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The Use and Incorporation of Extralegal Insights in Legal Reasoning

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1. Introduction

1.1. The issue (or rather: the problem) at hand

Following the early example set by American scholarship and indeed American case law,¹ over the last few decades (legal) scholarship in Europe has produced more and more interdisciplinary or multidisciplinary academic work² relating to a wide array of topics that traditionally belong to the areas of private law and the law of civil procedure.³ In these empirically-orientated legal studies,⁴ 'extralegal knowledge', i.e. empirical insights stemming from disciplines such as psychology, sociology, and economics, are combined with existing (doctrinal) legal insights based on traditional legal argumentation techniques, and then transformed into 'novel' legal knowledge to further different sorts of public policy aims. This has often led to new thoughts on how to organize legal rules and procedures as well as on our thinking about public policy issues. This century-old American trend has more recently been especially visible in the UK, and to a lesser extent also in Germany and the Netherlands.⁵

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¹ The Supreme Court case of Muller v. Oregon (208 U.S. 412, 1908) is broadly considered to be the starting point in the US.

With this terminology I am referring to all forms of (legal) scientific research that incorporates, to some extent, insights form disciplines other than law. I do realize that these terms are used in specific and often different meanings by different authors. See e.g. D.W. Vick, 'Interdisciplinarity and the Discipline of Law', 2004 Journal of Law & Society 31, no. 2, p. 164 and pp. 170-171, and I.J. Kroeze, 'Legal Research Methodology and the Dream of Interdisciplinarity', 2013 Potchefstroom Electronic Law Journal 16, no. 3, pp. 50-51.

Although the reasoning deployed hereafter probably has a broader range, I will confine myself here to the field of private law, my own field of expertise. See, generally, Th.S. Ulen, 'The Importance and Promise of Empirical Studies of Law', in P. Nobel & M. Gets (eds.), New Frontiers of Law and Economics, 2006, p. 29 and p. 31 (with references). The rise of empirical legal scholarship is explained by Ulen by pointing at the earlier emergence of law and economics (ibid., p. 32) and the need for the empirical testing of theories stemming from that emergence. Cf. also E.L. Rubin, 'Law and The Methodology of Law', 1997 Wis. L. Rev. 521, p. 555, and J.M. Smits, 'Law and Interdisciplinarity: On the Inevitable Normativity of Legal Studies', 2014 Critical Analysis of Law 1, no. 1, pp. 77-78. A large-scale overview of the empirical work being done is offered in P. Cane & H.M. Kritzer, The Oxford Handbook of Empirical Legal Research, 2010, but the specific question raised here is not addressed in that volume.

⁴ See Ulen 2006, supra note 3; G. van Dijck, 'Empirical Legal Studies', 2011 WPNR, no. 6912, p. 1105. In my phrasebook, 'empirical' would denote all attempts to find out how and why the law is what it is and what effects the law has, see Ulen 2006, supra note 3, p. 30.

⁵ Several examples of this are to be found in the literature used in this paper. Cf. also J.A. Blumenthal, 'Law and Social Science in the Twenty-first Century', 2002 S. Cal. Interdisc. L.J. 12, no. 1, pp. 1-4, and especially M. Adler & J. Simon, 'Stepwise Progression: The Past, Present,

An intriguing, and as yet unresolved question underlying all these kinds of studies – alongside more generally accepted, specific problems surrounding the interface of law and social science, which cannot be dealt with in this article⁶ – is whether it is in fact possible – and if so, how, why and when – to leap from such extralegal (e.g. psychological) insights to normative legal conclusions. Given that facts in themselves cannot generate values,⁷ how and when can any decision maker or researcher step over from, for example, empirical psychological facts⁸ to legal normative value judgments as one is required to do from a legal end, for instance as a judge, or from a public policy perspective? If psychological research tells us – to give but one example⁹ – that warning signs are only followed by those people who have been given the warning if the costs of complying with that warning are low,¹⁰ could a judge then conclude that a legal duty to warn should be rejected, as being superfluous, in all other circumstances? What, if anything, allows anyone to do so? What is, in other words, the yardstick, or what are the conditions under which it would be safe to say that one could cross from one side to the other? What kind of justification could there be, if there is one at all?¹¹

1.2. The importance of this issue and the reason for dealing with it

In order to stress the importance of these questions and the underlying broader issue, it is worth noting, first, that Smits has stated in this regard that we should not overestimate the meaning of empirical work for the law. Why should we not do so? Because:

'the relationship between the normative question of what the law ought to be (...) and the empirical question whether something 'works' is not completely clear.'12

If this is true – as I also think it is – then the future of the use of extralegal insights in law and of empirical legal scholarship as far as it is related to the law itself rests on our (in)ability to answer the question whether we can and may in fact leap from empirical insights to legal conclusions and public policy decisions. Of course, this question warrants a further investigation of the issue at hand.

In this regard, it is also worth citing what Lawless, Robbennolt & Ulen note in their casebook on *Empirical Methods in Law*:¹⁴

'It is also important to recognize that an empirical approach is not suited to answer all legal questions. While it is true that empirical evidence frequently provides us with crucial insights into important public policy issues on which there are deeply opposing views, such issues may ultimately turn on normative issues that cannot be answered by empirical research.'

and Possible Future of Empirical Research on Law in the United States and the United Kingdom', 2014 *Journal of Law & Society* 41, no. 2, pp. 173-202, who sketch the history of empirical legal research in the US and UK and try to explain the differences. The claim that interdisciplinarity in law will not work (Kroeze 2013, supra note 2, p. 55) is refuted by what has been done in the past.

⁶ See on those 'interface' problems many of the contributions cited below, and especially Blumenthal 2002, supra note 5, pp. 34-46, who also offers specific solutions to those specific items of concern.

⁷ See e.g., J.O. McGinnis, 'Age of the Empirical', 2006 *Policy Review* 47, p. 48.

⁸ Of course, J. Monahan & L. Walker, 'Social Authority: Obtaining, Evaluating, and Establishing Social Science in Law', 1985-1986 *U. Pa. L. Rev.* 134, 477, have argued that social science research is not a source of facts, but of social authority, but that discussion is outside the scope of this paper.

⁹ More elaborately I. Giesen, Handle with care, 2005.

¹⁰ See T.A. Dingus, S.S. Wreggit & J.A. Hathaway, 'Warning variables affecting personal protective equipment use', 1993 Safety Science 16, pp. 655-673, p. 661, p. 663 and p. 668; Cf. also J. Edworthy & A. Adams, Warning Design: A Research Prospective, 1996, pp. 52-53, 59 and 73.

¹¹ Cf. Giesen 2005, supra note 9, pp. 87-88; I. Giesen, 'Recht en ... Psychologie: over de waarde die psychologische inzichten voor de civilist kunnen hebben', 2011 WPNR, no. 6912, p. 1065, p. 1073.

¹² See (critically on the use of empirical materials) J.M. Smits, *The mind and method of legal academic. On the nature, method and organization of the legal discipline*, 2012, no. 16, and Smits 2014, supra note 3, pp. 75-86.

¹³ Of course this future also rests upon the way empirical legal scholarship is conducted and its methodology. On that issue, see L. Epstein & G. King, 'The Rules of Inference', 2002 *U. Chi. L. Rev.* 69, no. 1, pp. 1-133.

¹⁴ R.M. Lawless, J.K. Robbennolt & Th.S. Ulen, Empirical Methods in Law, 2010, p. 21.

And indeed, empirical insights can supplement or nuance the existing legal modes of thinking, or negate certain presumptions, but they can never (totally) replace the essentially normative¹⁵ legal analysis and public policy choices related to that analysis, ¹⁶ even and also if someone's normative choices might (also or partly) be based on empirical facts. Since empirical insights and legal analysis thus have to be 'paired', it is paramount to address the following question: when, and/or under what circumstances and/or to what extent can we in fact answer legal questions from an empirical approach? In other words: when some form of 'translation' is needed between law and empiricism, when is a normative qualification or transformation required, ¹⁷ and how do we go about finding the right (form of) translation? ¹⁸

An additional reason, or rather a justification, for doing this is that it is highly interesting – both from an academic and a practical point of view – to see whether the effort of trying to 'synchronize' the law with 'state of the art' insights from other disciplines, such as (insights from) psychology, might be a path which is worth further pursuing and which might be a justifiable exercise in itself given the time and money that would need to be invested.

