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The political theology of entropy: A Katechon for the cybernetic age

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Abstract

The digital revolution invites a reconsideration of the very essence of politics. How can we think about decision, control, and will at a time when technologies of automation are transforming every dimension of human life, from military combat to mental attention, from financial systems to the intimate lives of individuals? This article looks back to a moment in the 20th century when the concept of the political as an independent logic was developed in a time when the boundaries and operations of the classic state were in question. At the same moment, a whole new technological era was opened with the emergence of intelligent machines and computers in the postwar cybernetic age. Technology, and cybernetics in particular, loomed large in Carl Schmitt's articulation of the concept of the political, while the problem of radical open decision was at the heart of influential cybernetic approaches to politics. Linking them was the idea of entropic decay. Schmitt's invocation of theological concept of the Katechon, who restrains chaos in the time before Christ's return, in fact exemplifies the new understandings of order in a cybernetic age facing new challenges of technology in a globalized condition.

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"For the mystery of lawlessness is already at work, but only

until the one who now restrains [τὸ κατέχον] it is removed."

2 Thessalonians 2:7

Carl Schmitt first began to develop the concept of the Katechon during the Second World War, yet it is most well known for the prominent role it plays in his postwar book on global order, *Der Nomos der Erde* [Nomos of the Earth] (1950). Given Schmitt's well-developed and consistent theory of political theology, and his acknowledged Catholic inspiration, it is safe to say that the Katechon – the worldly figure who keeps the anti-Christ at bay until the return of Christ – needs to be interpreted through the lens of his theological orientations. At the same time, there is no question that this same book (like much of Schmitt's work in the period) is fraught with a serious concern for, and even fear of, a hyper-technologized

humanity. In an 'industrialized and engineered [*technisierten*] world', he wrote, created with the 'help of technology', humans may well 'transform their planet into a combination of produce warehouse and aircraft carrier'. Inevitably, in this new condition, new amity lines must be drawn, and beyond them, nuclear weapons may well be deployed, threatening the very destruction of humankind (Schmitt, 2003[1950]: 49). Nuclear war was, in the end, averted – a new nomos of the earth, perhaps, was developed and sustained.

Echoing Martin Heidegger's critique of modernity, Schmitt's invocation of the Katechon, who has the task of 'restraining' the lawlessness of the world, can hardly be separated from the challenge of contemporary industrial and military technology, given that the hope of any 'new order' was at its heart dependent on a reorganization of this new technical condition that seemed to promise annihilatory violence. As Nicolas Guilhot has brilliantly shown, postwar American thinking of international relations played on the intersection of age-old concepts of balanced governance and political theology with very modern issues concerning global equilibrium in a nuclear age (Guilhot, 2010). In the Cold War, we can see how the Katechon links cybernetic languages of technologized information systems and the deep theological roots of modern political forms.

But that era has now ended. What of the 21st century? How can we think of the political – the intertwined questions of security, technology, and order – today?

First, we need to recognize that we are now living in the midst of one of the great revolutions in human cultural history, on a par with the invention of writing or the development of the printing press. Those revolutions were initiated by technological innovations but ultimately resulted in total transformations of the cognitive, cultural, and political spheres. Our digital revolution is no different, except that it has taken place so

rapidly, and on a planetary scale, that it has been extraordinarily difficult to map and understand these changes as they have been taking place. And for two reasons – not just because of the pace and scale of change, but also due to the *ubiquity* of digital technologies and their capacity for generating seemingly natural habituations. The enmeshing of human minds and bodies with digital devices – a process that began earlier in the 20th century with the first responsive cybernetic machines, and then with the development of electronic computers in the Second World War and after – has produced a situation today where it has become difficult to distinguish at times between the seamless automaticities of the technological sphere and the naturally adaptive human nervous system itself. Given we have the neurobiological quality called 'plasticity', our subservience to machinic forms of prediction and control is becoming easier and easier in this algorithmic age, as these persistent and networked technologies have increasingly direct access to our brains as they form and manipulate our very attention.

So while the most visible surface effects of the digital revolution have attracted the notice of political and critical theorists, for the most part the appearance of new technological phenomena has been conceptualized within inherited political norms or categories: surveillance, privacy, speech, rules of war, human rights, and so on. It is less clear that the digital revolution has prompted a rethinking of the political as such in the 21st century. However, as some critical thinkers have been suggesting, what calls for attention right now is precisely the link between the prevalence of networked digital technologies in both everyday life and across all spheres of economic and administrative control, *and* their absolute and relentless automaticity. And this for very Schmittian reasons – namely that this automaticity threatens a *dissolution* of the political itself, a neutralization of the essential autonomy of

political action and a depoliticization of human life in general. What is more, this neutralization has now emerged as an ideological position, no longer affiliated with a liberal stance, but heralded instead by a new *technical* elite whose organizations operate in new ways not always well managed though formal governmental regulations, despite their enormous influence in the public sphere.

