7.

Conclusions: Transnational Legal Analysis, Transnational Narratives on Risk and the Failure of Science and Deliberation. Towards Legal Re-Materialisation?

This chapter ties together the threads of the analysis, focusing on the findings of the methodological, institutional and normative strands of enquiry. Each section briefly reconstructs the analysis conducted in the book, as unfolding throughout the second, third, fourth, fifth and sixth chapters. The first section develops some final considerations on the value of transnational legal analysis as a methodological framework. The second section focuses on the institutional enquiry into transnational narratives on GE organisms and risk governance. The aim is to step back from the book’s in-depth examination of discrete legal systems and provide the big picture, drawing all relevant conclusions.

The last section, which focuses on the findings of the normative strand of enquiry, raises a few final and somewhat provocative questions. Does legal proceduralisation offer a way forward to foster genuine and long-lasting agreement, at times of globalisation? What happens if, in an increasingly complex and fragmented societal landscape, legal proceduralisation and political deliberation fail to construct normatively legitimate solutions to regulatory conflicts? Can legal procedural paradigms help re-democratise an “amorphous” World Society?[[1]](#footnote-1) And if legal proceduralisation fails, what are the prospects for legal analysis to enquire into the construction of normatively legitimate discourses? Should legal analysis relinquish the distinction between law’s facticity and validity, and is normative legal analysis doomed? Can *legal re-materialisation* offer a solution and pave the way for new forms of transnational normative analysis?

1. Methodology: The Value of Transnational Legal Analysis as a Methodological Framework

The first part of the second chapter has explained in detail the foundations and the rationale of the methodological framework employed in the book. As a preliminary step, the chapter has provided a brief overview of Law and Globalisation and transnational legal studies, as well as a more in-depth account of two strands of transnational legal theory: TLO and TLP theory. As the analysis of the following chapters has made clear, this is not a book about methodology or transnational legal theory. Rather, transnational legal analysis is employed as a methodological framework to deconstruct transnational narratives *from within*, *across* and *beyond* the nation state level.

The methodological framing of the notion of “transnational law” and its application to the analysis of discrete legal systems underscores that transnational narratives do not emerge out of thin air. Rather, they are socially and politically constructed and embedded in specific legal systems. For this reason, the application of transnational legal analysis as a methodological framework postulates a focus on *transnationally relevant* legal systems. These are the norm-making sites where transnational narratives have originated and where they have been shaped, reshaped, challenged or reinforced. Indeed, from this methodological perspective, transnational narratives can only be deconstructed and explored through the identification and analysis of these legal regimes.

On these grounds, the book has used transnational legal analysis as a framework to *interrogate* regulatory systems and case law, with a view to deconstructing transnational narrativeson GE organisms and risk regulation. This differentiates the application of transnational legal analysis as a methodological framework from the enquiries of both TLP and TLO theory. As explained in greater detail in the second chapter, the conceptualisation of transnational legal analysis as a methodological framework is indebted to the theorisation of transnational law as a methodological lens under TLP theory. Further, TLP theory’s analysis of the evolution of societal and legal dynamics is reflected in the three constituent dimensions of transnational legal analysis as a methodological framework: extra-territoriality, legal pluralisation and legal hybridisation. In other words, as explained in the second chapter, the deconstruction and examination of transnational narratives from within (extra-territoriality), across (legal pluralisation) and beyond (legal hybridisation) the nation state level is a reflection of the evolution of law at times of globalisation and of its increasing extra-territorial impact, pluralisation and hybrid nature. However, the methodological conceptualisation of transnational legal analysis in this book goes hand in hand with a close focus on structural regulatory issues. Regulatory frameworks and case law lie at the heart of the enquiry into transnational discourses. This differentiates the application of transnational legal analysis from TLP theory, as the latter focuses on questions of agency and the triad of Actors, Norms and Processes.

In a similar vein, the methodological framework of the book is indebted to the acknowledgment in TLO theory that the nation state level and other positive legal regimes are part of the transnational picture.[[2]](#footnote-2) However, yet again, the object of enquiry differs. TLO theory has focused on the analysis of discrete TLOs, framing transnational law as a specific form of socio-legal ordering. In a very different vein, transnational legal analysis as a methodological framework places the deconstruction of transnational narratives at the centre of the enquiry. This reflects an unequivocally methodological understanding of “transnational law”, which is clearly differentiated from the analysis of TLOs as “quasi-fields” of law.