A third reason for pursuing this course – and another justification for trying to find a way to bridge the gap between law and the social sciences – relates to the impact that this new trend might have, or perhaps even already has, on private law scholarship. The future growth, or maybe even the continuation of private law scholarship as we now know it, is or might be partly dependant on the use of empirical insights and thus on the ways in which one is able to connect both worlds: empirical literature 'will greatly advance our understanding of law', as Ulen has stated.¹¹ Phrased differently: ignoring empirical insights might well be worse than using them, because we should not close our eyes to reality, not even the reality as it is seen from a legal point of view. It would thus be unwise not to think broadly, no matter how sceptical the more traditional, doctrinal legal researcher still is.²¹

A fourth, much more practical justification for studying the phenomenon at hand is that social science in the form of, for instance, sociological, psychological or economic studies has already been making its way into our courtrooms, influencing decisions on matters of public policy.²¹ This first happened in the US, but the idea has now crossed the Atlantic. If a civil judge is to use a study, to use that example again, that tells him that warning signs are only useful if the costs of compliance are low, and he is keen to use them in the right fashion, he must have some basic knowledge of that other discipline (psychology) and how to cope with it, if at all. Given these justifications for trying to cross over from social sciences to the law, the path towards finding a way of pursuing this seems to be all the more in order.

¹⁵ Cf. Rubin 1997, supra note 3, p. 555, and Smits 2014, supra note 3, pp. 81 and 84.

¹⁶ See Rubin 1997, supra note 3, p. 556; Giesen 2005, supra note 9, pp. 87-88; Giesen 2011, supra note 11, pp. 1072-1073; J.B.M. Vranken, 'Een nieuw rechtsrealisme in het privaatrecht', 2011 WPNR, no. 6912, p. 1113, p. 1121; J.B.M. Vranken & G. van Dijck, "Law and...' bewegingen: een slotbeschouwing', 2011 WPNR, no. 6912, p. 1125. Cf. also Smits 2014, supra note 3, p. 83: 'other disciplines will never be able to provide any "hard" knowledge on what the right solution to adopt is.' And McGinnis 2006, supra note 7, p. 55, claims that 'empiricism is not going to forge consensus on all issues', such as abortion.

¹⁷ Vranken 2011, supra note 16, p. 1121, referring to Mertz' introduction to the Volume mentioned below. To be sure, this issue is further complicated because social scientists cannot be certain that they have in fact properly understood the law and its institutions which they have attempted to analyze, see D. Nelken, 'Can law learn from social science', in E. Mertz (ed.), *The Role of Social Science in Law*, 2008, p. 157.

¹⁸ Other 'traps for the unwary', as Vick 2004, supra note 2, p. 185, calls them, cannot be dealt with here. Of course, I am aware of the fact that not all empirical studies are only descriptive in nature (cf. Rubin 1997, supra note 3, pp. 537-538).

¹⁹ Ulen 2006, supra note 3, p. 29. See also Vranken 2011, supra note 16, pp. 1119 and 1120, and Vick 2004, supra note 2, pp. 181-182 on the advantages of interdisciplinary work. Cf. also Rubin 1997, supra note 3, p. 522, and R.A. Posner, *Reflections on Judging*, 2013, p. 62, who states: 'We need evidence-based law across the board, just as we need evidence-based medicine across the board.' See also Smits 2014, supra note 3, pp. 85-86 (insertion of non-legal approaches is called for), and Giesen 2005, supra note 9, pp. 18-21.

²⁰ Ulen 2006, supra note 3, p. 34. See also more elaborately on the benefits of using social science in law: C. Engel, 'The Difficult Reception of Rigorous Descriptive Social Science in the Law', in N. Stehr & B. Weiler (eds.), *Who Owns Knowledge? Knowledge and the Law*, 2008, pp. 200-202. On the justification for using empirical works in law, see also B.G. Garth, 'Observations on an Uncomfortable Relationship: Civil Procedure and Empirical Law', 1997-1998 *Ala. L. Rev.* 49, no. 1, pp. 106-107.

²¹ See e.g. E. Mertz, 'Undervaluing Indeterminacy: Translating Social Science into Law', 2011 *DePaul L. Rev.* 60, no. 2, p. 397, with US examples on where and how this can go wrong. See also the seminal article by J. Monahan & L. Walker, 'Judicial use of social science research', 1991 *Law and Human Behavior* 15, no. 6, pp. 571-584; Nelken 2008, supra note 17, and J. Sanders et al., 'Legal perceptions of science and expert knowledge', in E. Mertz (ed.), *The Role of Social Science in Law*, 2008, p. 223, who deal with the *Daubert* case law (509 U.S. 579, 1993) in the US. All this is not to say, however, that empirical evidence is always used. It is rather quite the contrary, see R. Lempert, 'Empirical Research for Public Policy: With Examples from Family Law', 2008 *J. Empirical Legal Stud.* 5, no. 4, p. 908, in footnote 1.

1.3. A road map for addressing the issue

In trying to find the answers to the questions raised I will hereafter first survey and analyse the existing literature I could find that has specifically addressed this specific methodological issue (Section 2). Building on some of these ideas and linking these up with some thoughts on the (somewhat analogous) use of comparative law materials by the courts (Section 3), this article then tries to work out its own methodology for crossing the borders between other disciplines and the law (Section 4), before drawing some conclusions in Section 5. Of course, it might well be that this effort falls short of being entirely successful, because the guidance sought in the literature turns out to be less educational than desired. But the lessons that can still be learned might be worthwhile anyway. And what we can at least learn, in my view, is that if some more formal measures, procedural steps, are taken, we are in fact at liberty to cross the borders, notwithstanding the theoretical problems a legal researcher or judge will encounter (see Section 4).

For the sake of clarity, it is useful to mention beforehand that this contribution starts from a legal perspective, be it that of a judge, legal scholar or practising lawyer working on a case, who wishes or (driven by parties or lobby groups) needs to use empirical materials to further a specific (public or more privately-oriented) policy. The question raised and the challenge posed in such situations is always 'how to appropriately use well-done, but inherently imperfect research for legal and policy purposes.'²²

2. What is known 'out there' about bridging the gap?

2.1. An example

At Erasmus Law School (Rotterdam, the Netherlands), a PhD dissertation was defended in 2011 on Warnings and Product Liability, in which a wide array of cognitive insights were explained, analyzed and used for furthering our legal knowledge on warnings and liability rules.²³ This rather novel research project, at least in the Netherlands, had one 'flaw', or rather: one weak spot, in my view. That weak spot is that the research in question does not explicitly explain how, why and when a lawyer or legal researcher can (in general) take the step from social science – here: ergonomical and psychological – insights to normative legal conclusions. As stated before, how and when can anyone go from empirical facts to legal normative value judgments as one is required to do from a legal end, for instance as a judge. The author of the PhD in question did not present us with her insights on this and did not present us with general criteria for making the switch from one end to the other.²⁴

This flaw, however, is hardly one that would allow anyone to blame the PhD candidate in question, since the central question here is actually what general knowledge on these questions is in fact available at this point. As it turns out there is really not that much useful material to work with.

2.2. The existing literature

2.2.1. An older issue revitalized: Kantorowicz and Lepsius

The issue at hand is as such by no means a novel one.²⁵ As Olivier Lepsius reminded us some years ago,²⁶ it was already Kantorowicz who raised it in 1934, in a *Yale Law Journal* article on legal realism.²⁷ The nature of legal science was misunderstood by the then *en vogue* legal realist movement, he claimed,

²² J.K. Robbennolt, 'Evaluating Empirical Research Methods: Using Empirical Research in Law and Policy', 2002-2003 Neb. L. Rev. 81, no. 2, p. 778. See also J. Goldsmith & A. Vermeule, 'Empirical Methodology and Legal Scholarship', 2002 U. Chi. L. Rev. 69, no. 1, pp. 154 and 161. The indeterminacy of social science research is highlighted in Mertz 2011, supra note 21.

²³ S.B. Pape, Warnings and Product Liability, 2011.

²⁴ Although Pape does mention the 'synchronization' of insights from psychology with those from law, see Pape 2011, supra note 23, p. 416, but that is also 'all she wrote'. In a more recent PhD study, F.A. van Tilburg, Effecten van civielrechtelijke aansprakelijkheid op openbare ordebeleid, 2012, p. 208, rightly states that empirical research does not provide direct answers to legal questions, but allows a translation to the legal sphere. Its use would then lie in reinforcing or negating arguments by providing facts to add to mere presumptions.

²⁵ See also Engel 2008, supra note 20, pp. 169-170, on similar interfaces between law and social sciences.

²⁶ O. Lepsius, 'Sozialwissenschaften im Verfassungsrecht – Amerika als Vorbild?', 2005 JZ, no. 1, p. 8.

