

“Legal Consciousness Studies” and “Science and Technology Studies”. Drawing Parallels?

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■ Résumé

« *Legal Consciousness Studies* » et « *Science and Technology Studies* ». Croiser des parallèles ?

Des recherches entreprises dans le courant des années 1970, en sciences sociales, sur les sciences et techniques d’une part, le droit d’autre part, présentent de nombreux parallèles. Portant tous deux sur des phénomènes tout aussi centraux que pluriels, le rapprochement des recherches menées par les courants des *Science and Technology Studies* « STS » et des *Legal Consciousness Studies* « LCS » met en lumière des points communs qui relèvent tout autant de partis pris épistémologiques forts que d’approches méthodologiques originales. Dans cette contribution, nous tentons de mieux cerner des parallèles entre ces courants pour nourrir le questionnement sur un possible avenir des recherches en sciences sociales qui tirerait profit des apports des deux approches pour mieux comprendre les droits, les sciences et les techniques dans leurs interactions mutuelles.

Comparaisons – Épistémologie – Legal Consciousness Studies – Science and Technology Studies.

■ Summary

Social science research undertaken in the 1970s on science and technology on one hand, and on law on the other, had many parallels. Both focused on phenomena that are as central as plural, the comparison of the *Science and Technology Studies* “STS” and *Legal Consciousness Studies* “LCS” pathways highlights some common points that are just as much strong epistemological choices as original methodologies. In this contribution, we attempt to better identify parallels between these two veins of research in order to further explore a possible future where the social sciences would take advantage of the contributions of both approaches to better understand law, science, and technology in their mutual interactions.

Comparisons – Epistemology – Legal Consciousness Studies – Science and Technology Studies.

There were at least four reasons for us to try to draw parallels¹ between the scientific movement of “Legal Consciousness Studies” (hereafter LCS) and the Studies of Science and Technology (hereafter STS).

Firstly, our individual paths had previously led us to exchange points of view² on scientific and technical objects and practices and to explore, as a result, the resources of STS, among other approaches. This was firstly to understand how scientific controversies unfold in various arenas, how they are handled by the different groups concerned, in particular young people,³ and finally what the relationships are between these “objects,” practices, and controversies on the one hand, and the law on the other hand.⁴

Secondly, the two currents of thought, although distinct from the point of view of their objects, have their roots in the same historical period—that of the 1960s and 1970s—and the same cultural area: the Anglo-Saxon world, and in particular in the United States.⁵ They both reveal the same need: to renew, without of course getting rid of the internal debates, frameworks and methodologies used to analyze the major social phenomena of law and science. Both LCS and STS aimed at adopting critical and political positions on these issues.

Lastly, Susan Silbey, whose work has guided our thinking during our research meetings, has since the beginning of the 2000s devoted long-term work to studying the relations between law and science, and in particular observing law within research laboratories.

Finally, it seemed to us that up to now, and despite recent attempts, the encounter between these two research movements had not taken place. Hence, we wanted to explore the potential of such a dialogue between two positions which, in many ways, seemed to us to cover territories which, more and more often, come into juxtaposition. We therefore sought to better identify parallels between the “LCS” and “STS” movements in order to fuel that questioning about prospective developments in social research that would benefit from the contributions of both approaches in order to arrive at a better understanding of law, science and technology in their mutual interactions.

1. We are obviously not going to say that these two movements should be considered as being similar. The STS movement is much wider, visible and encompassing than LCS which, as suggested by the *Droit et Société* correspondents/referents who gave an opinion on our article, is probably only a current within the broader area of socio-legal studies. The choice to treat them on the same level, as two fields of interdisciplinary studies, seemed however heuristically powerful with regard to the thinking that some members of these two movements respectively devote to objects that cross the law or, more broadly, regulation and at least scientific and technical objects and practices.

2. See specifically Stéphanie LACOUR, Sacha LOEVE, Brice LAURENT, Virginie Albe *et al.*, “Deliberating Responsibility: A Collective Contribution by the C’Nano Idf Nanoscience & Society Office”, *Foundations of Chemistry*, 17 (3), 2015, p. 225-245.

3. Virginie ALBE, “Controverses”, in Agnès VAN ZANTEN and Patrick RAYOU (dir.), *Dictionnaire de l’éducation*, Paris: PUF, 2017, p. 112-114.