As Evgeny Morozov has warned, the drive in Silicon Valley toward what he calls a 'frictionless future', where data tracking and machine-learning algorithms ceaselessly learn to 'solve' the key problems of modern human life, is creating a broader culture that is not simply a technocratic turn in politics but a more dangerous a-political neutralization of politics altogether (Morozov, 2013: x). As Antoinette Rouvroy and Thomas Berns have argued, the many proliferating versions of 'big data' collection, analysis, and (especially) prediction across the spectrum of key arenas of human life all point to a new form of 'algorithmic governmentality' (sometimes referred to more generally as 'algorithmic governance') that increasingly eliminates human decision and hence the possibility of *failure* because the algorithms incorporate all deviation and exception into a ceaseless production of ever new predictive models, in real time, operating around the clock (Rouvroy and Berns, 2013). What the philosopher Bernard Stiegler calls the 'automatic society' is more than a new 'culture industry' for late capitalism: it is the total dis-integration of our social, economic, and political networks through the creation of new automatisms via technologies of integrated digitalization. What is novel about our new political economy and knowledge system is their seemingly inevitable tendency, again, to de-politicization; that is, the logic of automatization (in both technical *and* human spheres, including of course even our most intimate spheres today) prevents genuine intervention, interruption, reflection, decision, or even real contestation (Stiegler, 2016). At the same time, the vast scale and reach of networked

systems, and their linkages with multiple layers of administration – governmental and non-governmental – as well as with military institutions and other systems of control and coercion, makes tracking the influence and topology of these digital spaces incredibly difficult.

This is why the tendencies of these new systems of power and governance, at the actual level of operation of digital technologies, are, perhaps, so hard to conceptualize within the traditional vocabularies and orders of political theory. In his recent book *The Stack: On Sovereignty and Software*, Benjamin Bratton has noted that the emergence of planetary-scale computing 'not only deforms and distorts Westphalian political geography, it creates new territories in its own image'. Bratton sketches a variety of interconnected 'zones', each with their own logic, that make up the 'Stack', a new global configuration that is redrawing while erasing inherited political forms and processes. He calls for a new way of looking at these configurations. Drawing critically on the postwar ideas of Schmitt, Bratton imagines what he calls a *nomos* of the Cloud. 'Even in the absence of a proper *nomos*, they congeal layer by layer into a metastructural order of a different governing order: a machine that is a state held together by deciding the spaces of technical exceptions as much as legal ones' (Bratton, 2015: 34). The danger, Bratton warns, is that increasing automation will lead to what he calls the Black Stack and the increasing diminution of human autonomy.

In a 1929 essay on 'The age of neutralizations and depoliticizations', Schmitt was already warning about the dangerous fantasies of technocratic 'solutionism' that Morozov sees rampant in today's digital culture. As Schmitt explained, it was precisely the seemingly a-political character of technology, its *neutrality*, that masked its essential political character (Schmitt, 2007[1932]: 80-96). Today, the ubiquity and planetary scale of the digital revolution invites a similar reflection. Between what Schmitt calls the 'religion of technicity'

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and the depoliticization of technology as merely 'neutral' lies the real challenge of thinking politically about technology.

What I propose here is to track a history of the concept of the political, in the Schmittian sense of the term, centering on technology, following its path through the field of cybernetics – where it is usually understood to be absent. If our digital revolution is really a legacy of an extended postwar cybernetic age, it will be useful to examine how technology was conceptualized with respect to the autonomy of the political. How was the political as an *independent* concept understood within the technical tradition of cybernetic thinking in this period, one of intense and almost permanent crisis? This historical investigation may help provoke a new way of thinking about our contemporary moment, where humans, machines, and networked systems have developed relationships that demand at the very least new models of political organization, if not a new understanding of the political as such.

The concept of the political as technical

Schmitt's *Concept of the Political* was such an important moment in the history of political thought not because it offered a new definition or even conceptualization within that tradition, but rather because it tried to destroy that tradition altogether. Schmitt did not simply offer a realist, Hobbesian, existentialist legitimation of political authority over and against liberal or republican visions of that authority. The argument was more radical. The essence of the political, for Schmitt, was the *fact* of a collectivity willing to assert itself vis-à-vis other collectivities – they were, that is, fighting entities (Schmitt, 2007[1932]: 28). The radical shift Schmitt made in thinking about political authority was to eliminate the problem of justification of power *within* some kind of social or other form of human organization and to assert that a political order was in essence a *self-justifying* system whose only legitimation

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was survival. Political authority was not itself legitimated, which was, arguably, the whole point of the tradition of political philosophy. For Schmitt, the goal was not to argue for the legitimacy of any one particular form of governance or state structure. The important task was to be able to identify the exercise of genuine political authority, through its purely existential (that is, objective) determination of what he called friend-enemy relations.

Similarly, Schmitt's definition of the sovereign (in his 1922 book *Political Theology*) as the one who decides the exception, an orientation that seemed to explicitly privileged unfettered political authority over any legal framework or norm, looked to be a contribution to a long history of justifications of sovereign (or dictatorial) power. But that would be wrong. The sovereign, in Schmitt's view, is again a necessary implication of the political *system*. For the political entity to persevere as a unity it must be capable of adapting to the unprecedented situation, the exceptional circumstance that can never be predicted in advance. The state apparatus, the legal institutions, the administrative bureaucracy, none of the normative machinery that societies construct could ever maintain order if a crisis exceeds its capacity of response. This concept of the sovereign recognized the necessity of 'vitality' within the political system as an active existential entity.