By applying “methodological transnationalism” to a specific regulatory question within a discrete area of regulatory governance, the book shows the value of conceptualising transnational legal analysis as a methodological framework. As summarised above, transnational legal analysis is used to interrogate different regulatory frameworks and bodies of case law in transnationally relevant legal systems. A mere focus on “beyond the state” actors and hybrid patterns of regulatory governance cannot do justice to the social construction of transnational narratives within, across and beyond the nation state level. Nor can it help explore transnational discourses and their origins. Equally, the mere identification of conflicting transnational narratives cannot possibly uncover their rationales, underlying value systems, goals and political, socio-economic and distributional implications. This can only be done through an analysis of the specific legal systems where the narratives are embedded.

The introductory section in each chapter has focused on the application of the methodological framework and relevant findings, addressing four different but interconnected questions. The first question relates to the narrative under analysis throughout the specific chapters. The third chapter, fifth chapter and first part of the sixth chapter have focused on the hegemonic narrative on GE organisms and risk governance. The fourth chapter and second part of the sixth chapter, on the other hand, have turned to the counter-hegemonic narrative.

The second question focuses on the transnational relevance of the legal systems under analysis throughout the chapters; it asks why these legal systems are the object of analysis, what the transnational impact of these legal regimes has been and how the hegemonic or counter-hegemonic narratives have been constructed, reinforced or challenged within these legal systems. The US system is the legal order where the transnational hegemonic narrative on GE organisms originated. This is where the discourse on the benefits of agricultural biotechnologies and the economic costs of precaution first surfaced. Regulatory notions such as sound science or cost-benefit analysis, first developed and employed in US risk governance, have become a constituent part of hegemonic discourses on risk regulation; thus, US regulatory categories have clear transnational relevance. This reflects the logics of extra-territoriality. In an increasingly globalised world, the extra-territorial impact of national and regional legal systems has unprecedented power and reach. On these grounds, the third chapter has deconstructed the hegemonic narrative on GE organisms and risk governance *from within* the US national legal system.

The fourth chapter has turned to an analysis of EU law. This is located halfway through the dimensions of extra-territoriality, on the one hand, and legal pluralisation, on the other. Thus, from a methodological perspective, EU law has twofold transnational relevance. First, the EU legal system is the site where the transnational counter-hegemonic narrative on GE organisms has been constructed. For this reason, EU governance of agricultural biotechnologies has had an important transnational impact and EU regulatory categories have transnational relevance. Secondly, EU governance of GE organisms impacts on EU Member States. This adds a further layer of analysis, as the EU and EU Member State level have repeatedly clashed on regulatory implementation matters. The fourth chapter has thus deconstructed the counter-hegemonic narrative on GE organisms and risk governance *from within* the EU regional legal system and *across* the nation state (i.e. EU Member State) level.

The fifth chapter has focused on the SPS Agreement. The interpretation and application of the Agreement provisions has had a significant impact on the transnational debate on GE organisms, reinforcing the hegemonic narrative on agricultural biotechnologies and regulation of uncertain risks. On these grounds, the fifth chapter has examined the hegemonic narrative through an analysis of the WTO law regime, *across* the nation state level. Finally, the sixth chapter has turned to the Codex system and hybrid regulatory standard-setting by non-profit NGO actors. Both sites of norm-making have transnational relevance. In its interconnections with the SPS Agreement, the Codex system has considerably strengthened transnational evidence-based discourses on risk governance and agricultural biotechnologies. By contrast, NGO actors have directly challenged the hegemonic narrative on GE organisms and defended counter-hegemonic discourses. The sixth chapter has thus engaged in a further deconstruction of the hegemonic and counter-hegemonic narratives, *beyond* the nation state level.

The final questions addressed in each chapter bring us to the institutional enquiry of the book. What has the examination of these transnationally relevant legal systems uncovered, and how has it helped deconstruct the hegemonic and counter-hegemonic narratives on GE organisms? In other words, how has the analysis of these legal regimes shed light on the rationales, underlying value systems, goals and implications of the two transnational narratives? This third question is connected to and partially overlaps with the fourth question: how has the analysis of these legal regimes helped deconstruct transnational discourses on evidence-based and socially acceptable risk approaches to risk governance? Indeed, as explained since the introductory chapter, the hegemonic and counter-hegemonic narratives on GE organisms are informed by broader transnational discourses on the regulation of uncertain risks. The answer to these questions paves the way for an analysis of the institutional findings of the book. This is what the next section turns to.