4. Stéphanie LACOUR, Olivier LECLERC and Laurence DUMOULIN, “Regards croisés sur les objets et les pratiques scientifiques et techniques”, *Les Cahiers Droit, Sciences et Techniques*, 6, 2016, éditions PUAM, p. 11-22.

5. Though the Edinburgh and Bath schools represent major contributions to STS movement. In this sense, see Dominique PESTRE, *Introduction aux Science Studies*, Paris: La Découverte, 2006, p. 6.

I. Three Parallels Between LCS and STS

I.1. Opening up Black Boxes: Paradoxes in Law, Science, and Technology

The careful observation of the project that underlies LCS, as it appeared to us during our discussions, seemed to echo, at least partially, the work of some STS researchers. At least, we believe, it is possible to say that this project highlights a parallel between the apprehension of the phenomena of law and science, both being, in Susan Silbey's own words, "experienced in popular culture as arcane, impenetrable and often uninterpretable," but nonetheless truthful. They nevertheless present themselves fundamentally as institutions and processes aimed at regulating human life and society by publicly discussed words and reason, no longer resorting to an arbitrary (physical or metaphysical) force.⁶ The observation of the simultaneous presence, in a given society, of several faces, equally true and powerful in the minds of concerned citizens, of science and law, is undoubtedly the first touchstone of the comparisons that can be made of LCS and STS.

To understand how science simultaneously presents two images to audiences, STS focused their analysis on black boxes of scientific and technical activity. Indeed, according to these researchers, science and technology appear to be ontologically unified and methodologically purified (Science, Technology), to preserve the appearance of an objectivity that is expected (and claimed) to be out of the reach of "lay" citizens. This is what may be termed a myth of epistemological superiority. For STS researchers, de-essentializing Science and Technology—opening up those black boxes—is an essential step in understanding how knowledge, power relations and power contribute to the production of scientific and technical knowledge.

On the side of the socio-jurists, this observation has sometimes been analyzed and studied as part of a dual legal model in which "law as 'Reason' stands in opposition to a law acted by the social".⁷ This is how Jacques Commaille suggests that the law can, by going beyond this opposition, be apprehended heuristically as an "exceptional revealer of the transformations of societies and a privileged instrument for theorizing these transformations".⁸

Thus, for Bruno Latour,⁹ documenting an "anthropology of the moderns" consists of criticizing the double language of the "moderns" who claim to separate things and facts by producing a purified discourse on things and thus affirm their—Western and mythicized—superiority over other peoples. The work of Susan Silbey aims, according to us, to unveil the mechanisms of domination of the strong over the weak, within a

6. Susan S. SILBEY (ed.), *Law and Science (I): Epistemological, Evidentiary, and Relational Engagements*, Aldershot: Ashgate Publishing Ltd., 2008, Introduction, p. xii: "Yet, despite their purportedly open and available procedures, both science and legality are experienced in popular culture as arcane, impenetrable and often uninterpretable. [...] Neither law or science achieve the transparency to which it aspires."

7. Jacques COMMAILLE, "À quoi nous sert le droit pour comprendre sociologiquement les incertitudes des sociétés contemporaines?", *Sociologies*, 7 mars 2016, <<http://sociologies.revues.org/5278>>; more broadly, by the same author, *À quoi nous sert le droit ?*, Paris: Gallimard, coll. « Folio essais », 2015, p. 65 and following.

8. ID., *À quoi nous sert le droit ?*, op. cit., p. 2.

9. Bruno LATOUR, *Nous n'avons jamais été modernes. Essai d'anthropologie symétrique*, Paris: La Découverte, 1991; and, more recently, *Enquête sur les modes d'existence. Une anthropologie des Modernes*, Paris: La Découverte, coll. "Hors collection Sciences Humaines", 2012.

society, and the means by which this domination is perpetuated by the law, even though the latter may express, at least initially, the political project of doing otherwise.

The comparisons between the two movements do not stop there, however. STS and LCS have indeed developed—to uncover what has been called by the former the various facets of the co-production of science, technology and society, and by the latter the constitutive dimension of law—new methodologies that are very significant on an epistemological level and have marked a real break in the evolution of the production of knowledge about their objects.