Schmitt signals the direction of his radical approach in *Political Theology*. 'In the exception the power of real life breaks through the crust of a mechanism that has become torpid by repetition' (Schmitt, 1988[1922]: 15). The reference to life here is indeed absolutely critical. The political community is very much like the organism in its self-justifying, purely existential orientation. And historically, we can see similar conceptualizations of norm and exception in the biological sphere. As early as 1915, Walter Cannon (who would go on to conduct ground-breaking research on physiological shock during the Great War) was studying the ways in which the body prepared itself for crisis conditions – the famous fight or

flight response, as he named it, 'the elemental experiences … that come suddenly in critical emergencies'. As he then asked: 'What is the significance of these profound bodily alterations? What are the *emergency functions* …?' (Cannon, 1915: 185). In a much later essay, at the height of political and military crisis in 1941, Cannon would speculate on the analogies between physiological and political systems, noting that 'when bodily welfare is imperiled by enemies' alteration of the system becomes absolutely necessary. More to the point, he would assert that: 'The body is unified, integrated, for a single purpose – survival'. In crisis, the inner order undergoes 'reactions that profoundly disturb the internal environment'; but he adds: 'they disturb it, however, to render the organism more effective in a contest which may issue in either life or death' (Cannon, 1954[1941]: 22). It was Cannon, incidentally, who introduced the key word 'homeostasis' into cybernetics, and we can see that the process of maintaining equilibrium, which is what the word signifies, is not at all a mechanical, predictable process. Instead, the living being was more like a community, sometimes at peace, and other times at war, experiencing moments of normal perturbation within its *milieu* and making compensations, but then suddenly undergoing intense crises, forcing more radical reorganization in the face of immense existential risk.

The existential model of the organism can elucidate Schmitt's own reorientation of the political; however it cannot provide a model *for* the political, precisely because the political community is itself not a natural entity. Somewhat counter-intuitively, it is Schmitt's vitalist account of the sovereign exception, which breaks through the 'torpid' repetitive mechanism that will set up his specifically artificial and even *technical* conception of the political. Cannon himself was fully aware that if, in the face of crisis (economic, military, social) human beings needed to turn to biology for models of organization and response, they then had to build the infrastructures that would allow for the kinds of homeostatic and emergency

actions that would preserve the unity of societies, since they were not given naturally. And human societies ran the risk of hyper-organization, so they had to beware of succumbing to arbitrary dictatorial rule, which was not a danger in the biological world (Cannon, 1933).

As Schmitt remarked more than once, there was no fundamental oppostition between 'mechanistic' and 'organicist' positions. Human beings were living beings, however they also lived in a technical condition, and crucially, were protected within the artificial and hence always fragile construction that was the state. His reference point here was Hobbes, and the importance of Hobbes's machinic conceptualization of the state in this context was absolutely clear in Schmitt's 1938 book on the Leviathan metaphor and its 'failure' – which was at once Schmitt's attempt at a veiled critique of the Third Reich, and a critical analysis of the modern 'total state' as a technical instrument.

In his famous book, Hobbes traced many lines of thought connected to the image of the Leviathan, from the Biblical narratives, to Anglo-Germanic mythology, through to the idea of the 'mortal God'. They are all important, Schmitt admits, because they hint at the necessary power of the Leviathan to destroy all of the opponents and terrify everyone. But fully versed in contemporary science, philosophy, and medicine, Hobbes zeroed in on one key framework of understanding. The state is an *artificial machine* constructed to maintain security:

> … the idea of the state as a technically completed, man-made *magnum-artificium*, a machine that realizes "right" and "truth" only in itself – namely, in its performance and function – was first grasped by Hobbes … (Schmitt, 1996[1938]: 45)

The Leviathan was at once a kind of mythic organism that could hold men in fear *and* a modern technical instrument capable of organizing a complex social, political, and military system aimed at preserving peace for a people. And yet – and this is Schmitt's key argument – the state was also no mere automatic machine. As much as it was an 'artificial man', an automaton in other words, it lacked (precisely *because* it was an artificial organism) the kind of organismic integrity characteristic of a natural animal. So as Hobbes clearly noted, and Schmitt here emphasizes, the Leviathan as machine (unlike the natural man) needs the Sovereign to hold it all together, the artificial 'soul' (replacing the Cartesian) to animate this mechanistic structure.[1] The artificial soul, like the 'real' one, makes possible, we can say, the expression of *decision* within the machinery of the body – whether that is the body politic or the physiological organism. 'Hobbes transferred … the Cartesian conception of man as a mechanism with a soul onto the "huge man", the state, made by him into a machine animated by the sovereign-representative person' (Schmitt, 1996[1938]: 32).

Schmitt's aim, here in the Hobbes book of 1938 but also before 1933, was to warn against what he called the de-politicization or neutralization of the state. In 1938, the oblique critique of the Third Reich was this: the machinery of the state developed in the Westphalian period had soon suppressed the decisive center of the sovereign (the 'soul' of the automaton) and the state had therefore become a mere technical instrument of other forces in society, even as it rapidly evolved to become a dominant force of control and command in those societies during the 18th and 19th centuries. 'With the incredible development of the technical means of disseminating communication, information, and weaponry, the power of the state's command mechanism grew in a manner that was astonishing' (Schmitt, 1996[1938]: 42). If it had at least been tied to prevailing norms in those other epochs (reason in the 18th century, economic principles in the 19th) the state as technical being was now, in the 20th century,

completely free from *all* normative restriction. The machine of the state was all means, without an end; or to put it another way, it could now be put to any number of ends, and perhaps its most obvious end was technology itself – especially the technology of destruction: war.

