# Introduction: Science Is Politics By Other Means Revisited

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In the past forty years, Bruno Latour's claim that Science Is Politics By Other Means (SIPBOM) has been the underlying creed of Science and Technology Studies (STS), most of us simply taking it for granted. In contrast, this special issue is predicated on the observation of an enduring lack of exegesis of this catchphrase so remarkable that is has caused an outcry among natural scientists, echoed in some social science quarters. If SIPBOM has been a resource for decades, by turning it into a topic this special issue revisits one of the most exciting and challenging insights of contemporary thought.

At the time of sending to press this special issue of *Perspectives on Science*, we learn with regret of the passing of Bruno Latour (June 22, 1947 – October 9, 2022). In this issue, we have endeavored to capture the ideas of what we believe to be the greatest thinker of the twenty-first century. Part of our aim was also to understand how those ideas have helped further our own. We were hoping *Monsieur Latour*, as Anglophones used to call him, would find our readings and experiments worth commenting upon. Sadly, his untimely death has now made it impossible. RIP.

Since its inception, Bruno Latour's claim that "science is politics by other means" (*SIPBOM*) has circulated intensely in the academic world and beyond (Latour 1983, 1988). It has become the underlying creed of Science and Technology Studies, where it seems to have shifted the focus of attention from science to politics (Seguin 2000). Nowadays, most of us take it for

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granted even though its meaning remains rather ambiguous. Here are some interpretations found in scientific literature, with no claim to exhaustivity:

- The contestation of scientific ideas (Edgecoe 2001)
- Policies targeted at nonhumans (Seguin 2015)
- The laboratory as a form of power (Knorr-Cetina 1985; Pels 2003)
- The struggle for the public interpretation of reality (Vandenberghe 2014)
- The building of alliances between nonhumans and social interests (Brown 2015)

# Accordingly, SIPBOM raises a number of questions about:

- 1. Its interpretive diversity and the compatibility of meanings it has been ascribed. Do the above, and other, interpretations overlap, and to what extent? Are they complementary or incompatible? Are they equally valid in relation to Latour's writings? Do they have equal relevance for empirical research?
- 2. Its coherence with other aspects of Latour's work. How does it connect to other approaches used by Latour, such as actor-network theory (Latour 1987), or the extended symmetry principle (Latour 1993)?
- 3. Its links to other theoretical approaches found in STS and elsewhere. How does it stand in relation to Bennett's vital materialism (Bennett 2010), Foucault's power/knowledge (Foucault 1977), or Jasanoff's co-production idiom (Jasanoff 2004)?
- 4. Its impact on disciplines other than STS, foremost among them political theory. Why is Latour not widely regarded as a political thinker when politics pervades his entire work (Harman 2014, Seguin 2017)? Why has it not led political theorists to embrace science as an object of study? What influence does it have in other disciplines such as epistemology or sociology? Do Latour's explicit writings on politics actually depart from SIPBOM? (Latour 2004a) What can we learn from the debates he had with political scientist Pierre Favre, philosopher Gerard de Vries, or sociologist Ulrich Beck in the mid-2000s (Favre 2008; Latour 2004b, 2007, 2008)?
- 5. Its capacity to transform political institutions and influence political developments.
- 6. Its explanatory power and various uses in empirical research. Have case studies in STS paid lip service to it? How has it enhanced rather than impoverished our understanding of both science and politics? How useful has it been for the conduct of empirical research? Is it still relevant today?

If *SIPBOM* is mainly a resource in STS, the purpose of this special issue is to turn it into a topic, and to reflect upon the above and related questions. The special issue thus provides an opportunity to revisit one of the most exciting and challenging insights of contemporary thought.

In their article "Science is Politics by Other Means: Between Politics and Ontology," Eve Seguin and Laurent-Olivier Lord discuss the changing relationship between ontology and politics in Latour's analysis of science over the years. First revisiting Latour's empirical study of the birth of microbiology as outlined in The Pasteurization of France and the complementary paper published the year before, they put forward that the clues for properly understanding it were given nearly forty years ago by Karin Knorr-Centina, a STS scholar not associated with Latour. Taking her distance from both the ontological bias and individualistic depiction of politics that characterize several commentaries, Knorr-Centina rightly saw the Pasteur study as a demonstration of the power of the scientific laboratory. Building on this insight, Seguin and Lord contend the Pasteur study offers, though it was never formalized, an outstanding political theory of science that combines politics and ontology. The "other means" of the tagline refer at once to the ontological labor of science and its implementation of policies that target nonhumans and partake in political projects. In the second part of their paper, they turn to Latour's political treatise Politics of Nature: How to Bring the Sciences into Democracy. Unlike scholars who reduce it to a science policy, they argue that it redefines politics as the production of external reality, an activity that has been illegitimately monopolized by Science since antiquity and must be reformed. Seguin and Lord conclude that the book thus breaks away from the Pasteur study in conceptualizing politics as ontology. Despite the continued focus on science, it develops an ontological theory of politics and reverses the meaning of "science is politics by other means."

