conspiracy-theories-about-origin-coronavirus>].

That battle and its political ramifications for geopolitics,³¹ for the control of the narrative of the pandemic, for the use of the pandemic as affirmation of political or cultural legitimacy, etc.³² if fairly uninteresting, except for those in the business of managing story lines for specific objectives. But there is neither subtlety nor deep value in that exercise--except among technicians. It is not for nothing, then, that the Press and social media, apparently with little other news to report, has been cultivating this tempest in a teapot in a sort of ironic complicity with the propaganda departments of the combatants.

Let one instead consider an eddy in these politics that ought to be of more interest and greater value. I refer the extraordinary efforts, by the American press to manufacture a rift within the Chinese administrator class respecting either the value of pressing the "US labs created COVID-19" line or its validity. As reported by Bloomberg:

An unusual public spat between two top Chinese diplomats points to an internal split in Beijing over how to handle rising tensions with a combative U.S. president. The differences spilled into public view Monday after China's ambassador to the U.S. reaffirmed his opposition to promoting theories that the virus that causes Covid-19 originated in an American military lab. Ambassador Cui Tiankai said in an interview with "Axios on HBO" that he stood by his Feb. 9 statement that it would be "crazy" to spread such theories, even though a foreign ministry spokesman has repeatedly floated the idea on Twitter in recent weeks.³³

³¹ Ryan Pickrell, "Chinese foreign ministry spokesman pushes coronavirus conspiracy theory that the US Army 'brought the epidemic to Wuhan'," *Business Insider* (14 March 2020); available [<https://www.businessinsider.com/chinese-official-says-us-army-maybe-brought-coronavirus-to-wuhan-2020-3>].

³² Matt Field, "Why do politicians keep breathing life into the false conspiracy theory that the coronavirus is a bioweapon?," *The Bulletin of the Atomic Scientists* (19 March 2020); available [<https://thebulletin.org/2020/03/why-do-politicians-keep-breathing-life-into-the-false-conspiracy-theory-that-the-coronavirus-is-a-bioweapon/#>]; Lisa Winter, "Chinese Officials Blame US Army for Coronavirus," *The Scientist* (13 arch 2020); available [<https://www.the-scientist.com/news-opinion/chinese-officials-blame-us-army-for-coronavirus-67267>].

³³ "Rare Spat Between Chinese Diplomats Signals Split Over Trump," *Bloomberg News* (22 March 2020); available

What makes this story interesting—at least from the context of the West where it is getting some play—centers on the way in which an origin story can be used to invert the trajectory of morality. What is attempted here is to manufacture conflict within the story-telling community, and then to turn that into a story of the origin of weakness in the storytelling country. That is, in this case, the origin story coming from certain sectors of the Chinese bureaucracy (e.g., that the US produced and released COVID-19)³⁴ because it is publicly contested either evidences a rift within the ruling collective or suggests contention over the forms and manifestation of foreign policy³⁵ that evidences the weakness of the ruling collective and immorality of the story.

And yet it is not entirely clear that their either is a rift, or that the disagreement is merely a quite elegant effort to manage response among the masses in the US. The origin story in China remains as vibrant as ever for the consumption of Chinese mass opinion. But that is its function as a moral value origin story. On the other hand, its utility when projected toward the object of constructed evil is more problematic. Thus, the decision for the Chinese Ambassador to the US to grant an interview, and to grant it to Axios,³⁶ takes on a quite distinct hue.

In a rare interview, China's ambassador to the United States, Cui Tiankai, told "Axios on HBO" that he stands by his belief that it's "crazy" to spread rumors about the coronavirus originating from a military laboratory in the United States. Why it matters: Cui called this exact conspiracy theory "crazy" more than a month ago on CBS' "Face the Nation." But that was before the

[<https://www.bloomberg.com/news/articles/2020-03-23/china-s-top-envoy-to-u-s-breaks-with-foreign-ministry-on-virus>].

³⁴ Jerry Dunleavy, "Chinese diplomat amplifies coronavirus conspiracy blaming US military after State Department rebukes," *The Washington Examiner* (17 March 2020); available [<https://www.washingtonexaminer.com/news/chinese-diplomat-amplifies-coronavirus-conspiracy-blaming-us-military-after-state-department-rebukes>].

³⁵ "Rare Spat Between Chinese Diplomats Signals Split Over Trump," *supra*.

³⁶ See Axios, "Our Mission," available [<https://www.axios.com/about>] ("we've engineered Axios around a simple proposition — deliver the clearest, smartest, most efficient and trustworthy experience for audience and advertisers alike")

spokesperson for the Chinese Ministry of Foreign Affairs, Zhao Lijian, began publicly promoting the conspiracy.³⁷

A key exchange occurs early in the interview where the Ambassador confirms his view earlier expressed publicly that stories of the origins of COVID-19 in a US military lab were crazy.³⁸

Amb. Cui Tiankai [15:36:26] That was my position then and that's my position now. I think these questions, of course, we have to find eventually we must have an answer to where the virus eventually came from. But this is the job of the scientists to do, not for diplomats, not for journalists to speculate. Because such speculation will help nobody. It's very harmful. . .

Jonathan Swan [15:37:00] Well, it's good to hear you say that Mr. Ambassador, because it is actually your own spokesman, the spokesman for the Chinese Ministry of Foreign Affairs, Zhao Lijian, who has been spreading the conspiracy that the virus originated in a US laboratory. Does he have any evidence to support that theory?

Amb. Cui Tiankai [15:37:18] Maybe you could go and ask him.³⁹

But of course there is much meaning embedded here. Beyond the usual diplomatic slipperiness, the origin story here could expose much more than efforts at narrative control. For

³⁷ Jonathan Swan, Bethany Allen-Ebrahimian, "Top Chinese official disowns U.S. military lab coronavirus conspiracy," *Axios* (22 March 2020); available [https://www.axios.com/china-coronavirus-ambassador-cui-tiankai-1b0404e8-026d-4b7d-8290-98076f95df14.html]. On the efforts by the Chinese Foreign Ministry, see, Jason Scott and Iain Marlow, "Chinese Official Pushes Conspiracy Theory U.S. Spread Virus," *Bloomberg* (12 March 2020); available [https://www.bloomberg.com/news/articles/2020-03-13/chinese-official-pushes-conspiracy-theory-u-s-army-behind-virus].

³⁸ The interview transcript may be accessed at Jonathan Swan, Bethany Allen-Ebrahimian, "Top Chinese official disowns U.S. military lab coronavirus conspiracy," *Axios* (22 March 2020); available [https://www.axios.com/china-coronavirus-ambassador-cui-tiankai-1b0404e8-026d-4b7d-8290-98076f95df14.html].

³⁹ *Ibid.*

example, consider the challenge were it determined that the virus did indeed originate in a US military lab, but that the precipitating cause the virus became active only after it had been stolen from the US and sent for study to Chinese state labs? The metamorphosis of origin stories, and the meanings they permit, may not be entirely controllable. But one can decide for oneself.

B. US – China Dueling Origin Narratives.

It thus appears that, even in the midst of substantial human suffering, there is always time for propaganda and propaganda wars. The extraordinary narcissism of nations, taxed almost to the limits of their capacity to respond to the pandemic, devoting substantial resources to the spinning of propaganda with the objective of producing narratives of their respective greater glory, has now become an essential feature of the battles that later generations will come to understand as the COVID-19 wars.

Thus it is that one finds oneself assaulted by the simultaneous self-aggrandizing and heroic efforts of three leading political authorities to control the narrative of COVID-19 origin stories.⁴⁰ At the same time--and as the complicit, pandering, and enabling media institutions suggest--these heroic efforts extend to the role of each of these states as the leading global force for the defeat of the pandemic. The stakes are high, at least as measured by the lusts of the propaganda ministries of these states. The state that can claim the leading role in the glorious defeat of the plague believes that it can, at the same time, claim that the defeat reveals some sort of divine sign of the "worthiness" of the political apparatus and normative structures of the "victorious" state. The stage on which these performances for mass consumption are undertaken reflect the logic of the institutional apparatus of each of these states.

⁴⁰ Discussed earlier, see, Larry Catá Backer for the Coalition for Peace & Ethics, "Origin Stories and COVID-19: The Value of Stories of the Lab Created Origins of COVID-19," *Law at the End of the Day* (23 arch 2020). Available [https://lcbackerblog.blogspot.com/2020/03/origin-stories-and-covid-19-value-of.html].

Even to state these suppositions, the "rules" of the "game" that these states now indulge is to suggest the underlying buffoonery at the heart of these antics--but when coupled with the real consequences of the pandemic is assumes a much more macabre shading. Some brief reflections on this theme follow.

The self-serving excesses of state organs in time of pandemic recalls other instances of bizarre (and after the fact) pathetic behaviors of people during times of plague.

"In fact, chronicles from the 14th to 16th centuries are full of reports of people across central Europe being seized by a compulsion to dance – and doing so in their hundreds, sometimes until they dropped dead from exhaustion . . . In fact, chronicles from the 14th to 16th centuries are full of reports of people across central Europe being seized by a compulsion to dance – and doing so in their hundreds, sometimes until they dropped dead from exhaustion. Saint John's Dance, as this phenomenon is known (due to the fact that people often called out the name of John the Baptist as they cavorted), traumatised onlookers and triggered a fearsome backlash from a horrified, confused clergy."⁴¹

China, the United States and the European Union are even now dancing and shouting through the global streets at the feet of statues of themselves as the incarnation of a self-reflexive *summum bonum*.⁴² If the analogy holds, each will continue to do so, in their respective madness, until overcome and exhausted from their respective and sterile self-pleasuring they might thereafter return with greater intensity to the fruitful task of caring for their respective masses. But each worships a different god--as manifested in itself. And that makes this dance macabre transform itself from bathos to pathos. For it is in the dueling banjos aspect of these dances--of each of these mad dancers

⁴¹ Helen Carr, "The medieval dance of death," *History Extra* (2017) available <https://www.historyextra.com/period/medieval/the-medieval-dance-of-death/>; the article was first published in BBC History Magazine (December 2017).

⁴² For a brief introduction to the notion in philosophy, see Greg Ciliberti, "The summum bonum (highest good)," *Philosophical Guidance* (23 January 2020) available [<http://philosophicalguidance.com/2019/01/23/the-summum-bonum-highest-good/>].

gyrating to the tunes stuck in their heads--that one understands COVID-19 as a manifestation of an ideological opportunity. But more than that, as the way in which each of these states begins to conceive of the COVID-19 plague as some sort of divine test, victory over which will secure the divinely touched legitimacy of the political-economic model (and of the leadership of the governing core). Internal victory must then be manifested in some sort of internationalism in which the vindicated state system is offered as a "light onto the world."⁴³

Were each of these states engaged in a solitary project of narrative building, one might wonder at the effort, but leave things to individual idiosyncrasy. The problem, however, is that these are not strategies for internal development. Rather, they appear to serve as means of capitalizing on the COVID-19 plague itself to advance national political agendas. That advancement has several objectives.

The first is to convince domestic masses that the COVID-19 plague is not a judgement of the heavens, an indictment of the contemporary political-economic system and of its leaders. That requires the construction of an internal narrative (1) to show either that the plague is not a divine sign (e.g., the Chinese efforts to blame the U.S. for the plague rather than "nature"), or (2) that it is not a judgment of legitimacy but rather a test of the power of the system itself in which victory against the plague would serve to cement the internal legitimacy of the political economic model (e.g., the efforts of President Trump to avoid the invocation of the Defense Production Act in favor of encouraging public private partners to overcome the plague).

The second, is to convince external audiences (the masses and their elites in liberal democracies, the ruling elites elsewhere) that there is an identity between the political-economic model of a leading state and success (as a function of the expenditure of resources and the loss of life) in vanquishing the COVID-19 plague. This has been a position taken both by the Chinese and the American leadership--but to very different ends. In each case, the character of the response was tightly aligned with the political-economic model. In both cases the resulting

⁴³ Matthew 5:14-16 King James Version (KJV) ("14 Ye are the light of the world. A city that is set on an hill cannot be hid").

responses served as proof of the strength and inherent legitimacy of the political-economic model. But it has an additional purpose, and one that serves as the foundation for much of the invective of this essay. The purpose is this: having turned national response into a vindication of an ideologically framed political-economic model, it becomes necessary to protect that narrative from critique or challenge. That, in turn produces two types of responses. The first is to frame national narrative against a narrative of the failures of rivals. The second is to frame the virus itself as a manifestation of the illegitimacy, of the sickness, that is the rival system.

And that is what is the most interesting fight over the question of controlling narrative. This is not merely a question of system validation. Rather, it is the use of the plague itself--of its character as a disease that kills--as the representation of the character of the system against which it is deployed. To control narrative, then, can be measured by the extent to which it is possible to convince people that COVID-19, as illness, as plague, as disruptive force, is little more than the incarnation of the true character of the United States, or of China. ,

Both the U.S. and Chinese governments have passed blame back and forth. U.S. officials, including Secretary of State Mike Pompeo and President Donald Trump himself, have upped their use of the terms "Chinese virus" and "Wuhan virus," framing the outbreak as a Chinese issue. Pompeo urged G-7 leaders to adopt the language, as well, according to a report from the German magazine *Der Spiegel*. They've also accused Beijing of withholding information. Similarly, Chinese officials have regularly criticized the U.S. handling of the virus and played up America's failures around the outbreak, in addition to expelling American journalists and perpetuating the Army conspiracy.⁴⁴

⁴⁴ Kimmy Yam, "House members introduce resolution to pin coronavirus blame on China," NBC News (25 March 2020) available [https://www.nbcnews.com/news/asian-america/house-members-introduce-resolution-pin-coronavirus-blame-china-n1169051?cid=sm_npd_nn_fb_ma]. See also J. Edward Moreno, "Pompeo Pressed G-7 Leaders to Refer to 'Wuhan Virus' in Statement: Report," *The Hill* (25 March 2020); available [<https://thehill.com/policy/international/489484-pompeo-pressed-g7-leaders-to-refer-to-wuhan-virus-in-statement-report>].

The European Union itself has sought to push back on narrative that disturbs its own.

In an unusual choice of language, the bloc's foreign policy chief Josep Borrell called on EU countries to stand ready for a "struggle for influence" in a "global battle of narratives". . . . "There is a global battle of narratives going on in which timing is a crucial factor," he said, noting that the focus had shifted from Europe helping China to the other way round. "China is aggressively pushing the message that, unlike the US, it is a responsible and reliable partner. "In the battle of narratives we have also seen attempts to discredit the EU as such and some instances where Europeans have been stigmatised as if all were carriers of the virus. "The point for Europe is this: we can be sure that perceptions will change again as the outbreak and our response to it evolves. But we must be aware there is a geopolitical component including a struggle for influence through spinning and the 'politics of generosity'," Borrell said.⁴⁵

In this context, it becomes clearer why it is that both superpowers have expended so many resources, and why their media apparatus (public and private, directly or indirectly) have been so eagerly complicit in expanding this battle (for example Secretary Pompeo's efforts at the G7 meeting on 26 March 2020 to align EU states against the Chinese and "their" "Wuhan Virus").⁴⁶ It also explains the intensity of responses to assertions by either side of this effort to conflate COVID-19 with the essence of the Chinese or the American way of life. That the entire exercise is unnecessary and a distraction is beyond question. That it evidences the problem of internal control of factions in times of crisis, leaving core leadership little space for de-escalation. And even the effort to contest efforts by each side to paint the other as the disease behind the epidemic itself underlines the fundamental ideological battle the contest

⁴⁵ , "EU fires warning shot at China in coronavirus battle of the narratives," *South China Morning Post* (24 March 2020) available [<https://www.scmp.com/news/china/diplomacy/article/3076728/eu-fires-warning-shot-china-coronavirus-battle-narratives>.]

⁴⁶ Shaun Tandon, "Pompeo attacks Chinese virus campaign at G7 as Europeans seek cooperation," *Yahoo News* (26 March 2020) available [<https://news.yahoo.com/pompeo-says-g7-agrees-china-spreading-virus-disinformation-164946927.html>].

represents. The little skirmish around a Danish satirical cartoon nicely frames the context and the quantum of distraction that these elite battles over “authorized” versions of discourse pose for COVID-19 measures.

“The paper previously caused a stir in 2005 when it published twelve cartoons depicting the central prophet of Islam, Mohammad. Editor-in-chief Jacob Nybroe said the point of the cartoon was not to make fun of China and added that the newspaper is not considering apologizing for something it does not believe is wrong. “As far as I can see, we are dealing with two different cultural views,” Nybroe wrote in the paper. . . He added he did not feel the cartoon violated Danish law. . . As of Thursday, the paper had maintained its position and not issued an apology. However, it did publish an opinion from Feng Tie, China’s ambassador to Denmark, arguing why he believed it was wrong and offensive to publish the cartoon.”⁴⁷

The Deutsche Welle article also noted that the irresistible impulse to respond in kind. “So far, the Chinese have responded by denigrating the Danish flag and circulating images online depicting it with swastikas, sanitary towels and as a coffin.”⁴⁸ The scuffle reminds people of the obvious: that liberal democratic and Marxist-Leninist systems are founded on different sensibilities, and different ways of looking at the world, that both have insisted on their missionary role in the world (Marxist and liberal democratic internationalism), and that both immorally see in every crisis an opportunity not merely to meet the crisis but to use it in furtherance of their missions to spread the gospel of their supremacy, legitimacy, and authority to impose their own sensibilities on both the willing and unwilling masses. One ought to have no quibble about these titanic contests over narrative—certainly these have gone on in contemporary forms since the consolidation of Western (Roman) and Asian (Han dynasty consolidation) around the

⁴⁷ “China angry over coronavirus cartoon in Danish newspaper,” Deutsche Welle available <https://www.dw.com/en/china-angry-over-coronavirus-cartoon-in-danish-newspaper/a-52196383> (internal cite to “Mohammed cartoons have lasting effect,” DW available [<https://www.dw.com/en/mohammed-cartoons-have-lasting-effect/a-15878492>]).

⁴⁸ “China angry over coronavirus cartoon in Danish newspaper,” *supra*.

time that Jesus of Nazareth walked the Earth. Yet their human costs in the shadow of pandemic ought to give pause as to the cost of these impulses in context.

Plague is not the only instance in which political societies seek to conflate disease or moral disorder with the political weakness of a rival.⁴⁹ And it is here that one hears the strains of the dueling banjos playing the music of the *dance macabre* which both states appear to be unable to resist. There is little to say about the global campaigns of both states to blame the other for the manufacture of the plague, or to the laxity or cultural failings that led to its spread. Both seek to play the basest--but usually most effective--tune to inflame mass opinion, conflating the plague with military objectives that seek to destabilize the other state. These are effective though pathetic in the most basic sense of that term (to cause suffering or calamity).