²⁷ H. Kantorowicz, 'Some Rationalism about Realism', 1934 Yale L.J. 43, no. 8, pp. 1240-1253.

because the realists 'confuse explanation and justification'. In addressing this issue, he also separated empirical science from normative science:²⁸

'If legal science were an empirical science, its chief method would be explanation through cause and effect. If it were a rational and normative science, its chief category would be justification through reason and consequence.'

But, since the first proposition is not correct, 'genetic explanation and normative justification must be kept apart', according to Lepsius.

Lepsius himself concluded in 2005 from Kantorowicz' contribution that even a thorough way of establishing facts will not do away with what he calls the *Bewertungsproblem*, the problem of adding normative value to facts: no legal obligation follows from empirical facts.²⁹ He also calls this *Sein-Sollen-Fehlschluss*, i.e. the divide between 'is' and 'ought', one of the 'transfer problems' of the use of social sciences in law.³⁰ In his own concluding words, after reviewing some famous American constitutional cases:³¹

'Sozialwissenschaftliche Erträge können die Plausibilität juristischer Theorien erhöhen (intergratieves Model) und zur Fakterhebung beitragen (arbeitsteiliger Ansatz). Begründungen aber, das ist die Lehre aus Brown [i.e. the case of *Brown v. Board of Education*, IG], vermögen sie nicht zu liefern.'

[Social science contributions can enhance the plausibility of legal theories (integrative model) and can add to the fact finding (division of labour). Justifications, however, as can be learned from the case of *Brown v. Board of Education*, cannot be delivered.]

And with that, we have identified the problem (once again), but not solved it, and leapt from the pre-WW II era to the present, a present in which the same *Bewertungsproblem* is still a daunting one.

2.2.2. Modern trade-offs: Robbennolt

In 2002, Jennifer Robbennolt set out to discuss 'the persistent tension between the methods of social science and the theory, goals, and settings of law and policy.'32 She starts with the warning that to utilize empirical research means that there are trade-offs to be made. The question is 'how to appropriately use well-done but inherently imperfect research, for legal and policy purposes.'33 If one evaluates empirical research, for instance as a judge in a tort case on the perceived effectiveness of a warning sign, one should be concerned about different forms of the validity of the research in question, such as construct validity, internal validity and external validity.'4 The person (thinking about) using the data from, for instance, experimental studies should not uncritically accept the results of such studies as actually representing the way judges make decisions. However, uncritically rejecting results is equally bad since experimental research provides useful information about how people decide, understand instructions, etc.³⁵

Thus, neither accepting results at face value, nor rejecting results out of hand is sensible; more systematic consideration is needed. But there are obstacles to such careful consideration as well, especially motivational and cognitive biases and/or a lack of sufficient background knowledge. For instance, studies have found that participants rated the methodological quality of a study higher and as more convincing

²⁸ Kantorowicz 1934, supra note 27, pp. 1248-1249. Hans Kelsen, *Pure Theory of Law*, 1967 (a translation of his 1934 and 1960 edition of *Reine Rechtslehre*), also considered the law to be normative in nature (cf. also Smits 2014, supra note 3, p. 81) but also claimed that extralegal insights (political, economic, and others) might be taken into account when creating norms. Since this contribution is instead about the application of norms (by judges and scholars mostly) I will not further deal with Kelsen's theory and its implications.

²⁹ Lepsius 2005, supra note 26, p. 8. On this theme, see also S. Taekema & B. van Klink, 'On the border', in B. van Klink & S. Taekema (eds.), Law and Method. Interdisciplinary Research into Law, 2011, pp. 17-19.

³⁰ Lepsius 2005, supra note 26, p. 8.

³¹ Ibid., p. 10.

³² Robbennolt 2002-2003, supra note 22, p. 778.

³³ Ibid. See also Goldsmith & Vermeule 2002, supra note 22, p. 154.

³⁴ Robbennolt 2002-2003, supra note 22, p. 779.

³⁵ Ibid., p. 789.

when the results of the study at hand were consistent with their prior beliefs.³⁶ And to make things worse: this reaction may be more likely when the observer lacks a background in empirical research.³⁷

Is there something to be done about this? Yes indeed. Robbennolt suggests and clarifies the options of self-consciously analyzing the implications of a particular tension for the specific setting in which empirical materials are being used, of considering the tension at hand in the context of a body of research as a whole, and of receiving training in empirical research methodology, for instance by learning the strategy of 'considering the opposite' to mitigate the aforementioned effect ('debiasing') of better rating those studies that are consistent with already held beliefs.³⁸

Valuable as it is, this contribution to the debate does not yet resolve the question which I try to address in this paper. Robbennolt rightly warns us against the perils of using insights from one place to resolve questions elsewhere and informs us how to try to avoid mistakes in this regard (through 'debiasing'), but a more general form of instruction on how insights from social science are to be translated or transposed into law and legal questions is not given. But that omission might of course also be due to a genuine lack of a proper solution. Let us try to find out.

2.2.3. Perils of interdisciplinary work: Vick

This lack of devoting (at least some) space to the central issue of this contribution seems to be common, even though there is extensive literature that deals with all sorts of problems, perils and/or pitfalls which one encounters when one engages in interdisciplinary research, and thus balances on the edges of a 'law & ...' research question. An example of this is Vick's *Law & Society* paper from 2004.³⁹ This well-documented and highly persuasive paper on interdisciplinary work in the field of law mentions all sorts of perils ('traps for the unwary' as he calls them⁴⁰) of such undertakings, most notably the difficulty in understanding other disciplines and misinterpreting results.⁴¹ The central issue of this paper, i.e. the problem of transposing such (correctly interpreted and understood) results, is touched upon only once, however, and even then only slightly, where Vick addresses the theme that interdisciplinary research by legal scholars tends to be of a theoretical nature, which he explains by pointing out that 'theoretical approaches are closer to the traditional, text-based methods of legal analysis than are empirical approaches.²⁴² He continues by stating:⁴³

'This means not only that the integration of law with non-law theory is made easier, but also that the legal researcher does not have to abandon the metal models ingrained in their training as lawyers (...).'

Here he touches upon the problem of translating non-law to law, but without further elaborating upon this. Luckily, at least the importance of making the transition had already been highlighted earlier on. Vick stated in this regard:44

'At the very least, if information concerning the alien discipline cannot be transformed into something compatible with the schemata that academic lawyers already possess, it will not be useable by more than a small handful of those for whom interdisciplinary works are written.'

Again, the problem is specified clearly enough, but is still not resolved.

³⁶ Ibid., pp. 790-794.

³⁷ Ibid., pp. 796-797.

³⁸ Ibid., pp. 797-804.

³⁹ Vick 2004, supra note 2.

⁴⁰ Ibid., p. 185.

⁴¹ Ibid., p. 185.

⁴² Ibid., p. 190.

⁴³ Ibid., p. 190.

⁴⁴ Ibid., p. 189 (reference omitted).

2.2.4. German constitutional views: Lepsius

Olivier Lepsius,⁴⁵ mentioned before, seems to be keen to answer the aforementioned *Bewertungsproblem* by actually reformulating the issue as a mere problem of (legal) evidence: it is for the law to decide which facts (at stake in legal proceedings) need proof from a legal-normative angle since these are the facts which are needed to determine the existence of some form of legal consequences. It is those facts so decided upon that would need to be 'proven' by the social sciences, much in the same way as a judge would call upon a medical expert to determine medical facts. The judge (or more broadly: a lawyer) should not be meddling in this terrain himself as is now often still the case. Lepsius calls this form of cooperation between lawyers and scientists the *arbeidsteilige Ansatz*, a form of division of labour.

Of course, doing this does not really solve the issue either; what it does is that it redefines and thus 'abandons' the topic. In and for legal practice, that would be a perfectly suited and allowable way to handle things, but for now it is (methodologically) less attractive than finding a 'real' solution, if possible. This is also the case because new problems – possibly manageable – of course emerge here:⁴⁶ how should the judge deal with the expert allotted to the case? Which one of the experts is to be relied upon in this regard? And how to judge the experts' work as to its quality? Plus: even when using expert witnesses, the question of going from an empirical fact (most physicians would no longer use technique A since it is outdated as of...) to a verdict of negligence (using technique A in this case at that given point in time was negligent...) is still a difficult one.