1.2. Exploring Objects in Context: Law, Sciences, and Techniques in Action

Just as LCS marked a stage in the break with the sociology of law practiced in the United States in the 1960s and even 1970s and focused primarily on legal professionals and statistical approaches, STS marked a discontinuity within the philosophy of science. This latter was fully adhering to the strategy which consists of drawing criteria of demarcation between science and non-science, while the historical epistemology of science generally put forward the exceptionalism of scientific knowledge. STS led to the idea of an “essence of science” being left behind.¹⁰ With the methodological choice of favoring empirical surveys, and the development of laboratory anthropology, they focused their analyses on the practices of sciences and techniques—heterogeneous practices developed by the players who have an interest in them—and the circulation of knowledge in various institutions (laboratories, control agencies, standardization institutes, metrology offices, protest organizations, professionals, universities, start-ups, etc.).

This is one of the major contributions of STS. It has profoundly and radically renewed the epistemology of science, emphasizing the heterogeneity of science practices,¹¹ always situated and related to their context. Its approach is comprehensive, axiologically neutral and pragmatic. It is about staying closer to those involved, being empathetic with them, acting as a “modest witness”.¹² It is also about giving the same attention and deploying the same analytical abilities, without prejudging what is true or false, to study all those involved and the arguments that they display in the networks of production of scientific knowledge. Thus, STS show how, in their diverse practices, players and places, the sciences make up a common authority.¹³

For Susan Silbey and other LCS researchers, “legality [...] refer to the meanings, sources of authority, and cultural practices that are commonly recognized by actors as legal or associated with law, regardless of who employs them or for what ends”.¹⁴ This includes all in one movement both faces of the law, and it should be

10. Dominique PESTRE, *Introduction aux Science Studies*, *loc.cit.*

11. See, in particular, Peter. L. GALISON and David J. STUMP, *The Disunity of Science: Boundaries, Contexts, and Power*, Stanford: Stanford University Press, 1996, and indeed Karin KNORR CETINA, *Epistemic Cultures: How the Sciences Make Knowledge*, Cambridge: Harvard University Press, 1999.

12. Dominique PESTRE, *loc.cit.*

13. Bruno LATOUR, *Enquête sur les modes d'existence : une anthropologie des Modernes*, *op. cit.* (chapters 1 and 13).

14. Susan SILBEY, “Studying Legal Consciousness: Building Institutional Theory from Micro Data”, p. 692 in this dossier: “[... We] use the word “legality” to refer to the meanings, sources of authority, and cultural practic-

noted at the same time that the production of knowledge about this called for both a change of outlook and a methodological renewal.

The former preceded LCS and consists of a fundamental assertion that law in action is not identical to the law in books,¹⁵ without any hierarchical relationship between them. The latter is their specific contribution. The approach they favor, that of microsociology, makes it possible to shed light at the same time on the contingency of the conceptions that players reveal about what they consider to be the law that applies to them and the permanent belief in the superiority of a mythical legal system.¹⁶ This approach provokes criticism, as exemplified by the text written by Emilia Schijman, Daniela Piana and Noé Wagener in this dossier. Such criticism does not however erase either the contribution of microsociology compared to previous research nor the significance of the context for achieving better knowledge of the law.

This second parallel between the two research movements deserves to be looked into more closely, because it reminds the activist dimensions that presided over the creation of these movements. It was, and is still, about producing robust, shared knowledge about science, technology, or law, but the objective of STS, like that of LCS, was not confined to this. Rather the opposite, it seems to us that their results show a particular attention to the ideological dimensions that these objects incorporate.

1.3. Unveiling Embedded Ideologies: Law, Sciences and Techniques in Power

Despite their diversity and the permanent debates opposing the different currents of this research movement, it seems possible to assert, as Dominique Pestre does, that STS constitutes a "philosophical project built upon a methodological approach".¹⁷ This research has highlighted several invariants, sometimes counter-intuitive ones, in the field of science and technology. First of all, scientific evidence is always local and contingent, there is no transcendent necessity, and judging its relevance is precisely what scientific work consists of.¹⁸ Then, dissent comes first in the sciences. In other words controversy is, as Isabelle Stengers points out, the natural environment where "scientific facts" occur.¹⁹ Finally, since reality is apprehended

es that are commonly recognized by actors as legal or associated with law, regardless of who employs them or for what ends."

15. See Liora ISRAËL and Jérôme PÉLISSE, "Quelques éléments sur les conditions d'une 'importation' (Note liminaire à la traduction du texte de S. Silbey et P. Ewick)", *Terrains & Travaux*, 6, 2004, p. 101-111. These notions actually date back to work from the early 20th century: see Roscoe POUND, "Law in Books and Law in Action", *American Law Review*, 44, 1910, p. 12-36.

