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What's Law Got to do With Good Science?: A Debate and Dialogue

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What's Law Got to Do with Good Science?

A five-part debate and dialogue focused on Charis Thompson's book, *Good Science,* featuring contributions from Marie Fox, Thérèse Murphy and Ilke Turkmendag, and a response from Thompson. This SSRN version features only Part 1 (the introduction) and Part 2.

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PART 1: INTRODUCTION

Neither law and medicine, nor law and science, sit in easy partnership. We generally imagine them as having radically different priorities and practices: law, it is said, prizes argument, trades in competing claims, and works towards what ought to be, whereas medicine and science value accuracy and seek truth, and give priority to facts. Law is also widely seen as illiterate when it comes to matters medical or scientific. There are regular complaints that courts operate outside of their competence when handling such matters; they are seen as poor performers when it comes to gauging when and in what ways deference to medical and scientific expertise is, or is not, due. Relatedly, law has been accused of demoralising medicine, and the so-called 'law lag'—namely, law's inability to keep up with science and technology—is widely seen as unfortunate but unavoidable. There is also a sense that when law turns its attention to medicine, science and technology, it tends to obsess about limits, whether outright prohibitions or simply moratoria and 'red tape' obstructions. The picture, in short, is not a happy one, especially for law: amidst strong popular desire for caring medicine and responsible research and innovation—for processes, institutions and actors that will articulate, procure and sustain what we as societies want from medicine, science and technology—law and lawyers are deemed to dawdle, or to deter the wrong things, in the wrong ways and at the wrong times.

Some however see it differently, and our debate and dialogue takes its lead from them. As a general rule, this different way of thinking is characterised by curiosity about discrete but parallel bodies of research on the relationships between science and technology and other authoritative social institutions, including the law. In legal circles, it has recently attracted enough interest to be described as an emergent legal field; here, by way of convenient shorthand, we'll call this field 'law and science'.

As a field, law and science engages openly and actively with regulation scholarship. Interestingly, it is also open to Science and Technology Studies (STS), its far better-established, cross-disciplinary counterpart which has its own detailed accounts of the relationships between science, technology and the law (e.g. Felt et al, 2017). To date, law and science has been dominated by engagements with topics and themes concerning criminal justice, evidence, reproduction and parenthood, medicine, the environment, information technology, and intellectual property (e.g., Harrington, 2017; Pottage, 2011; Reece, 1998). More and more, however, it seems interested in deeper and broader engagement—and in particular, in conceptual questions concerning the partnerships, actual and potential, between law and science. In places, these questions focus on how science should be handled in legal settings (Jasanoff, 2015), or on forming sub-fields such as 'law, regulation and technology' (Brownsword and Goodwin, 2012; Brownsword, Scotford and Yeung, 2017). Elsewhere, the emphasis is on drawing out the ubiquity of connections between law and science (Faulkner, Lange and Lawless, 2012), how science and law are 'co-produced' (building on Jasanoff, 2004), and the importance of 'social studies of law' (Cloatre and Pickersgill, 2014).

In this debate and dialogue we seek to contribute to these conversations about this new field of law and science. Specifically, we seek to build on the idea that deeper and broader engagement between STS and sociolegal scholarship, and between these and other separate but parallel fields analysing science, technology and law, is to be welcomed. Our jumping-off point is Charis Thompson's *Good Science,* a book that flags ethics rather than law as its point of departure—the work is self-described as an 'ethical choreography'. Thompson's earlier ground-breaking scholarship in social studies of science, has proven to be a valuable resource for legal scholars. In particular, her ethnography of assisted reproduction (Thompson, 2005) which tracked the complex dynamics of science, kinship, gender, economics, law and other matters at play in what she termed the 'ontological choreography' of the ART clinic has informed legal approaches to and understandings of the governance of reproduction. In *Good Science* she builds on her conclusion concerning the implications of her ART study for future relations between science and society, focusing this time on the geopolitics and biopolitics of stem cell research. As Thompson notes, stem cell research was the 'object of more interdisciplinary *ethical* debate and labor than is typical of advances in science and technology' (2013, 5) and she contends that such ethical attention is essential to the progress of 'good science'. Our pieces engage with this ethical choreography, with the aim of examining how law and regulation too are implicated in the production of 'good science'. For us, in other words, *Good Science* speaks to more than the regulation of stem cell research, and our contributions reflect this. We focus on particular topics which resonated for us in Thompson's book – from the place of human rights in the regulation of science and technology, to parallels with the UK's approach to regulation of mitochondrial donation, and the politics of animal research and animal rights. Thompson's response endorses this approach, and our hope is that other readers will find other jumping-off points in her important volume to bring to an ongoing conversation about science and its relationship to law, ethics and society.