More interesting, however, is the popular expression of this dueling banjos tune when the door is opened by the state--the Chinese and American efforts of (private) elements to seek to assert legal claims against the government of the other for plague related damages. It is here that states indulge their love of *opera buffa* the principal requirements of which have always been clear diction and a facility with patter. That is evident from both Chinese⁵⁰ and US⁵¹ efforts. A publicity stunt?--of course; a sign (in the semiotic sense) of the popularization of the narrative at play in this contest among great powers?--certainly.

⁴⁹ For a discussion in the context of the conflation of sexual, religious, and moral behavior, and the alignment of corruption that follows from breach of each, see, Larry Catá Backer, "Emasculated Men, Effeminate Law in the United States, Zimbabwe and Malaysia," *Yale Journal of Law and Feminism* 17(1);1-63 (2005) available [https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1220&context=yjlf].

⁵⁰ 反击！中国律师对美总统发出律师函：必须向全国 14 亿人道歉 中创法律人 (25 March 2020), available [https://mp.weixin.qq.com/s/9DLXfeQr5mzEpxp20rJWOW].

⁵¹ Logan Alters et al. v. People's Republic of China, Case 1:20-cv-21108-UU (S.D.FI) (13 March 2020) available [https://images.law.com/contrib/content/uploads/documents/392/85094/Coronavirus-China-class-action.pdf]; discussed in Amanda Bronstad, "Class Action Filed Against China Over COVID-19 Outbreak," *Law.com* (13 March 2020) available [https://www.law.com/dailybusinessreview/2020/03/13/class-action-filed-against-china-over-covid-19-outbreak/].

In the end, however, one is left empty. The great battles--and the national resources devoted to them--over the characterization of the plague suggests one of the more unsavory elements of the COVID-19 crisis. That is the irresistible temptation for states to use the plague not just to further their own interests but also to reaffirm (or perhaps to reassure themselves) of the value and legitimacy of their political-economic model.

4. The Moral Testing of COVID-19.

Societies pride themselves on their morals. All societies have them; sometimes they just don't align either among societies or between the expression of morals and their practice. COVID-19 has tested social morals—or at least the extent to which societies are willing to make good on their abstract expression. In the process, it is worth considering whether morals and the moral order emerges from COVID-19 in an altered state.

A. COVID-19 and the Aged; Cruelty and Hard Choices in Times of Stress.

Care homes have seen appalling outbreaks leading to a collapse in staffing. In Europe, the military was called in to help at retirement homes and found elderly patients abandoned and, in some cases, dead in their beds. In two facilities alone there are reports of almost 90 deaths linked to the crisis.⁵² In New York, "Gov. Andrew Cuomo denied . . . that his state Health Department's controversial March 25 order saying nursing homes could not bar admission or readmission to a resident based on a positive COVID-19 test had anything to do with the over 6,500 deaths in those facilities related to the virus."⁵³

The issue of the relationship of the elderly and the COVID-19 pandemic is remarkable both for the focus of its coverage, and for the indifference of that coverage, with the fate

⁵² "Coronavirus: Europe's care homes struggle as deaths rise," *BBC News*; available [<https://www.bbc.com/news/world-europe-52147861>].

⁵³ Bernadette Hogan, "It Never Happened': Cuomo Denies Causing 6,500 Nursing Home Deaths," *The New York Post* (2 Oct. 2020); available [<https://nypost.com/2020/10/02/it-never-happened-gov-cuomo-denies-causing-nursing-home-deaths/>].

of the elderly in the shadow of pandemic. The character of that coverage, as well as the necessity of that indifference appears over and over: "The sister of one resident told local media that the home's managers had been pleading for tests to be carried out and it was only after someone died that they took notice" (Ibid.). That indifference is culturally driven. Indeed, it is the cultural inevitability that makes the coverage both horrifying and inevitable--and therefore likely to be displaced especially as society confronts epidemic in which death is infused in all of the calculus of societal responses. Re-cast in other terms (since it appears that all cultures share this view even as it is expressed through different practices)--indifference is grounded in an almost universal acceptance of the premise that the old must die, and that they be counted on to die sooner than those who are younger.

That sounds silly at first; yet it is a powerful ordering principle of society--and of medicine. Inherent in that premise is the powerful cultural signifier of "counting," of the ability to predict and thus order (and if necessary intervene to enhance) the underlying premise of an order to death grounded on age. But it is more than that, it is also attached to another cultural premise--that of the alignment between value (personal and societal) and age. If, as Pythagoras suggested, mankind is the measure of all things,⁵⁴ then the yardstick against which that measure is taken for each individual is notched with the anniversaries of birth.

Inherent then in the cultural calculus of the value of an individual is the reduction of that person to a fixed sum. It is the measure of that sum, then, that determines the extent to which a society might feel obligated to an individual (society calculates the "profit" to be made by such exchange in terms of the social costs versus the individual's value to society). This calculus is applied with a vengeance in crisis (e.g., "women and children first," etc.). That also sounds cruel. But societies that trade obligation for the value of the individual is common enough in the history of human organization.

⁵⁴ See Joshua Mark, "Protagoras of Abdera: Of All Things Man Is The Measure," *Ancient History Encyclopedia* (18 Jan 2012); available [<https://www.ancient.eu/article/61/protagoras-of-abdera-of-all-things-man-is-the-meas/>].

What enhances the cruelty are the means by which that assessment is implemented by a society in crisis. It is then that the true meanness of spirit of a society is revealed, and where cruelty is extended not merely to the act of valuation (and its consequences), but to the extent of the indifference to the pain (individual and collective, physical and mental) the implementation of these choices produce. The cruelty with which societies, especially when beset by pandemic, embeds that notion almost casually in law, in administrative practice, and in the way that social actors approach the way it "deals" with the elderly, more truly exposes the real meaning (and the valuation) of human dignity than all of the pieties with which its elites drive cultural narrative.

Let one consider post considers the cruelty inherent in submerged but operative principles of how human societies value human lives and what that produces in times of stress. More significantly, it suggests the way in which these measures, enhanced by law and regulation, produce a halo of cruelty that substantially undermines the way in which the principle of human dignity is itself undermined in fundamental ways. These very preliminary thoughts are wrapped around a recent Appeal issued by Rosa Kornfeld-Matte (Chile)⁵⁵ the first Independent Expert on the enjoyment of all human rights by older persons.

The treatment of the elderly has always been subsumed within the core principles that one of the ultimate consequences of age is death. As a consequence, the elderly are, as they age, increasing consumers of medical services with increasingly small returns (if, as societies tend to do, is such returns are measured by length and quality of life after treatment).⁵⁶ The

⁵⁵ "The Independent Expert on the enjoyment of all human rights by older persons," UN Human Rights; available [https://www.ohchr.org/EN/Issues/OlderPersons/IE/Pages/IEOlderPersons.aspx].

⁵⁶ R. Jaziri and S. Alnahadi, "Choosing which COVID-19 patient to save? The ethical triage and rationing dilemma," *Ethics, Medicine, and Public Health* 15 (2020); available [https://www.sciencedirect.com/science/article/pii/S2352552520301080]; Douglas B. White, Bernard Lo, "A Framework for Rationing Ventilators and Critical Care Beds During the COVID-19 Pandemic," *JAMA* 323(18):1773-1774 (27 March 2020); available [https://jamanetwork.com/journals/jama/article-abstract/2763953]. There is a rich literature that seeks to value the elderly, and one that, in

COVID-19 pandemic has merely exposed what had been an underlying set of principles in its most harsh application:.

Consider its exposure by the Italian College of Anesthesia, Analgesia, Resuscitation and Intensive Care (SIAARTI). Their Guidelines⁵⁷

The document begins by likening the moral choices Italian doctors may face to the forms of wartime triage that are required in the field of “catastrophe medicine.” Instead of providing intensive care to all patients who need it, the authors suggest, it may become necessary to follow “the most widely shared criteria regarding distributive justice and the appropriate allocation of limited health resources.” The principle they settle upon is utilitarian. “Informed by the principle of maximizing benefits for the largest number,” they suggest that “the allocation criteria need to guarantee that those patients with the highest chance of therapeutic success will retain access to intensive care.”

* * * ⁵⁸

The resulting hierarchy of care is not surprising. “L’età deve essere considerata nel contesto della valutazione globale della persona malata e non sulla base di cut-off predefiniti.”⁵⁹ Based

that exercise, also expresses the morality of aging and societal responsibilities toward those deemed to fall within that category. See, e.g., Thomas J. Kniesner, W. Kip Viscusi, and James P. Ziliak, “Life-Cycle Consumption and the Age-Adjusted Value of Life,” *The BE Journal of Economic Analysis & Policy* 5(1): (2006).

⁵⁷ “Decisioni per le cure intensive in caso di sproporzione tra necessità assistenziali e risorse disponibili in corso di pandemia di COVID-19,” SIAARTI (rev. 24 Nov. 2020); available [https://www.siaarti.it/news/353790].

⁵⁸ Yascha Mounck, “The Extraordinary Decisions Facing Italian Doctors,” *The Atlantic* (11 March 2020); available [https://www.theatlantic.com/ideas/archive/2020/03/who-gets-hospital-bed/607807/].

⁵⁹ “Decisioni per le cure intensive in caso di sproporzione tra necessità assistenziali e risorse disponibili in corso di pandemia di COVID-19,” SIAARTI (rev. 24 Nov. 2020); available [https://www.siaarti.it/news/353790], ¶4.2 il triage, p. 10. But note: “L’età non è di per sé un criterio sufficiente per stabilire quali pazienti possono maggiormente beneficiare delle cure intensive e pertanto non è possibile farvi ricorso in fase di triage stabilendo dei cut-off (soglie di età).” [Age is not in itself a sufficient criterion to establish which patients can benefit most from intensive care and therefore it is not possible to

on the idea that the more years one has the more valuable the life, treatment is based not on the possibility of recovery but on the value of life years.⁶⁰ Overall health is also to be taken into account. Yet for the elderly, that is also a proxy for the value diminishing characteristics of age.⁶¹

This is in part because early studies of the virus seem to suggest that patients with serious preexisting health conditions are significantly more likely to die. But it is also because patients in a worse state of overall health could require a greater share of scarce resources to survive: “What might be a relatively short treatment course in healthier people could be longer and more resource-consuming in the case of older or more fragile patients.”⁶²

Yet it is one thing to rank the elderly down a hierarchy of treatment in the face of scarce resources. It is quite another to act on that impulse in determining whether such decisions will be implemented in a humane manner. Reports from Europe indicate that this is not always the case, especially in the face of popular hysteria that tends to attend pandemic and its fear,

use it in the triage phase by establishing cut-offs (age thresholds).] *ibid.*, p. 11.

⁶⁰ Yascha Mounck, “The Extraordinary Decisions Facing Italian Doctors,” *The Atlantic* (11 March 2020); available [https://www.theatlantic.com/ideas/archive/2020/03/who-gets-hospital-bed/607807/].

⁶¹ “Nel caso delle cure intensive, si tratta di effettuare un’avalutazione comparativa delle condizioni globali dei pazienti non al fine di stabilire chi è più grave o ha maggiori necessità di cure, ma chi potrà con più probabilità (o con meno probabilità) superare l’attuale condizione critica con il supporto delle cure intensivestesse (sopravvivenza in terapia intensiva, con una ragionevole aspettativa di vita al di fuori di essa).” [In the case of intensive care, it is a question of making a comparative assessment of the overall conditions of patients not in order to establish who is more serious or greater need for care, but who is most likely (or least likely) to overcome the current critical condition with the support of intensive care themselves (ICU survival, with a reasonable life expectancy outside of it).] Decisioni per le cure intensive in caso di sproporzione tra necessità assistenziali e risorse disponibili in corso di pandemia di COVID-19,” SIAARTI (rev. 24 Nov. 2020); available [https://www.siaarti.it/news/353790], ¶4.2 il triage, p. 11 (commentary).

⁶² Yascha Mounck, “The Extraordinary Decisions Facing Italian Doctors,” *The Atlantic* (11 March 2020); available [https://www.theatlantic.com/ideas/archive/2020/03/who-gets-hospital-bed/607807/].

generally, of infection and either agony or death. In Spain, elder care facilities were abandoned, and those left behind were abandoned to their fate.⁶³ “Over 18,562 residents of care homes in England died with COVID-19 in a little more than three months and many of these deaths could be due to the U.K. government’s pandemic policies, which violated the human rights of vulnerable older people, says a report by Amnesty International.”⁶⁴ Though the Amnesty Report was clothed in the language of human rights, its moral element was plainly visible:

The UK government was clearly aware that the 400,000 residents of care homes in the UK, many of whom live with multiple health conditions, physical dependency, dementia and frailty, were at exceptional risk to coronavirus.⁹ Yet at the height of the pandemic, despite this knowledge, it failed to take measures to promptly and adequately protect care homes. Contrary to the claim by the secretary of state for Health and Social Care that a “protective ring” was put around care homes “right from the start,” a number of decisions and policies adopted by authorities at the national and local level in England increased care home residents’ risk of exposure to the virus—violating their rights to life, to health, and to non-discrimination.⁶⁵

In Italy and France those stricken in nursing homes may neither be tested nor identified, in part to reduce the official tally of the dead and the infected.⁶⁶ In many places nursing

⁶³ Lucía Benavides, “Spanish Military Finds Dead Bodies And Seniors ‘Completely Abandoned’ In Care Homes,” NR (24 March 2020); available [https://www.npr.org/sections/coronavirus-live-updates/2020/03/24/820711855/spanish-military-finds-dead-bodies-and-seniors-completely-abandoned-in-care-home].

⁶⁴ Anugrah Kumar, “Amnesty: UK gov’t violated human rights of care home residents during COVID-19,” The Christian Post; available [https://www.christianpost.com/news/amnesty-uk-govt-violated-human-rights-care-home-covid-19.html].

⁶⁵ *As If Expendable the UK Government’s Failure To Protect Older People in Care Homes During the Covid-19 Pandemic*, Amnesty International EUR 45/3152/2020; available [https://www.amnesty.org.uk/files/2020-10/Care%20Homes%20Report.pdf], P. 6.

⁶⁶ “570 people have died in nursing homes in France’s eastern region since the coronavirus outbreak,” *Daily Mail* (2 April 2020); available [https://www.dailymail.co.uk/news/article-8180169/570-people-died-nursing-homes-France-eastern-region-coronavirus-outbreak.html].

homes are strictly quarantined, making visits of (and oversight by) relatives nearly impossible.⁶⁷

But more importantly, what is emerging is a clear propensity for cruelty in the shadow of pandemic--but a cruelty made meaner by its veiling in the cold and utilitarian language of the administrator, of process, and of the *reductionism* at the heart of the turn toward the dehumanization of the elderly by reducing them to little more than an aggregate of measures against which their value to society is assessed. What had become a "natural" tendency of societies obsessed with the measurable in times of plenty is now exposed for its darker consequences in times of crisis.

That it is facilitated through the legitimating structures of law, of administrative regulation, and of a soulless utilitarianism the core premises of which (and the means by which it derives its measures) has never really be an object of societal, political or economic discussion, adds the most distressing level of cruelty to the entire enterprise. It may well be that a society must jettison its elderly in situations of stress. But to keep that principle hidden until it is time for some to take it on themselves to trigger that choice (and who chose them to make that decision under what circumstances?) appears to undermine the very fundamental character of the political-economic model in defense of which those same elderly gave much of their lives to sustain. Here, again, one encounters another set of fundamental issues exposed by COVID-19, whose resolution will await calmer time, but whose resolution is nonetheless necessary to protect the integrity of the political-economic model.

There is a small step from alleviation of pain to euthanasia. And euthanasia is as well based on a valuation of life, in part based on the years of "useful life" left in the patient. This reductionist valuation is so common as to be

⁶⁷ Emilio Parodi, "Uncounted among coronavirus victims, deaths sweep through Italy's nursing homes," Reuters (18 March 2020); available [<https://www.reuters.com/article/us-health-coronavirus-italy-homes-insigh/uncounted-among-coronavirus-victims-deaths-sweep-through-italys-nursing-homes-idUSKBN2152V0>] ["Immediately after the virus emerged in northern Italy on Feb. 21, care homes cut off access to visitors to limit the contagion risk to elderly patients most vulnerable to the disease"..]

unremarkable, but it represents an important societal consensus on the way in which life is valued.

In Spain, a former member of Catalonia's parliament claimed some elderly patients and those with pre-existing conditions are being given morphine to avoid the 'futility of health care'. Alfonzo Lopez Tena wrote in a tweet: 'Catalonia's govt decides to let die coronavirus patients who have "less years to live", [and recommends] no "admissions in hospital of patients with little benefit". * * * Yahoo news reported that according to regional newspaper LaVanguardia, the document cited by Mr Tena also recommends that medics do not use ventilators for patients older than 80."⁶⁸

At its limits, the cumulative effects do not merely illustrate the application of cultural presumptions in the ordering of society, and its harsher expressions when societies are in crisis. They might well point to a contradiction between the practice of these cultural presumptions about the alignment of age and death, with the fundamental concepts of human dignity and the value of life irrespective of life's inevitable march toward death (a march usually marked by age). And that brings one back to the Statement of the Independent Expert on the enjoyment of all human rights by older persons sought to bring a human rights perspective to these issues. That statement was then amplified by one distributed 1 October 2020.⁶⁹

Tragically, the COVID-19 pandemic is shining a spotlight on older persons. It has a disproportionate impact on older persons and has magnified existing violations of their rights. Existing inequalities that older persons face in terms of access to health, employment and livelihood are exacerbated. This involuntary focus

⁶⁸ Harry Howard, "Doctors facing 'temptation of euthanasia': French medic warns of terrible decision facing staff in coronavirus hit care homes while Spanish doctors are 'ordered to stop using ventilators for patients older than 80,'" *Daily Mail* (5 April 2020); available [<https://www.dailymail.co.uk/news/article-8189385/Doctors-France-treating-coronavirus-patients-faced-temptation-euthanasia.html>].

⁶⁹ The Independent Expert on the enjoyment of all human rights by older persons, "Older persons remain chronically invisible despite pandemic spotlight, says UN expert," UN Human Rights Mandate, available [<https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=26319&LangID=E>].

on older persons should not conceal the fact that they are chronically invisible. In most countries, information about the lived realities of older persons is at best fragmented, at worst, non-existent, and many countries lack adequate legislation at the national level to protect the rights of the older persons and to prevent ageism, discrimination, exclusion, marginalization, violence and abuse.⁷⁰

Both the Independent Expert and Amnesty has sought to frame the issue of the elderly in the common language of human rights. Yet at its core it remains a moral issue. COVID-19 suggests not just the morality gap in medicine, but also the connection between the governance framework of human rights and core moral norms—no transformed to suit the times.