2.2.5. Engel: legal academia as an interface actor

In his 2008 paper, Engel aims to find out why his (and my) fellow lawyers are so reluctant to use social sciences, even for descriptive purposes; why does legal practice find it difficult to digest social science? Are their concerns legitimate?⁴⁷ He then elaborates on the (possible) reasons for the reticence in the legal community towards the use of social science, dealing with issues such as the lack of expertise, the fear of the erosion of judicial power, an unwillingness to make value judgments (from elsewhere but law), the difference in tasks (analysis is not the same as decision making), differences in defining the situation to be solved, differences in reasoning (theoretical versus practical), the psychology of judging, doctrinal and procedural impediments to the use of social science, the autonomy of the legal system and the fuzzy goals of the law.⁴⁸

Given all these impediments, Engel claims that the integration of social science is in fact an art, incapable of resting on a 'one size fits all' answer. In fact:⁴⁹

'every new case, every new topic and every new academic paper must find the individually best way to carry off the integration.'

Of course, this does not help us much further but Engel does provide us with some generalizations that might be useful in some cases. First, he points to the use of a procedural instead of a substantive governance of this complex issue, which would be typical for lawyers. Second, he encourages us to treat different sorts of cases differently (an abortion case is not a copyright infringement). Third, he proposes to distinguish between the generation and the representation of court decisions, writing down a more accessible justification for a decision that was based on methods from social science. Fourth and foremost in this regard, he proposes that legal academics, trained in social sciences, serve as intermediaries, as so-called interface actors serving both lawyers as well as methodological standards when integrating law and social science.

⁴⁵ Lepsius 2005, supra note 26, pp. 12-13.

⁴⁶ As to the state of the law in the US, the *Daubert* decision by the Supreme Court (509 U.S. 579, 1993) and its offspring (see e.g. *Milward v. Acuity Specialty Products Group* (639 F.3d 11, 2011)) address such issues. This article, of course, does not aim to discuss this decision.

⁴⁷ Engel 2008, supra note 20, p. 170. On this reluctance, see also Blumenthal 2002, supra note 5.

⁴⁸ Engel 2008, supra note 20, pp. 173-200.

⁴⁹ Ibid., p. 202.

What is most striking from the above, providing food for further thought, is that in fact Engel's second, third and fourth generalizations are examples of a more procedural form of governance of the issue, his first proposition. This first generalization is a line of thought which I will return to later.

2.2.6. Casebook material: Lawless, Robbennolt & Ulen

In their 2010 casebook on empirical methods in law, Lawless, Robbennolt & Ulen touch upon an important aspect of legal analysis, which is that it is usually directed at reaching a solution to a particular problem (a dispute, wording a contractual agreement in the making), while empirical analysis examines patterns in the aggregate.⁵⁰ In their view, however, the aggregate patterns are highly relevant to the resolution of the case at hand, because 'establishing what tends to happen in general provides evidence of what happened in the individual case'.⁵¹ This evidence may not be all-decisive, but it does help to shed some light on the case at hand.

One might consider this – leaping from a generic, empirical argument to an argument in an individual case – to be the (best available) justification for going from one scientific side (empirical insights) to another (legal, normative decisions), although it is uncertain whether Lawless, Robbennolt & Ulen themselves would actually take this step. A factual presumption, to be treated as such under the law of evidence, that the necessary step can be taken in the case at hand is then indeed present. However, one can also say that this is but the first step of being able to do so, in the sense that without generic 'causation' (a pattern in the aggregate) there can certainly be no individual 'causation' (an individual solution based on the empirical insights). This availability of this 'first step' is in itself not enough, however, to be an ultimately convincing justification because it is (rather: it needs to be) supplemented by legal policy considerations that allow for the general presumption to be made to fit the individual case at hand. ⁵² And that brings us right back to the question with which we started.

2.2.7. A Dutch perspective: Vranken

Specifically for his audience in the Netherlands, Jan Vranken has drawn attention to the need to translate between empirical studies and legal research and its solutions. Why this need? Because, as we have seen, knowledge from social sciences cannot always be used immediately in a legal context. This is so, for one thing, because these results are not always orientated towards specific solutions as are legal studies, and secondly because empirical studies are often composed of probabilities and averages. Finding the right (normative) answer in empirical insights is thus nothing but an illusion, because empirical research is not without uncertainties either, and always under discussion. Thus, transformation (or 'translation') is needed and, as such, this is not a weakness but is rather an asset of, as well as being inevitable and a precondition for multidisciplinary research.

This process of transformation is something lawyers should not be afraid of, claims Vranken, because lawyers are 'by nurture' already trained in weighing all sorts of arguments, principles, factors, points of view, figures, and so on, when deciding cases. They tend to always (need to) qualify or translate facts into normative-legal outcomes. This process of weighing and justifying (through a reasoned motivation) the outcome does not become (all that) different when empirical, social science facts and insights are added to the picture, and is thus not the biggest problem for lawyers and new trends in legal research (such as the 'New Legal Realism' that Vranken focuses upon). His solution is thus to add any new, empirical insights – such as, in my recurring example, the psychological insight that the costs of compliance with a warning might reduce its effect – to the bundle of arguments and facts that lawyers need to weigh anyway.⁵³

⁵⁰ See also D. Canter, 'In the Kingdom of the blind', in D. Canter & R. Žukauskiené (eds.), *Psychology and Law. Bridging the Gap*, 2008, pp. 1-4, and Rubin 1997, supra note 3, p. 556.

⁵¹ Lawless, Robbennolt & Ulen 2010, supra note 14, p. 14.

⁵² Of course, much more could also be said on this theme, but that is another topic for another paper.

⁵³ On the foregoing: Vranken 2011, supra note 16, p. 1121. See also J.B.M. Vranken, 'Nieuwe richtingen in de rechtswetenschap', 2010 WPNR, no. 6840, pp. 318 and 325, and also, more recently, J.B.M. Vranken, Algemeen Deel****. Een synthese, 2014, p. 198. To be sure, in his latest (2014) work in this regard, Vranken (ibid., p. 190 and pp. 196-199) distinguishes, as regards the difficulty of the 'translation' task, between legal scholars and judges, due to their different position. A judge has to decide a given case, which the scholar does not have to do. This means the legal scholar can abstain from normative judgments. As a consequence, he can bring forward empirical facts without

This, of course, has the beauty of simplicity, but is it enough to cope with the divide between fact and law? It might be, but it also seems somewhat incomplete in the sense that we are not given any detailed tools to guide the process. What form or kind of weight can or should be attached to empirical facts? Do they weigh heavier than other elements, such as legal arguments or principles (e.g. legal certainty)? How do or should we cope with the situation that the empirical fact usually concerns an average, derives from a large data set and not a fact related to the person in question or any individual for that matter? And how about the balancing act itself, is that in fact really executed as it should by the deciding judge or will certain facts simply become lost in translation? More would need to be said, I think, on these issues.

2.2.8. Mertz' myth of transparency

Elizabeth Mertz has done a lot of work on the theme presented here, and deserves extensive discussion and, for the sake of clarity, given the complexity of her work, some extensive quotation as well. In 2008 she edited a volume of seminal essays on 'The role of social science in the law', and in her introduction ample attention is drawn to our issue. She introduces a new (third) vantage point which insists 'that we study the process of interdisciplinary translation itself' if only because we should be warned 'against an unduly simplistic approach to bridging important differences between law and social science' because we might make serious analytical mistakes.⁵⁴

She then discusses papers by White and Monahan & Walker on the issue of mixing disciplines, and then she very sharply raises the question whether a move between disciplines is even possible without losing something which is important.⁵⁵ A concluding, somewhat disturbing observation on her part is:⁵⁶

'In sum, any accurate or adequate attempt to move from social science to law (or vice versa) requires systematic attention to the translation process itself. (...) Analysis from diverse disciplinary points of view teaches us that this translation process is far from transparent. The important task ahead of us, then, is to develop better understandings of legal and social scientific 'transduction' – or translation in the more complex sense (...). Only from that foundation can we calculate the trade-offs involved in one approach as opposed to another. Although there is reason to be concerned that the average law student or lawyer or social scientist has had little opportunity to consider these trade-offs, there are some arenas in which the issue has been more foregrounded than others.'