In his article "Latour and Schmitt: Political Theology and Science," Stephen Turner discusses the relation between Latour's and Carl Schmitt's political theories, paying particular attention to Latour's revisions of Schmittian theory. Latour systematically replaces the concepts of Schmitt's meta-theology of politics, whilst retaining the basic structure of Schmitt's thought and expanding it. Turner argues that Latour has taken up Schmitt's notion of representation and thus qualifies as a Schmittian. Nevertheless, he has replaced the Schmittian concept of acclamation by those of collectives and the public, has used translation and transubstantiation to replace Schmitt's decisionism, and has substituted the cosmopolitical for the political. Whether Latour's revision has upstaged Schmitt is debatable, though. For Schmitt, all political concepts are disguised theological concepts because metaphysics and political theology cannot be

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disentangled, as shown by the autonomous individual postulated by liberalism, or by Marxist social classes ascribed agential powers. Schmitt's critical political theology is the analysis of the secularization of the concepts of acclamation and the political. Turner sheds light on the parallel structures of Schmitt's and Latour's thought. He concludes that in redefining agency, Latour offers an alternative political theology, not a meta-theology that could be interpreted within the parameters of Schmitt's theory.

In his article "Attending to Latour's Militaristic Rhetoric and Politics 'With Other Means'," Lee Claiborne Nelson focuses on lesser known aspects of Latour's work. His claim is that Latour ultimately aims at charting a different Leftist approach. Nelson first observes that von Clausewitz's famous phrase on war and politics was wrongly translated as "by other means" when it should have read "with other means." Applying the right translation to Latour's catchphrase is more in keeping with his thinking as it maintains politics as a central means to build society. Latour's abundant use of militaristic metaphors shows that his politics must be read from a military standpoint. Taking advantage of this observation, Nelson interprets Latour's politics, especially his environmental concern, with the military theory distinction between pitched battle and Fabian strategy. The neoliberal Right is fighting the implications of climate change in Fabian fashion, that is, by instilling doubt about the reality of climate change. Latour points out that the green Left is trying to counter this strategy by upholding a modernist vision seeking to win the war through certainty and closure of the controversy. Nelson shows that in lieu of such a pitched battle, Latour proposes a non-modernist politics. We should accept living in a war of the worlds upheld by heterogeneous groupings building friends and foes relations. Without the help of the Nature-Culture divide, the Left must engage in struggles over the configuration of existence.

In their article "Politicizing Algorithms by Other Means: Toward Inquiries for Affective Dissensions," Florian Jaton and Dominique Vinck address the current impasse regarding algorithms in public life by means of Latour's trajectory of issues, which sketches the five meanings of the term "political" defined as moments or stages in the life of an issue. Reworking Latour's model, they put forward that the introduction of new entities and the changes they bring about in the collective world, which correspond to the first meaning of political, is often the outcome of naturalized habits, the fifth meaning. That is what is happening with algorithms: their contemporary multiplication in the collective is the outcome of their naturalized definition as computerized methods for problem solving, upheld by academics and business people. Algorithms have managed to generate the concerned publics that give its second meaning to political, and are currently the object of regulation attempts, which also

make them political in the fourth meaning, that of governance. However, these attempts are very unlikely to curb the political impact of algorithms since they have so far failed to reach the third stage of the politicization process, characterized by a frontal conflict between allies and adversaries. For Jaton and Vinck, the inability of algorithms to create lines of confrontation is due to the impoverished ontological soil that accompanies their institutional definition. Using materials from an ethnographic study conducted in a computer science laboratory, they argue that by digging into the genealogy of algorithms' constricted definition and associated ontological slimness, and by making their contemporary constitutive relationships more visible, historical and ethnographic studies can contribute to vascularizing them and turning them into objects of enlarged disputes.

In her article "Latour on Politics: Political Turn in Epistemology or Ontological Turn in Politics?," Noemí Sanz Merino challenges two widespread interpretations of Latour's recent work. The first one is the mainstream STS view that Politics of Nature has introduced an ontological turn in politics. Sanz Merino disputes this view and emphasizes the continuity in the conceptual foundations of Latour's thinking. She argues that the emergence of actor-network theory (ANT) years ago already signaled an ontological turn on principle. Latour has remained faithful to it and to the politics that derives from it. The second interpretation discussed by Sanz Merino is John Law's and Graham Harman's claim that with Politics of Nature Latour has taken a normative turn. For her, in focusing on science in the making as sociopolitical intervention, ANT's descriptivism depicts science as a performative activity. Hence, the political epistemology outlined in *Politics of Nature* is not a fresh orientation, political and normative, but the consequence of Latour's initial ontological turn. This epistemology describes the collectives involved in controversial topics, and the associated distribution of powers. It encourages the practice of diplomatic anthropology in situations of collective experimentation, which stimulates communication in decision making. The intervention of political epistemology proceeds from loyalty towards ANT, its amodern concepts and ontological turn on principle. Sanz Merino concludes that from the outset Latour's project has been political throughout.