B. Women's Autonomy

The issue of morality in the shadow of COVID-19 has not been confined to that of the elderly and the morality of resource allocation. This even as people necessarily focus on the urgent issues of preventing infection, treating the sick, and finding a cure, while protecting the social order and economic well-being of society. And yet it would be a mistake to detach issues of morality from the way that society confronts the challenge of COVID-19. More importantly, there is a necessary moral element when, in the shadow of the COVID-19, political and other actors seek to advance objectives that are not directly related to the fight against COVID-19.

But the issue of COVID-19 morality also shows a more cynical side. This cynical turn focuses on the way that morality, and moral thinking, becomes a key element of the accountability of our institutional and political leaders. The illustrative case centers on abortion regulation in the shadow of COVID-19.

Politics consumes morality like any other factor in the production of power. Once consumed, what started out as an autonomous morality, expressed as its great principles for the guidance of a consenting community, is excreted by the body politic as a means to an ends, one achieved through the manipulation of the structures of power ostensibly designed to

⁷⁰ Ibid.

constrain the amoral exercise of politics, but that, in some cases serves as its catalyst. Political actors are not moral actors as political actors, though they may believe themselves moral actors within their moral communities.

Political actors are better understood as prisoners of the logic of the institutions into which they have (freely) inserted themselves. Those institutions have no morals. And whatever morals are supposedly embedded therein are turned to the service of the institution. It is in that engagement that such morality loses its character as morality and instead becomes an instrument for the cultivation of the power of the institution, and its reflection in the power of those political actors who can manage (and appear to control) the institutional *Weltanschauung*. That is, once consumed within political institution, morality loses its force as morality and becomes instead merely a specific expression of political power which can then be projected outward onto those who must be bound by its expression.

These were the thoughts that might intrude as one reads reports of the way that "Gov Greg Abbott has announced a move to ban most abortions in the state during the [coronavirus](#) outbreak, declaring they don't qualify as essential surgeries."⁷¹ The reporting explained:

Attorney General Ken Paxton said Monday that the order issued over the weekend by Abbott barred 'any type of abortion that is not medically necessary to preserve the life or health of the mother.' Failure to comply with the order can result in penalties of up to \$1,000 or 180 days of jail time, Paxton said. 'No one is exempt from the governor's executive order on medically unnecessary surgeries and procedures, including abortion providers,' Paxton said. 'Those who violate the governor's order will be met with the full force of the law.'

The issue also has also flared in Ohio, where abortion clinics received letters Friday from Republican

⁷¹ Valerie Edwards, "Texas governor bans most abortions during coronavirus outbreak because they 'don't qualify as essential surgeries' - as Ohio considers following suit," *Daily Mail* 24 March 2020. Available [<https://www.dailymail.co.uk/news/article-8147325/Texas-moves-ban-abortion-coronavirus-outbreak.html>].

Attorney General Dave Yost ordering them to cease all 'non-essential' surgical abortions. Yost wrote that the procedures violate a March 17 order issued by the state health director. However, representatives of Ohio clinics said that they were in compliance with the health director's order and planned to continue providing abortions.⁷²

The weaponization of COVID-19 can also advance pro-abortion agendas, especially through the use of conditionality in aid. Nigerian advocate and filmmaker, Obianuju Ekeocha., was quoted as charging that as "a result of the pandemic, "donor nations" from the West are tying COVID-19 relief packages to support for abortion and other kinds of sexual radicalism"⁷³ These actions should be troubling for moral actors whether one embraces the position that abortion is a moral wrong, or conversely embraces the position that centers itself on the dignity of women in her relationship to conception as a moral imperative.

None of this is remarkable as politics; but it is worth considering as morals, or more specifically as the expression of morals through moral acts. These moral acts might be assessed by a simple measures—the fidelity of action to norm. And it is in that colliculus that the actions of these officials, falls short. Indeed, the morality of a politics of COVID-19, aligned with a politics of abortion (whether or not grounded in moral positions) might, as in this case, expose the temptations of immorality in crisis. The actions of the administrative and political officials of Texas and Ohio exposes the way that the morality of COVID19 responses also serves as a temptation to immorality, where temptation is understood a religious (and especially Biblical) sense.

One need not speak here to the morality of abortion, or even to its politics. Instead, the actions of these officials speak

⁷² Ibid. See also Abigail Abrams, "Abortion Clinics Are Rapidly Closing. Many Won't Come Back," *Time* (2 December 2020); available [<https://time.com/5916746/abortion-clinics-covid-19/>].

⁷³ Brandon Showalter, "COVID-19 relief is being weaponized to push abortion in Africa, documentary film claims," *The Christian Post* (10 December 2020); available [<https://www.christianpost.com/news/covid-19-relief-is-being-weaponized-to-push-abortion-in-africa-film-claims.html>].

instead to the avoidance of both. If one can assume that the Governor's action is an immoral act to serve his version of a moral purpose, does that absolve the immorality of the path taken? One might think not. The act is immoral *as politics* if only because rejects fidelity to the core ideology of political action. It is an immoral *morality* because it compromises morality while appearing to advance it. A moralist cannot help but feel dirty (in the moral sense) in the face of this action—the act of turning a moral good toward an immoral tool to advance a (contested) moral purpose. The “feeling dirty” arises from the deception at the heart of the actions; and calls to mind the maxim of equity, that one who comes into equity must come with clean hands. The officials may praise themselves for their politics, yet that amounts to little more than a celebration of weakness, of the weakness that comes from succumbing to temptation—to the very rejection of the morals ostensibly advanced.⁷⁴

It is that dirtiness, indeed, that diminishes the moral objective for which it was used. A moral actor opposed to abortion would find little solace in an administrative measure that continued to preserve abortion in a number of cases which that moralist would consider immoral. At the same time a moral actor who understands a woman's relationship to her body and conception as the central moral issue would find even less solace in an act designed to attack or challenge that moral position, but only sideways through the attrition of technicalities. That is by an act that appears to advance the normative morality of those who hold life sacred on the basis of a premise that centers the health of the woman in its moral calculus. From both perspectives the consequential immorality of the political consumption of morality becomes clear. Its Satanic character (even understood as metaphor for a principle of inversion) becomes clearer as well—revealing in the political act the exercise of power without morals. What one has, in the end, is an expression of immorality expressed as the exercise of administrative discretion under cover of crisis. One ought to fear for their souls—even if the soul can be reduced to little more than the societally originating premise of fidelity to the organizational and moral norms of the community.

COVID-19, then, like Satan in the Book of Job, becomes the agency through which societal (and in this case political)

⁷⁴ Job 1:8-12 (KJV).

actors are tempted under circumstances of stress, to reject the moral order that supports their political authority. To so reject is to reduce morality to a consumable and to acknowledge the amorality of politics—reduced to a vessel filled without reference to a moral (or in secular terms, a coherent principled) order. One does not deal here though, with a binary—black and white, moral or immoral. Instead one deals with the interaction of morality and expediency (the immoral as the means that ought to taint even as it advances).

The cover of COVID-19 to advance a moral position on abortion is merely one of an almost endless variation of the same challenge that is posed for political actors across the full range of the moral basis for the organization and political society. Yet it is instructive because the moral issues are fairly clear. The immorality of COVID-19 politics becomes murkier when, in the face of the pandemic, political, religious, societal, and economic leaders (those who exercise political authority over these sectors of societal organization) begin to use the cover of COVID-19 to reshape the core premises around which society is organized. Though there is nothing immoral about such reshaping, it is the deception, the use of the cover of COVID-19 as a means of hiding what is being done, that gives the politics of COVID-19 its fundamentally immoral character.

5. COVID-19 and the Acceleration of Data Driven Governance.

It should come as no surprise that the COVID-19 pandemic would generate responses by states, entities and other actors with governance (and self-governance) authority. Such responses, in turn, provide a window about the state of the mechanics of governance among these communities. More specifically, it also provides a window on the evolving alignments between the command functions of law and the implementation functions of data driven governance.

COVID-19 has produced substantial challenges to states and other entities with responsibility for the well-being of people. Much of the news about the way that states and other entities have been undertaking that responsibility has focused on medical measures to detect, control and eventually cure or prevent the disease. But states and other entities have also devoted substantial attention to the economic, societal, political,

and cultural consequences of the disease. Especially difficult has been consideration of the measures that might be taken to meet the medical challenges posed by the disease without violating institutional or cultural taboos. Most of these measures revolve around the core strategy, implemented in infinite contextually specific variations--containment.

Containment, however, is a strategy that does not lend itself well to law. *Except for constructing and devolving powers to contain* (person, idea, speech, bodies, processes, and the like), *the space within which containment is to be situated* (self-containment at home, hospitals, cruise ships, jail, student dorms, or the like), *and the conditions under which the power to determine and enforcement containment within designated spaces* (or with respect to speech, suppressed) *may be exercised*, containment is by its nature an administrative act. But it is more than that, containment strategies, including, choices about the holding of mass attendance events (like factory work, classroom instruction, cultural or sports events) do not lend themselves to the sort of discretionary decision making that is the hallmark of administrative practice by individuals.

That insight suggests that a containment based approach to COVID-19 would have to be data driven to be successful. But more than that, it would have to be a data consumptive enterprise, the purpose of which would be to feed an analytics that would help development algorithms for judging (1) disease risks of individuals and (2) likely consequences of such individual ratings given a variety of contexts in which that would be discovered.

A recent study considered the data based comprehensive approach undertaken by authorities in Taiwan.⁷⁵ This point considers that research study in the context of data driven governance within a rule of law state.

The Wang-Ng-Brook study explained that Taiwan

⁷⁵ C. Jason Wang, MD, PhD; Chun Y. Ng, MBA, MPH; Robert H. Brook, "Response to COVID-19 in Taiwan: Big Data Analytics, New Technology, and Proactive Testing," *JAMA* (online March 3, 2020); available [https://jamanetwork.com/journals/jama/fullarticle/2762689?guestAccessKey=2a3c6994-9e10-4a0b-9f32-cc2fb55b61a5&utm_source=For_The_Media&utm_medium=referral&utm_campaign=ftm_links&utm_content=tf1&utm_term=030320].

quickly mobilized its government with the object of identification, containment and efficient resource allocation through centralized management.

Taiwan leveraged its national health insurance database and integrated it with its immigration and customs database to begin the creation of big data for analytics; it generated real-time alerts during a clinical visit based on travel history and clinical symptoms to aid case identification. It also used new technology, including QR code scanning and online reporting of travel history and health symptoms to classify travelers' infectious risks based on flight origin and travel history in the past 14 days. Persons with low risk (no travel to level 3 alert areas) were sent a health declaration border pass via SMS (short message service) messaging to their phones for faster immigration clearance; those with higher risk (recent travel to level 3 alert areas) were quarantined at home and tracked through their mobile phone to ensure that they remained at home during the incubation period.⁷⁶

Taiwan also instituted proactive measures, "seeking out patients with severe respiratory symptoms (based on information from the National Health Insurance [NHI] database) who had tested negative for influenza and retested them for COVID-19."⁷⁷ Citizen reporting hotlines were created and people were encouraged to serve as the eyes and ears of the health establishment. Lastly the state "addressed the issue of disease stigma and compassion for those affected by providing food, frequent health checks, and encouragement for those under quarantine."⁷⁸

Mainland Chinese efforts at data enhanced or driven COVID-19 containment measures were more closely tied to

⁷⁶ *Ibid.*

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*, This rapid response included hundreds of action items (eTable in the Supplement). Challenges were noted as well. First the decision to communicate mostly in Mandarin and sign language. Second, the focus on air travel left notable gaps, especially for example with docking cruise ships. There was concern as well about the stamina of these programs—that is the strength of will of the state (and public patience with these measures) through the end of what might be a long pandemic season. *Ibid.*

Mainland Social Credit practices.⁷⁹ Chinese authorities have been working to align their regulatory approaches to the management of responses to the pandemic with their social credit system. It was widely reported in Spring 2020⁸⁰ reported that the social credit system for individuals has been modified to include a "health color code" with the code tied to obligations to quarantine. A Yellow rating requires a seven day quarantine; a red contagion risk requires stronger measures. Both yellow and red contagion rankings also produce collateral consequences--restricted access to malls, public transport or restaurants (which may be completely restricted). In some cases yellow or red contagion ratings affect the right to return to work and in some cases to return to one's home. The system is an add on to the Alipay system tied to the Alibaba e-commerce site and widely used.⁸¹

In the form of the Alipay Health Code it effectively supplemented the current social scoring system with health data. It is also coordinated with WeChat and Alipay tracking of pharmacy purchases to track illness. "Ant and the Chinese government did not provide details on how the app works, though it reportedly also shares information tied to the health code and transactions with law enforcement,"⁸² Lastly the system was tied to voluntary and mandatory reporting; individuals were asked to self-report health or to report the health of others, companies were required to keep track of employee health. These were in many places merged into health code platforms which ultimately fed into the three color system.⁸³

⁷⁹ On Chinese social credit, see, e.g., Larry Catá Backer, "Next Generation Law: Data-Driven Governance and Accountability-Based Regulatory Systems in the West, and Social Credit Regimes in China," *Southern California Interdisciplinary Law Journal* 28:123-172 (2018).

⁸⁰ See, e.g., "China Adds COVID-19 Contagion Risk Ratings to Individual Profiles in National Surveillance System," *CPO Magazine*; available [<https://www.cpomagazine.com/data-privacy/china-adds-covid-19-contagion-risk-ratings-to-individual-profiles-in-national-surveillance-system/amp/>].

⁸¹ *Ibid.*

⁸² See, John Adams, "Morning Brief 3.4.20: Alipay's coronavirus 'health code' feeds payment data to police," *Payments Source* (4 March 2020); available [<https://www.paymentsource.com/news/alipays-coronavirus-health-code-feeds-payment-data-to-police>].

⁸³ Nicole Jao, "Alipay Developed China's National Health Code Rating System," *Technode* (17 Feb. 2020); available

The analytics of the system have not been entirely revealed but include weighted factors based on places visited and contact with people already known to be infected. Lack of transparency, of course, is one of the great issues of data driven governance in this, its formative stage. The addition to the social credit system also has been criticized on the usual grounds (not that these usual grounds are unimportant or worth ignoring; indeed, they go to the integrity of the system and thus cannot be ignored even within the ruling ideology of those crafting the system). These include the robustness (including accuracy) of data, the coherence of the analytics, and the actual usefulness of the algorithms (in its role of imposing rewards and punishments) in relation to state policy.

The contagion color coding system further cements the relationship between the private Alipay enterprise and the state. The Alipay Health Code program⁸⁴ is administered through Alipay, which effectively enrolls a substantial majority of the population which are almost universally used for economic transactions in China. The connection between the DAMO⁸⁵ in Hangzhou and high level elements of the CPC ought not to be ignored in this construction. As important, the refinement of data driven ratings for managing individual conformity to regulation will provide the platform through which it will be possible to expand the program to entities as well. For Westerners, the *New York Times*⁸⁶ provides the usual (and for that reason useful) analysis from the perspective of the influence driving cliques it represents ("But a New York Times analysis of the software's code found that the system does more than decide in real time whether someone poses a contagion

[<https://technode.com/2020/02/17/alipay-developed-chinas-national-health-code-rating-system/>].

⁸⁴ 支付宝健康码 7 天落地超 100 城 数字化防疫跑出“中国速度”2020-02-19 16:17:46 来源：新华网 available [http://www.xinhuanet.com/tech/2020-02/19/c_1125596647.htm].

⁸⁵ Alibaba DAMO Academy; About (March 220), available [<https://damo.alibaba.com/>].

⁸⁶ Paul Mozur, Raymond Zhong and Aaron Krolik, "In Coronavirus Fight, China Gives Citizens a Color Code, With Red Flags," *New York Times* (1 March 2020); available [<https://www.nytimes.com/2020/03/01/business/china-coronavirus-surveillance.html>].

risk. It also appears to share information with the police, setting a template for new forms of automated social control that could persist long after the epidemic subsides." Ibid., *passim* in this section from Ibid).

Israel provides a glimpse at approaches more aligned to the ideologies and methods of liberal democratic states. Israel passed legislation that opens the possibility of tracking people known to be infected with COVID-19.⁸⁷ In a statement posted to Facebook,⁸⁸ prime minister Benjamin Netanyahu wrote:

"We will dramatically increase the ability to locate and quarantine those who have been infected. Today, we started using digital technology to locate people who have been in contact with those stricken by the Corona. We will inform these people that they must go into quarantine for 14 days. These are expected to be large – even very large – numbers and we will announce this in the coming days. Going into quarantine will not be a recommendation but a requirement and we will enforce it without compromise. This is a critical step in slowing the spread of the epidemic."⁸⁹

The law is particularly interesting for the way that, like the measures in Taiwan, it aligns and makes coherent multiple measures for maximizing attainment of (measurable) goals. In this case the coordination is with COVID-19 testing.⁹⁰ The consequential coordination with surveillance manages population movements. More importantly, when expanded to cover surveillance of movements of the entire population it may provide basis for warning those not exposed to COVID-19 to the proximity of COVID-19 positive individuals. Thus, it was reported that:

⁸⁷ Natasha Lomas, "Israel passes emergency law to use mobile data for COVID-19 contact tracing," *Extra Crunch* (18 March 2020) available [<https://techcrunch.com/2020/03/18/israel-passes-emergency-law-to-use-mobile-data-for-covid-19-contact-tracing/>].

⁸⁸ The Prime Minister of Israel (17 March 2020); available [<https://www.facebook.com/IsraeliPM/posts/3345468375467884>].

⁸⁹ Ibid., see also Lomas, "Israel passes emergency law," *supra* note 6.

⁹⁰ Sam Dorman, "Israel's Netanyahu seeks 'mass blood tests' to weed out COVID-19, restart economy: report," Fox News (22 March 2020) available [<https://www.foxnews.com/world/israel-netanyahu-mass-blood-tests-coronavirus>].