One of those arenas has been and still is the debate in the United States on the death penalty. She concludes her introduction, however, with at least a hint of optimism by stating:⁵⁷

'It should be obvious that I agree fully with David Nelken in his observation that there is much work still to be done in systematically analysing the process of translation itself in this domain. (...) Neither social scientists nor legal professionals benefit from the myth of transparent translation. Careful analysis of the very different epistemologies, institutional settings, goals and languages involved can only improve interdisciplinary communication. From the social scientists' perspective, if a core goal is achieving better understandings of law, then it is clearly important to proceed with an accurate sense of the internal categories that organize legal experience. From legal professionals' point of view, achieving good results from the use of social science requires at least some sophistication about the systems of knowledge behind

any hesitation (or the need for translation). However true (and valuable in itself) this may be, most scholars still want to put forward their own normative claim. And if they do, their effort to translate will be at least as difficult as the effort that the judge has to make. Vranken's account and position is of course highly valuable, but as to the question of how the translation from empirical fact to normative judgment can or should be made, the foregoing brings no new insights to the floor next to those that I have already described in this section. The same holds true for the difference introduced (ibid., pp. 199-200) between the possible reasons for interdisciplinarity and the sort of information generated: the translation from fact to normative judgment is a more formidable task when the proposed use is more intense (orientation, inspiration, copying); the 'how' question is then again not addressed specifically.

⁵⁴ E. Mertz, 'Introduction', in E. Mertz (ed.), *The Role of Social Science in Law*, 2008, pp. xiii and xiv.

⁵⁵ Ibid., p. xvii.

⁵⁶ Ibid., p. xviii.

⁵⁷ Ibid., p. xxix.

them. Neither of these is possible unless we transcend the myth that we are speaking the same language and move beyond the somewhat arrogant assumption that we can effortlessly pick up each other's professional knowledge. Translation of this kind will inevitably, as we noted at the outset, involve transformation and, indeed, loss. But it is possible to move forward with some care, developing more systematic analyses not only of the kinds of losses and transformations involved, but also of the gains to be had from a more informed and critical conversation.'

This hint of optimism has to do with the fact that Mertz has in fact been able to provide at least some guidance.

Building on what was stated in her 2008 introductory paper,⁵⁸ Mertz has proposed in her 2011 paper for the *DePaul Law Review*,⁵⁹ in a very broad fashion, to use insights from linguistic anthropology in thinking about how to make the transition from social science to law, and to avoid problems while doing so (she provides ample examples of mistakes which are made). This is needed because – as a reminder – lawyers when moving into new worlds are 'poorly equipped', while at the same time social scientists are 'frequently blissfully unaware of the realities of the legal universe into which their findings may be dropped.'⁶⁰ From this, the following can be concluded:⁶¹

'As a consequence, people on both sides of this ongoing conversation may proceed unaware that they are assuming a level of interdisciplinary transparency that does not exist. They may, in fact, be trying to have two very different conversations. At best, they leave these exchanges with a smug sense of superiority, reflecting on how stupid or silly the other disciplinary perspective was. At least in this case they are aware that there is some kind of disciplinary difference. At worst, they leave thinking that they have understood one another perfectly, when in fact they selectively heard bits and pieces that they found useful, fitting them into their own disciplinary frameworks. In these cases, a failure to carefully reflect on the translation process itself yields misleading results, paired with a misguided sense of overconfidence in the scientific validity of those results.'

Thus, something needs to be done. Mertz' thoughts on how to properly engage in the translation process, as she calls it, are then guided by the work of the anthropological linguist Michael Silverstein. Silverstein⁶² has proposed a new framework for understanding translation since we are in fact not really dealing with true translation when we go back and forth between social science and law. There is no such thing as translating words in exact equivalents of another language (i.e. another science). Straightforward equivalences are indeed unusual and limited and beyond those rare straightforward cases, we are engaging in a different task when moving between languages (sciences) because transparently translating does not capture the intended meaning.⁶³ In such cases, translation becomes 'transduction'.⁶⁴ To give an example: the use of 'vous' in French can denote that someone is speaking to a plurality of persons, but also to a singular person addressed in a formal manner. Translating this 'vous' as 'you' in English is just not good enough to capture (the word 'tranduce' is used here) a core part of what is meant; something more, like a formal tone, is needed.

This is not all, however; sometimes an even more dramatic step is needed and we have to make a so-called 'transformation' (e.g., the psychological insights as to the costs of warnings have to be transformed into the law). As Mertz explains:⁶⁵

⁵⁸ Ibid., p. xvii.

⁵⁹ Mertz 2011, supra note 21.

⁶⁰ Ibid., p. 406.

⁶¹ Ihid

⁶² See M. Silverstein, 'Translation, Transduction, Transformation: Skating "Glossando" on Thin Semiotic Ice', in P.G. Rubel & A. Rosman (eds.), Translating Cultures: Perspectives on Translation and Anthropology, 2003, p. 75. Here, I have used the account (or: translation) of Mertz 2011, supra note 21, p. 406 and following, as to Silverstein's theory.

⁶³ For example, the words 'may you give birth to a wandering ghost' is a profane utterance in the Tonkawa language, but that essence is – as can be easily ascertained – not really captured when translated into English. See Mertz 2011, supra note 21, p. 407.

⁶⁴ See Silverstein 2003, supra note 62, pp. 83 et seq.

⁶⁵ Mertz 2011, supra note 21, p. 409, following Silverstein 2003, supra note 62, pp. 91 et seq.

'Certainly, when we are translating between different cultural contexts as well as different languages, he [Silverstein, IG] notes, we can no longer speak of "translation" in the most transparent sense, because we have to shift so much of the literal meaning to achieve anything resembling equivalence in the overall meaning. In fact, the search for equivalence may in and of itself distort; when we try too hard to create an equivalence, we may hide the fact that there are things that we simply cannot translate. Thus, the appearance of equivalence in our translation results in an even more imprecise sense of the differences between the two systems for our listeners or readers.'

As a consequence, 'any accurate or adequate attempt to move from social science to law (or vice versa) requires systematic attention to the translation process itself' and, this being the case, we need to develop a better understanding of legal and social scientific 'transduction' (i.e., translation in the more complex sense as noted above). From this, Mertz concludes that we need to begin with an accurate assessment of differing norms within the communities being translated into law. As a consequence of the case, we need to develop a better understanding of legal and social scientific 'transduction' (i.e., translation in the more complex sense as noted above).

Luckily, quite some work has been done on the differences between law and social science, for instance by Canter,⁶⁸ on which we can then build when taking up this task. A task which is still not an easy one, because the theoretical account by Mertz still needs to be made into something that is applicable and works in the regular practice of carrying out interdisciplinary research.

2.3. An intermediary conclusion

As an intermediate conclusion, one probably feels at least slightly disappointed. Scanning the available methodological literature does not really get us much further. We do know that the issue is real and serious enough; we do know that we need to work on it. But how? There the doctrine analysed so far is not all that useful. Or will it suffice to reformulate the issue and thus abandon it altogether (Lepsius)? That would at least not be scientifically correct. But then what? How can we engage in this task? Is working from the presumption on the aggregate level (Lawless et al.) enough to justify the leap? Or does the external insight provide an additional argument to be counted in as such (Vranken) or (only) if procedural governance is followed (Engel)? Mertz has shown a path that might well be worth pursuing somewhat further, paying systematic attention to the process of translation as such, but that is by no means easy either. For the most part, however, the problem is largely ignored or only warned against; it is certainly not solved.⁶⁹

Why is that? Why are there hardly any solutions offered? It might well be because the problem at hand is too difficult to tackle or to grasp; the problem might just as well be insurmountable. Without trying to provide any definite answers here, this difficulty is probably due to the (historical and philosophical) seriousness of the divide between 'is' and 'ought', and it is probably strengthened by the fact that a legal decision typically involves one single case whereas the empirical data usually involve averages from numerous 'cases'. Furthermore, in legal practice empirical insights are used (and have been for some time) in a legal setting anyway, if a judge or legal scholar so decides. And there is nothing that anyone can do, except to warn against the perils associated with that. Still, this fact in itself clearly shows that there is a need to resolve this issue and we should try to get somewhat further. In that respect, one could ask whether there is not an equivalent problem (and thus also maybe an equivalent solution) to be found in the law's dealings with other more or less external perspectives, such as comparative law and its theory? Now is as good a time as any to find out...

⁶⁶ Mertz 2011, supra note 21, p. 409.

⁶⁷ Ibid., p. 412.

⁶⁸ Canter 2008, supra note 50, p. 2, presents a figure which forms a rather accurate summary of the differences.

⁶⁹ Cf. Taekema & Van Klink 2011, supra note 29, pp. 10 and 29, who distinguish different types and forms of interdisciplinary research but do not address the question of how to 'transform' knowledge from one science to another. See, however, the discussion between R.A. Hillmann, 'The Limits of Behavioral Decision Theory in Legal Analysis: The Case of Liquidated Damages', 1999-2000 Cornell L. Rev. 85, no. 3, pp. 717-738, and J.J. Rachlinski, 'The "New" Law and Psychology: A Reply to Critics, Skeptics, and Cautious Supporters', 1999-2000 Cornell L. Rev. 85, no. 3, pp. 753 et seq.