In his article "Actor Network Theory and Sensing Governance: From Causation to Correlation," David Chandler argues that the emphasis on technologies displaces modernist forms of politics, which generates worrying consequences. Enabling new possibilities for governing, from the quantified self to data analysis in schools and businesses through new sensing capacities, new technologies of sensing are increasingly enabling politics by other means, particularly for watching the emergence of natural hazards and the impacts of climate change. Sensing governance, defined as the governance of

effects rather than causation, relies on the construction of non-modern ontologies which highlight the development of new post-epistemological approaches that put greater emphasis on the ontology of relations rather than on the ontology of being. Chandler analyzes how correlations reveal agencies and processes of emergence and how technologies have been deployed in this area, providing some examples of how the shift from causal relations to sensing effects has begun to alter governmental approaches. He argues that sensing governance works on the surface, on the 'actualist' notion that 'only the actual is real,' leading to obscure assemblages. Seeking to work on how relational understandings can help in the present, this governance accepts that little can be done to understand and to prevent problems or to learn from problems and aspirations for transformation.

In his article "Constitutional Ecology of Practices: Bringing Law, Robots and Epigrams into Latourian Cosmopolitics," Niels van Dijk explores the constitutional elements in Latour's political philosophy, especially his cosmopolitics. He begins by distinguishing five conceptions of politics in Latour's work (Realpolitik, Schwarzkist-politik, Naturpolitik, Dingpolitik, and Cosmopolitik). Focusing on Politics of Nature and Cosmopolitik, van Dijk discusses the model of political ecology that introduces a new bicameralism to replace the modern constitution. He pleads for a constitutional understanding and points to the practices by which constitutional achievements have historically been established through controversies. Coining the expression "constitutional ecology of practices," he highlights that different practices such as politics, science, organization, and law contribute to staging ways to assemble and proceed together. Van Dijk analyzes engagement with the practice of law, which leads to reinterpret Latour's bicameral proposal and the modern constitution as "epigrams", i.e., practical models for ordering contributions of different practices. Using robotics, he studies the role of epigrams in a cosmopolitical attempt to introduce these non-human entities in the collective. This case study allows him to explicate and discuss elements of constitutionality in practice, Latour's proposals, and non-modern constitutionalism in action.

In their article "How Do Technological Systems Define Who War Victims Are?," María Belén Albornoz and Javier Andrés Jiménez Becerra analyze how a software (the Inter-Institutional System of Information for Justice and Peace) has translated and displaced politics. This application was meant to accurately document situations of human rights violations and to contribute to the design of public policy and the construction of collective memory. More specifically, it was designed to define victims of war and means of compensation from the Columbian state. Paradoxically, it was victimizers who ended up benefiting from it. To understand this unintended consequence of the technological artifact, Albornoz and

Jiménez study the way information was collected, organized, and negotiated, and the technical and legal construction of the notion of victims of war. As a political act, the system reflects the cultural values of those who design and use it, and it becomes an aseptic mediator of historical-judicial truth and the policy of Transitional Justice. Once black boxed, it institutionalizes a way of knowing things and reproduces them in new contexts. This case study helps to understand the sociotechnical translation of legal, social, and historical elements, and the emergence of a new hybrid and its power to define who is a victim and how victimizers can return to civil life. Exercising a ritualized power, the corresponding assembly allowed society to recognize judicial spaces as repository of memory and to shape a specific setting up of transitional justice.

As mentioned above, the tagline "science is politics by other means" has widely circulated in STS and has certainly given food for thought, as shown by the variety of interpretations found in the literature. The papers collected here show that it is still regarded as the umbrella term that encapsulates Latour's work. At the same time, they tend to indicate that beyond the confines of science, "politics by other means" proves particularly inspirational. By analogy with what political theorist Ernesto Laclau used to say of the word "democracy," one could argue that "politics by other means" is a "floating signifier." Scholars gathered in this issue thus read it through different grids and put it in relation with a range of themes: politics, law, technology, ontology, methodology, intervention, the military, and religion, which testifies to the scope of Latour's thought. We hope this special issue will encourage readers to pause and rediscover the depth and richness of this idea, and to translate these insights into new empirical and/or theoretical research.

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