"On orders of Prime Minister Benjamin Netanyahu, the Shin Bet domestic spy agency is running this new surveillance program tracking telephone data. When someone has tested positive for the coronavirus, the Israeli spy agency traces where that person's cellphone went over the past two weeks, the incubation period for COVID-19. And if your cellphone was nearby, you get a text message. Sharon Perri is a cellular tracing expert".⁹¹

Of course, all of this will have significant potential application for all sorts of other uses--especially important in places like Israel.⁹² "The other state bodies don't have the necessary technological means to aid this effort," Argaman said in a statement. "I am well aware of the sensitivity of this matter and therefore have instructed that only a very limited number of agents will be handling this and the information will not be saved in the Shin Bet database.").

The alignment of state security and health ministries, connected through technology and melded through the utility of coordinated data warehouses, presents both efficiencies in meeting short term objectives (mitigating adverse health effects of COVID-19) and challenges (managing the effects of this new regulatory tool in light of the foundational premises of political organization). But not just Israel. "Civil liberties campaigners have warned the move to monitor citizens' movements sets a dangerous precedent."⁹³ This is part of a larger conversation, and a larger critique, one that eventually will require resolution.⁹⁴ It is not clear in what direction, and with what consequences, that resolution will produce. At a minimum it is likely to challenge the core premises around the foundational

⁹¹ Daniel Estrin, "Israeli Government Criticized For How It Monitors COVID-19 Cases)," *NPR* (19 March 2020) available [<https://www.npr.org/2020/03/19/818192570/israeli-government-criticized-for-how-it-monitors-covid-19-cases>].

⁹² Aron Heller, "Spying on the virus: Israel secret service to track patients," *Egypt Independent* (17 March 2020) available [<https://egyptindependent.com/spying-on-the-virus-israel-secret-service-to-track-patients/>].

⁹³ Lomas, "Israel passes emergency law," *supra* note 6.

⁹⁴ Catalin Cimpanu, "US, Israel, South Korea, and China look at intrusive surveillance solutions for tracking COVID-19," *ZDNet* (20 March 2020) available [<https://www.zdnet.com/article/us-israel-south-korea-and-china-look-at-intrusive-surveillance-solutions-for-tracking-covid-19/>].

principle of human dignity on which liberal democratic states are organized, at least since 1945.

South Korea also presents a response based on the aggregation of multiple projects of data harvesting when coordinated with consequence based directives. These are meant to produce synergies between data based governance and the super structure of administrative regulation and law. Data driven measures, then, are not just treated as an implementation technique but as the vehicle through which administrative-legal rules are actually operationalized and through that operationalization actually defined. The differences, however, between Korea and for example, Mainland China, may reflect those of the political economic model and the constraints of its rights based constitutional order.

In its initial stages, the Korean approach combined an aggressive testing program (critical data harvesting) with analytics based alignments with other national data bases. "If these patients can't be found, testing capacity doesn't mean much. This is where smart city infrastructure comes in. The aim is to work out where known patients have been and test anyone who might have come into contact with them."⁹⁵ Tracking was implemented in three ways. The first was through the use of debit and credit cards—producing both a map of movements and making possible the application of analytics to purchases. The second was through the use of mobile phones as tracking devices for movements which could be recorded, aggregated and then analyzed for aggregate trends even as it was possible to reach down to individual users when necessary. Third, the country's system of CCTV cameras could be used to track and to provide facial recognition capabilities.⁹⁶ South Korea added an element of transparency as well. "The result of the tracking is not only used by health authorities⁹⁷ but also made public via

⁹⁵ Jung Won Sonn , "Coronavirus: South Korea's success in controlling disease is due to its acceptance of surveillance," *The Conversation* (19 March 2020) available [https://theconversation.com/coronavirus-south-koreas-success-in-controlling-disease-is-due-to-its-acceptance-of-surveillance-134068].

⁹⁶ Jung Won Sonn , "Coronavirus: South Korea's success in controlling disease is due to its acceptance of surveillance," *The Conversation* (19 March 2020).

⁹⁷ "세계가 놀란 확진자 동선 추적 '통신과 금융 인프라' 덕분" Chosun Website; available [http://it.chosun.com/m/svc/article.html?contid=2020031400735&ut

national and local government websites, free smartphone apps that show the locations of infections, and text message updates about new local cases. This help citizens avoid hotspots of infections."⁹⁸

China , Korea, and Israel are useful case studies, principally because they are quite proactive in moving development forward, but also because they are both emblematic of two quite distinct frameworks for organizing political society. They are also both influential--an influence that can actually be measured by the intensity of the criticism of their actions. Other states, however, have not been idle. In Spain, for example, the police have begun to use drones to enforce the stay at home rules. "The police in Madrid are now deploying their own spies in the skies, filming streets and parks, using its onboard speaker to order people home. "We will not hesitate to use all the means at our disposal to ensure your security and that of everyone," Madrid's Police Force explained on Twitter. "Although some still make it difficult for us."⁹⁹ Indeed, drones became an essential part of surveillance and policing efforts as states sought to better manage their populations to meet the challenges of pandemic. As one supplier of drones expressed the sentiment at the time: "Drone technology has emerged as a key tool to support those who operate at the frontlines as more and more Public Safety entities engage in finding out how it can aid in their missions."¹⁰⁰

Through early April 2020, they have been used mostly to augment the physical presence of police and to warn people away from discouraged activity. Neither the technology nor its use is new; but the exceptional circumstances have pushed the

m_source=undefined&utm_medium=unknown&utm_campaign=itchosun].

⁹⁸ Jung Won Sonn , "Coronavirus: South Korea's success in controlling disease is due to its acceptance of surveillance," *The Conversation* (19 March 2020).

⁹⁹ Zak Doffman, "Coronavirus Spy Drones Hit Europe: This Is How They're Now Used," *Forbes* (16 March 2020) available [<https://www.forbes.com/sites/zakdoffman/2020/03/16/coronavirus-spy-drones-hit-europe-police-surveillance-enforces-new-covid-19-lockdowns/#636086c87471>].

¹⁰⁰ Erick Razon, "Drones are an Essential Tool to Fight COVID-19 in Europe,: A Recap of Leading Use Cases and DJI Support Application Form" DJI Enterprise Blog (30 March 2020); available [<https://enterprise-insights.dji.com/blog/dji-drones-essential-tool-fight-covid19-europe-support-program>].

boundaries of the ubiquity of surveillance and of its use as an instrument of severe social control. It is undertaken for all the best reasons now. But a tool has neither morality nor ideological constraints. Thus, what is new is its deployment in this way in Europe, where sensitivities toward these sorts of activities may be much higher than elsewhere. The technology, of course, will become more potent when (and if) it is combined with national measures for aligning facial recognition to drone based data of activity that violates administrative rules about staying in place.

Implications. The use of data driven measures produces broader implications that are likely to be ignored in the heat of immediate response to the health crisis of the pandemic. Yet, the rush to deploy data driven tools, and to use it in a way that suggests the ease with which it is possible to control a population—to effectively quarantine it and to shut down large sectors of an economy, ought to give pause. Greater pause, perhaps, to the way that these measures had the effect of law but were effectively “law-less”—that is they operated as new forms of rulemaking sourced in the exercise of administrative discretion made “law-full” through open ended mandates approved by judiciaries as consistent with the political-legal order at least in the rush to save lives.¹⁰¹ Here is a metamorphosis in slow motion. And it is a transformation that reveals the inner core of a character of a system long buried under the comforting velvet of layers of principles.¹⁰² In this light,

¹⁰¹ See, e.g., Betsy Z. Russell, “Why stay-home orders during pandemics are legal, constitutional: “Time after time, courts have upheld a state’s authority to enact and enforce a quarantine law, and that dates back at least to 1902.”,” KTVB (27 April 2020); available [<https://www.ktvb.com/article/news/health/coronavirus/stay-home-order-legal-constitutional/277-5e963fd3-35a1-4cd4-a923-1b782406a7c0>], Samuel Dodge, “Michigan’s public health orders are legal under state code, but there will be constitutional challenges,” MLive (19 Nov. 2020); available [<https://www.mlive.com/public-interest/2020/11/michigans-public-health-orders-are-legal-under-state-code-but-there-will-be-constitutional-challenges.html>].

¹⁰² This metamorphosis is well exposed by the odd marginal judicial opinion that goes against the grain: see Matt Petrillo, “Federal Judge Rules Pennsylvania Gov. Tom Wolf’s COVID-19 Shutdown Orders Unconstitutional,” CBS Philly (15 September 2020); available [<https://philadelphia.cbslocal.com/2020/09/15/federal-judge-rules-pennsylvania-gov-tom-wolfs-covid-19-shutdown-order-unconstitutional/>] (“In a 60-plus page opinion, the judge wrote: “There

a set of initial implications of these transformations begins to emerge:

First, it suggests that in the context of the places considered, it is possible to implement a data driven system for the coherent and comprehensive approach by public authorities to meet the threat of disease. Yet that possibility can only be realized where there is a tight discipline on governmental and critical private actors—something that has been lacking in the U.S., for example.¹⁰³

Second, at the same time it is clear that a government's success was due in large part that the system was already in an advanced stage of creation (to fight SARS for example or to control terrorism) at the time COVID-9 exploded on the scene. Moreover the effectiveness of the system will be enhanced by substantial normative coherence, something that was lacking in the United States,¹⁰⁴ and controversies around which shaped the Israeli government's response as well.¹⁰⁵

Third, the response required a substantial effort not just to the conceptualization and construction of data harvesting systems, ad a relevant data set, but also of an analytics from data capable of providing useful conclusion and suggestions. That ca

is no question that this country has faced, and will face, emergencies of every sort. But the solution to a national crisis can never be permitted to supersede the commitment to individual liberty that stands as the foundation of the American experiment.”); “Churches Win Federal Court Decision Against Two Of State’s COVID-19 Mandates,” CBS Denver (21 Oct. 2020); available [https://www.msn.com/en-us/news/crime/churches-win-federal-court-decision-against-two-of-states-covid-19-mandates/ar-BB1aepGw].

¹⁰³ See, e.g., Rich Calder, “New York City Police, Sheriff Won’t Enforce Thanksgiving Covid-19 Limits: Cuomo held holiday gatherings to 10 people, but law-enforcement agencies don’t plan to check compliance,” *The Wall Street Journal* (24 Nov. 2020); available [https://www.wsj.com/articles/new-york-city-police-sheriff-wont-enforce-thanksgiving-covid-limits-11606231659].

¹⁰⁴ See, e.g., Joe Kelly, “Wisconsin Justices Clash Over Legality of Lockdown Order,” Courthouse News Service (5 May 2020); available [https://www.courthousenews.com/wisconsin-justices-clash-over-legality-of-lockdown-order/].

¹⁰⁵ See, e.g., Aeyal Gross, “Rights Restrictions and Securitization of Health in Israel During COVID-19,” Bill of Health (Harvard Law School Blog)(29 May 2020); available [https://blog.petrieflom.law.harvard.edu/2020/05/29/israel-global-responses-covid19/].

be undertaken by states, though sometimes it is possible, like in the U.S. and China, to use private data harvesting networks and systems.¹⁰⁶ In both cases, the metamorphic character of the effort emerges at times: “COVID-19 has accelerated this trend as companies have had to adapt and fast-track digital transformations of their operations to meet the increasing demands of data-driven services and products.”¹⁰⁷

Fourth, these analytics had to provide a basis for developing quick judgment of consequences--especially with respect to identification of individuals, and with respect to their containment. But that speed and efficiency was perhaps purchased at some cost to the developing principles of privacy and individual rights. Here a balancing and re-calibration might be necessary--but that re-calibration (as evidenced by the operation of the system) did not appear to have been undertaken with much engagement by the people or relevant political actors.

Fifth, the issue of calibration becomes more acute in the context of information control. Here it takes two forms. First is the fight against fake news and rumor mongering. As was clear in the situation in Wuhan in December, it is sometimes difficult for officials to discern the difference between courageous acts of individual patriotism and anti-social rumor mongering. The results of mistakes can be disastrous. Yet there appears to be little attention paid to those issues. The second involves the management of official information. Here public transparency and accountability requires a more open textured

¹⁰⁶ See, e.g., Zak Doffman, “Yes, Apple/Google COVID-19 Tracking Is Now On Your Phone—Here’s The Problem,” *Forbes* (29 June 2020); available [https://www.forbes.com/sites/zakdoffman/2020/06/29/serious-new-blow-for-apple-and-google-as-covid-19-phone-tracking-is-rejected/?sh=48e038b667cc]; Kif Leswing, “States are finally starting to use the COVID-tracking tech Apple and Google built — here’s why,” *CNBC* (3 Oct. 2020); available [https://www.cnn.com/2020/10/03/covid-app-exposure-notification-apple-google.html].

¹⁰⁷ Andrew Gordon, “The EY Global Integrity Report 2020 highlights that despite companies having more data, they face significant gaps in effectively protecting it,” *EY* (25 June 2020); available [https://www.ey.com/en_us/forensic-integrity-services/how-to-safeguard-data-while-ethically-leveraging-its-value]. See generally, *Is this the moment of truth for corporate integrity? Global Integrity Report 2020*, Forensic & Integrity Servicesey.com/integrityreport (June 2020); available [https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/assurance/assurance-pdfs/ey-is-this-the-moment-of-truth-for-corporate-integrity.pdf].

engagement. Yet most states, the United States included, tend to view its duty to severely manage its public communication in ways that are sometimes possible appear more valuable to the administrative officials than to the public.¹⁰⁸ That is especially important in the context of accountability.

Sixth, there appears to be little effort either to protect data integrity, or to manage systems for removing erroneous data and correcting consequential errors that are produced by bad data.¹⁰⁹ And yet, protecting the integrity of the system of data driven management of disease based crisis at the cost of damaging individuals who suffer the consequences of erroneous application due to bad data, may create contradictions between the principle of systemic efficiency and the organizing principles of states founded on the notion of individual human dignity.¹¹⁰ Additionally, criminal activity remains an issue: "Ransomware attacks on hospitals and health systems have continued during the pandemic, raising key cybersecurity considerations about infrastructure disruptions and COVID-19 test data integrity."¹¹¹

Seventh, the issue of public data base integration will prove the most challenging even as it holds the most transformative potential.¹¹² What the researchers noted, for

¹⁰⁸ For the U.S., see, e.g., Michael D. Shear and Maggie Haberman, "Pence Will Control All Coronavirus Messaging From Health Officials: The White House's attempt to impose a more disciplined approach to communications about the virus was undermined by President Trump, who complained the news media was overstating the threat," *The New York Times* (27 February 2020); available [<https://www.nytimes.com/2020/02/27/us/politics/us-coronavirus-pence.html>].

¹⁰⁹ Discussed in Larry Catá Backer "Automated Law: The Problem of Data Integrity Moves (if only for a Moment) to Center Stage," *Law at the End of the Day* (11 Feb. 2020); available [<https://lbackerblog.blogspot.com/2020/02/automated-law-problem-of-data-integrity.html>].

¹¹⁰ See, "Assessing Data Integrity in Times of COVID," Rutgers Cancer Institute (4 June 2020); available [<https://cinj.org/assessing-data-integrity-times-covid>].

¹¹¹ Jackie Drees, " COVID-19 cyber threats: Why data integrity is crucial & how to protect it," *Becker's Health IT* (6 May 2020); available [<https://www.beckershospitalreview.com/cybersecurity/covid-19-cyber-threats-why-data-integrity-is-crucial-how-to-protect-it.html>].

¹¹² Susan Teran, "A Key Building Block for any COVID-19 Response: Data Integration," *Allscripts blog* (28 May 2020); available

example, was that Taiwan integrated its national health insurance database with its immigration and customs database. Both are public sector data bases tied to large public sector operations. It was put forward for the proposition that data base integration was useful for developing specific focus analytics--in this case targeting the management of strategies of containment against the spread of a contagious disease. Yet that also suggests issues for the future. The first is the utility of data harvesting fragmentation by public bodies. In the context of data driven governance, it remains unclear why a taxonomy of data "ownership" among government agencies dictated by a jurisdictional taxonomy with origins in a prior century ought to extend its dead hand to manage the fundamental building block of control in this century. The issue becomes more complex when data is owned, generated or controlled by private sector enterprises. That, of course, ought to raise the question of political and normative premises built around these emerging systems of control. Instead, the discourse of law, in the face of this emerging data governance modernity, appears increasingly Luddite in form and character.

Eighth, almost entirely ignored are the issues of private data governance of the type utilized by state authorities. The transformative character of COVID-19 on administrative practice and the regulatory toolkits have already started to be examined.¹¹³ In most markets driven political structures, an enormous amount of regulatory authority over the daily lives of people are now delegated to the discretionary authority of

[<https://www.allscripts.com/2020/05/a-key-building-block-for-any-covid-19-response-data-integration/>].

¹¹³ "Regulatory quality and COVID-19: The use of regulatory management tools in a time of crisis," OECD Brief (30 Sept. 2020); available [<http://www.oecd.org/coronavirus/policy-responses/regulatory-quality-and-covid-19-the-use-of-regulatory-management-tools-in-a-time-of-crisis-b876d5dc/>]. ("One of the most salient concerns facing regulatory management tools in the future is the ability to develop new, timely responses to fast changing economic, technological and public health environments; and the need to ensure the resilience of the regulatory system to future systemic threats." Ibid.); William D. Eggers, Shruthi Krishnamoorthy, Pankaj Krishnani, "Transforming government post-COVID-19 How flipping orthodoxies can reinvent government operating models Deloitte Insights (15 June 2020); available [<https://www2.deloitte.com/us/en/insights/economy/covid-19/transforming-government-post-covid-19.html>].

private actors.¹¹⁴ Though sometimes these delegations are more or less closely aligned to public objectives, for the most part the range of discretionary authority is broad. Those enterprises are also increasingly driven by analytics derived from fractured data bases that they manage (and sell). To manage these managers appears to be an important element for comprehensive strategies, especially in the face of epidemics. Here one encounters the challenges of rethinking conceptual walls between public and private data, data integrity, and the transparency of the analytics and judgments derived from the employment of these emerging regulatory actions.

5. Disjunctions Between those who Manage and those who Bear the Costs of Meeting the COVID-19 Challenge.

A. Data Driven Pandemic and the Ascendancy of Simulated Reality as the New Political Space: The Administration of Disease and the Disease of Administration in the Light of COVID-19.

In *The Measure of Reality: Quantification and Western Society 1250-1600*,¹¹⁵ Alfred W. Crosby summarized the arc of 350 years of development beginning around the turn of the 14th century this way:

Western Europeans evolved a new way, more purely visual and quantitative than the old, of perceiving time, space and material environment. * * * In practical terms, the new approach was simply this: reduce what you are trying to think about to the minimum required by its definition; visualize it on paper, or at least in your mind, be it the fluctuation of wool prices at the Champagne fairs or the course of Mars through the heavens, and divide it, either in fact or in imagination, into equal quanta. Then you can measure it. * * * Then you possess a quantitative representation of your subject that is,

¹¹⁴ On the dangers of public private tech driven regulatory alignments, see Julie E. Cohen, Woodrow Hartzog, and Laura Moy, "The Dangers of Tech-Driven Solutions to COVID-19," Tech Stream, Brookings (17 June 2020); available [https://www.brookings.edu/techstream/the-dangers-of-tech-driven-solutions-to-covid-19/].