3. Drawing analogies: legal historians and legal comparatists

3.1. Old wine in new bottles?

One could ask whether the question raised here is in fact something new to the law. Is this not the same problem that one that has already encountered time and again in using the insights brought by legal history and, more recently, the use of comparative law?⁷⁰ Is not the bridge between what used to be the law and the legal rules as they should now be just as tricky to cross? And is not the border between what is the law in country A and what should (not only could) be the law in country B just as deep a river to cross and as thorny a path to take? If that is the case, as I think it is, the question becomes whether legal historians or comparative lawyers can help to solve our issue. Perhaps not, but let us try to find out.

3.2. Legal history reveals that our key question is not a novel one

Those who carry out legal historical research are and should always be aware that they are investigating a legal system, e.g. Roman law, which was once in existence and had formal standing and binding force upon the people within the Roman Empire. But that is of course no longer the case in our present-day world. What the Romans thus did is and cannot be something we should automatically do nowadays. Roman law is studied more as a (historical) fact, something that was once among us, rather than a normative and binding set of rules and principles guiding our lives.

This, of course, also entails that the possible use (by transformation) of an old legal rule in present-day times by a historian – who in fact sometimes also makes normative claims as to the law as it stands now – is not to be taken lightly. Special considerations are then needed and a serious justification must be forthcoming in order to do so. In legal history this theme has special value since it relates to the way legal history as a topic, as a course in the law curriculum, is or should be viewed. Should legal history be studied as a historical fact, in its historical context for historical purposes (to know how the law was at one time)? Or should legal history be strictly related to the law as it now stands, to teach us, but first and foremost to inspire us now?⁷¹ In this paper, there is no room for any further discussion of these questions. What remains is that even within the confines of the legal discipline, the question as to the possibilities of using 'facts' to come to normative conclusions is well known. The same follows from a look at the nearby terrain⁷² of comparative law as another sub-discipline of the law.

3.3. Is comparative law capable of providing answers?

Comparative law is a fruitful way to spend one's time as a legal researcher since new insights found elsewhere might well be inspiring and actually also highly important. A legal duty in country A not just to warn against certain dangers, but also to supply safety equipment to those in harm's way might be inspirational for policy makers and lawyers elsewhere. Such new arguments add a new element to the discussion, thereby enriching it.⁷³ It is thus no surprise that comparative law studies are being frequently undertaken, and in those studies the use in a legal system of a solution that is found to be the law elsewhere is widespread and manifold. Here, also, a 'transition' is made, even though this might not (have) happen(ed) explicitly.

The transition meant here might be, and probably is, somewhat easier than the one between different sciences since both pillars here are about 'law' and thus contain a visible normative aspect that can be accepted when accepting the foreign rule. The step to take, the bridge to cross, is thus from a normative judgment by a legislator or judge in country A to another possible – but at least also normative – judgment to be made in country B. Even considering this 'easier' transition, the comparison between using social science in law, on the one hand, and using comparative law, on the other, is still fruitful, I believe, because what comparative law does, and brings to the fore, in this respect is to provide a way

⁷⁰ The connection made here between the translation problem and comparative law was also hinted at in Vranken 2010, supra note 53, p. 325.

⁷¹ On this discussion, see W.J. Zwalve, 'De toekomst van het Romeinse recht', 1993 *Ars Aequi*, p. 455, battling with J.A. Ankum, 'Stenen voor brood', 1993 *Ars Aequi*, p. 459, and (reacting to both) R. Zimmermann, 'Rechtsvergelijking, rechtsgeschiedenis en ius commune', 1994 *Ars Aequi*, p. 276.

⁷² A. Watson, Legal Transplants: An Approach to Comparative Law, 1974, pp. 102-106.

⁷³ Giesen 2005, supra note 9, pp. 18-21. See also, as to comparative law, Smits 2012, supra note 12, no. 39.

to go about making such a comparison (between A and B). It thus provides some sort of 'method'. The significance of that comparison aimed at influencing or inspiring one of the systems under review is that with the comparison the much debated translation is already given, at least in part.

That the aforementioned 'transition' is easier here than it is between, for instance, law and sociology, is exemplified by what the most well-known comparative lawyers Zweigert & Kötz put forward when dealing with the issue of the similarities and differences between comparative law and the sociology of law:⁷⁴

'In its *applied* version, comparative law suggests how a specific problem can most appropriately be solved (...). In such cases the comparative lawyer (...) may be pressed to say how the positive law should be altered (...) [and] has to operate with assumptions which (...) would rightly be derided by the sociologist of law as simple working hypotheses. (...) Without in the least suggesting that the comparative lawyer can ignore the insights and discoveries of the legal sociologist, he often cannot avoid adopting, however tentatively and provisionally, theses which the sociologist of law would regard as unproven, but which are nevertheless cogent enough to carry weight in discussions or decisions about changing the law.'

In other words, even for truly normative decisions on the content of the law, comparative material can and may be used, whereas this would not be the case for sociological materials. It is thus in fact easier (or: to a greater extent allowed) to go from A to B in a comparative law setting.

What is not different, however, is that the aim of comparative law is, as elsewhere, knowledge. Studying more legal systems brings a wider variety of solutions for legal problems. It also engenders a critical attitude amongst other functions.⁷⁵ Both functions are also served by interdisciplinary studies of legal rules and institutions, and thus, a further look at the methodology of comparative law would seem to have some merit.

In this regard, Zweigert & Kötz state that when it comes to the 'evaluation stage' of the comparative process – which in my opinion is the most important stage because this is where progress can be made – the 'only ultimate criterion [to decide which solution is best, and thus should or could be transplanted to another system, IG] is often the practical evidence and the immediate sense of appropriateness.'⁷⁶ Somewhat further in their book, they show that the standard used here is that which is used every day by lawyers (i.e. 'most suitable and just').⁷⁷ The comparative evaluation, the step where an advice is given to transplant an insight from A to B, is thus in essence really not so different from any 'regular' scholarly decision on the content (from a normative perspective) of one's own law. It all comes down – as is often the case in dealing with problematic issues in law – to stating what would provide the 'best' solution and then justifying why that would be the case.

Is comparative law then so simple, and thus perhaps of little value here? By no means, because it has also been noted that one's legal rules cannot be transplanted, without further ado, to another legal system: the background, cultural context, the nature of the different legal systems as such, their dogmatic pillars, and judicial organization, etc., all have a say in making this transition a formidable one. Of course, Alan Watson's work on 'legal transplants' is topical in this area,⁷⁸ but where Watson was keen to show that legal transplants were in fact 'popular' in the sense of an important impetus to changes in law all over the world, and thus to be welcomed (and allowed),⁷⁹ others have stated that such transplants are in fact impossible or at least not possible in any straightforward sense, while some claim that they are hazardous.⁸⁰ This has to do with the fact that a transplant also generates a transfer of the normative dimension of the rule in question and thus a transfer of the legal culture (and the social context) behind that rule.⁸¹ To give an example: it might be that country B wants to safeguard the general idea that people

⁷⁴ K. Zweigert & H. Kötz, An Introduction to Comparative Law (3rd ed.), 1998, pp.11-12.

⁷⁵ Ibid., p. 16.

⁷⁶ Ibid., p. 33.

⁷⁷ Ibid., p. 47.

⁷⁸ See e.g. Watson 1974, supra note 72.

⁷⁹ Ibid, p. 95 and following (with conclusions).

⁸⁰ See E. Örücü, Critical Comparative Law: Considering paradoxes for Legal Systems in Transition, 1999, pp. 15-17 and 76-79.

⁸¹ See C. Lei, 'Contextualising legal transplant: China and Hong Kong', in P. Monateri (ed.), Methods of Comparative law, 2012, p. 192, and

are largely responsible for their own well-being; this country would then probably be reluctant to accept the extensive use of legal duties to warn others against all sorts of perils.

Without having to delve any deeper into this, in itself, very interesting topic, it is thus clear that a binding rule in country A cannot for that reason (being binding elsewhere) alone be transplanted to country B. This is even voiced by Watson, who does think that legal rules 'move' easily,⁸² when he states:⁸³

'A final peril of Comparative Law is that, even when legal facts are proved or appear to be proved for one system, one may argue too easily from them to a similar situation in another system which has a relationship with it. The method, of course, is itself unobjectionable and can be used with great profit; the perils are that the results obtained by it cannot be absolutely certain, that it is extremely difficult to judge the right extent to which one can draw satisfactory parallels and it is easy to overstep the mark, and that it is often tempting to base further argument and deduction on the results.'