1. Institutional Analysis: The Social and Political Construction of Transnational Narratives on GE Organisms and Risk Governance

In times of COVID-19 pandemic, many points raised in this book have emerged with unprecedented clarity and have found some empirical confirmation in everyday life. Scientific ignorance, scientific uncertainty and the evolutionary nature of scientific knowledge and research have come under the spotlight, beyond the modernist assumption that science can provide “sound”, correct and universally valid responses. Science has a crucial role to play in the governance of uncertain risks; however, it is no silver bullet. Its limits and inherent fragility are nowadays clearer than ever. The existence and relevance of scientific pluralism is also, nowadays, clearer than ever. While any national regulatory response to COVID-19 claims to be informed by science, scientific data and scientific models diverge considerably. This results in (very) different regulatory outputs.

The inferences that regulators draw from the available evidence are also bound to vary. Variation in the extent to which regulators take persisting uncertainty into consideration reflects different value judgments and normative frames. The pandemic has reminded us that, in contexts of scientific complexity, science cannot always provide a “correct” answer. Nor can we always assume that scientific evidence is sufficient for producing an adequate characterisation of uncertain risks.

Finally, COVID-19 has painfully shown that different regulatory responses are a consequence of the delicate balance between public health (or environmental) stakes and economic interests. The intended level of protection pursued in a jurisdiction reflects the specific balance that regulators have struck between the two. OLFs, including the impact of different regulatory options on vulnerable constituencies, are also part of the picture. And indeed, as the success of the COVID-19 vaccination campaigns has shown, the decision as to whether or not risks are worth taking is always influenced by an evaluation of the advantages and disadvantages associated with a product or process. When the stakes are high and the societal benefits of a products are clear uncertain risks will be socially acceptable even for risk averse constituencies. The positive reception of COVID-19 vaccines, notwithstanding their unprecedentedly fast development and uncertainties surrounding specific potential risks associated with vaccination, testifies to this.

This book has argued that the determination of the threshold of legally relevant adverse effects, warranting regulatory intervention, is never a matter of “pure” science.[[3]](#footnote-3) Rather, this determination results from three different factors. The first factor consists of recourse to more or less prudential approaches to risk assessment. This results in a different evidence base. The second factor consists of a regulatory focus on persisting uncertainty, as opposed to adherence to sound science, i.e. conclusive proof of the existence of specific hazards and risks.[[4]](#footnote-4) This results in different inferences. As the book has illustrated, different normative frames come into play indirectly at this stage. Reliance on sound scientific approaches as a matter of risk assessment policy and regulatory focus on sound science are cost-benefit effective in and of themselves; they relieve market actors from regulatory burdens and economic costs, and indirectly reflect the pursuit of a cost-benefit effective level of protection. Adherence to prudential approaches and a focus on persisting uncertainties and scientific insufficiency, by contrast, indirectly reflect the pursuit of a higher than cost-benefit effective level of protection and consideration of OLFs. In other words, they embody the assumption that “society may be willing to pay a high cost to protect an interest to which it attaches priority”.[[5]](#footnote-5)

The third factor impacting on the determination of legally relevant adverse effects is the intended level of protection pursued by regulators. This comes into play *indirectly*, as the normative frame through which science is assessed and evaluated, when experts conduct their risk assessment and regulators draw all relevant inferences from the available evidence base. However, it surfaces more clearly and plays a *direct* role in cases where hazards and risks have been conclusively proven. In these cases, regulators confront the question whether or not, or to what extent, to regulate hazardous products or processes in the face of predicted exposures. Even where faced with the same exact scientific evidence, regulators pursuing different levels of protection will draw different conclusions as to the acceptability of a risk and the threshold of risk triggering regulatory intervention.

Under evidence-based models, the intended level of protection pursued by regulators shall be economically cost-benefit effective. On these grounds, uncertain risks should only be regulated insofar as the relevant public health and environmental benefits are expected to outweigh the economic costs associated with risk regulation. Ultimately, risks will be regulated where the choice not to regulate would no longer prove cost-benefit effective. The relevant adverse effects should not be “unreasonable” and “excessive”, taking into consideration the economic costs that risk regulation would shift onto market actors and the economic benefits that the relevant products or processes can yield.

Under socially acceptable risk approaches, by contrast, the level of protection pursued by regulators need not be cost-benefit effective; more than cost-benefit analysis may be taken into account by risk managers. Regulators may thus choose to minimise exposures to hazards or determine that no level of exposure can be deemed to be “safe”. This reflects the pursuit of enhanced levels of protection. Qualitative OLFs, including socio-economic or distributional issues, may also be taken into consideration and feed into the setting of the intended level of protection and determination of the threshold of socially acceptable risk. Further, precautionary action may be warranted when, in the face of inconclusive or insufficient scientific evidence, a risk may be too high to meet the intended level of protection. Elements such as OLFs, precaution and the pursuit of enhanced levels of protection are non-scientific in nature. However, the same is true of economic cost-benefit analysis and the pursuit of a cost-benefit effective level of protection.

