Controlling the Desire for Control. Machines, Institutions and Democracy.

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ABSTRACT: The contemporary world, with its complexity and development, forces us to greater levels of trust—trust in machines, algorithms, experts, institutions, elites, intermediaries, representatives, etc. In spite of that, the confidence is often unwarranted, and it can be shattered to the extent that it triggers movement in the opposite direction. This leads to a generic wish for disintermediation: the desire to regain control, verify information for ourselves, be correctly represented, demand that there are always people involved in automatic decision-making processes, recover self-determination or manage delegation more carefully.

I suggest that we explore our desire for control to explain some central features of the ideological landscape in which we find ourselves and the extent to which that can affect the future of democracy. Machines and institutions have a lot in common, and the way we relate to them does as well. Here I am following the suggestion by Ezio Di Nucci (2021) that we relate technophobia with political populism. We can establish a parallelism between our attitude toward technology and the crisis of political representation, between popular suspicion when it comes to increasing technological sophistication and the populist desire to recover political control that was supposedly lost in the chain of delegation. Distrust in technology and suspicion regarding technocratic distance are very similar; technology is incomprehensible for human beings, and politics has reached a level of complexity that seems incompatible with popular sovereignty. It is very reasonable to aspire to keeping both technology and politicians under control, but we need to see how to go about it so that we still receive the benefit we expect from both the technology and the politicians we are controlling. We must consider the type of control that will be adequate when we need to deal with sophisticated technologies and what accountability is viable and democratic in complex societies and global frameworks.

We seem condemned to dehumanization by a world of machines in digital spaces and a world of global institutions. The popular imaginary connects technological development with a loss of control, in the same way that political complexity increases political estrangement and the crisis of representation. There is a similar attitude of distrust and a comparable desire to retake control over our lives in the discourse that suspects that we are giving too much power to machines, robots and algorithms or to politicians, Europe and global institutions. There is too much artificiality in both cases, and we must respond by recovering the human scale, our lost prominence. Anti-technological populism is very closely aligned with political populism; technophobia and populism both have an exaggerated rejection of delegation as well as excessive confidence in control.

This succinctly described panorama presents more problems than answers. It compels us to explore certain paradoxes or dilemmas in the way we configure our world, both in the technological realm and in our democratic institutions. How can we make our general superiority over machines compatible with the fact that there are certain things that they do better, and this is often true not *in spite of* but *because of* the fact that they are not subject to our control (a paradigmatic example would be machine learning)? When is the relinquishing of control dehumanizing and when is it intelligent? How do we understand that the universal competence for politics, the idea of popular sovereignty, should not be incompatible with the recognition of the diversity of competencies or the authority of certain forms of knowledge in public decision making? How do we design the system of governance in such a way that knowledge and the experts assume an important position without renouncing the democratic principle of equality? How do we balance

delegation and popular control in a way that is both optimal for political results and legitimate according to democratic principles?

I will examine these types of questions in three steps. In the first place, we should understand the basis for *the delegation of control*, in other words, the fact that people have relinquished much of the control to diverse devices (technological or political), and it does not seem like we are going to stop doing so. In the second place, I will share several examples of the opposite movement—*the control of delegation*—as well as its limits and undesired consequences. Finally, I will try to establish the extent to which and the conditions necessary for us to understand *delegation as control*.

1. The delegation of control

Technology and institutions assist us in combating complexity. In both realms, there is a lot of delegation, which means that we are giving up control or at least accepting limitations on our control. The improved functioning and security of certain machines with a particular level of complexity would be impossible if we insisted on increasing our control over them, if we were not prepared to renounce part of our technological sovereignty. Di Nucci refers to this as "the control paradox" (2021): there are technologies that are better at control than our efforts to control are. That delegation allows us to better manage the complexity of those technologies, but more importantly, of the world in which we live. That leads to us ceding control to cars, to planes, to heating and cooling systems, to drones, to passwords and, in the social and political sphere, to various types of professionals, experts, representatives or institutions.

As users and voters, we are the sovereigns in the end, but not necessarily at all times, because there are moments when we prefer to limit that sovereignty, to share it or even to relinquish it. We can examine this paradox of a sovereign who self-limits his or her power by analogy with those systems that are intelligent because they are capable of opposing the express will of those who direct them. The sophistication of many technologies includes procedures that prevent the person who is in charge (of a devise or of a government) from doing what he or she wants, from the auto-lock brakes on our vehicles to constitutional limits on the political system. Is it not the case that our best technologies demand that we renounce at least a part of our control over them? And could it be that democracy is a system whose intelligence consists of being able to institutionally combine the delegation of power with control over it or, to heighten the paradox even further, to combine popular sovereignty with suspicion of that very sovereignty?