Schmitt was making similar arguments before 1933. As early as *Political Theology*, he was showing how the modern state was being understood as a self-running machine:

> the consistency of exclusively scientific thinking has … permeated political ideas…. The sovereign, who in the deistic view of the world … had remained the engineer of the great machine, has been radically pushed aside. The machine now runs by itself. (Schmitt, 1988[1922]: 48)

His well-known critique of liberalism was, effectively, that the liberal concept of the state repressed the decision and thereby neutralized sovereignty and de-politicized the state. His argument, repeated in various contexts, was that de-politicization is something quite different from neutralization. Over the course of European history, when the 'central sphere' of society (which defined the space of the political and therefore the zone of the friend-enemy decision) became itself a site of internal contestation and a threat to the continuity of the state and of social order, sovereigns could (and did) *neutralize* theses spheres by de-politicizing them and shifting the political into another sphere, a new 'central sphere' that would provide a more unified and less antagonistic space of community. The Hobbesian era is exactly one of these epochal shifts in the history of neutralization that took place in the aftermath of religious civil war.

Now what is interesting is that Schmitt recognizes, in the late nineteen-twenties, that the very idea of a 'common sphere' in the modern European states had pretty much evaporated, along with any strong 'theological' (that is, metaphysical) commitment that would underwrite any faith in an analogical political structure of authority for sovereignty. The situation was extremely dire, in his view, not only because the state had been stripped of its capacity for maintaining order in crisis situations (deciding the 'exception'), but more important perhaps, there was no obvious foundational sphere with the kind of intensity and unity to provide a new organization of the 'political' itself. On what ground would friend-enemy decisions be made? How would any sovereign be legitimated?

At this point it is useful to turn to Schmitt's 1929 essay on neutralizations and de-politicizations, because it reoriented the question around the problem of technology. The challenge was the new revolutionary state of the Soviet Union. The Russians, he noted, have opted for a new 'religion' of technicity. Abandoning any political theology, the new state was one that relied on technology to reorganize society and solve the problems of economy and order. With the crisis of the political, the move to technocracy (or what Cannon called 'biocracy') was certainly appealing. But as Schmitt pointed out, there was no such thing as a neutral politics of technology. Or to put this another way, the technical instruments available to the state (and here we should emphasize military technologies) can be put to use by other states in different ways and with different results. The decision was still paramount. For Schmitt, the inherent neutrality of technology is what made technology inherently political. Lurking in his analysis here is a more radical idea. As he remarked, in the current age, it was technology that connected everyone, quite literally. Technology was the space in which human beings now had to align themselves. Without actually naming it the new 'central sphere', ('the present century can only be understood provisionally as the century of

technology') Schmitt did proclaim that whether we liked or not, technology was going to redraw all the lines of political division and redefine the very parameters of enmity and friendship. 'How ultimately it should be understood will be revealed only when it is known which type of politics is strong enough to master the new technology and which type of genuine friend-enemy groupings can develop on this new ground' (Schmitt, 2007[1932]: 95).

In the aftermath of the Second World War, the imbrication of technology, enmity, and the political only intensified with the development of nuclear weapons. Indeed, one of the challenges in the postwar period for thinking about politics on the international plane was the apparent impossibility of 'enmity' and war given the overwhelmingly destructive capacities of what Hannah Arendt called the 'supernatural' technology of atomic power. Schmitt was no exception here, and clearly his work on international law and the very notion of the Katechon as developed in *Nomos of the Earth* was oriented to the problem of global configurations of power. But there was a different dimension of the problem of technology and the political in Schmitt's postwar thinking, which is less obvious but perhaps more important for tracing the legacy of cybernetic concepts in contemporary techno-political infrastructures.

What Schmitt recognized early on was that it was no longer merely a question of mastering the new technologies and forming new political orientations. As early as 1954, in a dialogue on power, he was again looking back to Hobbes, but now to argue that humans use technology as a way of compensating for their 'biological weakness and inadequacy'. The point he was making is that in the contemporary era humans now 'overcompensate in a monstrous way' with their technical prostheses. No longer was Schmitt just focusing on the neutralization of the *state* and the suppression of the decision in that context. Now, he was realizing how technology as a kind of prosthetic produces machine-human networks that

overwhelm the 'human' decisions within them: the danger is that the technological networks now master the humans who have built them.

> The human arm that holds the atom bomb, the human brain that innervates the muscles of the human arm is, in the decisive moment less an appendage of the individual isolated human than a prosthesis [*Prothese*], a part of the technical and social apparatus that produces the atom bomb and deploys it. (Schmitt, 2015a[1954]: 45)

The individual human is now just a part of complex web of activities distributed through a series of machines and people, and in fact that individual must be understood in terms of the total network of activity: 'The power of the individual is only a kind of secretion [*Ausschwitzung*] of a situation that results from a system of incalculably enhanced division of labor'. When Schmitt's interlocutor in the dialogue wants to celebrate the achievements of modern technology, noting for example, 'that we have machines that calculate faster and better that any human brain', Schmitt responds that the problem is the very 'we' implied here. 'It is indeed no longer the human *qua* human, but rather a chain-reaction unleashed from the human' (Schmitt, 2015a[1954]: 45). The new form of power we are confronted with is 'an objective, autonomous eminence, which infinitely exceeds the narrow physical, intellectual and animating capacities of its individual human inventors' (ibid.: 46). This is the 'new Leviathan' of our age, for Schmitt – the cybernetic age, we might say.