¹¹⁵ Alfred W. Crosby, *The Measure of Reality: Quantification and Western Society 1250-1600* (Cambridge University Press, 1997).

however simplified, even in its errors and omissions, precise. You can think about it rigorously. You can manipulate it and experiment with it, as we do today with computer models. (Ibid., 227, 228-229)

The trajectories of what Alfred Crosby called "The New Model" of perceiving the "mysteries of reality" and thus perceived, of rationalizing these mysteries within them,¹¹⁶ has continued in fits and starts through to the current age. It has marked the entirety of the organization of human institutions as much as it has shaped the current forms of its perceptions of itself especially the art of modelling--of rendering reality in abstract space drawn from data.¹¹⁷ In the process it has transformed time, space, and the way we mark them, and with that the world around us.

The trajectories, however, have changed. What through the seventeenth century had been a means for rationalizing the world around us, by the 20th century had now inverted the relationship between reality and perception. When what is perceived becomes real, reality is relevant only as a means of accountability, as a check on the viability of perception itself. That, of course, has produced a powerful philosophical reaction in the 20th century from an engagement with the nature of phenomena¹¹⁸ and later to its political manifestation.¹¹⁹

COVID-19 has now exposed the extent to which those inversions have come fully to government at last. The pandemic has now exposed also the way in the perception of politics and human organization, its reality is shaped, understood, and controlled through *quantitative representation*. COVID-19 has now also exposed the extent to which, whatever the lingering elements of the post 1945 era *ancien regime* intelligentsia suggest otherwise, the reality of politics is being manifested as

¹¹⁶ Ibid., p. 239.

¹¹⁷ See "Building Better Models: Why Macroeconomics Needs to Enter," *The Economist* (3 August 2020); available [https://www.economist.com/free-exchange/2010/08/03/building-better-models].

¹¹⁸ Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (David Carr (trans) Northwestern University Press, 1970 (1938)) (esp. §9 Galileo's Mathematization of Nature)

¹¹⁹ Jürgen Habermas, *The Theory of Communicative Action Vol. 2 Lifeworld and System: A Critique of Functional Reason* (Thomas McCarthy (trans) Boston: Beacon Press, 1987)

the product of a perception of data that produces a managed simulation of the world in which it seeks to control. Modelling is the way we create these simulacra and through that creation creates for itself a more prominent role in the political management of human affairs. The character of that role is not as a tool of politics but as politics itself. This was made clear, for example, by the Council of Europe, as it sought to accommodate reality but embedded in core European principles.¹²⁰ That, in *essence* (and we deal almost entirely now in a world that operates by reducing objects to its essence and then layering those reduced essences into models of reality), is what COVID-19 has revealed in 2020.

The implications are important, especially as revealed by an ascendancy of data driven Pandemic; likely the most important legacy of COVID-19. Its effects have touched virtually every aspect of collective life. One of the most interesting aspect of the COVID-19 pandemic has been the way in which it is exposing growing disjunctions--growing gaps--between the principles, customs and traditions on which a political order is organized and the way it has been operated after January 2020. Those who have made it a point of protecting the conceptual basis of the old order have been especially sensitive to this disjunction and have, even early in the emerging era of pandemic, sought to alert and correct (or better put, fill) the gaps that have existed for a while but which are now inescapably apparent. These efforts are particularly notable in the context of the developing conceptual regimes of human rights.¹²¹ The Report noted:

The major social, political and legal challenge facing our member states will be their ability to respond to this crisis effectively, whilst ensuring that the measures they take do not undermine our genuine long-term interest in safeguarding Europe's founding values of

¹²⁰ Council of Europe, Respecting democracy, rule of law and human rights in the framework of the COVID-19 sanitary crisis: A toolkit for member states, Council of Europe Information Document SG/Inf(2020)11 (7 April 2020); available [https://rm.coe.int/sg-inf-2020-11-respecting-democracy-rule-of-law-and-human-rights-in-th/16809e1f40].

¹²¹ Amnesty International: *Europe at a Crossroads: Dos and Don'ts for Authorities When Responding to the COVID-19 Pandemic* (London: Amnesty International, 2020); available [https://www.amnesty.org/download/Documents/EUR0120792020ENGLISH.PDF].

democracy, rule of law and human rights. It is precisely here that the Council of Europe must carry out its core mandate by providing, through its statutory organs and all its competent bodies and mechanisms, the forum for collectively ensuring that these measures remain proportional to the threat posed by the spread of the virus and be limited in time. The virus is destroying many lives and much else of what is very dear to us. We should not let it destroy our core values and free societies.¹²²

Most spectacularly, of course, has been the way in which states and other institutions were able to mobilize the masses in ways that substantially altered their lives, their freedoms of action and movement, and their access to collective activities (economic, religious, social, and political).¹²³ This ought not to be taken lightly. Without much of a block, even the "freest" society deployed the language of war and of national emergency to loosen the usual restraints on the exercise of power (for limits, e.g., [here](#)). As notable has been the way in which traditional principles of macro-economic policy has been sidelined as the usual gatekeepers and regulators abandoned restraint in efforts to preserve at least short term stability.¹²⁴

¹²² Ibid.

¹²³ See, Jiachuan Wu, Savannah Smith, Mansee Khurana, Corky Siemaszko and Brianna DeJesus-Banos, "Stay-at-home orders across the country: What each state is doing — or not doing — amid widespread coronavirus lockdowns," NBC News (25 March 2020; updated 29 April 2020); available [<https://www.nbcnews.com/health/health-news/here-are-stay-home-orders-across-country-n1168736>]; Raymond Zhong and Vivian Wang, "China Ends Wuhan Lockdown, but Normal Life Is a Distant Dream," *The New York Times* (17 April 2020); available [<https://www.nytimes.com/2020/04/07/world/asia/wuhan-coronavirus.html>]; "Coronavirus: What are the lockdown measures across Europe?," DW (14 April 2020); available [<https://www.dw.com/en/coronavirus-what-are-the-lockdown-measures-across-europe/a-52905137>]; Michael Cohen and Amogelang Mbatha, "South Africa Orders Three-Week Lockdown to Curb Virus Spread," Bloomberg (23 March 2020); available [<https://www.bloomberg.com/news/articles/2020-03-23/south-africa-orders-three-week-lockdown-to-curb-virus-spread>]; Manveena Suri, Swati Gupta and Ivana Kottasová, "India, population 1.3 billion, orders 'complete' coronavirus lockdown," CNN (24 March 2020); available [<https://www.cnn.com/2020/03/24/asia/india-lockdown-coronavirus-intl/index.html>].

¹²⁴ See, Daniel Villareal, "Here's How U.S. Coronavirus Stimulus Package Compares to Other Countries Around the World," Newsweek (10 April

The magnitude of these disjunctions has acquired a somewhat different character in the context of pandemic. COVID-19 responses has centered the use of metrics and data-based analytics in managing responses to infection in a more comprehensive way. These metrics take two forms. The first is data based surveillance. The second and more indicative of the future, is modelling.

The first of these, monitoring, surveillance, reporting and data harvesting is well worn territory--at least as measured by the span of a human life.¹²⁵ These are meant to serve both as tools and as the substance of regulation. As tools, these are the means by which accountability can be quantified and reduced to a value against which other values can be compared (or compared against triggers). They also serve (as a sort of performance of accountability) of the proof of the value or "correctness" of political and policy choices made. At the same time they also substitute for the regulations they are meant to make visible where the construction of the systems or premises of data gathering, surveillance, and the like, are left to those constructing or implementing them, and where their choices effectively have normative effect.

2020); available [<https://www.newsweek.com/heres-how-us-coronavirus-stimulus-package-compares-other-countries-around-world-1497360>]; Chad Stone, "Fiscal Stimulus Needed to Fight Recessions: Lessons From the Great Recession," Center on Budget and Policy Priorities (16 April 2020); available [<https://www.cbpp.org/research/economy/fiscal-stimulus-needed-to-fight-recessions>]; European Council, Council of the European Union, "Report on the Comprehensive Economic Policy Response to the COVID-19 Pandemic," Press Release (9 April 2020); available [<https://www.consilium.europa.eu/en/press/press-releases/2020/04/09/report-on-the-comprehensive-economic-policy-response-to-the-covid-19-pandemic/>]; Alexander Chipman Koty, "Why China's COVID-19 Stimulus Will Look Different than in the Past," China Briefing (6 April 2020); available [<https://www.china-briefing.com/news/chinas-stimulus-measures-after-covid-19-different-from-2008-financial-crisis/>]; "Policy Responses to COVID-19: Policy Tracker," International Monetary Fund (last updated 4 Dec. 2020); available [<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>].

¹²⁵ See, Urs Gasser, Marcello Ienca, James Scheibner, Joanna Sleight, Effy Vayena, "Digital tools against COVID-19: Framing the ethical challenges and how to address them," arXivLabs (21 April 2020); available [<https://arxiv.org/ftp/arxiv/papers/2004/2004.10236.pdf>]; see also discussion *supra* Section 4.

The way in which COVID-19 is counted is an example of where both functions merge. The counting is meant to be used to *account* for the presence of the disease.¹²⁶ It is also meant to provide the measure against which political decisions might be made, for example, eliminating "stay at home" rules" or economic closures.¹²⁷ Yet the numbers, which appear so solid because of the unassailable solidity of a number as an object whose meaning cannot be varied (three always means three), exist only in themselves. When one tries to give them meaning in context, that becomes far harder.¹²⁸

Where the *counting* rules vary, then a comparative *accounting* becomes impossible--though politically valuable. The value comes in when public entities are tempted to use numbers strategically to support political decisions and then seek to suppress numbers that might undermine their choices in favor of data that supports it.¹²⁹ It is a temptation to use the unassailability of numbers to hide what or misdirect, or better put, to manage numbers the way that infections of COVID-19 are managed through policies of stay in place rules.

Most affected countries have inadvertently under-reported deaths. Studying mortality data in 12 countries, *The*

¹²⁶ Teri Schultz, "Why Belgium's Death Rate Is So High: It Counts Lots Of Suspected COVID-19 Cases," NPR (22 April 2020); available [<https://www.npr.org/sections/coronavirus-live-updates/2020/04/22/841005901/why-belgiums-death-rate-is-so-high-it-counts-lots-of-suspected-covid-19-cases>].

¹²⁷ "Wolf administration clarifies metrics used for reopening Pennsylvania," NorthCentral Pa.com (26 April 2020); available [https://www.northcentralpa.com/life/covid-19_updates/wolf-administration-clarifies-metrics-used-for-reopening-pennsylvania/article_98cbf44a-8752-11ea-bf3f-ef71d66ee372.html].

¹²⁸ Alan Reynolds, "The Misleading Arithmetic of COVID-19 Death Rates," Cato at Liberty (2 March 2020); available [<https://www.cato.org/blog/misleading-arithmetic-covid-19-death-rates>].

¹²⁹ Kathleen McGrory, "Florida medical examiners were releasing coronavirus death data. The state made them stop," Tampa Bay Times (29 April 2020); available [<https://www.tampabay.com/news/health/2020/04/29/florida-medical-examiners-were-releasing-coronavirus-death-data-the-state-made-them-stop/>] ("The moves to withhold information comes at a sensitive moment for state leaders. Florida's coronavirus death toll is continuing to rise and state officials have begun talks about when and how to start reopening.")).

New York Times found that in March at least 36,000 more people died during the coronavirus pandemic than the official death counts.¹³⁰ These include deaths from the contagion as well as those from other likely causes. And a *Financial Times* analysis of overall fatalities during the pandemic in 14 countries found that the death toll from coronavirus may be almost 60% higher than reported in official counts.¹³¹

Numbers do not lie, but numbers do not speak truth either. They are objects and symbol of something that has meaning (three means three), but the significance of that meaning cannot be determined except within a specific context (three apples, three oranges in Spain and thirty oranges in Italy). The understanding of a number (as (a) sense or signification, (b) meaning or intention and (c) significance or ideal worth; Lady Welby, "Significs," in *Encyclopedia Britannica* (1911)) is also dependent on the way in which the number is given meaning.¹³²

In the case of COVID-19, that has proven hard to do. Cathy O'Neil nicely summarized her list of ten reasons to doubt the numbers.¹³³

1. The number of infected is close to meaningless. Only people who get tested can be counted * * *
2. The tests aren't accurate and the inaccuracies aren't symmetric.

¹³⁰See, Jin Wu, Allison McCann, Josh Katz, Elian Peltier and Karan Deep Singh, "412,000 Missing Deaths: Tracking the True Toll of the Coronavirus Outbreak," *The New York Times* (last updated 27 Nov. 2020); available [<https://www.nytimes.com/interactive/2020/04/21/world/coronavirus-missing-deaths.html>].

¹³¹ See, John Burn-Murdoch, Valentina Romei and Chris Giles, "Global coronavirus death toll could be 60% higher than reported: Mortality statistics show 122,000 deaths in excess of normal levels across 14 countries analysed by the FT," *Financial Times* (26 April 2020); available [<https://www.ft.com/content/6bd88b7d-3386-4543-b2e9-0d5c6fac846c>]. See also Soutik Biswas, "India Coronavirus: The 'Mystery' of Low COVID-19 Death Rates," *BBC* (27 April 2020); available [<https://www.bbc.com/news/world-asia-india-52435463>].

¹³² See, Lady Victoria Welby, "Significs," in Jan M. Broekman and Larry Catá Backer (eds), *Signs in Law—A Source Book (The Semiotics of Legal Education III)* (Dordrecht: Springer, 2013), pp. 43-49,

¹³³ Cathy O'Neil, "10 Reasons to Doubt the COVID-19 Data," *Bloomberg Opinion* (13 April 2020); available [<https://www.bloomberg.com/opinion/articles/2020-04-13/ten-reasons-to-doubt-the-covid-19-data>].

In particular, they produce many more false negatives than false positives * * * 3. The number of tests doesn't equal the number of people tested. Because the tests are so inaccurate, some people get tested twice to be more sure of the results.* * * 4. The numbers aren't in sync. People sometimes die weeks after being hospitalized, and they get hospitalized a week or more after testing positive for the virus.* * * 5. The meaning of hospitalization is changing.. * * * 6. Deaths aren't reported immediately or consistently.* * * 7. Deaths outside hospitals aren't being reported.* * * 8. The policy for attributing deaths isn't consistent. Once somebody is gone, why waste a valuable test?* * * 9. Officials may have incentives to hide coronavirus cases.... "Juking the stats"*** 10. What happens in one place, or on average, might not be applicable everywhere.¹³⁴

Note though that doubt does not suggest uselessness. Semiotics teaches that the numbers still have meaning, it is just that the meaning insisted by the character of the number is misleading, but may lead to something (else) of value. ¹³⁵

It in this context that numbers serve a critical role in triggering policy decisions, in providing the conditions necessary to justify governmental (or private) action or in justifying political positions, especially in the context of the competition among states eager to prove that their systems were better suited to meeting the crisis (by reference to triumph measured by numbers). The current contest between the

¹³⁴ Ibid.

¹³⁵ For example, Graeme Wood, "Iran Has Far More Coronavirus Cases Than It Is Letting On: The surprising number of Iranian government officials succumbing to COVID-19 offers a hint that the disease is far more widespread than the official statistics indicate," *The Atlantic* (9 March 2020); available [https://www.theatlantic.com/ideas/archive/2020/03/irans-coronavirus-problem-lot-worse-it-seems/607663/] ("Why would Iran lie? On February 21, Iran conducted the latest in a series of sham elections in which only government-selected candidates could run for office. To show disapproval, many Iranians refuse to vote, and as participation has dropped, the appearance of electoral legitimacy has dropped as well. Iran's government told its people that the United States had hyped COVID-19 to suppress turnout, and Tehran vowed to punish anyone spreading rumors about a serious epidemic. Forty-three percent of Iranians voted, unaware that the outbreak had already begun." Ibid.).

United States and China provides an ostentatious case in point.¹³⁶

COVID-19, of course, is not just about counting; it is also about keeping track. Some of it appears to be less problematic when measured against the old constraints on the state.¹³⁷ But surveillance has a large, and for some troublesome element as well. First tracking people's movements poses a challenge to old notions of privacy, whether the tracking is undertaken by the state¹³⁸ and elsewhere.¹³⁹ It is also undertaken by private enterprises. With respect to these, it has become clear now the ease with which large providers of mobile devices can turn those into tracking tools.¹⁴⁰

It is here, and for the most part only here, that there is a point of convergence between COVID-19 driven data based governance and the traditional discourse and human rights/constitutional principles. The European Union efforts under its regulatory/rights framework provides a nice example

¹³⁶ See Mark Moore, "China Questions US Handling of Coronavirus Amid Global Backlash," *The New York Post* (27 April 2020); available [https://nypost.com/2020/04/27/china-questions-us-handling-of-coronavirus-amid-global-backlash/].

¹³⁷ "Public health surveillance is the ongoing, systematic collection, analysis, and interpretation of health-related data essential to planning, implementation, and evaluation of public health practice. For surveillance of COVID-19, and the virus that causes it, SARS-COV-2, CDC is using multiple surveillance systems run in collaboration with state, local, territorial, and academic partners to monitor COVID-19 disease in the United States." CDC, Coronavirus Disease 2019 (COVID-19) CDC Website; available [https://www.cdc.gov/coronavirus/2019-nCoV/index.html]; for Europe, see European Center for Disease Prevention and Control, *Strategies for the surveillance of COVID-19* (April 2020)); available [https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-surveillance-strategy-9-Apr-2020.pdf].

¹³⁸ Amrita Khalid, "Utah's New COVID-19 Contact Tracing App Will Track User Locations," *Quartz* (23 April 2020); available [https://qz.com/1843418/utahs-new-covid-19-contact-tracing-app-will-track-user-locations/].

¹³⁹ Discussed above Section 4.