16. On the question of the coexistence of this myth with the multiplicity of daily practices of law and speeches they give rise to, see Susan SILBEY and Patricia EWICK, "The Rule of Law—Sacred and Profane", *Society*, 37 (6), 2000, p. 49-56.

17. Dominique PESTRE, "L'analyse de controverses dans l'étude des sciences depuis trente ans. Entre outil méthodologique, garantie de neutralité axiologique et politique", *Mil neuf cent. Revue d'histoire intellectuelle*, 25, 2007, p. 29-43.

18. In this vein, Harry M. COLLINS, *Changing Order. Replication and Induction in Scientific Practice*, Chicago: The University of Chicago Press, 1985 then 1992.

19. Isabelle STENGERS, *L'invention des sciences modernes*, Paris: La Découverte, 2010.

only in fragments and always through distorting prisms (cognitive and social, linguistic and material), it is natural for a multiplicity of *legitimate and interesting* propositions to emerge.

This renewed outlook on the sciences had two consequences. Firstly, a certain number of dichotomies which were hitherto considered as operative in the traditional ways of considering the sciences—including the illusion of a symmetrical exclusion of knowledge and practices²⁰—were abandoned. Secondly, the hegemony of the sciences claiming the monopoly of both access to the truth and legitimate voice in public space²¹ to address social issues involving science (e.g. energy, climate, food, and health) is being questioned. STS has thus helped to undermine the positions of authority that are constantly being rebuilt around the sciences. Politicians and activists challenged the neutrality of scientific knowledge and showed its organic link to power.²²

It seems to us, in the analysis of the work of LCS, that the approach implemented by Susan Silbey and her colleagues has many points in common with that of STS. We find, in different terms, a similar concern for modesty and symmetry to access the knowledge of law through studying the consciousness of law in all strata of the population. Similarly, Legal Consciousness Studies is, it seems to us, built on the basis of a radical reconsideration of some of the most seemingly insurmountable dichotomies and oppositions that founded knowledge about the law: between law in the books and law in action, between legal professionals and private citizens. It thus seeks to question the hegemony of law when it claims to have a monopoly on access to the truth and, ultimately, to challenge the necessary authority and prevalence of certain interpretations of the law, as borne by the powerful, over the law lived and experienced daily by citizens. In deciding to take legality seriously, the life of law in its daily manifestations, LCS take the opposite of the research carried out by the American jurists, critics of the law and realists, without denying the role and the place of law in the books, of the myth of the Law. Their contribution, therefore, is far from being merely methodological, since their microsociological approach relates very clearly to a much more general perspective of criticism of the hegemony of law, which tends to put the power associated with the latter back in the hands of all its actors.

II. Two Axes of Interaction for Social Research on the Interplay Between Law, Science, and Technology

II.1. Developing Consolidated Research Streams: STS and LCS in Action

In a similar fashion in both movements, LCS and STS, one finds a permanent concern, to take seriously the object they study. There are maybe two reasons for

20. These include the mythical tales about the sciences, in other words the “golden” science in Science textbooks in relation to science as it is being done, but also the one that makes a difference between experts and lay people, who are now seen as co-producers of knowledge. In this vein, see for example Bernadette BENSUADE-VINCENT, *La science contre l'opinion : histoire d'un divorce*, Paris: Seuil, 2003.

21. Union des rationalistes, Association française pour l'information scientifique (AFIS) for example

22. Dominique PESTRE, “L'analyse de controverses dans l'étude des sciences depuis trente ans. Entre outil méthodologique, garantie de neutralité axiologique et politique”, *op. cit.*

this: the suspicions of the illegitimacy of the approach chosen, and the resistance of the epistemic communities which previously had an authoritative say about Law and Science. This sometimes involves paying potentially high costs to access these areas, and not missing out the details, the literature, and the knowledge mobilized elsewhere. Such attention to the contexts, forms, and discourses that surround the objects and the actors of law, science and technology have, in both cases, although not with equal success, pushed the supporters of the LCS and STS approaches to institutionalize these streams of research, notwithstanding the fact that their movements covered various scientific positions, both disciplinary and methodological.