And in fact, in another dialogue from the fifties, Schmitt framed the postwar challenge as both a question of the *nomos* of the earth – the new global legal spaces of air, sea, and land – and a question of accelerated technology. And not just of weaponry, but also

the 'apparatuses' that 'surpass the capacities of the human brain' and substitute for the activities of the human body. The question of even how to ask this question overwhelms one of the dialogue's participants; he admits that his own brain 'relents', and another suggests: 'Then allow yourself to build a cybernetic apparatus that grasps and answers the question for you' (Schmitt, 2015a[1954]: 66). As late as 1965, Schmitt would return to the question of the machinery of the state, noting that in our 'scientifically-technologized civilization' automaticity reigns. Defending Hobbes, he would remind us again that yes, the Leviathan was a technical instrument, but it requires the guiding hand of a sovereign, or at least some ordering principle. Without it, there are no genuine decisions and therefore no genuine political action. The autonomous technical state was not capable of such action. 'To speak in this context of "decisions" would be as absurd as if one wanted to take the alternating red and green traffic lights of today's thoroughfares as a series of "administrative acts", that is, as decisions….' As Schmitt would put it clearly, invoking Hobbes: 'No perfected cybernetic apparatus [*kybernetischer Apparat*] is capable, on its own terms, of asking *Quis judicabit* [Who decides]?' (Schmitt, 1965: 67).

Schmitt seems to be positioned here, both conceptually and historically, between a form of technocratic neutrality with its dangerous political consequences, and a vision of the future Deleuzean 'control society', that 'new monster' (Deleuze, 1992: 4), as he sought a path toward a new political order that would somehow preserve the political within this technologized, militarized, and industrialized modernity.

A cybernetic concept of the political

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Man does not hold technology in his hand. He is its plaything. In this situation there is a complete forgetfulness of being, a complete concealment of being. Cybernetics becomes a replacement for philosophy and poetry.

Heidegger (1969: 63)

Heidegger's critique here of the cybernetic worldview, which went back many years, would appear to mesh well with Schmitt's own warnings about the dangers of an automatized, technologized sphere of calculative 'administrative'. For it is true that cybernetics, the science that tried to encompass under one theoretical frame intelligent machines, organisms, and humans, relied on the central doctrine of the self-steering entity, the automaton without a 'soul', so to speak. Certainly, for a long time, the legacy of cybernetics in the political domain has been a legacy of technocracy, exemplified most famously perhaps by the 'Project Cybersyn' system designed by Stafford Beer for the Chilean government and implemented (somewhat imperfectly to say the least) in the years before the military coup aided by the United States in 1973 (Medina, 2011).

At the same time, it is clear that the postwar reconfiguration of both states and international blocs in the wake of unprecedented war and genocidal violence demanded new ways of thinking about politics and internal relations, and for many, cybernetic orientations offered just the kind of radical new models for such a project. Returning to some of this thought, which has hardly entered the canon of political theory today, we can see that it is not all dominated by an erasure of the political or a denial of decision, as we might expect if we take the extreme Heideggarian position.

An early example is instructive. In the forties and fifties the political scientist David Easton was faced with a very Schmittian question. His (and others') work in quantitative research led him to the realization that an excess of data had overwhelmed the very identification of the political at the heart of the enterprise. How to locate the essence of the political when, in modern societies, so much activity was connected with operations of the state? Easton was one of the first American scholars to draw explicitly on what was called "systems theory" to attack this theoretical problem. What is important to note here is that this new orientation was not an attempt to systematize the activity of politics. First, Easton was (like Schmitt) trying to identify the conceptual core of the political. 'To distinguish a political system from other social systems, we must be able to identify it by describing its fundamental units and establishing the boundaries that demarcate it from units outside the system' (Easton, 1957: 385). Second, as we see in the diagram below that accompanied this influential article, Easton in no way repressed the key category of decision – just the opposite.

<< **Figure 1**. Diagram of a systems theory model of politics. Source: David Easton, 'An Approach to the Analysis of Political Systems' [fig. 1] >>

In fact, if we look more carefully at how Norbert Wiener (the co-founder of discipline of cybernetics and its most active proponent after the war) explained the concept, we can begin to see how political analogies can be understood without assuming any technocratic tendencies or simplistic automatization models. As Wiener wrote in 1950: 'The machine, like the living organism, is … a device which locally and temporarily seems to resist the general tendency for the increase of entropy. By its ability to make decisions it can produce around it

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a local zone of organization in a world whose general tendency is to run down' (Wiener, 1950: 34). Clearly, the question is how to define and conceptualize the nature of these decisions. But at the very least, the question of the political in the cybernetic field was how to understand the *system* of politics as a very active arena of response to environments, one that required a decisive reaction to changing conditions, and often with high degrees of uncertainty (Steinbruner, 1974). As we saw, the key term 'homeostasis', which Wiener took from his early collaboration with Walter Cannon, always implied the possibility of crisis, which would necessitate new organizations and actions. As John von Neumann once remarked, referring to the astonishing capacities of the nervous system, 'there are several organs each capable of taking control in an emergency…; (von Neumann, 1966: 73).

The science of cybernetics was not, then, simply a reduction of complex activities to a mechanism, but a science *of* complexity. Going beyond mechanism and organicism (or even 'vitalism'), cybernetics studied the self-organizing and self-steering entities capable of adapting to challenging and ever-changing environments. The opportunity for political theorists did not lie in old metaphors of the 'machine' per se, but in insights drawn from the special kind of machines that cyberneticists studied and built: that is, *information* machines. As Karl Deutsch, one (if not the most) important figure in this movement put it, cybernetics was a wholly new model of 'communication and control' that promised a novel method for the study of complex organizations, in particular human societies (Deutsch, 1951). Deutsch, a German-speaking law student from Czechoslovakia who had come to the USA in 1938 then stayed after Hitler's annexation of the Sudetenland, had become colleagues with Wiener and others at MIT when he began teaching there after his PhD at Harvard. In his famous 1963 book *The Nerves of Government*, Deutsch laid out his principles:

… governments – that is, political systems or networks of decision and control – are dependent on processes of communication and … they resemble certain aspects of man-made communication equipment. (Deutsch, 1963: 145)

As with Easton, if we take a close look at Deutsch's complex diagram for a system of political control, decision is clearly a crucial component of the system. Feedback is simply a mode form informing decisions.