¹⁴⁰ See Emily Crane, "Will lockdown end by default? Data shows Americans in 44 states are venturing out more often and rejecting social distancing measures," *Daily Mail* (28 April 2020); available [https://www.dailymail.co.uk/news/article-8261219/Data-shows-Americans-venturing-despite-COVID-19.html].

of the engagement.¹⁴¹ These focus on the relation of data to the individual; it does not focus as well on data and the transformation of governance and democratic ordering. That is to be expected under a framework in which the individual and individual rights are centered but in which the use of data by collective entities is understood as a species of techniques with little effect on key principles that support the character of the political model adopted in liberal democratic states.¹⁴² And, indeed, that partial convergence of the framework for protection of individual liberties under constitutional and international frameworks suggests limited utility of old conceptions of such rights systems in the face of a technology of government the measures of which tend to fall between the cracks of that framework.

This brings one to a brief consideration of the second, and for our purposes far more interesting form is the role of modelling. Modelling takes data, develops premises of relationships between them and then constructs from this data and these presumed interactions a simulacra of the reality they are meant to mimic. By so mimicking, the model can then be used to study the character of the reality thus simulated, and, if comprehensive enough, can also be used to predict and to change the outcomes predicted. To simulate society is to reproduce it in ways that can be used to look back (for confirmation of the robustness of its characteristics) and to look forward to suggesting how the simulation will encounter and react to stimulus (for example a COVID-19 pandemic). The modeling project makes visible the mathematical recreation of our world through a process of reduction and essentialization of chosen key factors (data and relationships), rationalize these

¹⁴¹ European Data Protection Board, adopted Guidelines 04/2020 on the use of location data and contact tracing tools in the context of the COVID-19 outbreak (Adopted 21 April 2020); available [https://edpb.europa.eu/sites/edpb/files/files/file1/edpb_guidelines_20200420_contact_tracing_covid_with_annex_en.pdf].

¹⁴² But see, Council of Europe, *Respecting democracy, rule of law and human rights in the framework of the COVID-19 sanitary crisis*; *supra* ("The major social, political and legal challenge facing our member states will be their ability to respond to this crisis effectively, whilst ensuring that the measures they take do not undermine our genuine long-term interest in safeguarding Europe's founding values of democracy, rule of law and human rights." *Ibid.*, p.2)).

reduced and essentialized bits, and then develop a means of visualizing layers of essentialized responses in time.

Newer, “agent-based models” are like the video game SimCity, but with a rampaging pathogen: using computing power unimagined even a decade ago, they simulate the interactions of millions of individuals as they work, play, travel, and otherwise go about their lives. Both of these approaches have often nailed projections of, for instance, U.S. cases of seasonal flu.¹⁴³

Societies have moved from using big data based games for entertainment, to seeing in them the potential to re-create the entirety of a human society, and on that basis extending the ability of those with the power to do so to intervene in the affairs of (simulated) humanity. In effect, data driven pandemics now constitutes a form of time travel in which models carry us forward to alternative futures that can be embraced or avoided by traveling back in time from the outer temporal space of the model and correcting the factors that produced a specific temporal outcome.¹⁴⁴

What was once the realm of politics (choices) is now the stiff of statistics. Indeed, modeling turns politics from the subject --the means by which decisions are made and authenticated (in accordance with current theories of popular participation, however attenuated) to its object. In a political context dominated by models, politics and political decision making become the thing that must be managed and directed in accordance with the genius of the model. Politics moves,

¹⁴³ Sharon Begley, “Influential Covid-19 model uses flawed methods and shouldn’t guide U.S. policies, critics say,” STAT (17 April 2020); available https://www.statnews.com/2020/04/17/influential-covid-19-model-uses-flawed-methods-shouldnt-guide-policies-critics-say/ (“Statistical model” refers to putting U.S. data onto the graph of other countries’ Covid-19 deaths over time under the assumption that the U.S. epidemic will mimic that in those countries. But countries’ countermeasures differ significantly. As the epidemic curve in the U.S. changes due to countermeasures that were weaker or later than, say, China’s, the IHME modelers adjust the curve to match the new reality.” Ibid.)

¹⁴⁴ See Sharon Brody and Derek J. Anderson, “Mass. General Hospital Builds COVID-19 Simulator To Help Predict Impact of Policy Decisions,” CommonHealth (26 April 2020); available https://www.wbur.org/commonhealth/2020/04/26/mass-general-hospital-covid-19-simulator].

therefore, from the act of decision, to the act of model making and application.

One gets the sense, and one would not be wrong in sensing, that the politics of COVID-19 responses, and its structuring is now driven not by judgment based on data, but on the judgment of the models that are used to construct the alternative world scenarios whose reality is assumed and on that basis is used to make a determination of what ought to be imposed.

The epidemiological models of COVID-19's initial outbreak and spread have been useful. The Imperial College model, which predicted a terrifying 2.2 million deaths in the United States, agitated drowsy policymakers into action. The University of Washington's Institute of Health Metrics and Evaluation (IHME) model has provided a sense of the scale and timeline for peak hospitalization. Other models have estimated the effects of quarantine and of travel restrictions, or sought to find the pandemic's turning point. Despite some notable flaws, the epidemiological models have cumulatively had a beneficial effect on the national conversation. Their ability to incorporate some epidemiological knowledge and the limited available data led to better—and harder to dismiss or deny—predictions of the near future than mere guesswork would have allowed.¹⁴⁵

Where bad policy choices once called for better decision making within the normative structures of politics (liberal democratic or Marxist Leninist); now bad choices call for better models that is better simulacra. "Thousands of policymakers across the country, mostly at the state and local level, will need to decide where and when to re-open schools, ease business and social distancing restrictions, allow sports to resume, and make a myriad of other choices. * * * Existing models have been

¹⁴⁵ Alex Engler, "A Call for a New Generation of COVID-19 Models," *Brookings* (23 April 2020); available [https://www.brookings.edu/blog/techtank/2020/04/23/a-call-for-a-new-generation-of-covid-19-models/]; see also "New Model Forecasts When States Likely to See Peak in COVID-19 Deaths," *UT News* (17 April 2020); available [https://news.utexas.edu/2020/04/17/new-model-forecasts-9-states-likely-to-see-peak-in-covid-19-deaths-by-end-of-april/].

valuable, but they were not designed to support these types of critical decisions." ¹⁴⁶ Political decisions are calculated and driven by the model; politics is undertaken in the choice of the model, decisions about the way it is populated with data, and decisions about the relationships deemed critical in the process of reduction and essentialization that flattens lived reality to the simulation within which policy choices can be tested¹⁴⁷). The political classes--in this model (here used with the irony it has come to deserve)--are reduced to the administrators of the systems whose decisions they are charged with implementing.

There is a certain irony here. For years before COVID-129 there has been a chorus of people (me included) who warned about the dangers of simulation, of data driven governance, and of the Artificial Intelligence (AI) and big data models necessary to rationalize these into something "useful" even where they saw the utility in the project. The object, at its heart was to more closely align the new mechanics of governance and the new government it would birth, more closely with the normative values that appeared to still matter (or at least on the basis of which political collectives still officially adhered). But in the rush to "conquer" or "overcome" COVID-19, all of this has been thrown to the winds. Or at least those who were doing the warning have been sidelined in the rush to embrace, without the slightest hesitation, the suzerainty of the model as the chief vehicle through which a politics of pandemic could be rationalized, and thus understood, implemented.¹⁴⁸ In its place, one finds a politics of modelling--one that does not dispute the animating premise of the new governmentality; that the model must be obeyed--but one that

¹⁴⁶ Engler, *A Call for a New Generation of COVID-19 Models*, *supra*.

¹⁴⁷ Sharon Begley, *Influential COVID-19 Model*, *supra*.. See also, Giulia Giordano, Franco Blanchini, Raffaele Bruno, Patrizio Colaneri, Alessandro Di Filippo, Angela Di Matteo & Marta Colaneri, "Modelling the COVID-19 epidemic and implementation of population-wide interventions in Italy," *Nature Medicine* 26:855-860 (2020); available [<https://www.nature.com/articles/s41591-020-0883-7>] ("Predictive mathematical models for epidemics^{15,16,17,18} are fundamental to understand the course of the epidemic and to plan effective control strategies. . . Here, we propose a new mean-field epidemiological model for the COVID-19 epidemic in Italy that extends the classical SIR model, similar to that developed by Gumel and colleagues for SARS". *Ibid.*).

¹⁴⁸ Criticized in application in Jon McCloskey, "Why No COVID-19 Models Have Been Accurate, And How To Fix That," *The Federalist* (27 April 2020); available [<https://thefederalist.com/2020/04/27/why-no-covid-19-models-have-been-accurate-and-how-to-fix-that/>]

merely invests political power within contests for championing first the "right model" and then the "correct application" of that model.

As Nietzsche might suggest, our priestly class has broken the idols of our old gods and raised a new shiny, scientific and data driven god for the priests to serve as intermediary and on whose altar human society will be offered.¹⁴⁹ This is not done with evil intent; the opposite may well be true. But the intention is constant¹⁵⁰ and its priests are no longer political figures with direct connection to the people who they represent. Instead they are the researchers and technicians who now practice politics in their construction and tending of the models from which they derive their power and whose oracles are offered up to those with formal political power, who ignore their peril.

And the greatest irony--simulacra are as imperfect as the world it seeks to model. It reflects not just the flaws of the world simulated, but it may also amplify and distort those flaws in ways. There is already an awareness of the ways in which models may reflect. "The essence of these arguments lies in an important, and perhaps counter intuitive observation: Using data and technology in a decision-making process doesn't make a decision automatically free of problematic (and possibly illegal) social discrimination."¹⁵¹ But that produces a contradiction. A simulation is useful only to the extent that it reflects the world it models. But to model that world also reveals the disjunctions between its idealized view of itself, and the reality of the way that those ideals may have little or different connection with the actual behaviors of human actors.

Here one begins to see the way in which politics may insinuate itself in the production and use of models. It is at the stage where one determines what world the model will simulate--the world as it exists or the world as the models would like to exist. To create a simulation that reproduces an

¹⁴⁹ Friedrich Nietzsche, "The Antichrist," in (Walter Kaufmann (ed and trans) *The Portable Nietzsche* (Viking Press, 1968), 565-656, ¶ 42.

¹⁵⁰ "COVID-19 by Indian State," CDDEP; available [https://cddep.org/tool/covid-19-by-indian-state/].

¹⁵¹ Emily Shaw, "Avoiding Prejudice in Data-Based Decisions," Sunlight Foundation (31 July 2020); available [https://sunlightfoundation.com/2015/07/31/avoiding-prejudice-in-data-based-decisions/].

idealized reality is to further distort the simulation and to reduce its utility. It also suggests that simulation cannot avoid the embedding of politics--only that the politics is hidden within the premises and modalities of simulation construction. That is, that a simulation is used not merely to see how a specific set of factors have effects on communities or individuals; but at the same time how human and communal behavior relates to the ideal version of itself. As such, a simulation does not necessarily reflect reality but instead the reality of perfectibility.

But the politics of simulation is not evidenced merely by the way in which it relates to the tensions between the real and idealized version of the society it simulates. It also embeds politics in the way a simulation chooses to emphasize (amplify) certain human or individual characteristics and reduce others to a marginal space. This is not just a matter of data harvesting (the information that is used to build simulations and that which is ignored--a well-known issue), rather it is the way that this data is weighted and embedded within the mathematical relationships that together create a functioning simulations.

Thus, politics, and prejudice, filter into the construction of the mathematical relationships through which a simulation is constructed and then manipulated to aid in the construction of conclusions. This is unavoidable--the essence of simulation is essentialization that is in turn the expression of the need to reduce the complexity of reality to a manageable level. Reductionism, then, produces an important site for politics. The way in which one decides how and why reality is reduces; the choice of who makes those decisions; the way that reduction is expressed; the expression of the essential; these are the spaces in which politics is practiced in a world in which human society is managed through models. But note the consequence--where politics is now embedded in the construction of models, it no longer is centered on those who are formally vested with political authority--whether that authority is exercised through a Marxist-Leninist or a liberal democratic model.

The same applied to the use of the model. Part of the value of simulation is predictive. But prediction assumes that nothing changes. The real value of simulation is to test policies and other interventions before they are actually put into effect. How one chooses those interventions, how those interventions may be constrained by higher order values; how

those solutions may be guided by the political character of a society, and how those intervention reflect the customs and expectations of a society will make a great deal of difference. The way the range of choices are constructed, and the importance of these meta-principles serve to mold the spectrum of choices deemed plausible points to yet another point of politics in simulated governance.¹⁵²

Where the power to develop choice spectrum are delegated to technicians and modelers, those external constraints either disappear in the service of a "value free" choice spectrum is constructed, or more likely, the choice spectrum will reflect the personal views of the modeler. One has yet to consider the rules for testing those choice processes—except at the level of the ideal. There is much talk that aspects of modeling (AI; surveillance, data use, etc.) must conform with the highest ideals of society, but there is very little in embedding those ideals into the practices of simulation as a substitute for engagement in the real world which it is meant to serve. Where it is emerging, it assumes the role of descriptive coding, by providing the universe of assumptions and value (coefficient) instructions necessary to translate objectives into something quantifiable.¹⁵³

And here again metamorphosis. For the public international human rights community, for example, this means layering a chapeau of principle over data and analytics against which those projects might be held to account. The Working Group for Business and Human Rights, would, of course, insist that the principles of the UN Guiding Principles for Business and

¹⁵² Matissa Hollister, "AI Can Help with the COVID-19 Crisis—But the Right Human input is Key," World Economic Forum (30 March 2020); available [https://www.weforum.org/agenda/2020/03/covid-19-crisis-artificial-intelligence-creativity/].

¹⁵³ European Commission, "High Level Expert Group on Artificial Intelligence, Ethics Guidelines for Trustworthy AI," Report (8 April 2020); available [file:///Users/lcb911/Desktop/AIHLEG_EthicsGuidelinesforTrustworthyAI-ENpdf.pdf] ("it aims to offer guidance on the second and third components: fostering and securing ethical and robust AI. Addressed to all stakeholders, these Guidelines seek to go beyond a list of ethical principles, by providing guidance on how such principles can be operationalised in socio-technical systems."). See also, "Will Germans trade privacy for coronavirus protection?," DW (29 March 2020); available [https://www.dw.com/en/will-germans-trade-privacy-for-coronavirus-protection/a-52943225].

Human Rights¹⁵⁴ serve as the normative foundation for COVID-19 responses, including data driven responses.¹⁵⁵ The Working Group might also plead for analytics that prioritizes human rights based assumptions in the protection of business and its factors of production, principally labor.¹⁵⁶ Joined by others, the Special Rapporteur on the Right to development would press the case for development rights norms in times of COVID-19, here focusing on democratic participation in policy approaches to the pandemic, a sentiment that runs counter to the thrust of data driven modeling except to the extent that such a call for participation produces a new model for data gathering in its own right (that is to data gathering of public sentiment for inclusion in societal control models for example).¹⁵⁷ Likewise,

¹⁵⁴ United Nations, Guiding Principles for Business and Human Rights (NY and Geneva: UN, 2011).

¹⁵⁵ "The pandemic will eventually pass. States and business actors must use this moment to not revert to business as usual, but to forge a new normal based upon the globally agreed standard provided by the Guiding Principles." Statement by the UN Working Group on Business and Human Rights, "Ensuring that business respects human rights during the Covid-19 crisis and beyond: The relevance of the UN Guiding Principles on Business and Human Rights," (27 April 2020) Available [<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25837&LangID=E>].

¹⁵⁶ Press Release: "COVID-19: State and business respect for human rights critical to resilience and recovery, say UN experts," UN Human Rights website (28 April 2020); available [<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25836&LangID=E>] ("As governments scramble to extend a financial lifeline to struggling businesses, any financial support or bailouts should come with a clear requirement – to commit to respect human rights and dignity of people," quoting Anita Ramasastry); Press Release: "Every worker is essential and must be protected from COVID-19, no matter what – UN rights experts," UN Human Rights Website (18 May 2020); available [<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25892&LangID=E>] ("We are also deeply concerned about the disproportionate risk presented to workers that are low-income, minorities, migrants, older persons and those with pre-existing health conditions, women, as well as the informal sector and those in the 'gig' economy.").

¹⁵⁷ Press Release: "Leave no one behind" – Don't forget your commitments in your response to the COVID-19 crises, UN expert urges States," UN Human Rights Website (9 April 2020); available [<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25786&LangID=E>] ("Alfarargi called on all governments to enable disadvantaged and marginalised and vulnerable individuals and groups to meaningfully participate in decision-making processes. "This is essential to overcome structural inequalities and discrimination, to

the UN's Independent Experts might urge protection of identifiable traditionally marginalized groups in the development of policy models, for example sexual minorities,¹⁵⁸ severe labor exploitation in the form of so-called modern slavery,¹⁵⁹ corruption,¹⁶⁰ and the way that models value effects and outcomes against each other.¹⁶¹ Independent experts could

ensure their place as key actors in the development of countries, and to ensure the equal sharing of benefits.””).

¹⁵⁸ Statement: “COVID-19: The suffering and resilience of LGBT persons must be visible and inform the actions of States,” UN Human Rights Website (17 May 2020); available [https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25884&LangID=E] (“COVID-19, and the measures taken to address it, exacerbate inequalities and discrimination. The existence of criminalization laws, for example, makes LGBT persons more vulnerable to police abuse and arbitrary arrest and detention in the context of movement restrictions and curfews.”); Press Release: “‘States must include LGBT community in COVID-19 response’: The how and why from a UN expert,” UN Human Rights Website (17 May 2020); available [https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25889&LangID=E] (“Madrigal-Borloz said that States should ensure that pandemic-related measures are not discriminatory and are designed with the participation of LGBT communities, and ensure accountability for arbitrariness and abuse.”).

¹⁵⁹ Press Release: “Governments must do more to prevent slavery and exploitation during COVID-19 pandemic,” UN Human Rights Website (30 Nov. 2020); available [https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=26552&LangID=E] (“To ensure that no one is left behind as a result of the COVID-19 pandemic, States must increase their efforts to identify and protect victims of slavery and trafficking, including by ensuring their access to essential health services, including reproductive health services, psycho-social counseling, legal assistance, vocational training, income-generating support and remedies without discrimination.”).

¹⁶⁰ Press Release, “COVID-19 highlights deadly cost of corruption and the urgent need for companies to respect human rights: UN experts,” UN Human Rights Website (9 July 2020); available [https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=26064&LangID=E] (““Targeted sanctions, asset freezes and visa denials can be used against individuals who perpetrate human rights abuses and/or engage in corrupt acts. Public procurement laws must ensure that taxpayer funds are not given to companies that pay bribes and commit fraud, and that government contracts go to those that respect human rights.””).