Thus, STS, under the influence, especially in the United States, of Sheila Jasanoff,²³ created chairs, supported dedicated journals, annual meetings, etc., in order to provide their work with spaces for expression—and of recruitment—capable of conferring stability on them, despite the difficulties of access to the field, the length of the investigations, the technicality of the objects explored, etc. This undertaking, although still at work today, was clearly successful and has durably positioned research, but also ended up with having STS figure among the array of academically recognized teaching programs.

Despite all their efforts, LCS—as such or even as part of a larger gathering of the most critical approaches to socio-legal studies²⁴—have not, in the United States, been borne to such heights, overtaken in that enterprise by less critical initiatives, such as the economic analysis of law, as shown by Antoine Vauchez.²⁵ The spread of these approaches in Europe has also remained relatively modest, which can partly be explained, as we do in the introduction to this dossier, by the specificities of the cultural legal contexts on either side of the Atlantic, but that cannot be the only reason.

There are many questions that can be raised about the potential of these two movements, starting from these divergent observations. They obviously concern the means and mobilizations that need to be deployed, in a perspective of epistemic communities,²⁶ to acquire the opportunity to publish, discuss, recruit legitimately and, from a more militant point of view perhaps, be heard by public authorities and citizens. They are, after all, at the source of a clean break in the praxes attached to themes close to power.

For STS, this academic success, according to some commentators, has been achieved at the cost of a regrettable softening of the size and critical scope of the research in question.²⁷ Have Legal Consciousness Studies, for their part, managed to maintain unity, be it critical or more broadly political? We can at least remark

23. In that respect, see Olivier Leclerc's introduction to his published translation of several of this author's major writings, *Le droit et la science en action*. Sheila JASANOFF traduite et présentée par Olivier Leclerc, Paris: Dalloz, coll. « Rivages du droit », 2013, in particular p. 9.

24. Austin SARAT and Susan SILBEY, "Critical Traditions in Law and Society Research", *Law and Society Review*, 21 (1), 1987, p. 164-174.

25. Antoine VAUCHEZ, "Entre droit et sciences sociales. Retour sur l'histoire du mouvement *Law and Society*", *Genèses*, 45, 2001, p. 134-149.

26. See on this concept: Emanuel ADLER and Peter M. HAAS, "Conclusion: Epistemic Communities, World Order, and the Creation of a Reflective Research Program", *International Organization*, 46 (1), 1992, p. 367-390.

27. In this vein, see Jérôme LAMY and Arnaud SAINT-MARTIN, "Marx, un spectre qui ne hante plus les *Science and Technology Studies*?", *Le Portique* [en ligne], 32, 2014, document 6, uploaded online on February 5, 2016.

that this objective is still present in a significant part of this research community. Susan Silbey, in 2005, called on the community not to forget this founding dimension of LCS, in her article “After Legal Consciousness”, translated in the opening of this special issue.²⁸ To achieve it, one possible way is more directly related to the work that this author has been elaborating for more than 10 years on the subject of legal consciousness in research laboratories. At the turning point of the research issues that it explores in those specific contexts, indeed, there is the space for an encounter, which for the time has not succeeded, between LCS and STS. Our questions to her were about the conditions of such a meeting.

II.2. Law Within Science? Or *Vice Versa*?

In her work on research places (in the fields of sciences of matter, life sciences, and engineering), Susan Silbey studies how the regulation of risk management in the laboratory²⁹ (for the environment, health, and safety) seeks to create a model of compliance and a chain of responsibilities in a universe whose organization is usually based on distributed authority and a historical tradition of autonomy. The question which then arises is, according to the author, whether and—in the event of a positive answer—how the regulations for risk management apply in laboratories without destroying the values endorsed by the concerned communities: academic freedom, relationships between researchers and spaces for invention and imagination.