Let me present this in a somewhat provocative fashion: the paradox of all intelligent systems is that they do not allow us to do what we want. We can observe this with some examples: from constitutional law, from automatic driving systems and from financial products. What a constitution most resembles is a series of prohibitions and limitations; it even makes its own modification difficult. It requires procedural conditions and qualified majorities to ensure that any changes are not unplanned events or the result of a tiny majority. Similarly, even though they are innocently described as just one more "driving assistant", antilock braking systems prevent us, in a moment of panic, from braking as much as we want, which could jeopardize our stability and result in more damage, which is what we want to avoid in the end. Formulating this in another way: the automobile industry stopped trusting drivers long before the drivers stopped trusting the automobile industry. In fact, the evolution of this industry reveals that, as drivers, we trust ourselves less than the cars. In addition, people can freely buy all the financial products they would like (and can afford, of course), but the experience of the previous economic crisis has led us to tighten conditions, forcing credit institutions to ensure that those who buy these products have the necessary solvency and knowledge to acquire a product that is not free of risks. In each of these cases, the desire in the moment is distinguished from the final desire, our desire for control now as opposed to our general desire for control. Popular will should not be confused with that day's polling results; my desire for control is not to be able to brake at any cost, but to avoid an accident; my freedom to buy may also respond

to the risks of buying anything. In some ways, systemic intelligence has configured a series of protocols so that people cannot do what they want when they are handling particularly dangerous devices, whether that is a vehicle, a financial product... or a government.

That is why one can affirm without exaggeration that, from the most modest technology to the most sophisticated political procedures, government systems are more intelligent when they can resist the stubbornness of those who govern (whether that is the sovereign people or their eventual representatives). All human progress is at play in the difficult balance between allowing human desire to govern events and simultaneously preventing arbitrariness. An intelligent system is, in a manner of speaking, a system that protects us not only from others but also from ourselves; it is configured based on the experience of the dangers that we are capable of self-generating and in the face of the atavism of considering that our worst enemy is always someone other than ourselves. In fact, there is a flourishing market that we could call, without exaggeration, "protecting people from themselves". This includes the "behavioural apps" that advertise, encourage and monitor us. Human beings do not always want to do what they want, and that self-limitation is the source of reasonable behaviours.

This whole world of control and the renunciation of it is full of paradoxes and counterintuitive realities. I have pointed out some of them that reveal the importance of renouncing control, but there are also other kinds. The paradox of the password, for example, exposes the inconveniences inevitably associated with every security strategy. Devices demand complicated passwords; we write them down so we do not forget them, which makes it easier for us to forget them and, more importantly, counteracts the requirements of security. Another more trivial inconvenience is the loss of time that comes from having to type that password when we need to use the phone, for example. That time could entail an uncomfortable loss of control if we were confronting an urgent situation. Almost everything that provides us with increased control also implies specific risks.

Finally, I will mention a case in which human intelligence, in this case the intelligence to protect the nature of sport, has understood that the decisive presence of human referees is inevitable on sporting grounds (even though, from a technical point of view, it would be perfectly dispensable and more objective to do without them). Refereeing in tennis or football would improve in exactitude if it were more controlled by continuous review through what is called "hawk-eye" in the first case and VAR in the second. The use of these procedures is limited so as to avoid making the sport lose its rhythm and emotion but, more importantly, because one of the main things that makes it interesting is that it is not governed by an exact procedure. In these cases, unlike the previous ones, we could talk about there being more human presence than would be optimal if we believe that the fundamental value of both sports is that they are fair, but perhaps a sufficient presence for the sporting event to not lose the feeling that it is a battle between humans that is also decided by humans (even if that leads to a not insignificant number of errors and arbitrariness).

2. The control of delegation

Human beings do not meekly accept having things escape our control, whether it is technology or political processes. We try to increase control with additional security measures, demanding there be more humans in the loop, with greater legislative production or minimizing the amount we delegate to our representatives who we want to control as closely as possible. It is an old desire that Norbert Wiener formulated in 1960 with a famous declaration about the "purpose put into the machine": "if we use, to achieve our purposes, a mechanical agency with whose operation we cannot efficiently interfere... we had better be quite sure that the purpose put into the machine is the purpose which we really desire" (Wiener 1960). In this formulation, it is taken as a given that the objective is something proposed to the machine exogenously, but is that sufficient for the case of machines that learn? Should we assume that our leaders would do it better and would be more democratic when we delegate in them less?