On these grounds, the determination of legally relevant adverse effects in the field of risk regulation is never a mere scientific matter. The narrative on sound science disregards scientific pluralism, scientific complexity and different forms of scientific uncertainty, as if sound science were always bound to provide factually “correct” answers. Further, it obscures the *normative frames* through which science is assessed and evaluated. The attacks on “political” factors like precaution and OLFs neglect the (direct or indirect) role of *non-scientific* considerations surrounding cost-benefit effectiveness and the pursuit of a cost-benefit effective level of protection, under evidence-based models. Far from being neutral and objective, as illustrated in chapter three, the assumption that sound science approaches *must* be adhered to and sound science *must* be relied on is informed by considerations surrounding the economic cost-benefit effectiveness of risk regulation.

Against this overall backdrop, the conundrum of agricultural biotechnologies has become a lens through which to investigate the political and social construction of narratives on uncertain risks and their governance. The enquiry into the rationales, underlying value systems, goals and far-reaching implications of diametrically opposed evidence-based and socially acceptable risk discourses lies at the heart of the institutional analysis of this book.

Chapter three has deconstructed the hegemonic narrative on GE organisms and risk governance from within the US legal system, highlighting the connections between sound science approaches, adherence to sound science and the pursuit of an economically cost-benefit effective level of protection. The analysis has underscored the technocratic component of evidence-based discourses and emphasised that these approaches foster the exercise of individual, market access and trade-related rights. By focusing on aggregate wealth maximisation and by pursuing the greatest net beneficial protection of public health and the environment, evidence-based models yield considerable economic benefits. However, as the thorny issue of coexistence clearly shows, they also neglect qualitative OLFs. Further, the analysis has shown that recourse to cost-benefit analysis results in the identification of a baseline threshold of safety and the pursuit of a baseline (as opposed to enhanced) level of protection. These, however, are determined by taking a sound scientific evidence base into account; on these grounds, reliance on sound science and the application of cost-benefit analysis are liable to underestimate uncertain risks and their effects.[[6]](#footnote-6)

Chapter four has turned to the counter-hegemonic narrative on agricultural biotechnologies and risk regulation, deconstructing it within the EU legal order and across the EU and Member State levels. The analysis has shed light on the central elements, implications and overarching goals of the counter-hegemonic narrative and socially acceptable risk discourses.

Chapter five has moved on to the WTO legal system, deconstructing the rationale of the hegemonic narrative by focusing on *EC – Biotech* and the specific interpretation and application of the SPS Agreement by the WTO dispute settlement organs. This chapter has shown that, in the absence of any self-standing criteria of “pure” science, the application of lato and stricto sensu de novo review draws on the mere acknowledgment that deferential procedural review would afford Members the opportunity to defend virtually *any* SPS measure. This, however, would be irreconcilable with the rationale and overarching goal of WTO law, i.e. trade liberalisation. In other words, it would undermine any attempt at transnational regulatory convergence in SPS regulation. This casts further light on the implications of the evidence-based narrative on GE organisms, and risk governance more generally. Not only do evidence-based approaches, as illustrated in the third chapter, pursue aggregate wealth maximisation and facilitate the exercise of individual trade rights. As the fifth chapter shows, they are also linked to transnational regulatory convergence and trade liberalisation. This is the double economic dividend referred to in the introductory chapter.

Finally, chapter six has engaged in an analysis of hybrid regulatory standards enacted by beyond-the-state actors. The enquiry into the Codex’s standards confirmed the linkage between the hegemonic narrative and evidence-based risk governance, on the one hand, and trade liberalisation, on the other. The examination of regulatory standards enacted by non-profit NGOs, by contrast, has put the counter-hegemonic narrative and distributional stakes back at the centre of the analysis.

As the institutional analysis of the book has shown, the hegemonic and counter-hegemonic narratives on agricultural biotechnologies reflect different value systems, the pursuit of different goals and a different balance between individual and collective interests. Neither evidence-based nor socially acceptable risk approaches can lay claim to neutrality or objectivity. Rather, they are informed by different normative frames and are associated with different advantages and disadvantages. Ultimately, the hegemonic narrative on GE organisms and risk regulation *is* hegemonic *because* the application of evidence-based approaches maximises aggregate wealth, facilitates transnational regulatory convergence, and fosters trade liberalisation. Consequently, the counter-hegemonic narrative is destined to remain counter-hegemonic.