The history of science, and especially the history of scientific disciplines that it refers to, highlights the autonomy and the internal regulation of disciplinary communities. In doing so, does not it also maintain an idealized view of science? Law, as well as the new forms of management that Susan Silbey studies, actually constitute, within the research laboratories, only one external source, among others, of legal norms. The point, in her view, is to study whether or not the communities targeted appropriate those norms. The variable nature of the relationships between scientific researchers and the legal and ethical norms which surround them is partly related to the position of the latter in the tacit and official hierarchies of the epistemic communities to which they belong. This is brilliantly demonstrated by Rafael Encinas de Munagorri.³⁰ Leaning on an idealized vision of the field of exploration—here, the “top laboratories”—in order to evaluate the constitutive dimension of this norm seems to us quite regrettable. A mirror criticism has been made of the work that Bruno Latour unfolded in *La fabrique du droit*, which was based on the ethnography of contentious practices displayed in an extraordinary space, that of the French Council of State.³¹

28. Susan S. SILBEY, “After Legal Consciousness”, *Annual Law Review of Law and Social Science*, 1, 2005, p. 323-368.

29. Susan SILBEY and Patricia EWICK, “The Architecture of Authority: The Place of Law in the Space of Science”, in Austin SARAT, Lawrence DOUGLAS and Martha M. UMPHREY (eds.), *The Place of Law*, Ann Arbor: University of Michigan Press, 2003, p. 77-108, and also, Susan S. SILBEY (ed.), *Law and Science (I & II): Epistemological, Evidentiary, and Relational Engagements*, Aldershot: Ashgate Publishing Ltd., 2008.

30. Rafael ENCINAS DE MUNAGORRI. “La communauté scientifique est-elle un ordre juridique?”, *Revue trimestrielle de droit civil*, 2, 1998, p. 247-283.

31. See Liora ISRAËL, “Conseils de sociologues. Bruno Latour et Dominique Schnapper face au droit”, *Genèses*, 87, 2012, p. 136-152

The second question we wish to raise, with a view to bringing its work closer to that of STS, is that of the normative object, in the broad sense, chosen by the author. While focusing the study on safety rules makes it possible to document the legal consciousness of the different actors who intervene, directly or indirectly, in the laboratories, it nevertheless seems to us that it could be interesting to include in the observation other standards which seek, with more or less success, to establish themselves in the daily life of these research laboratories. Such a methodology, less centered on a particular body of rules, would be closer to the approach that Susan Silbey and Patricia Ewick adopted in *The Common Place of the Law*, by choosing to question their interviewees about their daily lives and practices in order to be able to perceive both the ways in which they do refer to the law as the discourses they expound on it.

What about intellectual property laws, especially industrial property? What is the real scope, in the life of laboratories, of the regulations that are applied, again coming from the outside, in terms of budget management or project management, or funding of research and teaching? In the same order of questioning, without focusing on law, we can observe that a certain number of disciplinary rules are imposed on the epistemic cultures of each of these laboratories.

While almost all of these questions have been studied in the field of STS,³² almost none of these studies look at them from the exciting perspective of legality, as defined by Susan Silbey. Comparing the knowledge coming from the two academic movements would have the virtue of placing law within the set of the dimensions that STS can observe within the networks at work in the production of knowledge, and looking, by taking it really seriously, how this knowledge and the mechanisms it produces (whether technical, organizational, or otherwise) influence the development of the law, and *vice versa*, how this set of legal norms influences the production of knowledge and the functioning of the disciplines, on an array of questions whose political significance is far from trivial.

We also had a question about the specificity of the contributions of this research on natural science and engineering laboratories for the LCS current. The approach adopted by Susan Silbey, whose work is still in progress, seems to correspond to the project of focusing her study on how actors who can easily be described as "elites" in the world of science express a specific legal consciousness and "negotiate" with the law. The field she opted for in this project was, by her own admission, a direct response to some of the criticisms she had received at the end of her previous work. Accused of being concerned only by ordinary citizens who are very far, or even too far, from the circles of power to influence the institutions of the law, she decided to

32. Maurice CASSIER and Marilena CORREA, *Patents, Innovation and Public Health: Brazilian Public-Sector Laboratories' Experience in Copying AIDS Drugs*, ANRS, 2003; Malte HENKEL, "Academic Identity and Autonomy in a Changing Policy Environment", *Higher Education*, 49 (1-2), 2005, p. 155-176; Grit LAUDEL, "The Art of Getting Funded: How Scientists Adapt to their Funding Conditions", *Science and Public Policy*, 33 (7), 2006, p. 489-504; Gary RHOADES and Sheila SLAUGHTER, *Academic Capitalism and the New Economy. Markets, State, and Higher Education*, Baltimore: Johns Hopkins University Press, 2004; Jean THÈVES, Benedetto LEPORI and Philippe LARÉDO, "Changing Patterns of Public Research Funding in France", *Science and Public Policy*, 34 (6), 2007, p. 389-399.

observe next the everyday life of the law in the spaces occupied by the research elite.