All that sounds very familiar in the context of this paper, of course.

So even if a rule works perfectly well in country A, the transplantation of that rule is still not and cannot be an automatic one;⁸⁴ it might well have different effects elsewhere.⁸⁵ Here, also, normative choices come into play, and other (legal) arguments usually carry some weight as well when making that choice, a choice which will have to be a reasoned one. The comparative argument is simply one of many arguments. The weighing of different arguments as Vranken has described (see above) also takes in the comparative argument; and that is all that will in fact happen. The comparative argument has no more moral force than any other legally sound argument.⁸⁶ This also means that one might be inclined to say that in system B, the law as it is in system A is but 'a fact' and not a binding, normatively driven rule. In that sense, the problems with the transition we call 'legal transplants' are not all that different from those that an interdisciplinary scholar faces.⁸⁷ The above quotation from Watson confirms this. But if that is indeed the case, the solution to weigh the comparative insights as one of the arguments is perhaps also the same?

3.4. Intermediary conclusion

The case of transplanting a legal rule from context A to context B shows that the problem of bridging gaps is not one that only persists in dealing with two distinct disciplines but also when dealing with two distinct legal systems. In comparative law, the answer is found in weighing all the arguments, including comparative ones, and reasoning from there. Therein might lie a possible solution for interdisciplinary scholars as well.

4. Discussion: some possible solutions

4.1. Case-to-case inspiration

What the foregoing goes to show, or at least tends to show, is that it is probably only on a case to case basis that the answer to the question of how to bridge the gap can be given, since the weighing of arguments is done in each case on its own merits, and that probably a normatively loaded, internal (legal) reason for accepting a rule or insight from elsewhere should already or also (as part of the total weighing process) be present.

W.J. Kamba, 'Comparative law: a theoretical Framework', 1974 ICLQ 23, no. 3, pp. 513-561.

⁸² Watson 1974, supra note 72, pp. 95-96.

³³ Ibid., p. 15.

⁸⁴ See in this respect M. Adams, 'Globaliserende rechtspraak: democratisch omstreden?', 2012 *Ars Aequi*, p. 531, who claims that even though (foreign) law usually has no force outside its own jurisdiction (ibid., pp. 532-534), it might still be useful as a 'reflective' tool and a source of inspiration (ibid., pp. 539 and 540).

⁸⁵ Watson 1974, supra note 72, p. 20.

⁸⁶ On the use of comparative law and its argumentative status in difficult cases, see I. Giesen, 'The Use and Influence of Comparative Law in 'Wrongful Life' Cases', 2012 *Utrecht Law Review* 8, no. 2, p. 35.

⁸⁷ See also Vranken 2014, supra note 53, pp. 195-196, and p. 176.

To take the analogy with comparative law one step further, one could say that the magical word for present purposes might be 'inspiration' (a form of magic in itself of course) in the sense that our problem (crossing borders to other systems or other disciplines) is in fact all about finding some form of *inspiration* elsewhere in order to come up with or to think of a novel solution to the legal problem at hand. What one 'takes across' is in fact only the inspiration, nothing more or less. This would of course entail that the 'translation' metaphor used so far is in fact not entirely valid or well chosen. Instead of trying to 'translate' a concept from one discipline to another, we should probably speak of one discipline 'feeding off' another by taking over its concepts, ideas and so on, as inspiration.⁸⁸

The big 'plus' here from a scientific angle is of course that inspiration can and may always be sought and found, and then also used.⁸⁹ No one can deny another the use of some form of inspiration, be it a novel legal argument, a legal solution from elsewhere or an insight from sociology, psychology or whatever other, non-legal discipline is available (literature, movies, and so on). To be sure: there is never an obligation for a scholar, judge or policy maker to find, use and/or give priority to any form of extralegal inspiration (there might be no purpose in doing so), and in case of a clash the legal argumentation might be given more weight than any empirical insight in the end.

The possible strength of the notion of 'inspiration' as a driving force or even a justification behind the 'external borrowing' of ideas becomes readily apparent if one considers what Cottorrell has described (in my terminology) as 'law's nature':90

'When law borrows from scientific disciplines or practices it appears to do so as it sees fit, taking what it deems useful, on its own conditions, for its own purposes. Concepts borrowed are often transformed, turned into 'hybrid artefacts', tailored to legal use.'

But before we decide to take that as our only and thus definite answer to the issues addressed in this paper, let us have another stab at trying to find an answer that might shed some more light on when it is in fact allowed to cross over.

4.2. A more formal 'due process' approach

If my quest for what could well be 'the Holy Grail' of interdisciplinary methodology cannot be completed successfully, as it would seem from the previous struggle, there is nothing left but to go for 'plan B', being that of finding 'the Next Best Thing' available. The next best thing is in this case: finding some form of procedure, a more formal process, guided by procedural rules on what to do and what not to do, coupled with a duty to justify the choices made, to steer the process of using empirical insights in legal discourse. This would be a *due process* approach, so to speak.⁹¹ Let me elaborate somewhat on this approach, which builds on and was also voiced to some extent in the literature dealt with above, most notably Vranken, Mertz, as well as Engel who considers this to be a standard response for lawyers overwhelmed by complexity.⁹²

If there is – or seems to be – a mismatch between what social science would have us believe to be 'the truth' and what our legal system would hold out to be 'the law', that mismatch alone will not suffice as a reason, let alone a justification, to change the law into the direction that social science would guide us. Law has its own normative arguments to consider as well. In weighing all the available arguments, factors and considerations, the new social science insight might well be highly important, since it adds a new

⁸⁸ Goldsmith & Vermeule 2002, supra note 22, p. 167, speak of the 'intellectual leakage across disciplinary boundaries of ideas that lawyers find persuasive' when proclaiming that the influence of political science on law comes naturally. Cf. also Smits 2014, supra note 3, p. 83 (and p. 85), who stresses that 'potential alternatives' to accepted legal solutions are shown.

⁸⁹ Vranken 2014, supra note 53, p. 199, reminds us that when one finds inspiration elsewhere, there is no need to actually 'translate' because one can then copy the idea as such and rework that to fit the local context or legal environment.

⁹⁰ R. Cottorrell, 'Why must legal ideas be interpreted Sociologically?', 1998 J. of Law and Society 25, pp. 174-175, as quoted by Vick 2004, supra note 2, p. 189, in footnote 156.

⁹¹ This terminology is not to be confused with, but was indeed inspired by, the American constitutional clauses (the Fifth and Fourteenth Amendment) under that name. As it turns out, the same name has been used in this setting before, see E. Beecher-Monas, Evaluating Scientific Evidence. An interdisciplinary Framework for Intellectual Due Process, 2007.

⁹² Engel 2008, supra note 20, p. 202.

element to the discussion thereby enriching that argument.⁹³ But the novel insight itself is not enough; there might be one or more good reasons not to follow up on that insight, given the other arguments presented to the decision maker.⁹⁴ Thus, there is ample need to be cautious when using insights from elsewhere in a legal discussion leading to legal consequences; law is not only about psychology, or sociology or economics, it is also (and perhaps mainly) about value judgments being made at a given point in time at a given place.

This cautious approach would then have it that a judge, practitioner or legal scholar is only 'allowed' – in the scientific sense of the word – to leap from extralegal insights to legal solutions if certain (formal, procedural) criteria have been satisfied: if due process is attended to.⁹⁵ The following non-exhaustive set of criteria that ultimately deal with rather common methodological problems (such as construct validity, internal validity and external validity biases⁹⁶) might be listed here as relevant criteria that the judge or scholar should consider and weigh, taken together, before using empirical insights in his legal reasoning:⁹⁷

- whether the empirical work is in fact relevant for the question of law that arises,
- whether the work is up to the current state of the art in the field methodologically, as well as regards its research design, etc., and its implications,
- whether (more generally) the research is valid and reliable,
- whether there is conflicting empirical work on the same issue,
- whether the study has been replicated and confirmed or not,
- whether the study is but one building block of a larger set of studies needed for policy implications,
- whether the researcher is both an expert and objective and independent, and so on.⁹⁸

With regard to all of these factors, and others that might of course be added,⁹⁹ the reasoned justification provided by the user of the extralegal information (the judge deciding the case, and so on) would be crucial. That justification would, for instance, need to deal with the issue, raised above, that aggregated data are used in individual cases.