The message of this book is not that uncertain risks should not be taken. Nor is it about pursuing the lowest possible threshold of risk under all circumstances. Rather, this book has argued that there is nothing objective and “correct” in the choice to focus on what we *know*, rather than what we do *not know*. Nor is there anything objective and “correct” in focusing on regulatory cost-benefit effectiveness, rather than pursuing enhanced levels of protection and considering different OLFs. Evidence-based models are *not* “better” than socially acceptable risk approaches. The acritical assumption that uncertain risks must be taken, or the quest for “pure” or “better” science, will not bring us far. Facts and values are intertwined in the field of risk governance, and the starting point in risk regulation debates should always be a discussion about *values* and all relevant *stakes*.

Technological and scientific developments, in and of themselves, can hardly be considered inherently “good” or “bad”. As explained in the first and third chapters, new genome editing techniques are increasingly being employed. Their advocates have emphasised the greater precision, reliability and safety of this new generation of GE organisms.[[7]](#footnote-7) This might prove to be true, dispelling persisting doubts as to the public health and environmental risks posed by agricultural biotechnologies. As new advances take place in the sector, climate-resilient GE crops might also in the future prove more effective than their conventional counterparts as a climate change adaptation strategy. Research and investment in biotech firms may then shift from herbicide-resistant and pest-resistant crops to more environmentally sustainable GE crop varieties. New and more effective coexistence strategies may be developed. The agricultural biotech sector may also open up to new actors and become more transparent. Further, public opinion could shift within jurisdictions and stakeholder groups.

All of this could happen one day, in the future; agricultural biotechnologies and their risks may then become increasingly accepted across different constituencies. The day may come when the decision to take the uncertain risks associated with agricultural biotechnologies is *not* informed by *sound science* and *economic* considerations, but draws on the acknowledgment that these risks are *socially acceptable*. For the time being, however, counter-hegemonic discourses on GE organisms and socially acceptable risk approaches have a *right* and a *reason* to exist.

1. Normative Analysis: The Failure of Science and Procedural Deliberation. Towards Legal Re-Materialisation?

The normative strand of analysis of the book has enquired into the ability of both science and procedural deliberation to generate agreement in the field of risk governance, with a view to solving regulatory conflicts. The book has argued and shown that science can hardly help generate genuine agreement. While reference to mere scientific matters *could* play a role in cases where uncertainties are very low and scientific agreement very solid, this role will be limited.

When the evidence base for regulatory action differs, this begs the question why these differences exist; such differences reflect more or less prudential approaches to risk assessment. Indeed, as the book has shown, the very framings of the relevant scientific questions can at times be irreconcilable.[[8]](#footnote-8) Equally, different inferences drawn from the available scientific evidence reflect the different extent to which regulators adhere to sound science or focus on multiple forms of uncertainty.

In controversial cases where scientific uncertainty persists, reference to mere scientific matters cannot square the circle. Sound science or the “best” science will not necessarily yield factually “correct” answers. Further, even in cases where uncertainties are not salient, science cannot possibly solve the value-laden conundrum of the acceptability of uncertain risks: normative considerations surrounding the intended level of protection, economic cost-benefit effectiveness and OLFs are always present in the field of risk governance. Science cannot generate genuine agreement because, in the face of scientific complexity and whenever normative perspectives differ, it cannot provide a single “valid” and universally agreeable answer. Rather, normative frames play a crucial role. Nor can any self-standing and objective criteria of “pure” science be identified to solve controversies, as testified by the slippery slope of substantive (de novo) and procedural (deferential) review of risk regulation measures.[[9]](#footnote-9) Even more clearly, recourse to sound science approaches and adherence to sound science cannot possibly generate agreement and provide a normatively legitimate solution to regulatory conflicts. They embody an assessment and an evaluation of scientific evidence through a specific normative frame.

Procedural deliberation provides a more promising way forward, insofar as it acknowledges the role played by normative frames and values in the evaluation of scientific evidence and in making a final decision as to whether and how to regulate risks. The book has posited that procedural struggles to mediate between different values and goals *can* work. On these grounds, the normative strand of analysis has employed the Conflicts Law framework to enquire into its potential to solve horizontal, vertical and diagonal conflicts in the field of GE organisms. However, the book has also underlined that deliberative practices do not exist in a political and socio-economic vacuum.[[10]](#footnote-10) A set of *substantive* preconditions must be met for *procedural* deliberation to succeed in constructing normatively legitimate solutions.