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PART 2. To Talk about Science is to Talk about Ethics—But Not about Rights?

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Charis Thompson's *Making Parents* (2005) is, I think, a terrific book. I am also a fan of her 2004 essay on CITES and the African elephant, so I had a sense I would enjoy *Good Science*. I was right: *Good Science* is a very good read, replete with insight, learning and flair. It has an abundance of powerful phrases and frames: 'sciences that "have ethics"', and 'the end of the beginning of' stem cell research, were particular favourites of mine. It also introduces and makes good use of a method Thompson calls 'triage' (a method she developed in order to fill a gap in the ethnographer's approach), and it even has endnotes that are both germane and genuinely interesting.

I read *Good Science* as a book about science and ethics, rather than a book about stem cell research in South Korea, Singapore and the US in the first years of this century. I read it that way because it suited me, and I think most of us do this most of the time: a riot of the new can be stimulating but resonance is nice, too. My interest in the right to science, and more broadly in the relationship between the human rights, law and bioethics, meant that I was looking for resonance with *rights* or *human rights*. I found it in a range of places—from Thompson's discussion of the need for a 'flexible architecture of reciprocity' in stem cell research (p. 188), to her explanation of why we should desist from using animals as research subjects. But I had to work harder than expected, which brings me to the question I want to ask in this short reflection piece: Why was that? Specifically, why does a book that makes the case for 'sciences that have ethics' have so little to say about human rights or human rights law?

The question is not designed to shove, to prod or even to nudge. There is no hubris on my part; no move to substitute rights-based approaches to science for 'sciences that have ethics'. It is just that if ethics is construed broadly (as it is in *Good Science*[1]), and if what Thompson calls the 'ethical choreography of science' enrols and produces many actors (and many things, too), I can't help but ask: What happened to human rights—both human rights as law, and rights talk more generally?

Thompson says that 'Scientific futures cannot be created *de novo*; they must make sense in terms of the repertoire available in a given place' (p. 259). Aren't human rights part of the repertoire in a range of places, both local and global? This seems likely given their internationalisation and institutionalisation in recent decades, and the rising profile of economic and social rights (in particular the right to health and, more particularly, the right to have access to essential medicines (Murphy, 2013)). And as I see it, the criticism that human rights has faced from advocates of development, global health and reproductive justice make it more likely still that human rights are part of the way in which scientific futures are sketched. So, what then does it say, and with what effects, that Charis Thompson and I seek to know the world in such different ways?

[1] As 'an overarching normative term … ranging in its application from political contests over funding, rhetoric, and institution-building to matters of personal belief and normative arguments made by scholars and activists hailing from a range of disciplines and social locations' (2013: 26).

In what follows I am going to think aloud about this. I have two ideas. First, Thompson does not engage with rights or human rights because she is steeped both in sociology, especially science and technology studies (widely known by its acronym, STS), and in what she describes as 'transnational feminisms' (p. 9). Many feminist scholars—within and out-with the field of law—steer clear of human rights, preferring to focus instead on 'reproductive justice' (Browner, 2016; Morgan, 2015). In similar vein, neither sociology in general, nor STS in particular, has been interested in rights in the way that the fields of law and philosophy, and also international relations, political science, anthropology and history, have been.

It is not, to be fair, a one-way street. Human rights law scholarship, for its part, has not been particularly interested in STS, even STS *à la carte* (cf. Murphy and Ó Cuinn, 2013). And the right to science, though it is now drawing interest, remains one of the least commented upon rights within the international bill of rights, wherein it features in both the Universal Declaration on Human Rights (1945) and the International Covenant on Economic, Social and Cultural Rights (1966). Equally, most international human rights scholars who engage with questions of reproduction do so not by reference to science and technology, but rather via a public health orientation, with a focus on securing safe motherhood, ending forced sterilisation and guaranteeing access to modern (not high-tech) forms of contraception (Murphy, 2017). Sociological ways of seeing haven't had much traction either, though the recent shift in international human rights law from a singular focus on advocacy and standard-setting, and the rising interest in economic and social rights (Saul, Kinley and Mowbray, 2014; Young, 2012), do seem to be producing opportunities for human rights law scholars to be less normatively-inclined (Erdman, 2015).