"Take back control" was the motto of Brexit supporters but, in addition to being a slogan of political propaganda, it corresponds to a general movement of resistance against the loss of control, real or apparent, that we experience in the face of sophisticated technology and politics in an environment of increasing complexity. This mentality characterizes not only certain political actors but broad social sectors and certain elemental instincts of withdrawal, protection and desire to recuperate spaces of familiarity and intelligibility. The mantra of "empowering", for example, corresponds to the assumption that we become stronger when we delegate less, that the people are more sovereign when their will is more immediate, that representation distorts those represented, that vigilance over politicians increases their efficiency, that an increase in participation necessarily improves politics, that a referendum is always better than deliberation... In general, there is excessive confidence in constituent power and excessive suspicion of constituted power. Resistance in the face of delegation is the basis for the crisis of representation, which is seen as a poor surrogate for direct democracy (Mansbridge 2003). In this way, a mentality is created that confuses political mandates with instructions (Przeworski / Manin / Stokes 1999, 12). Representatives would be nothing but our ventriloguists, and there would be no decision more democratic than one adopted in a referendum, the primary moment when control is recuperated.

However, are we sure that the best relationship we can have with our technology is one of maximum control, that in this way we take greater control over our destiny and democratize institutions? We could recall in this regard the provocation of Niklas Luhmann when he asked if there was justification for the assumption that more communication, more reflection, more knowledge, more participation always produce something good (and nothing bad) (Luhmann 1991, 90). Transparency is, without a doubt, an essential value, but it is subordinated to the true goal of democratic politics: that it be comprehensible for the citizen who has to judge it, without that meaning that everything must be seen at all times. Something similar happens with the enthusiasm regarding the politics of proximity, in other words, thinking that the most immediate realm is *necessarily* the most appropriate when it comes to deciding, in terms of both legitimacy and effectiveness. Many issues only find their appropriate level of democratic self-determination if we distance the customary level of decision-making and include in the group of those who decide other people who are very distant in space or time. There are decisions that are better adopted not *despite* being adopted far from the immediate environment but because of that distance. Transnational organizations, institutions of impartiality or agreements made in locations outside of the immediate electoral pressure have this very role and justification.

The idea that "more" does not always mean "better"—as everyone has seen in the realm of information or data, where proliferation can be misleading—is especially valid when we talk about control: having something under control can mean negating its possible benefits. And, in the opposite sense, delegation does not always mean a rejection of free decisions or one's own responsibilities, in the same way that trusting does not imply believing or accepting everything. It is not necessarily the case that the best policies and the most democratic decisions are those adopted with the greatest participation, with the representatives who are subject to the most oversight and at the closest distance. Many decisions may require technical competence, delegation, discretion, confidence and distance. This experience should lead us to emphasize the importance of the procedures and the institutions that moderate control over the political process, as carried out by both representatives and those represented, the sovereign people.

The case of the European Union is probably one of the best at illustrating this type of paradoxes. Europe is achieving integration by exchanging sovereignty for power, which would be a version of renouncing control in exchange for the ability to act. The states that set the integration process in motion (and those who joined later) did not do so to lose control of their destinies, which would be absurd. Instead, they wanted to recover control at a supranational level, delegated and united, a power they had been losing and that loss was preventing them from supplying those common goods to which they had a right—such as peace, prosperity or global relevance—to their respective populations, through the classical procedure of sovereign power (immediate control). This exchange of sovereignty

for power is very similar to obtaining general control in exchange for renouncing the immediate control that is realized at any level of complex government and in relatively sophisticated technologies. In the opposite direction, Brexit is perhaps the best example of the extent to which an operation to regain control may in fact make the British end up with less control over themselves than they had when they were part of the European Union. They will, for example, have to accept many of Europe's commercial norms without being in the places where the regulations are decided. In many aspects, perhaps inevitably in more situations than they would like, the British will be affected by European regulations without being able to help determine them. Some people used this argument to advise the United Kingdom against exiting: it is better to be inside the European Union and influence it than to be outside and nevertheless continue to be under its authority (Chalmers 2013).

A similar logic is in play in all the decisions to enter or exit some EU institutions or to accept the common decisions. Iceland, Norway and Switzerland have seen the extent to which EU pressures and the opportunities it represents affect them. They have and will continue to have to adopt many of the rules decided by a club to which they do not belong. The 2015 referendum in Greece was not an exercise in sustainable sovereignty but a gesture that dramatized it, and the Greek people had less power after it than they had had previously. These are examples of how counterintuitive sovereignty is and how the feeling of control can coincide with a reality of greater subordination.