The second part of the second chapter has provided an overview of Conflicts Law theory, paving the way for the application of the framework in the following chapters. The third chapter has sketched out some considerations on the transatlantic horizontal conflict on agricultural biotechnologies. It has highlighted the unbridgeable normative gap between the regulatory approaches of the US and EU, and reached the conclusion that deliberation is bound to fail. The fourth chapter has analysed horizontal and vertical conflicts on agricultural biotechnologies in the EU, illustrating the gap between the approach of EU institutions and EU Member States at the regulatory implementation stage. EU institutions have drawn on an evidence-based approach; lack of conclusive, sound scientific proof of specific hazards and risks is all that they have ever taken into consideration. Further, they have consistently ignored political disagreements and societal controversies within and across EU Member States. By contrast, taking enhanced levels of protection, OLFs and the tenets of the precautionary principle into account, EU Member States and societal stakeholders have repeatedly made the point that the uncertain risks posed by GE organisms are neither socially acceptable nor worth taking. Yet again, the conflict is intractable and the normative gap too broad to bridge by means of procedural categories.

The fifth chapter has focused on the WTO dispute settlement organs’ failure to carve out an adequate procedural meta-norm and construct normatively legitimate solutions to vertical conflicts under the SPS Agreement. By putting the material context of the Agreement at the centre of the enquiry, the analysis has suggested that the evidence-based interpretation of the science-based obligations is unsurprising: it perfectly responds to the Agreement’s aim to facilitate transnational regulatory convergence and foster trade liberalisation. Just like deliberative practices, procedural meta-norms do not exist in a vacuum. Recourse to lato and stricto sensu de novo review must be examined in the broader context of the SPS Agreement and by taking into consideration the Agreement’s overarching goals. Finally, the sixth chapter has confirmed the normative gap between diametrically opposed evidence-based and socially acceptable risk approaches and emphasised the impossibility of re-embedding hybrid regulatory systems, with a view to solving diagonal conflicts.

On these grounds, the normative analysis of the book has shown that legal proceduralisation and Conflicts Law are bound to fail in the case of GE organisms; the normative gap between hegemonic and counter-hegemonic discourses is unbridgeable. Legal procedural categories cannot possibly succeed in constructing normatively legitimate solutions and horizontal, vertical and diagonal conflicts are destined to remain unresolved. Perhaps more importantly, however, the normative analysis of the book has developed a different point. The book has suggested that the success of truly deliberative practices, the successful identification of a procedural meta-norm and the successful solution of diagonal conflicts are a *procedural* reflection of a set of pre-existing *substantive* conditions. In respect of procedural deliberation, in particular, the salient substantive precondition appears to be the existence of shared values, goals and perspectives. From this perspective, procedural deliberation and legal proceduralisation can work. However, their success largely relies on (and reflects) pre-existing substantive factors.

This has two implications. First, the struggle to *construct* normatively legitimate solutions through *procedural* legal categories should be complemented by a *substantive* *deconstruction* of regulatory approaches and legal systems, with a view to identifying the different perspectives involved, the values and interests at stake and the goals pursued. This can shed some light on the margins of success of deliberation and legal proceduralisation. This is the form of analysis conducted throughout the institutional strand of enquiry of the book. For example, identifying where different approaches to regulation and regulatory implementation are located on the spectrum between evidence-based and socially acceptable risk models provides indications on the prospects of deliberation between different actors. This kind of analysis has informed the enquiry into the transatlantic horizontal conflict and EU-wide horizontal and vertical conflicts. In a similar vein, an analysis of the material context of a legal system can give some hints on the potential identification of a procedural meta-norm. This deconstruction has been at the centre of the enquiry into the interpretation of the SPS Agreement. On these grounds, the deconstruction stage complements and paves the way for procedural reconstruction.

Secondly, this substantive deconstruction of regulatory approaches and identification of the values and interests at stake can save legal proceduralisation from the “technocratic trap”. As noted since the first and second chapters, a focus on governance arrangements, deliberative practices and legal procedural categories can easily obscure the substantive political, socio-economic and distributional stakes underlying regulatory conflicts. In this sense, insofar as agreement is pursued as a “goal” and the assumption is that any conflict *can* and *should* be solved, modern procedural deliberative accounts incorporate a technocratic element.[[11]](#footnote-11) If the relevant substantive stakes are neglected, technocratic agreement may be mistaken for political deliberation. In a similar vein, lowest common denominator compromises may be considered an expression of deliberative practices. Transatlantic negotiations on agricultural biotechnologies or the procedural compromise underlying the 2015 EU reform offer some examples.