But if and when these criteria have been duly considered, weighed against one another, and justified, the extralegal materials can be considered reliable¹⁰⁰ (enough) and may thus be used in the decision-making process (again: there would be no obligation to do so). The legal or public policy outcome may then be inspired by the empirical insights found. To put it differently: the *Sein* can then be used to answer the *Sollen*, basically because all possible safeguards have been put in place. Or, to return to our earlier example: if the empirical insight that warning signs are only followed by people who have been given the warning if the costs of complying are low, is a sound insight according to the list of factors, a judge may in fact conclude that a legal duty to warn should be rejected in different circumstances. So, in essence, this entails that the answer to the main question of this contribution is that *when* the procedural safeguards

⁹³ Smits 2012, supra note 12, no. 39; Giesen 2005, supra note 9, pp. 18-21.

⁹⁴ On this aspect also Blumenthal 2002, supra note 5, pp. 48-51

⁹⁵ This is of course the way that a judge deals with any type of scientific information he receives, for instance when being informed by experts, see also Canter 2008, supra note 50, pp. 6-7.

⁹⁶ See e.g. Robbennolt 2002-2003, supra note 22, p. 779.

⁹⁷ On such an assessment, see e.g. C.F. Cranor, 'A Framework for Assessing Scientific Arguments: Gaps, Relevance and Integrated Evidence', 2007 J.L. & Pol'y 15, no. 1, pp. 7-58, who strongly advocates the 'weight of the evidence' approach (under which all evidence is considered collectively, and not each piece as a separate item); he found an audience in Milward v. Acuity Specialty Products Group (639 F.3d 11, 2011).

⁹⁸ Cf. also the five lessons that Lempert 2008, supra note 21, pp. 925-926, teaches consumers of empirical research. See also J.B.M. Vranken, 'Consequenties van een versterking van de rechtsvormende taak van de Hoge Raad: talrijk, divers en soms vergaand', 2009 *NJB*, p. 1090, who poses three questions. Next to relevance and reliability, he asks whether the transformation to law can be made. Of course, that is precisely the question I would like to answer by addressing the other two points.

⁹⁹ One could also use the four criteria by Monahan & Walker 1985-1986, supra note 8, p. 499 et seq. (surviving critical review; valid methodology; generalizability; supported by other research). One could also think of providing the decision maker (judge, lawyers, policy makers) with the level of (un)certainty associated with a particular assertion of a scientific fact. C. Weiss, 'Expressing scientific uncertainty', 2003 Law, Probability and Risk 2, pp. 25-46, has proposed a scale for doing so. Advocates of admissibility standards, such as D.L. Faigman, 'To have and have not: Assessing the Value of Social Science to the Law as Science and Policy', 1989 Emory L.J. 38, no. 4, pp. 1005-1095, of course also rank as proponents of a (type of) due process approach.

¹⁰⁰ The factors mentioned thus lead to reliability but then also to the possibility to translate the empirical fact to the normative legal domain. Vranken 2014, supra note 53, p. 195, strictly separates the two. Only after the reliability is given does the question as to the possibility of a 'translation' arise.

have been met, it is possible, specifically because (to answer the *why?* question) these procedural safeguards have been met, to leap from extralegal insights to normative legal conclusions by using (the *how?* question) the inspirational insight found elsewhere in the formulation of the (new) legal outcome.

An important consequence of the due process approach advocated here is of course that it asks of judges, practitioners and scholars to be or at least become 'somewhat' (note the understatement used here) familiar with the methodology of the social science at stake. That hurdle might also prove to be gigantic and insurmountable.¹⁰¹ But as long as that is the case – legal education still seems to be unable to sufficiently train future lawyers in this respect¹⁰² – this difficulty might still be overcome by using court-appointed experts to collect or at least evaluate the usefulness of the extralegal materials available,¹⁰³ by assessing their relevance, reliability, validity, conflicting opinions, and so on. This intervening court-appointed expert would thus function as would an expert medical witness in a medical malpractice case, where the medical expert is asked what went wrong and whether that was in any way someone's fault or not.¹⁰⁴ The judge could thus resort to an external expert to advise him on how to be a decent scientific gatekeeper (in order to exclude 'junk science'¹⁰⁵) when it comes to the possible use of insights from social sciences.¹⁰⁶

5. Implications and conclusions

5.1. Implications: lessons learned?

As David Canter noted – before elaborating on the many divides and differences¹⁰⁷ between lawyers and psychologists – for the gap between law and psychology to be bridged 'it is essential that all those involved have "professional humility", i.e. that 'each profession recognizes that it sees only part of the whole picture and that there are equally legitimate if rather different perspectives. Since one should strive for public policy decisions to be made in accordance with the best available information at hand, viewing the issue at hand form all possible perspectives, this is of course vital to the area of law and public policy.

In an effort to try to bridge the gap, in order thus to be able to reach public policy decisions based on both legal and empirical arguments, I propose the following. Considering Mertz' observation we must be keen to work on the process of translation itself. Part of that work could be to further investigate how and to what degree extralegal insights could be part of the reasoning process of the decision maker. Comparative law could be useful, first, as a learning tool, a playground so to speak in which to experiment, and second, by making sure that there are no definite answers. All this is then of course geared towards the due process approach just elaborated upon, which I propose to follow to 'overcome' the apparently insurmountable divide between social science facts and legal decision making.

As far as I am concerned – thus from a lawyer's point of view – and despite all the warning signs flagged as amber and red, if taken up in the manner stated here it is still useful and fruitful to explore the 'jungle' of another scientist's territory, to embark on the trip to an unknown land and to use inspirational insights from elsewhere. What is achieved is that all kinds and types of external insights (arguments for lawyers) are being internalized on a (pretty) well-founded basis, 110 if at least procedural safeguards

¹⁰¹ It is of course difficult for instance for judges to value insights from other disciplines, see e.g. Vranken 2009, supra note 98, p. 1090; for instance, testing validity is difficult, see e.g. Vranken 2011, supra note 16, p. 1121.

¹⁰² Cf. Posner 2013, supra note 19, p. 347, and I. Giesen, 'Towards a lus Commune 3.0?!', 2013 MJ 20, no. 2, p. 163.

¹⁰³ Cf. Monahan & Walker 1985-1986, supra note 8, p. 512 (for these authors, this is only a means of last resort).

¹⁰⁴ Cf. Lepsius 2005, supra note 26, p. 12, who advocates using social scientists much in the same way as courts nowadays use experts from the fields of natural sciences when it comes to medical or natural science issues.

¹⁰⁵ In the US, the *Daubert* decision (509 U.S. 579, 1993) already makes the judge himself the gatekeeper in this respect. As stated, this article does not aim to discuss the *Daubert* decision.

¹⁰⁶ Of course, the difficulties of dealing with expert witnesses, as highlighted in Section 2.2.4, creep in again when considering this solution, but that is (i) unavoidable, and considering the built-up expertise with this issue so far, (ii) manageable, even though additional research in this regard is considered necessary, see B.L. Cutler & M.B. Kovera, 'Expert Psychological Testimony', in 2011 Current Directions in Psychological Science 20, no. 1, pp. 53-57.

¹⁰⁷ See also Mertz 2011, supra note 21, p. 403. Cf. also Rubin 1997, supra note 3, and Engel 2008, supra note 20.

¹⁰⁸ Canter 2008, supra note 50, p. 1. Cf. Blumenthal 2002, supra note 5, pp. 5 and 24.

¹⁰⁹ See also Mertz 2008, supra note 54.

¹¹⁰ In that way, suggestions pop up and feedback is given, thus enabling lawyers to learn, cf. Rachlinski 1999-2000, supra note 69, p. 757.

are being used. Even if at the end of the day such insight is not used or is not determinative of the issue at hand, it has been of (some) importance, adding to the weighing of arguments that the judge (or any other public policy designer) has had to make in deciding on the legal issue. In fact, it may reinforce the other arguments, those that were decisive, that an external perspective was taken on board but was not considered to be sufficiently compelling.

5.2. Concluding remarks

My conclusion would be that decision makers in the (broadly defined) field of 'legal empirics' would have to (a) be careful, but still (b) (try to) bridge the gap between law and empirics when (c) certain formal steps are being taken, and (d) a reasoned justification as explained above is provided. What of course speaks out clearly in favour of adopting this *due process approach* is that this approach itself touches upon the very core of what the law, of what legal reasoning is all about, i.e. providing justifications for actions undertaken and decisions made, weighing all the available arguments for and against the solution reached.¹¹¹ That alone provides, I think, legal empiricists with ample room to manoeuvre when they (wish to) mix 'outside insights' with law. ¶

¹¹¹ See also Vranken 2014, supra note 53, p. 195.