¹⁶¹ Press Release: “Chile must prioritise water and health rights over economic interests, says UN expert,” UN Human Rights Website (20 August 2020); available [https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=26177&LangID=E] (“Since 2016, residents have been allocated 50 litres of water per person per day; water is delivered in uncertified

make a case against the valuation of human life inherent in triage in the form of a transformation of the right to life as immeasurable, not just with respect to fetuses but to the aged as well.¹⁶² Together these read like instruction of coders and those constructing models on which policy will be based. And that is their greatest point of effectiveness. Despite their reactionary and anachronistic thrust (almost invariably seeking to induce states to draft more laws), the real value of these efforts is to serve as the normative baseline, and to articulate the objectives and assumptions, through which model makers and coders can develop analytics and identify relevant data. And that in itself transforms the enterprise of societal organization in a fundamental way.

For all that, there is a certain comfort to this data driven turn, one that might have raised hackles in almost any other context in which political decisions are being made. This is a culture well trained in the certainty of science and the power of quantification as inherently less ambiguous and deceptive than words. They provide our contemporary wizards with the power to "read the past, present, and future in accordance with numbers and computations" (Crosby, *supra*, p. 124) based on the faith that reality is mathematical (*Ibid.*, p. 123). That is simulations can be used to create our world in a form in which it is possible to travel in time and in so doing to change predicted outcomes by changing present responses now makes those of us with power feel like we (they) might wield the power of the gods. That the power is flawed and imperfect is of little moment in terms of its utility for exercising power.

tanker trucks and sometimes is so unsafe it gives children diarrhoea. "This is not enough to meet the usual domestic needs during the pandemic," Heller said. "The Chilean Ministry of Health recommends frequent hand-washing as one of the most effective ways to prevent the spread of COVID-19, so the government must guarantee adequate water to everyone and ensure businesses do not undermine the State's ability to meet its obligations."").

¹⁶² Press Release: "No exceptions with COVID-19: "Everyone has the right to life-saving interventions" – UN experts say," (26 March 2020); available [<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25746&LangID=E>] ("Advances in biomedical sciences are very important to realize the right to health. But equally important are all human rights. The principles of non-discrimination, participation, empowerment and accountability need to be applied to all health-related policies."").

So if epidemiological models don't give us certainty—and asking them to do so would be a big mistake—what good are they? Epidemiology gives us something more important: agency to identify and calibrate our actions with the goal of shaping our future. We can do this by pruning catastrophic branches of a tree of possibilities that lies before us.¹⁶³

The model becomes the "Holy Spirit" of a magisterium of experts in whose hands decisions are now vested (for the analogy in contemporary religion.¹⁶⁴ And these are useful gods indeed—even better than the gods of law and theory; for these gods are less intelligible; they are immanent within the algebraic formulations of mathematically driven reductionist relations, and they may be only interpreted, constructed and applied by a priestly class whose power is now assured. These are the matters that ought to give us all pause; but not panic. That pause need not be directed toward a reactionary effort (and on pursued ultimately in vain) for the return of the old order. It is far too late for that (and in a sense that effort also constitutes a sort of simulation of nostalgia). It ought to be directed toward the principles on which our new high priests of modelling, and their control of the political collective can be constrained and made responsive to whatever higher order set of principles we believe, as a collective, express our (and the ultimate irony here) essence.

B. Simulating Politics in the Shadow of COVID-19: " 'like the school nurse trying to tell the principal how to run the school'.

The COVID-19 pandemic has also cast a stronger light on the inter-relationship between quantification and technology. The difference between the expression of the lust to quantify, our *concupiscentia carnis*,¹⁶⁵ today, and that of a century ago might be understood as a function of capacity. But

¹⁶³ See Zeynep Tufekci, "Don't Believe the COVID-19 Models," *The Atlantic* (2 April 2020); available [https://www.theatlantic.com/technology/archive/2020/04/coronavirus-models-arent-supposed-be-right/609271] ("In our time, however, the problem is sometimes that people believe epidemiologists, and then get mad when their models aren't crystal balls." Ibid.)

¹⁶⁴ see, e.g., "The Holy Spirit's Assistance to the Magisterium in Teaching: Theological and Philosophical Issues," *CTSA Proceedings* 51:125-142 (1996).

¹⁶⁵ I John ii:16.

not just capacity--also the capacity to embrace quantification, and its power to simulate, as a moral positive.¹⁶⁶ I also spoke to the essence of simulation in reductionism (e.g., one must reduce a phenomena to its essence) and to the discretionary perils of essentialization (e.g., what and how phenomena are reduced speaks as much to the viewer as to the thing viewed).

Ultimately I spoke to the power of simulation as both *the form* through which the world is seen and manipulated, and as *the language* through which such formation and manipulation can be justified and the role of the manipulator authenticated. *Form* suggests the centrality of political discourse around models which structure not just the simulation of the context in which political decisions must be made, but also provide the *language* to be used to formulate and explain (and justify) the response in terms of the simulation itself.

While most political elites tend to be quite opaque about their engagements in this respect (especially those who most loudly claim to center transparency in governance--an irony which is both ordinary and profound in contemporary culture), the leading elements of American political culture now appear to embrace transparency. A recent story widely circulated provides a window on the way that the theoretical musings earlier elaborated are actually shaping the forms, discourse, and language of politics.¹⁶⁷ It is in this context worth considering the

¹⁶⁶ Larry Catá Backer, "Meaning Making and Making Meaning "Obvious": The Case of the Embrace of Surveillance in the Age of Pandemic," *Law at the End of the Day* (3 May 2020); available [<https://lbackerblog.blogspot.com/2020/05/meaning-making-in-new-era-of-pandemic.html>]. There it was noted:

Here one speaks to the formation of surveillance as a cluster of ideas, techniques, principles and judgments that is obvious. The re-formation of surveillance as a set of obvious understandings, of common meaning, and with obvious moral value (good or evil) may be more significant than the legal debate about the structures for organizing surveillance and assigning authority over its implementation and oversight across public and private actors, more important than the political and economic debate about surveillance. And yet the construction of the obvious--of surveillance as a set of significations with moral value that then drive economic, political, and legal debates--may be overlooked. (Ibid.).

¹⁶⁷ See Frances Mulraney, "Trump administration officials thought COVID-19 death toll would never reach 60,000 and that medical experts caused the

way that the reporting illustrates the ubiquity of the simulation as the vehicle for politics, and the way that this has produced its own simulated politics. One version of the story follows (for another, [here](#)) and with it an elaboration of the eight (8) principal points I wish to make: 1. *There is still a tenancy to personalize simulation*; 2. *Simulations are understood as the way that values are now expressed*; 3. *The authority of simulations remain a function of class*; 4. *Simulation shifts the locus of politics*; 5. *Simulation substitutes quantified for moral authority or principle*; 6. *The more effective tools of politics are now quantifiable and predictive*; 7. *Simulation reduces the populace to silence*; and 8. *Simulation ultimately reduces the power of the leadership core*.

1. *There is still a tenancy to personalize simulation*. The usual seraglio politics of spaces that are effectively hermetically sealed (e.g., a Standing Committee of a Political Bureau, or an Office of a President) appear to shift their focus but not their target in a context where decisions are made around or through simulation. There is a tendency, then, to align, to *create an identity, between the simulation and the simulator*. It follows that the effective essence of this essentializing tool is the personal politics and ambitions of the simulator. In effect the simulation is an extension of the simulator as much as it is the modelling of the slice of reality from out of which a policy decision must be made. Simulations, then, are the masks worn by those who wish to hide personal agenda in the more neutral language of quantified reality.

2. *Simulations are understood as the way that values are now expressed*. To choose a particular form of simulation is to choose a set of values that are to be advanced by the simulation. But more than that, to choose a particular form of simulation is meant to foreclose any debate on the premises on which that simulation was chosen. *Choosing simulations is a form of choosing sides in a political contest*.¹⁶⁸ In the case of COVID-19,

president to overreact 'like the school nurse telling the principal how to run the school'," Daily Mail (3 May 2020); available [<https://www.dailymail.co.uk/news/article-8281555/Trump-administration-officials-thought-COVID-19-death-toll-never-reach-60-000.html>].

¹⁶⁸ See, John Leslie King and Kenneth L. Kraemer, "Models, Facts, and the Policy Process: The Political Ecology of Estimated Truth," Center for Research on Information Systems and Organizations (CRITO) Working Paper #URB-006 (1992); available

that necessary fragmentation was understood as separating out those who placed a greater value on economic simulation against those who would value health more. Both of course are after the same ultimate result--the maximization of the welfare of the American people--but each of their conceptual universes produce highly different pathways to that goal--and with those pathways quite different effects on individuals.¹⁶⁹ There is an analogy in international law--the fracture of the human rights listed in the Universal Declaration of Human Rights among two International Covenants. One was modeled on the principle that all economic, social, and cultural rights could only be realized through the primary protection of civil and political rights. The other that human rights could only be modeled on the basis that civil and political rights were merely the fruit of the attainment of robust economic, social, and cultural rights.

3. *The authority of simulations remain a function of class.* Class remains central to simulation. But by that one ought not to think of class in the simplistic (though valuable for the time) way that it is understood through a European Marxist-Leninist lens, or as the ecologies of societal rankings in the West. Rather one might better think of class as informal collectives built around societal markers of prestige and authority.¹⁷⁰ There is not a soul on Earth who is not trained in assessing these in accordance with the ranking rules of the society she inhabits. One's simulation is only

[https://escholarship.org/content/qt1c31s58g/qt1c31s58g_noSplash_a1518b0580ea1afa7c3d83a743ff4b1a.pdf]. Cf., Nathan Coombs, "Modelling Worlds: The Politics of Simulation," *The Disorder of Things* (12 August 2012); available [<https://thedisorderofthings.com/2014/08/12/modelling-worlds-the-politics-of-simulation/>].

¹⁶⁹ Cf., Özgür Özman, , James J Nutaro*, Laura L Pullum, Arvind Ramanathan, "Analyzing the impact of modeling choices and assumptions in compartmental epidemiological models ," *Simulation* 92(5): (2016); available [<https://journals.sagepub.com/doi/10.1177/0037549716640877>] ("Our study reveals that the magnitude and velocity of the simulated epidemic depends critically on the selection of modeling principles, various assumptions of disease process, and the choice of time advance."); Efstratios Georgakarakos, Christos V. Ioannou, Theodoros Kostas, Yiannis Papaharilaou, "The impact of model assumptions on results of computational mechanics in abdominal aortic aneurysm," *Journal of Vascular Surgery* 5(3):679-688 (2010).

¹⁷⁰ In the common understanding, see, e.g., Naphtali Hoff, "Being a Leader of Influence," *Huffington Post* (1 Feb. 2016); available [https://www.huffpost.com/entry/being-a-leader-of-influen_b_5529130].

as authoritative as one's standing within these prestige classes. This was nicely distilled in the reporting of the battle over COVID-19 models in the Trump White House: "One former senior administration official told the Post that the bloc looked at the health experts 'like the school nurse trying to tell the principal how to run the school'.¹⁷¹" This quote effectively tells one all on needs to know about simulation within a vertically structured social, political, and economic order. It is both refreshingly candid and quite rigid about what it suggests as the connection between simulation and authority.

4. *Simulation shifts the locus of politics.* Where politics once occurred around simulation (that is politics was exogenous to simulation), now politics occurs within simulation (that is it is now endogenous). One does fight about the use of politics--as a tool, as a measure of reality, as anything, really. Instead one fights about its assumptions, its constructions, and the evaluation of its predictive qualities as one shifts contingent factors that move the model in any direction.¹⁷² Where that becomes impossible (techno-expert capture in a modelling universe of hyper-silos) then that politics is undertaken through the construction of an alternative model. In this case, it was based on the availability of a health versus an economics centered model. These two models, like *condottieri* in 15th century Italy, then march around endlessly in battles of attrition in which total victory is impossible and unwelcome, but the marginal advantage decides the fate of all. This, then, is what the chronicles of the intrigues within the White House might be reduced to--and always the simulation in the background, and the foreground.

5. *Simulation substitutes quantified for juristic moral authority or principle.* Quantification and the simulations it produces have the great virtue of providing the authority that is necessary to

¹⁷¹ See, Frances Mulraney, "Trump administration officials thought COVID-19 death toll would never reach 60,000," *supra*.

¹⁷² A small but telling example from the U.K where Parliament was able to intervene in the roll out of an algorithm designed to determine both where new housing was to be built and the extent of local discretion in determining siting. See James Tapfield, "Tories hail U-turn on 'mutant algorithm' that sparked fears of planning free-for-all in the shires as Housing Secretary Robert Jenrick says shift WON'T wreck target of building 300,000 new homes a year," *Daily Mail* 16 December 2020; available [<https://www.dailymail.co.uk/news/article-9059131/Tories-hail-U-turn-mutant-algorithm-shires-planning-revolt.html>].

advance projects.¹⁷³ This virtue is especially important in the absence of either personal, moral or principled authority. In a sense, then, the rise of simulation is the strongest pointer to the decay politics. Politics can only be expressed with the reassurance of quantified and simulated reality in a context in which the old political institutions and structures, along with those eager to serve within them, no longer enjoy the level of trust necessary to buttress a political and societal system entirely on its own.

6. *The more effective tools of politics are now quantifiable and predictive; analytics can then substitute for markets.* Politics has lost its moorings in values and principles. Instead, it is now moored in outcome. And outcome is itself the managed product of simulation. This is neither new nor transformative: it is instead an intensification and deepening of tendencies already quite visible in politics globally. At its most profound level, data driven analytics presumes itself capable of superseding, or of becoming, the idealized simulation of markets.¹⁷⁴

¹⁷³ See, Theodore M. Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton: Princeton University Press, 1995). See also, Andrea Saltelli, "Ethics of Quantification or Quantification of Ethics?," *Futures* 116 (February 2020).

¹⁷⁴ Consider the argument of the development of algorithms in university admissions. See, e.g., Brian Rosenberg, "Can Algorithms Save Admissions?," *The Chronicle of Higher Education* (15 Dec. 2020); available [https://www.chronicle.com/article/can-algorithms-save-college-admissions] (suggesting reliance on something like "the Gale-Shapley algorithm to solve what is sometimes called the "stable-marriage problem." Put simply, the algorithm creates matches between two sets of elements given an ordering of preferences within both sets. It is designed to make happy marriages." Ibid.). Interestingly, even in this context, the object of the algorithm is to preserve service provision among colleges other than the most prestigious with respect to which markets remain a viable means of allocating students. That goes back to the relationship of algorithmic governance and class discussed supra. Similar patterns apply to COVID-19, for example with respect to the allocation of vaccines. See, National Academies of Sciences, Engineering, and Medicine, *Framework for Equitable Allocation of COVID-19 Vaccine* (Helene Gayle, William Foege, Lisa Brown, and Benjamin Kahn (eds); Washington, D.C.: National Academies Press, 2020); available [https://www.nap.edu/download/25917]. Here, data, logistics, administrative efficiency and legal mandates produce an environment in which allocation must be determined in accordance with the ideals of a simulated market driven by national welfare maximization principles whose expression is left to experts.

7. *Simulation reduces the populace to silence.* Simulation ultimately realigns democratic authority.¹⁷⁵ The ultimate outcome of a simulated politics is the intensification of the construction of the electorate (or the masses elsewhere) as passive stakeholders. But more than passive, simulation reduces the people to silence, the silence of an onlooker unable to understand the reality around her without the aid of those who can interpret the simulacra of reality and thus guide them toward an alignment of simulated and experienced reality. Principles are easy to engage--anyone can do it. Predictive analytics makes it harder for just anyone to participate.

8. *Simulation ultimately reduces the power of the leadership core.* Simulation indicates the rise of the machine (AI) and its techno-expert priests and the diminution of the populace as an effective political actor (even when measured from the cynical baselines of the end of the 20th century).¹⁷⁶ But it has a more pernicious effect--it can reduce the core leadership to a similar state. Core leaders exercise decision making power in a world of simulation, but it is the simulation (and their simulators) who actually wield the power to order (and manage) the reality within which decisions may be plausibly made. At the same time it opens a new venue for corruption--the reverse engineering of predictive simulation in the service of a decision seeking justification. In either case the authority of the core leadership can be diminished and with it another struct in the foundations of a political system.

C. Those who Must Bear the Burden of Modelling Anti-COVID-19 Measures..

The realities of containment as a mitigation strategy against the spread of COVID-19 has become the basis for national measures across the Globe. This was emphasized by the American official, Dr Anthony Fauci, the head of the infectious diseases unit at the National Institutes of Health in an explanation for transmission through global news media.

¹⁷⁵ Cf., Nikolas Rose, "Governing by Numbers: Figuring Out Democracy," *Accounting, Organization and Society* 16(7):673-692 (1991).

¹⁷⁶ Cf., Carmen Tanner, Adrian Brugger, Susan van Schie, and Carmen Lebherz, ""Actions Speak Louder Than Words: The Benefits of Ethical Behaviors of Leaders" *Journal of Psychology* 218(4):225-233, 225. (2010)

As the outbreak spreads, daily life has been increasingly disrupted, with concerts and conferences canceled and universities telling students to stay home and take classes online. To contain the outbreak in China, the government quarantined millions of people for weeks. Italy has announced similar measures, locking down 16 million people in the north of the country. Fauci said he did not think the US would impose total shutdowns - but said 'anything is possible'. 'We have to be realistic. I don't think it would be as draconian as nobody in or nobody out,' he told Fox News Sunday. 'But if we continue to get cases like this, particularly at the community level, there will be what we call 'mitigation,' where we have to essentially do social distancing, keep people out of crowded places, take a look at seriousness, do you really need to travel, and I think it's particularly important among the most vulnerable.'¹⁷⁷

This post briefly suggests the relevance of current work on linking human rights to private household indebtedness in the context of national macro-economic regulation to the question of the human rights effects of public and institutional free riding that occurs in the context of national measures to mitigate contagion in ways the costs of which may be disproportionately shifted to the most vulnerable national populations. It questions the need for or fairness of developing policy for the collective good, the costs of which are shifted down to individuals who thus effectively subsidize collective policy twice--first through the taxes they pay and the obedience they give to state and enterprise. Second by having to bear personally the costs of that policy as it affects their livelihood and perhaps their health and well bring.