As if that were not enough, the reach of this "Brussels effect" (Bradford 2012) stretches beyond the continent. The European Union extends its influence over the rest of the world through its legal institutions, its regulations and its commercial standards, much beyond its institutional realm. This curious externalization of its regulatory power allows Americans, for example, to protect their personal data because of rules that they have not approved but that they cannot abolish without losing many opportunities to participate in the global market.

Human beings have always lived in environments that we control only partially. This is true for natural spaces, social relationships, the use of technology, political processes or historical destiny. Our history has always been a struggle to reduce uncertainty and provide ourselves with the greatest security possible in all these fields. Populism vindicates a type of direct control over reality understood as the recuperation of something that we once had—before it was delegated—but which we actually never had. From this perspective, populism could be defined as an overestimate of direct control and an underestimate of indirect control; control would come to be seen not so much as an aspiration but as something that is recovered. With this type of mythology of the social contract, taken literally and not as a fiction to explain where the legitimacy of the processes of political construction come from, one cannot understand the paradoxical nature of all power. Its consequence is that it disincentivizes the exploration of acceptable forms of transaction and the balance between control and delegation, supervision and confidence, in which our relationship with technology and our democratic coexistence take place.

3. Delegation as control

In the same way that, in many technological environments, ceding power to machines allows us to govern the general situation better (more effectively, with more benefits and security), establishing procedures for delegation can be understood as an improvement in our self-government. Obviously, that cannot be achieved with just any delegation or ceding of power, but with one that is designed in such a way that the immediate control that is renounced is in some way recovered as general supervision. Delegation, technology or politics consists of renouncing direct control in order to gain general control. This is the great discussion in which we are engaged about technological humanism or complex democracy, the solution to which cannot consist of uncontrolled technology or technocratic politics without popular sovereignty, but neither can it consist of insisting on maintaining an idea of control that belongs to technological and political populism that does not achieve anything other than in fact decreasing the ability to freely configure our personal and social life.

This idea of delegation as general control or supervision seems to be gaining ground in different realms where immediate control is impossible or unadvisable. We could also mention the fact that, regarding artificial intelligence, among legislators, there has been a gradual shift from the word "control" to "confidence"; they seem to understand that the human presence that they desire in machines, unless we want to destroy their effectiveness, must be conceived in terms of accuracy, not submission. Some forms of institutional design travel a similar path. In the same way that formal sovereignty does not necessarily imply effective sovereignty, there can be forms of control that prevent actual control. We may be able to think about self-limitations to the pressure to control that would generate better performance from the controlled systems and greater general supervision over them. The idea of mixed government—along the lines of classic republicanism—as a type of institutional framework that combines democratic components and non-democratic components is restored in the theory of democracy (Manin 1997, 237). Democracy does not mean the presence of citizens in places where decisions are made, but insists, instead, on the fact that elective institutions and those elected can be judged by the citizens.

The delegation of tasks and responsibilities is one of the basic tenets of organizations when they want to confront tasks of a certain size, which require that hierarchical control be replaced by horizontal confidence. The more intelligent a system, a technology, a person, an institution, the less willing they will be to accept direct control, the more margin for delegation is needed to satisfactorily fulfil the functions we expect of it. Submitting to strict control would ruin its performativity. If political interventions are excessive, the subsystems will reject intervention or, if they accept them, they will lose part of their dynamism, professionalism or internal complexity. Any operation of government must adapt to the autonomous mode of operation of the system that it wants to govern. When we need to govern societies of distributed intelligence, expert systems or intelligent machines, we must respect the fact that freedom, creativity and autonomy will lead to partially anticipatable results. Complex systems are self-referential, operationally closed and immune to external managerial interventions. They can respond to the relevant changes that are produced around them but always with their own language and operative logic. This means fundamentally that the government of any non-trivial system must respect the modus operandi of those systems and avoid the imposition of any logic that is external to them. Luhmann has presented this as a cognitive strategy, but it could be formulated in a pragmatic fashion:" the object can only be investigated by placing its selfreference in motion, in other words, taking advantage of its own motion" (1984, 654). It requires us to exploit, rather than combat, the inherent tendency of complex systems to self-organize. The most promising alternative for governing complex systems is "guided self-organization" (Helbing 2015, 72), in other words, an action meant to allow its selforganization and to prevent only those dynamics that put the self-organization of other subsystems in danger.