<< **Figure 2** Diagram of Information Flow in Foreign Policy Decisions. Source: Karl Deutsch, *Nerves of Government: Models of Political Communication and Control* [p. 258] >>

For Deutsch, sovereignty is reimagined as a function of a system. It can therefore be concentrated in specific sites of the system, or more evenly distributed throughout the system. If the former, 'the performance of the system may resemble the situation of concentrated sovereignty, familiar from the absolute monarchies of Europe' (Deutsch, 1963: 209). However, Deutsch's main argument is that a political system does not *require* such concentration. Again drawing from cybernetics and systems theory, he points out that the crucial notion of equilibrium is not a simplistic idea of 'balance'; and again, homeostasis is not a simple idea of reaction and counter-reaction.

… where classic mechanism often thought of equilibrium as a suitable overall description of an entire large system, the concepts of equilibrium and

disequilibrium are now most useful as descriptions of temporary states of

small components of such systems … (ibid.: 186)

This is why decision points may well be dispersed across the system, as local areas of

stability may be required to keep the larger system continuous and viable. A dynamic (or

what the influential systems theorist Ludwig von Bertalanffy would call an 'open') system is

never at rest, it never has a singular identity, because it is always structurally adapting to new

conditions, however subtly (von Bertalanffy, 1968).

<< **Figure 3**. Diagram of an open biological system. Source: Ludwig von Bertalanffy,

General System Theory [Figure 7.1] >>

Here again we find a Schmittian dimension: the ability to adapt, to 'learn', to exhibit

what Deutsch explicitly calls 'plasticity', is another way of saying that the political system is

capable of breaking with older norms when it confronts novel situations and decides a new

course.

Thanks to what it has learned in the past, it is not wholly subject to the

present. Thanks to what it still can learn, it is not wholly subject to the past.

Its internal rearrangements in response to new challenges are made by the

interplay between its present and its past. (Deutsch, 1963: 108)

What was essential to Deutsch's vision, it must be said, was that these responses could not be *automated*. If the political was the 'steering sector' of society, in conditions of 'storms, currents, waves, and sandbanks', he strongly emphasized the need to empower human cognitive capacity through heuristics, in order to gain knowledge, but also through critical reflection to test our values and our outcomes (Deutsch, 1971: 18).

It is also worth pointing out that Deutsch, from the beginning of his career in the late forties, was always interested in the way that political systems were evolving and transforming, moving away from classic Westphalian 'nation-state' forms, and merging into new, larger configurations (like the coming European Union or NATO, what Schmitt called *Großraume*, or political 'large spaces') and acquiring new characteristics in the process (Deutsch *et al.*, 1957).

So we can see that we have at once a kind of 'cybernetic' turn in Schmitt's thinking after the war, one that carries forward an earlier interest in technology and automaticity, *and* a prominent decisionist element in early cybernetic thinking around the political. Both trains of thought were also engaged with the shifting spaces of the political in a radically new global order. In this intersection we can begin to explore the implications of a cybernetic interpretation of that new figure of political theology appearing in Schmitt's postwar work, namely the Katechon.

The cybernetic figure of the Katechon

'….the arch enemy, disorganization'.

Norbert Wiener (1950)

Postwar global order had to position the Katechon as a radically *secular* figure, and in three senses of the term. First, as Schmitt explained in *Political Theology II*, the Christian era is not 'a long march' with a directed historical path. It is, in fact, 'a single long period of waiting, a long interim between two simultaneities' (Schmitt, 2008[1970]: 89). Therefore, the Katechon, who 'restrains' the disorder of lawlessness in historical time is acting only for the local and temporary historical orders in anticipation of the end of history. There is, in other words, absolutely no relation to the divine. Second, whatever our understanding of the theological context of the Katechon, the figure itself does not *function* as a theological entity. As Tertullian famously concluded, the Katechon of his era was in fact the Roman Emperor. The one who restrains in historical time is simply the political or military or legal force capable of producing order. Finally, if one addresses the Katechon from the perspective of political theology (that is, the political as a secularized theological concept) it is even more radically secular, since its theological function does not at all inhere in its own activity or structure. Therefore its analogue in the political sphere is in fact just itself – the producer of order as a pure *function*.