While many focus on macro issues with respect to the consequences of COVID.19 (and thus also of planning for future iterations of epidemics of known capacity), relatively little

¹⁷⁷ Megan Sheets, "Top coronavirus expert Dr Fauci says four million tests should be available by end of the week, as he warns Americans to avoid crowds and brace for quarantines as death toll rises to 21 with two new victims reported at Washington nursing home," *Daily Mail* (9 March 2020); available [https://www.dailymail.co.uk/news/article-8088669/Vulnerable-Americans-need-avoid-crowds-U-S-health-official-warns.html].

attention has been paid to the micro effects of the COVID-19 epidemic, and especially of its impacts on individuals who are neither large enterprises, rich states, or wealthy individuals or families. All of those creatures are quite capable of taking care of themselves--though their own folly may be as much a catalyst of triumph or disaster as any outside intervention. As for the factory worker, the school teacher, the office worker or lower level manager, for these individuals and their families, the risk and consequence parameters are of a slightly different order. Indeed, even the student, who must adapt to the policies of a university that is balancing the risks of operating as normal against the need to ensure the continued flow of income, will tend to balance those opposing choices against the valuation of the extent to which they might export the "costs" of the choices onto students (especially) with collateral subsidizes by faculty and staff.

In a sense, then, the *containment policies*--of states and enterprises, and of the communities drafted in support of their implementation--*represent an instance of free riding but with the polarities reversed*. In this case, it is the state, the enterprise, the social organization that achieves a benefit, indeed a substantial benefit on the beneficial action of others. And those "others" bear the burden directly by having to use their own resources to subsidize the effects of those policies of containment on their own (and their families) welfare. This is not to suggest that the policies are unnecessary or wrong. Indeed, containment has proven to be quite useful--especially when it is undertaken as part of a comprehensive prevention and mitigation strategy, to reduce the severity of the incidence of epidemic. But that success is not obtained for free, and the question of the equities of distributing its costs downward to those who are least able to bear those costs tends to be either ignored or overlooked.

It was in that context that it is worth looking with fresh eyes at the work of Juan Pablo Bohoslavsky, the UN the Independent Expert on Foreign Debt and Human Rights. His 3 January 2020 Report¹⁷⁸ provides a useful analysis of the national macro-effects of foreign debt.

¹⁷⁸ Pablo Bohoslavsky, "Report of the Independent Expert on the effects of foreign debt and other related international financial obligations of States on the full enjoyment of human rights, particularly economic, social and cultural rights" (A/HRC/43/45) (3 Jan. 2020); available [<https://undocs.org/en/A/HRC/43/45>]. See also Pablo Bohoslavsky,

In his 3 January 2020 *Report*, Bohoslavsky sought to understand the problem of debilitating individual debt as a form of societal free riding. That free riding takes place in a context in which states privatize their obligations to their citizens to ensure economic, social and cultural rights.

"82. . . . "At the core of this phenomenon lies so-called "financial inclusion", the colossal failure of States to ensure the realization of economic, social and cultural rights for all. The explosive increase in private debt is what has sustained aggregate demand and economic growth over the past decades, often at the expense of indebted households. Millions of people around the world transfer a significant part of their wealth and well-being to the financial sector, whose links to the real economy continue to erode, compromising shared prosperity and financial stability and security, and reinforcing inequality. 83. Private debt should not be contracted by individuals and households as a way to compensate for the State's obligations to protect, promote and fulfil human rights. Personal or household financial and other costs associated with the repayment of debt should be at such a level that the attainment and satisfaction of human rights are not threatened or compromised. Contracting and repaying debt or defaulting on repayment should not entail human rights violations."¹⁷⁹

His *Guiding principles on human rights impact assessments of economic reforms* (GPHRIA) suggests a framework for mitigating the free riding that is a necessary consequence of the framework within which global production has been organized and the role of the state transformed. The GPHRI Principles "underline the importance of systematically assessing the

"Guiding Principles on Human Rights Impact Assessments of Economic Reforms" A/HRC/40/57 (19 Del 2018); available [https://www.ohchr.org/EN/Issues/Development/IEDebt/Pages/DebtAndImpactAssessments.aspx] (hereafter "GPHRIA").

¹⁷⁹ Bohoslavsky, "Report of the Independent Expert on the effects of foreign debt and other related international financial obligations of States on the full enjoyment of human rights, particularly economic, social and cultural rights" (A/HRC/43/45) (3 Jan. 2020);, supra ¶¶82-83.

impact of economic reforms on the enjoyment of all human rights before decisions are taken to implement such reforms, as well as during and after their implementation." (Summary). The Principles "apply whenever economic reform policies may foreseeably result in impairment of human rights. These principles are likely to be most relevant in the context of acute economic and financial crises (reactive function)."¹⁸⁰

Whatever new thinks of the viability of a set of Principles to impose on states a human rights due diligence obligation similar to that imposed on enterprises under the UN Guiding Principles of Business and Human Rights, the framework sets out a useful approach for states faced with multiple and potentially conflicting risk mitigation obligations in the context of a disease based crisis. That is, it ought to help understand the way that mitigation of harm to the state or the enterprise, might at the same time augment the risk and burdens on vulnerable populations. State ought to have the responsibility of mitigating harm to their vulnerable populations as they consider plausible alternative approaches to the litigation of collective harm caused by disease. It is that balancing that remains elusive under current frameworks.

The object in suggesting the utility of the work of the Independent Expert on Foreign Debt and Human Rights is not necessarily to suggest yet another layer of human rights due diligence tied specifically to human rights as these have been woven together by the international community through the UN's Geneva apparatus. To some extent, the global community has already adsorbed a substantial number of variations of this fundamentally sound (but for the present incoherent set of approaches to the embedding of relevant human rights standards into the everyday activities of states and enterprises. Instead it is to suggest the transformative possibilities organized in ten points.

1. That notions of institutional free-riding (especially by states and economic actors) has become a problem with substantial consequences to the integrity of states and the viability of markets.

¹⁸⁰ GPHRIA ¶ 1, *supra*.

2. That the notions of free riding and its corrosive effects have, to date, been translated into the language and discourse of human rights, bound up within the legalizations of human rights in the two principle International Human Rights Covenants (and founded on the core non-binding premises of the Universal Declaration of Human Rights).

3. That contemporary reliance on the discourse of human rights by policy intelligentsia, while certainly providing a powerful vehicle for legitimization of the propositions developed, have also tended to de-center the *core harm* at the center of the issue presented in favor of the *elaboration of the abstraction* (human rights) applied to a process (due diligence) that ought to produce certain undertakings (a balancing of policy and consequence along the normative lines of substantive human rights) by states and enterprises.

4. And yet that care harm is worth re-centering, especially in the context of state actions in response to the threats of plague and mass disease with substantial mortality rates. Indeed, human rights as an elaborated abstraction, in this context, ought to be understood as the means through which states understand both the nature of a "harm" and its duty to mitigate or remediate that harm when it occurs as a result of actions it takes. At the same time, the harm principle reminds states that a practice of seeking the least harmful means of effectuating policy most robustly advances the welfare of the society over which it has been vested with responsibility (under whatever political-economic model that state is founded and operates).

5. The harm is exacerbated where it is a consequence of state policy that a seeks to benefit from avoiding the costs of its decisions, or of the undertaking of its collective responsibilities, by effectively *forcing individuals to bear the costs of collective decisions*. Here the state (through policies of containment in the context of CXOVID-19 and enterprises (in the context of risk mitigation decision making that either increases the risk of contagion to workers, or substantially burdens employees and others with the consequences of changes to business practices in the face of epidemic) adopts policies for the collective good in a way that is indifferent to the costs imposed on individuals.

6. States (and enterprises) would necessarily scoff at the idea that they might be free riding on vulnerable individuals. They might suggest that as the collective they are the embodiment of the individual, or that their primary duty is to the collective and that the basic bargain that caused the creation of the state involved the acceptance by individuals that that they might be harmed by (or have to bear individually the costs imposed collectively) on people by the state.

7. But these notions are in a sense absurd. One can accept, and even laud, the majesty of the state and its ruling apparatus, one can recognize the leadership role of a communist party or of a board of directors, and acknowledge that their duty (as leadership cores) to the collectives they serve. But that acknowledgement says nothing about the duty of these leadership cores to individuals, nor does it speak to the development of a duty by the core to ensure that the collective rather than individuals, bear collectively, the costs of policy decisions undertaken for the collective good. The two issues are quite distinct.

8. Thus the question of the authority of the state to forbid people from leaving their houses, or of enterprises to unilaterally impose new work requirements is quite distinct from the question of who ought to bear the consequences of those decisions. It is no longer as easy a matter to retain the authority to command these actions and then delegate their consequences to those least able to bear it.¹⁸¹ The better argument ought to be that the state (or the enterprise) the entity with the power to assert authority to compel obedience to those decisions ought

¹⁸¹ That was understood, implicitly, in the responses of states to compensate, however parsimoniously, their populations for the costs of shutting down significant portions of the national economy. See CARES Act, H.R. 748, 116th Congress (2019-2020); available [https://www.congress.gov/bill/116th-congress/house-bill/748] ("his division establishes the Paycheck Protection Program to provide eight weeks of cash flow assistance to small businesses through federally guaranteed loans to employers who maintain their payroll. Such assistance shall be to cover costs such as payroll, paid sick leave, supply chain disruptions, and employee salaries. The division further provides that certain amounts owed on such loans are eligible to be forgiven."); Birgit Spiesshofer, "COVID-19—A 'Hamilton Moment' for the European Union?," *Emancipating the Mind: Bulletin of the Coalition for Peace and Ethics* 15(2): (2020).

to bear the costs. The reality, today, however, is that state and enterprise are free to device whatever policy they feel necessary without the slightest worry that they (or their organizations) will have to pay for the harm causes or bear the costs of implementation.

9. Here at last one can begin to see the problem. It is not that the people trapped on cruise ships, or forced at the expense to produce value for enterprises in new ways, or prohibited from traveling, or denied access to good and services ought to be free to disregard these policy directives. Rather it is that those with the power to impose them (for the greater good) also ought to bear the costs of attaining that good. To shift the costs to individuals not only produces harm; it may well produce human rights harm.

10. At the same time, a state and an enterprise might have an obligation to mitigate the harm that is caused by a policy choice.¹⁸² That can be undertaken by the now well-worn least restrictive means principle. That is a state or enterprise might be obligated to mitigate risk of harm to individuals by choosing from among alternatives to positive collective objectives, the one that causes the least individual harm. That is the one in which the state (or enterprise) minimizing its free riding to implement its policy goals). This is especially important in crisis events around infectious diseases like COVID-19. And yet that discourse is nowhere now to be found either within that of liberal democracies or those of Marxist Leninist States. A pity.

6. *Metamorphoses*.¹⁸³

This essay begins with Ovid and ends with Lucretius: *nam quodcumque suis mutate finibus exit, continuo hoc mors est illius quod fuit ante* [For if anything is so transformed as to overstep its own limits, this means the immediate death of what it was before].¹⁸⁴ *Metamorphoses* served as the theme of this

¹⁸² See discussion, *supra*., at notes 152-160.

¹⁸³ With irony: "Now stands my task accomplished, such a work as not the wrath of Jove, nor fire nor sword nor the devouring ages can destroy." Ovid, *Metamorphoses* (A.D. Melville (trans.) Oxford, 1986(c. 14 A.D.)), p 379.

¹⁸⁴ Titus Lucretius Carus, *De Rerum Natura* [On the Nature of Things] i. 670-1 (also i.792-3, ii. 753-4, and iii. 519-20) (also translated as "For change

essay, in its senses of change of form or shape. Metamorphoses is the signature marker of COVID-19 on the bodies of individuals and on their collective organizations. Yet to that theme of transformation is a moral—and that is supplied by Lucretius: that which has changed shape cannot ever assume its prior form. To is no longer capable of assuming its prior form. Metamorphoses augur the passing of one thing as it becomes another. That it retains the husk of what came before of little moment. It provides a (vain) hope for reactionary tendencies of those in human collectives who walk looking backwards, and it constrains those who by looking forward only (falsely) believe that transformation detaches the emerging essence from the husk of its past.

This essay has suggested the metamorphoses of COVID-19 on human institutions and the cultural premises on which they are founded. To that end, it has, like Ovid, started with origin stories. COVID-19 has played a central role in the transformation of societal self-conception, and on the authority of those forces that may speak to origins and their ordering power. But the great metamorphoses touch every aspect of the great structures of human (collective) organization as well as of individual (self) conception within the collectives in which they inhabit. Origins are a mirror of the societal self. It is at once an interior gaze (how a collective sees itself through its own “eyes”) and a projected gaze (how the collective expects others to “see” it). The seeing is not an objectification so much as it is the incarnation of the spirit of the place—its anima and animus exposed and raw in the face of deep challenge.¹⁸⁵ But it is also how one projects self-conception to others. In that respect as well COVID-19’s battle of the origin stories reveals as much about how states as moral orders see themselves and how they have come to expect others to see them.

in anything from out its bounds means instant death of that which was before”; from *On the Nature of Things* (William Ellery Leonard (trans.) Project Gutenberg ebook #785 (2008); available [<http://www.gutenberg.org/files/785/785-h/785-h.htm>]).

¹⁸⁵ As well as its archetypes. See generally, Carl Jung, “The Concept of the Collective Unconscious,” (RFC Hull (trans) (1936) reproduced at Bahaistudies.net; available [<http://www.bahaistudies.net/asma/The-Concept-of-the-Collective-Unconscious.pdf>]. . Cf., Carol L. Berzonsky, and Susanne C. Moser, “Becoming homo sapiens sapiens: Mapping the psycho-cultural transformation in the Anthropocene,” *Anthropocene* 20:15-23 (2017).

And what is the self that society is becoming? That, in part emerges from what COVID-19 responses reveal in the areas considered. COVID-19 has revealed the authoritarian instincts not just of Marxist-Leninism, but that of liberal democracies when moments of stress reveals the underlying foundations. But that revelation of authoritarianism actually serves more pointedly to reveal not merely the embrace of authority (for that is what, in its essence what one speaks of when invoking the ideology authoritarianism), but of the arrangement of unquestionable authority vertically arranged. In Marxist Leninist states those structures revolve around interlocking leadership cores up a chain of command. In liberal democratic states it revolves around the unquestionable authority of knowledge keepers and technocracies.

COVID-19 has transformed morals. The moral panic¹⁸⁶ that is COVID-19 has exposed a view of the value of the most vulnerable. It has transformed the notions of social self-preservation (collectively) and then mimicked at the level of the individual, that is founded on notions of strength, power, and wealth. The morality of herd culling has been a strong undercurrent of COVID-19—as policy and individual choice. As well the morality of hierarchy, and the end of moral leveling—has also been exposed. That immorality touches not just on decisions of treatment and protection hierarchies, but as well on the way that government distributes the burden of responding to COVID-19. Taken together, these transformations suggest the emerging immorality of horizontal equity and of the equality of the individual.

There is a connection between the movement of morals and that of governance. COVID-19 has changed the shape and form of governance, of law and jurisprudence, and of the structures of governance. The husk of old law remains of course. Government appears unchanged. It still speaks through the arcane idioms of legislation, regulation, and jurisprudence,

¹⁸⁶ Cf. Sander L. Gilman, “Moral Panic and Pandemics,” *The Lancet* 375(9729):1866-1867 (29 May 2010); available [https://www.thelancet.com/journals/lancet/article/PIIS0140673610608628/fulltext?rss=yes&utm_source=twitterfeed&utm_medium=twitter] (“A pandemic or an epidemic is actually not only how widespread a disease actually is, as Chan implied, but rather how it is perceived. . . . Real infectious diseases do have a powerful psychological effect. SARS quickly became a “moral panic”, which spread worldwide, being accompanied by a true sense of stigma.”).

enforced through its structures of coercive authority. And yet, it operates now through the digestion of data. Data feeds systems of rewards and punishment grounded in values based analytics. Data also feeds models—the models used to construct scientific approaches to policy. These are, in turn, reification of ideal states concocted by those who deploy armies of coders and modelers to their tasks. It is in this way that the virus armies of COVID-19 have infected the body politics, and its collective expressions in other collective organizations.

And before these changes the populace stands mute. There is no other recourse in a context in which simulation substitutes for engagement, and the greatest value of the individual is as a disaggregated producer of data, and an object of transformation to fit closer to a simulated ideal state. And that individual has become passive and poor—dependent.¹⁸⁷ More tellingly, Societal collectives have more clearly revealed the relationship between the individual and the collective—irrespective of the ideological political order in which they may be situated. It is to leadership cores that the authority to take risks is increasingly vested. That authority may be exercised personally or through data driven analytics. The risks of that exercise, though, is borne by the masses. The nature of engagement has been transformed as well—from expressive politics, to data generation—from the active to the passive principle of political connection to the apparatus of the state, now more clearly revealed, in turn, as the product of an ecology of simulation.

The populace may find comfort in the reassurances, made by those with the power to do so, that people and their collective organizations will soon return to their prior conditions. Yet it may prove a formidable task to reanimate that corpse: “*continuo hoc mors est illius quod fuit ante.*”¹⁸⁸ Perhaps one might take from this a final moral—the COVID-19 virus

¹⁸⁷ See, e.g., “UN: Pandemic Pushed 32M People into Extreme Poverty,” *NewsMax* (3 Dec. 2020); available [<https://www.newsmax.com/newsfront/pandemic-united-nations-extreme-poverty/2020/12/03/id/999799/>]; Rusty Woo Yuniar, “Pandemic wipes out years of progress on Asian poverty, from Indonesia to the Philippines and Thailand,” *South China Morning Post* (13 Dec. 2020); available [<https://www.scmp.com/week-asia/economics/article/3113654/pandemic-wipes-out-years-progress-asian-poverty-indonesia>].

¹⁸⁸ Titus Lucretius Carus, *De Rerum Natura* [On the Nature of Things], *supra*, i. 670-1.

has, in fact, reduced human society to a mere reflection of its nature, its purpose, and its methods. To understand society post-COVID-19 one may well have to study more closely the structures and organization of the communities of COVID-19 virus.¹⁸⁹ The autopoiesis¹⁹⁰ of the virus and of the human communities within which it now forms a relationship, may well reveal alignments that are worthy of further study.¹⁹¹



¹⁸⁹ Here Niklas Luhmann might prove helpful. See Niklas Luhmann, *Introduction to Systems Theory* (Peter Gilgan (trans) Cambridge: Polity Press, 2013).

¹⁹⁰ Here one necessarily moves beyond the traditional notions of self-reflexivity within the husks of societal systems unmarked by the system transforming effects of COVID-19. Autopoiesis retains a connection with the old forms, Cf., Gunther Teubner, *Law as an Autopoietic System* (Oxford, 1993), "but its internal structures have produced a creature that is quite changed."

¹⁹¹ See, e.g., Michael Rempel, "Power/Knowledge: A Foucauldian Reconstruction of Niklas Luhmann's Systems Theory," *International Journal of Sociology and Social Policy* 16(4):58-90 (1996).