We would then be talking about strategies of indirect government that can be gathered together under the concept of "government of context" (Willke 1989), especially when we are referring to the government of differentiated social subsystems. This would consist of combining the self-organization capacities of each of the systems and the possibilities that politics has to establish the conditions and frameworks in which those autonomous systems should be deployed. In this way, the logics of distributed intelligence would be combined, in a new balance, with those of the last word, which would belong to politics, crowd wisdom and *Kompetenz-kompetenz*, the horizontality of the masses and the verticality of politics. We could free politics from the weight of many decisions for which it has hierarchical authority but lacks cognitive competence, while saving autonomous systems from the errors that stem from their inability to see the compatibility of the whole, its side effects and poorly calculated risks. "Conditioning self-government" could be a good way to define the objective of these contextual interventions, with which it does not mean to control behaviour but to provide society with forms of organization, procedures, self-control and the division of power that will allow different systems to understand their self-

government alongside other systems that also self-govern. The government of context is more complicated and more indirect than control, but it does not destroy the autonomy and idiosyncrasy of what it is attempting to govern. It accepts functional differentiation as the basic architecture of modern societies, on the one hand, and on the other, it provides procedures for the systems to relate among themselves. The notion of context must be understood here in the sense of Darwin's natural selection, which ended up replacing the strict determinism of classical mechanics, in other words, as a new type of self-organization that implies a reflexive causality.

All of that seems even more relevant when we try to imagine what a government of financialized markets and beyond the nation state would be like, where anything similar to control cannot be understood as a simple strengthening of governments in the face of markets. The global financial system is too important and has too many consequences to be abandoned in the hands of private organizations and too complex and sophisticated to be managed by public institutions. For that reason, the goal would be to configure a mixed system of governance that includes components of self-organization and of public supervision. It requires a hybrid mode of exercising authority when neither the public nor private authority is up to the task because, in essence, the public authority lacks the knowledge and the private authority lacks the power. Translated to the terminology that we are using, one could say that the markets should be controlled, but that cannot be done with direct and immediate control but through indirect and contextual regulations that respect their own logic.

We would be addressing a way of governing, a type of control that integrates elements of delegation which allow it to govern or control. The key to successful delegation consists of converting what appears, at first glance, to be an incompatibility or a dilemmathis could include a control that neutralizes the vitality of that which is controlled or a lack of control caused by a hopelessly unpredictable result—into a virtuous balance. Delegation would be something like control without controlling, an intermediary position between dominating and abdicating, between manipulating and alienating, between supressing and being supressed. When we delegate a task, we renounce direct control, but that does not mean that we renounce all control (Di Nucci 2021). The paradox of control consists of ceding control in order to retain it or recuperating it in other forms when immediate control is no longer possible or is dysfunctional. It does not imply apathy or irresponsibility but a renunciation of control that is required to exercise control in some way. If delegation and representation free us from having to take responsibility for every topic in great detail or at a level of expertise we do not have, from the normative point of view, they do not fully exonerate us from the task of observation and control. Representation and delegation only partially resolve the problem presented by the complexity of contemporary democracies since democracy presupposes the popular ability to assess the way the delegated function is realized in the final analysis. The political system in a democracy has no choice but to observe and control its representatives critically. One can delegate in a way that is irresponsible or submissive, but also in a way that is intelligent. It is one thing to lose control out of negligence and another to actively renounce part of it with the intention of improving a particular performance.

Defending the political value of delegation does not mean being in favour of authoritarian politics or technocracy, nor does it mean that algorithms should decide. It means calling attention to the necessity that those who constitute the ultimate source of authority in a democracy—the sovereign people—also control their desire to control the political process. An excessive desire for control can be as dysfunctional as the loss of control. In rulings about the governance of technology, we tend to talk about "meaningful human control", in other words, control that is sufficient, not excessive. This idea would find its political equivalent in the requirement that the political process is comprehensible to everyone and there is accountability, not so that the people are always present in every political decision or so they contemplate every step of the process as it takes place. The question that would need to be addressed then is how much delegation is legitimate and effective without renouncing meaningful popular control.

The control that is fundamental so that technology does not dehumanize us and so politics will not lack popular legitimacy does not need to be direct, continuous and immediate. There can be technological and social control without that requiring the permanent presence of the controller. The controlled system—the technological device or political representatives—does not represent the mere execution of the instructions of the controllers. There is a trade-off that makes giving up some direct control turn into an increase in general oversight. Delegation can improve control if it is well designed so the system is more effective, the supervision prevents getting lost in the details and there is greater accountability. In the balanced design of all that, what is at stake is that the technology is human centred and politics continues to be democratic. It means thinking about the way in which delegation can be a sophisticated form of control, in the face of the delegation of control and the control of delegation.

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