Against this overall backdrop, it is all the more important that procedural analysis is preceded and complemented by a substantive enquiry and deconstruction. This form of analysis can cast some light on the margins of success of legal proceduralisation, and help draw a clearer distinction between technocratic agreement and genuine deliberation. Agreement should neither be pursued at all costs, nor be framed as an overarching goal. Rather, it should build on a common ground of shared substantive values and thus reflect a fruitful mediation between all perspectives and interests at stake. Where this common ground of shared values is missing, and legal proceduralisation and political deliberation fail to construct normatively legitimate solutions, legal and value pluralism should be safeguarded. Just like in the case of GE organisms, acknowledging that there are no margins to construct universally agreeable solutions is the first step to ensuring the coexistence of different discourses and approaches.

Nonetheless, this does not quite settle the post-modern normative conundrum of transnational legal studies. If legal proceduralisation fails to provide normatively legitimate solutions, and the recognition and defence of legal and value pluralism is the end point of the analysis, we are back to the starting point: the acknowledgment of legal pluralism under transnational legal theory.[[12]](#footnote-12) Ultimately, this negates any normative dimension in the analysis. It also triggers a further and broader question, beyond the specific case of regulatory conflicts on GE organisms. In the face of increasing societal complexity, differentiation and fragmentation, what are the margins of manoeuvre for *modern* procedural paradigms to tackle regulatory conflicts in a *post-modern*, transnational scenario?

As suggested elsewhere, the World Society whose advent Luhmann foretold might as well be defined as an “amorphous” World Society.[[13]](#footnote-13) Economic interconnectedness and demographic, media and information flows have brought to the fore a far-reaching restructuring of societal ordering. Transnational regulatory convergence and increasing trade liberalisation have then pushed forward the neo-liberal globalisation agenda, increasingly homogenising World Society. Yet, the World Society we are living in has remained amorphous; while homogenised in several respects, it is inherently fragmented in political, socio-economic and cultural terms.[[14]](#footnote-14) Therefore, as noted elsewhere, the prospects for legal proceduralisation to identify normatively legitimate solutions to highly complex regulatory conflicts and successfully construct shared principles and values appear rather bleak.[[15]](#footnote-15) In the face of societal fragmentation and ubiquitous contestation over substantive values, procedural legal paradigms like Conflicts Law theory struggle to re-legitimise law through the identification of genuinelyagreed political and legal solutions. Overall, as summarised in the introductory chapter, modern procedural accounts have put too much faith in the ability of rational communicative processes to construct shared substantive values and identities and underpin societal integration. In the post-modern era, these paradigms struggle in the attempt to control political and socio-economic tensions and construct legitimate solutions.

This raises the question of whether normative legal analysis is doomed in the transnational landscape. Should transnational legal theory, then, relinquish the distinction between law’s facticity and validity, and limit itself to deconstructing law? Or do we find ourselves in a “Rodrik trilemma” scenario,[[16]](#footnote-16) and should we look back to the nation state level? As suggested elsewhere, *legal re-materialisation* and a new focus on *purposive* forms of normativity offer an alternative way forward, paving the way for *post-modern* normative legal analysis.[[17]](#footnote-17) The starting point is the acknowledgment of law’s inability to construct a universally legitimate discourse in the post-modern era. Post-modern normative analysis thus “leaves behind any claim to universality or universalisation”[[18]](#footnote-18) and embarks on a less ambitious project. Just like at the times of the Welfare State,[[19]](#footnote-19) law’s legitimacy is assessed against the normative yardstick of specific *substantive* values, principles and goals.[[20]](#footnote-20) Clearly, the relevant debates have significantly changed. For this reason, the central question becomes “how, and under which forms, the formerly nation state based normative and political debates are likely to re-emerge at the transnational level”.[[21]](#footnote-21)

A deconstruction of competing transnational narratives like the one conducted throughout the institutional analysis of this book can help identify fluid transnational stakeholder constituencies; these defend specific substantive values, refer to specific substantive principles and advocate specific regulatory approaches. In the case of agricultural biotechnologies, as the analysis has shown, these constituencies are located and operate within, across and beyond the nation state. They have relied on hegemonic or counter-hegemonic discourses on uncertain risks and defended different approaches to the governance of GE organisms, taking different perspectives and referring to different substantive values and interests. This is an example of how normative and political debates are re-surfacing at times of globalisation.