In any case, what Schmitt described in *Nomos of the Earth* was a series of political-legal orders of a territorial-spatial form in Europe that had what I will call a *systematic* form, in that their dynamic equilibrium was maintained not by a single simple sovereign force or authority, but by a complex web of institutions and authorities. Schmitt forcefully argues, for example, that in the early Holy Roman Empire, there was no 'conflict' between Rome and the monarchs. Nor was the emperor 'elevated' above the kingdoms. The office was a commission, with 'concrete tasks and missions' that formed the work of the Katechon. As the original order of Europe breaks up in the era of religious wars and the founding of the colonial space, it finds a new ordering that will preserve security and peace – at least within

the territorial confines of Europe. Here we have a new 'equilibrium' that is defined by Schmitt *not* as the 'relations' between sovereign states, but more carefully as an interstate order that deploys the individual state as its agent. The legal equality of the state converted interstate war in Europe into a method of balance. As Schmitt writes, referring to these new Hobbesian states, or 'great men':

> The new *magni homines* had equal rights that were mutually recognized as such. But their equality as personal members of a close community of European sovereigns differed from the equality or weight that each – even the smallest – had in the system of a territorial equilibrium [*in dem System eines territorialen Gleichgewichts*]. (Schmitt, 2003[1950]: 145)

Without detailing the whole narrative, it is plausible to trace the story of these successive global orders as organized *systems* capable of maintaining an internal equilibrium against the ever-present forces of disorder – whether external to the system or (perhaps more important for Schmitt) internal to the system. So how can we locate the function of the Katechon in these systems? And how do we differentiate (if we can) the space of the political from the activity of the Katechon?

If the Katechon is the restrainer of the Antichrist, understood now more abstractly as lawlessness or the tendency to disorder, entropy in other words, it is important to see that it is not the case that the Katechon is a direct agent of order. That is exactly the interpretation that Schmitt and others clearly argued against. Instead, we should interpret the *political* as the possibility of creating the 'fragment of order'. But even here, it seems to me that looking at Schmitt's work in the interwar period, and especially his 'negative anthropology' and

existential frameworks of analysis, that it is more accurate to say that even the political is not the creation of an order but more the *deferral of a disorder*. To speak in cybernetic terms that are of course somewhat foreign to Schmitt – but not exactly ahistorical – the political might be defined as an exercise in 'negentropy'. And this concept does resonate with Schmitt's Weimar argument that each state is a temporary 'fragment' of order in a shifting plurality of states (Schmitt, 2000[1930]: 310). What is absolutely certain is that the political, for Schmitt, is never the positive instantiation of an order. The political protects against disorder; its radical mobility reveals its lack of substantial foundation.

If this is the case, then the Katechon might best be understood as the *protection* of the political, which is itself the shelter against radical disorder, radical lawlessness, the collapse that is 'dis-organization'. Now, I frame the Katechon this way because Schmitt is (in *Nomos of the Earth*) concerned with his contemporary situation, a concrete global situation that seemed to defy any ordering principle because the advent of new technologies (military and other) had made equilibrium and dynamic adaptation literally impossible. What would be the new 'system' that would *encompass* the globe but not totalize it? The old Eurocentric order was dead.

> This order arose from a legendary and unforeseen discovery of a new world, from an unrepeatable historical event. Only in fantastic parallels can one imagine a modern recurrence, such as men on their way to the moon discovering a new and hitherto unknown planet that could be exploited freely and utilized effectively to relieve their struggles on earth. (Schmitt, 2003[1950]: 39)

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The challenge in 1950 was obviously tied to the coming of the hydrogen bomb. But the bomb was only part of a larger question concerning technology, as we have seen. And Schmitt saw the challenge as resolutely linked to that question. The earth would need 'one who manages to restrain the unencumbered technology, to bind it and to lead it into a concrete order' (Schmitt, 2015a[1954]: 80). As he had already written in 1929, technology was the inevitable ground of all the new friend-enemy relations, but it was now, in the 1950s, also the matrix of a new predicament – the enmeshing of the human in the machine systems of advanced technical industrial civilization. The political question was an alignment of peoples along these new military *and* technical axes. The mission of the Katechon was therefore not simply the 'balance' of the political system writ large (the coming Cold War, that is). Crucial to the cybernetic dimension of Schmitt's katechontic moment was the preservation of the political as such – the preservation of the political against its threatened neutralization *by* the escalation of automatized technicity itself.

What I want to suggest, then, is that we see Schmitt's Katechon less as a single figure or institution and more as a function within a system, for this is what he himself demonstrated so clearly in *Nomos of the Earth*. In the eighteenth century, for example, there was no particular entity that held the 'balance' for the *jus publicum europaeum*.

The importance of the Katechon, then, lay *within* the large systems of organization; its role was to maintain their openness and their cognitive clarity, so to speak, against increasing technicity and organizational entropy. The importance of the Katechon, in other words, was to hold open the space of genuine decisions that could disrupt the regulative and normative demands that would work *against* maintaining the dynamic equilibrium of a complex system – especially in times of crisis and unexpected novelty. The Katechon was never a system of centralized control and command, for Schmitt, and thus not itself a producer of exceptional

decision or authority (or even critique) within the system. The Katechon was resolutely not a super-sovereign.

Schmitt reflected on the modern form of the Katechon in a cryptic diary entry written just after the war, and I think this formulation is helpful for framing a new concept of the Katechon for the cybernetic age. There he wrote: 'There are temporary and transient, splintered and fragmentary, holders of this function [*Es gibt zeitweise, vorübergehende, splitterhaft fragmentarische Inhaber dieser Aufgabe*]' (Schmitt, 2015b: 47). I like to think that this means that the Katechon can appear, perhaps unpredictably – imperfectly even – within our social systems, and not to solidify an order against the threat of chaos, or even propose alternative orders, but rather to preserve the *spirit of the political* in an age of increasing automaticity and control. A recent theological commentary on the problem puts the point well: 'The katechon – a radically anti-eschatological theologico-political concept – is opposed to the "end of the world", or better, to the atrophy of the openness to the world' (Virno, 2007).