Moving now to my second idea: in *Good Science*, Thompson is writing about science and about ethics, and potentially each of these stands in the way of engagement with rights and human rights, and especially with human rights law. Legal scholars—those most closely associated with rights—generally do not see science as an object of study, at least not in the way that sociologists and transnational feminists do. The legal field, seen by and large as an autonomous site, is what grabs and holds attention. True, we could look at law in the space of science, and science in the space of law, but to date (especially if we exclude the fields of evidence law and intellectual property law) few have done this (cf. Pottage, 2008; Silbey and Ewick, 2003). Perhaps one reason for the gap is that, like me, many legal scholars simply smile and nod when they read that the poet Sylvia Plath said 'The day I went into physics class it was death'. We smile and nod because we sense we know how she felt; we sense a soul mate who, like us, was well aware that science is 'different'.

Lawyers' engagement with ethics is problematic, too. Age-old debates about law and morality are of course familiar to us, and 'law and ethics' trips off the tongue almost as easily as 'law and politics'. Equally, many of us see law as having some sort of moral basis: in the absence of that, law would be politics or legalism, and we want law's normativity to be 'bigger and better' than either of these. To evidence this we need only take the example of a human rights court, say the European Court of Human Rights. For such a court, being either too legalistic or too political brings judicial power into question and put the court's legitimacy at risk. By contrast, the idea of the court as a moral actor has strong, legitimacy-maintaining appeal.

It seems to me that lawyers aren't, however, curious enough about pairings such as law and morality, law and ethics, and human rights and bioethics. Larger groupings are neglected, too, including 'ELSI', which stands for the ethical, legal, and social implications (of new biotechnologies), 'ELSI 2.0', the reformed version, and 'ELSPETH', which is *Good Science's*

turbo-charged version featuring politics, economics, theology and history, in addition to ethics, law and sociology. Ask yourself: how many lawyers have been interested in what prompts these combinations, and what makes some more durable than others? I think the answer has to be that few if any of us have been interested in such questions.

Looking at my own field, international human rights law, when and why do we use the phrase 'the legal and the ethical'? Equally, when and why do we elide the legal and the ethical, and when and why do we emphasise one more than the other? Also, what do others think of our practices of connection and disconnection? I find few answers, or even discussions of such questions. The movement to extend human rights responsibilities to businesses has, of course, brought demands from the latter for clarity on what is a legal responsibility, and what is an ethical one. And, in the field of health care, there have been claims that the rise of human rights law has provoked, or hastened, a demoralisation of medicine (Montgomery, 2006). But in the field of science and technology, I think the jury is still out.

For instance, far more bioethicists than legal scholars have had something (mostly critical) to say about the Universal Declaration on Bioethics and Human Rights (2005). And the European Court of Human Rights—widely seen as the 'jewel in the crown' of human rights law—has offered no guidance on why it sees assisted reproductive technology as raising 'sensitive moral and ethical issues' or what meaning it gives to the constituent terms. These gaps are problematic, in part because the Court tends to use its own declaration that moral and ethical issues are in play as a trigger for granting broad regulatory discretion to states, even if this means turning a blind eye to rising levels of cross-border reproductive treatment (*S.H. and Others v. Austria*, 2011). Looking more broadly, the global 'success story' of access to antiretrovirals is hard to read, too (Murphy, 2013). Is it a human rights success story (as many international human rights lawyers claim) or is it something else?

The point is not about who gets credit, or about everything being 'this' or 'that' ('law' or 'ethics', and so on). Rather, what I am saying is that we—the lawyers—need to be more interested in the divergences, the overlaps and, more broadly, the relationships between the fields that populate ELSI, ELSPETH and the like. But, again it is not a one-way street: there are bioethicists, and science and technology 'entrepreneurs' too, who are guilty of misrepresenting law. The entrepreneurs, and some bioethicists, like to peddle the 'science lag'—the idea that when it comes to science and technology, the law is always going to be behind, limping a little. There is a sense, too, that law is all about limits, and, relatedly, that it should be boxed-off so as to avoid corrupting the inquiry, scientific or ethical, that needs to be pure and, of course, prior. Furthermore, when bioethicists look specifically at human rights, and human rights law, framings can be one-dimensional (Murphy and Turkmendag, 2014; Murphy, 2018), and really rather dated by comparison with the conversations that human rights legal scholars are having about 'human rights experimentalism' (De Búrca, 2017) and the like.

To sum up: I read *Good Science*—a book about science and ethics that foregrounds 'sciences that have ethics'—expecting it to engage with my field of expertise. I hoped for resonance with rights and human rights, and with human rights law, too. I didn't depart empty-handed: *Good Science* is a book that challenges and sparks ideas. But neither was I reassured. Overall, I am confused: Is it really the case that to talk about science is to talk about ethics, but not about rights?

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