One may however wonder, contrary to previous criticisms, whether at that level this is still the everyday life of the law. At the very least, it seems that these actors could sometimes be described as “intermediaries” of the law and not just “dominated” in relation to its authority, insofar as it might threaten their creative autonomy. How, then, to interpret their practices, their daily lives, in light of the legality schemas that Susan Silbey and Patricia Ewick described in the founding work of LCS, meta-narratives about legality that they gathered with the help of the terms “before”, “with”, and “against” the law? Would it not have been more relevant, in response to previous criticisms, to target a wider variety of actors in scientific research? What influence(s), finally, do the positions, conscious or not, of these particular actors—the elite of contemporary nature sciences and engineering—have on the modes of production of knowledge and the working of those disciplines, if those schemas are at least conceptually linked to the knowledge available about the organization of epistemic communities and the role of top scientists within them? All these questions remain open today, it seems to us, and offer perspectives for social science research, be it in law, science and technology, or both.

Finally, to push the symmetrical reasoning a little further, we wondered whether it would be possible to transpose the approach that Susan Silbey and her coauthors developed to understand legal consciousness, and apply it studying other forms of normativity that can be highlighted through the study of science and technology. The performative dimension of at least some of the statements and mechanisms that materialize science and technology in our societies is very real. Just as law, in the words of Susan Silbey, “is a durable and powerful human invention because a good part of legality is just this invisible constraint, suffusing and saturating our everyday life,”³³ the scientific and technological knowledge and mechanisms are—often invisible but nevertheless very effective—standards whose presence is ubiquitous in our daily lives.

In Susan Silbey’s much used example,³⁴ of the chairs placed in public parking spaces that have been cleared of snow in some North American cities, the normativities at work are probably, at least partially, legal, as the author emphasizes. They are, however, also most certainly, the results of non-state producers of norms, such as a widespread view of social justice (someone took the time to clear up this space, it is not illogical that she benefit from that). There is also a technical constraint that comes from a different normativity³⁵ (to park on this site, one would have to stop the vehicle in the middle of the flow of traffic, get out, take the

33. Susan S. SILBEY, “After Legal Consciousness”, p. 331.

34. ID., “J. Locke, op. cit.: Invocations of Law on Snowy Streets”, *Journal of Comparative Law*, 5 (2), 2010, p. 90.

35. In this respect, the example often used by Bruno Latour of speed bumps, known as “sleeping policemen”, is enlightening. The very picture of the idea of technical mediation, they do not simply fulfill a function—slowing down drivers—but have many other dimensions in their make-up, which the author describes as agents, times, and places, but which we believe may also be analyzed in terms of standards. See Bruno LATOUR, “La fin des moyens”, *Réseaux*, 100, 2000, special report “Communiquer à l’ère des réseaux”, p. 39-58.

initiative to move the chair without knowing who it belongs to or where to put it, then go back again before starting a maneuver, this constraint interacting with the one which derives from the average size of the vehicles, something that makes it materially impossible to ignore the warning and park in half a place, etc.). In the end, the contributions of the works resulting from two research movements as rich as STS and LCS seems to us a promising line of research which has not, for the moment, been fully explored by any of the movements in France.³⁶

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— "Regards croisés sur les objets et les pratiques scientifiques et techniques" (dir., with Laurence DUMOULIN and Olivier LECLERC), *Les Cahiers Droit, Science et Technologie*, 6, PUAM, 2016;

— *Des nanotechnologies aux technologies émergentes. La régulation en perspectives* (dir.), Bruxelles: Larcier, 2013.

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— "Mutations de l'éducation scientifique ? Défis d'un renouvellement épistémologique : mouvements STS et étude de controverses", *Spirale*, 58, 2016;

— "Les chercheurs dans les controverses. Réflexion sur huit controverses entre science et société", *Natures Sciences Sociétés*, 21, 2013;

— *Enseigner des controverses*, Rennes: Presses Universitaires de Rennes, 2009.

36. It must be said that work has already been done on intersecting viewpoints between STS and the whole of SLS, some of which are similar to avenues we suggest. See also, supervised by Emilie CLOATRE and Martyn PICKERSGILL (eds.), *Knowledge, Technology and Law. At the Intersection of Socio-Legal and Science & Technology Studies*, London: Routledge, 2016.