Whatever the new alignments and enmities that our new techno-political world demands, the katechontic principle that will restrain the worst excesses may well be our resistance to this atrophy of openness. For this atrophy is an invisible and surreptitious, insidious and maybe even nefarious, neutralization of the openness of decision and invention, an openness that goes well beyond the political and that speaks to all the higher spheres of human cognition and life.

References

Bratton, B. (2015) *The Stack: On Sovereignty and Software*. Cambridge, MA: MIT Press.

Cannon, W. B. (1915) *Bodily Changes in Pain, Hunger, Fear and Rage*. New York: Appleton.

Cannon, W. B. (1933) 'Biocracy. Does the Human Body Contain the Secret of Economic Stabilization?', *The Technology Review* 35: 203–27.

Cannon, W. B. (1954[1941]) 'The Body Physiologic and the Body Politic', *Scientific Monthly* 79: 20-6.

Deleuze, G. (1992) 'Postscript on the Societies of Control', *October* 59: 3-7.

Deutsch, K. W. (1951) 'Mechanism, Organism, and Society: Some Models in Natural and Social Science', *Philosophy of Science* 18: 230-52.

Deutsch, K. W. (1963) *Nerves of Government: Models of Political Communication and Control*. New York: Free Press.

Deutsch, K. W. (1971) 'On Political Theory and Political Action', *American Political Science Review* 65: 11-27.

Deutsch, K. W. *et al.* (1957) *Political Community and the North Atlantic Area: International Organization in the Light of Historical Experience*. Princeton: Princeton University Press.

Easton, D. (1957) 'An Approach to the Analysis of Political Systems', *World Politics* 9: 383-400.

Guilhot, N. (2010) 'American Katechon: When Political Theology Became International Relations Theory', *Constellations* 17: 224-53.

Heidegger, M. (2003[1969]) 'Seminar in Le Thor (1969)', in M. Heidegger, *Four Seminars*, trans. A. Mitchell and F. Raffoul. Bloomington, Indiana University Press, pp. 35-63.

Hobbes, T. (1996) *Leviathan*. Cambridge, UK: Cambridge University Press.

Medina, E. (2011) *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile*. Cambridge, MA: MIT Press.

Morozov, E. (2013) *To Save Everything Click Here: The Folly of Technological Solutionism*. New York: PublicAffairs.

Rouvroy, A. and Berns, T. (2013) 'Gouvernementalité algorithmique et perspectives d'émancipation: Le disparate comme condition d'individuation par la relation? [Algorithmic Governmentality and Prospects for Emancipation: The Assemblage as Condition of Individuation by Relation?]', *Réseaux* 177: 163-96.

Schmitt, C. (1950) *Der Nomos der Erde im Völkerrecht des Jus Publicum Europaeum* [The Nomos of the Earth in the International Law of the Jus Publicum Europaeum]. Berlin: Duncker and Humblot.

Schmitt, C. (1965) 'Die vollendete Reformation: Bemerkungen und Hinweise zu neuen Leviathan-Interpretationen' [The Reformation Completed: Remarks and Notes on New Interpretations of Leviathan], *Der Staat* 4: 51-69.

Schmitt, C. (1988[1922]) *Political Theology: Four Chapters on the Concept of Sovereignty*, trans. G. Schwab. Cambridge, MA: MIT Press.

Schmitt, C. (1996[1938]) *Leviathan in the State Theory of Thomas Hobbes: Meaning and Failure of a Political Symbol*, trans. G. Schwab and E. Hilfstein. Chicago: University of Chicago Press.

Schmitt, C. (2000[1930]) 'State Ethics and the Pluralist State', in A. J. Jacobson and B. Schlink (eds) *Weimar: A Jurisprudence of Crisis*. Berkeley, CA: University of California Press, pp. 300-12.

Schmitt, C. (2003[1950]) *The Nomos of the Earth in the International Law of the Jus Publicum Europaeum*, trans. G. L. Ulmen. New York: Telos Press.

Schmitt, C. (2007[1932]) *The Concept of the Political*, trans. G. Schwab. Chicago: University of Chicago Press.

Schmitt, C. (2008[1970]) *Political Theology II: The Myth of the Closure of any Political Theology*, trans. M. Hoelzl and G. Ward. Cambridge, UK: Polity.

Schmitt, C. (2015a[1954]) *Dialogues on Power and Space*, trans. S. G. Zeitlin. Cambridge, UK: Polity.

Schmitt, C. (2015b) *Glossarium: Aufzeichnungen aus den Jahren 1947 bis 1958* [Glossarium: Records from the years 1947 to 1958]. Berlin: Duncker and Humblot.

Steinbruner, J. (1974) *The Cybernetic Theory of Decision*. Princeton: Princeton University Press.

Stiegler, B. (2016) *Automatic Society, Volume 1: The Future of Work*, trans. D. Ross. Cambridge, UK: Polity.

Virno, P. (2007) 'Anthropology and the Theory of Institution', http://eipcp.net/transversal/0407/virno/en (accessed January 9, 2018).

von Bertalanffy, L. (1968) *General System Theory: Foundations, Development, Applications*. New York: George Braziller.

von Neumann, J. (1966) *Theory of Self-Reproducing Automata*. Urbana, IL: University of Illinois Press.

Wiener, N. (1950) *The Human Use of Human Beings: Cybernetics and Society*. Boston: Houghton Mifflin.

Note

1.   'That great "Leviathan" … is but an artificial man…; and in which the "sovereignty" is an artificial "soul", as giving life and motion to the whole body …' (Hobbes, 1996: 9).

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