The *deconstruction* of transnational narratives can then pave the way for the *construction* of *substantive* normative arguments. Ultimately, this post-modern perspective entails taking a side in the debate and deciding where to stand. It involves constructing substantive, purposive arguments as to what approach should inform regulatory frameworks, which goals should be pursued at the regulatory implementation stage, which values should be defended, what balance should be struck between the different interests at stake and which principles should inform the solution of regulatory conflicts within, across and beyond the nation state.[[22]](#footnote-22) In the case of GE organisms, for example, substantive normative analysis could involve advocating evidence-based or socially acceptable risk approaches, defending their underlying value systems, promoting their goals and putting forward specific arguments relating to how regulatory conflicts ought to be solved.

The re-materialisation of law and the construction of substantive normative arguments might be the only way to solve the post-modern normative conundrum of transnational legal studies. If legal proceduralisation fails in the attempt to recouple law and politics in the post-national constellation, legal analysis can still structure substantive, purposive arguments. As argued elsewhere, legal re-materialisation and post-modern normative analysis could make transnational legal studies the site of new debates and discussions between different visions for globalisation.[[23]](#footnote-23) Further, they could breathe new life into politics, beyond the dichotomy of “input” and “output” legitimacy, the nation state and technocracy.[[24]](#footnote-24)

Genuine agreement on the validity and legitimacy of law is the only way to preserve its universal recognition. However, where there are no grounds for genuine agreement, regulatory conflicts should not be solved at all costs. In fact, they are bound to re-surface. No case proves this in a clearer way than the transnational controversy on GE organisms. If legal proceduralisation fails in its struggle to safeguard law’s normative legitimacy, then, all that legal analysis can do is acknowledge its own limits and put forward substantive normative arguments. In the post-modern era and in the transnational landscape, this may prove more important than ever.

1. See Leonelli, n 37 in chapter 1. [↑](#footnote-ref-1)
2. See also n 38 in chapter 1 as well as the first part of chapter 2 for a clarification regarding the terminology of “within, across and beyond the nation state” and similar terminology employed under TLO theory. [↑](#footnote-ref-2)
3. See n 48 in chapter 1. [↑](#footnote-ref-3)
4. See chapter 1, section III, and chapter 3, section V, for more details on sound science approaches to risk assessment and adherence to sound science. [↑](#footnote-ref-4)
5. See above, chapter 4. [↑](#footnote-ref-5)
6. In this respect, see the in depth analysis in chapter 3, section VI. [↑](#footnote-ref-6)
7. CRISPR-Cas9 technology, in particular; see chapter 1, section I. [↑](#footnote-ref-7)
8. See chapter 3 (for the gap between product and process-based models), and chapter 4, section V in particular (for an analysis of more or less prudential approaches to risk assessment within the EU). [↑](#footnote-ref-8)
9. See the analysis in chapter 5; see also Leonelli, n 73 in chapter 1, for an analysis of judicial review of EU risk regulation. [↑](#footnote-ref-9)
10. See n 131 in chapter 1. [↑](#footnote-ref-10)
11. See n 131 in chapter 1. See also Leonelli, n 37 in chapter 1. [↑](#footnote-ref-11)
12. See chapter 2, part 2 and section V in particular. [↑](#footnote-ref-12)
13. See Leonelli, n 37 in chapter 1. [↑](#footnote-ref-13)
14. Ibid. [↑](#footnote-ref-14)
15. Ibid. [↑](#footnote-ref-15)
16. See the famous theorisation of the trilemma in D Rodrik, *The Globalization Paradox: Democracy and the Future of the World Economy* (Norton, 2011). [↑](#footnote-ref-16)
17. Leonelli, n 37 in chapter 1. [↑](#footnote-ref-17)
18. Ibid. [↑](#footnote-ref-18)
19. See chapter 2, part 2 and section V in particular. [↑](#footnote-ref-19)
20. Leonelli, n 37 in chapter 1. [↑](#footnote-ref-20)
21. P Zumbansen, “The State as Black Box and the Market as Regulator” (2009) 165 *Journal of Institutional and Theoretical Economics* 62, at 67. See also Leonelli, n 37 in chapter 1. [↑](#footnote-ref-21)
22. Leonelli, n 37 in chapter 1. [↑](#footnote-ref-22)
23. Leonelli, n 37 in chapter 1. [↑](#footnote-ref-23)
24. Leonelli, n 37 in chapter 1. With regard to the EU legal order, see Leonelli, “The Glyphosate Saga and the Fading Democratic Legitimacy of EU Risk Regulation”, n 1 in chapter 1; and Leonelli, “The Perfect Storm: GMO Governance and the EU Technocratic Turn”, n 1 in chapter 1. [↑](#footnote-ref-24)