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How to carry out interdisciplinary legal research Some experiences with an interdisciplinary research method

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1. Introduction

The aim of this contribution is to share my experiences with interdisciplinary legal research. The term interdisciplinary is used in this contribution in relation to legal research which incorporates insights from non-legal disciplines.¹ The aim is to provide some guidance as to how or how not to actually carry out interdisciplinary research. Which guidelines may be formulated from a legal methodological perspective in carrying out this type of research? Which problems might be encountered and in what ways might these be solved? The article departs from my research experience which concerns the interaction of family law and sociology. It is a revised contribution of a presentation held at the Utrecht University's Symposium on Legal Methodology in 2010. Although this article does not provide a general review of interdisciplinary legal research methodology, the problems I have encountered are probably of a more general nature, at least as far as the combination of legal research with socio-empirical data is concerned. Some of the issues might well be applicable to other combinations of law & ..., some of them may not, depending on the nature of the other discipline involved and the aim of the research.

In the next section the arguments in favour of interdisciplinary research will be identified. Subsequently, attention will be paid to a number of general methodological problems which are typically the result of trying to bridge legal and sociological empirical research. These will be illustrated on the basis of concrete research. The idea is to shed some light on the problems, but, due to the fact that this type of research is relatively new, it is at this stage and at an individual

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¹ Although these concepts are sometimes distinguished in contemporary literature, there is no generally accepted definition of the terminology in the legal doctrine itself. See for instance R. van Gestel, 'Wetgeving en wetenschap', 2009 *Ars Aequi*, pp. 30-36 and J.B.M. Vranken, 'Nieuwe richtingen in de rechtswetenschap', 2010 *WPNR*, pp. 318-328, at p. 324 who use the term multidisciplinary, whereas B. van Roermund, 'Rechtswetenschap – disciplinair en interdisciplinair', 2005 *R&R*, no. 1, pp. 81-107 uses the term interdisciplinary, both indicating research involving data from more than one discipline.

level not yet feasible to present good research practices; rather the aim is to raise more awareness concerning these problems, which could help other researchers in better designing their research plan (Section 3). The overall conclusion will be set out in Section 4.

2. Why an interdisciplinary research method?

2.1. *Internal or external effectiveness of law*

In the light of the current debate on the methodology of legal research,² a first issue to deal with is whether interdisciplinary research has something to add to the existing methods of legal research or, to put it stronger, whether it is sometimes necessary. In this respect a distinction has to be drawn between different types of effectiveness of the legal system.³ Legal systems ultimately regulate and order people's behaviour. Whether a specific legal provision successfully contributes to this aim is dependant on two distinct sets of effectiveness: the internal and the external effectiveness.

Firstly, the internal effectiveness of a legal system refers to the consistency and coherency of the legal norms and their definitions. *Internal consistency* is essential for any legal system. In order to achieve the goals of legislation, legal norms should for example not contradict each other and should be clear. A typical research question concerning the internal effectiveness of a specific legal rule is whether that norm is in line with the principle of equality. If it is not, there is internal inconsistency. Another example concerns the question of what the exact scope of a legal provision is. The issue of internal effectiveness may relate to both the *de lege lata* (is a specific legal instrument consistent and coherent as it stands?) as well the *de lege feranda* perspective (how could a specific legal approach be optimised); in both situations the legal norms and concepts are the ultimate yardstick.⁴

Secondly, the external effectiveness measures whether a legal norm is effective in real life, so it concerns the law in action. A typical question is whether a legal solution achieves its goals in its operation in society. Does it (only) have the expected effect on people's behaviour? Legal provisions are often based on presumptions on people's behaviour, but are these presumptions realistic? So external effectiveness refers to the *external consistency* of the legal system with the context and culture in which it functions.

Both types of effectiveness can be evaluated separately from each other. This implies that even when a legal norm is not in all respects internally consistent with other legal norms, it can still be successful in achieving the desired effects in people's behaviour.

The distinction between those two types of effectiveness has a number of implications, to start with the appropriate research method.

2.2. *Type of research question determines method*

When the aim of a certain research project is to find legal answers on the basis of legal data an external non-legal perspective is not required. To give an example, many aspects of the new

2 I. Wendt, 'De opgekomen methodenvrees in het rechtswetenschappelijk debat in Nederland. Een voorstel', 2009 *NJB*, pp. 782-789, C.H. Sieburgh, 'L'art de la distinction', 2008 *NJB*, pp. 3-13, P. Westerman & M. Wissink, 'Rechtsgeleerdheid als rechtswetenschap', 2008 *NJB*, pp. 503-506, J.H.A. Lokin, 'Regtskunde, rechtsgeleerdheid, rechtswetenschap', 2008 *RM Themis*, pp. 49-51, A.R. Mackor, 'Tegen de methode', 2007 *NJB*, pp. 1462-1465.

3 See on the different concepts of effectiveness: G.J. Veerman & R. Mulder, *Wetgeving met beleid*, 2010, pp. 12-14.

4 This does not imply that empirical research techniques are not relevant in relation to internal effectiveness; it may well be relevant, for instance in order to carry out a large-scale case law analysis using statistical methods in order to analyse how a specific legal concept is applied by courts.

provision in the Dutch Civil Code introducing a duty for parents who wish to divorce to hand over a parenting plan to the court are not clear.⁵ What are the requirements which have to be met before a court can declare a divorce petition admissible? And what should, according to the legal system, happen when parents do not hand over a parenting plan? How does this duty relate to other provisions in the divorce law system? These are purely legal issues which can only be answered on the basis of legal data and legal standards.⁶ This type of research questions relates to the internal consistency of the legal system. Both the question on the specific requirements of this parenting plan and how it interplays with other legal divorce issues and whether that is desirable from a legal perspective can be answered from an internal legal systematic perspective.

When the research questions are related to the effectiveness of the law in external consistency terms, so to external effectiveness, another perspective is required. External effectiveness evaluates the difference between the legal reality and the real reality. When a research project's aim is to find out whether the new piece of legislation on parenting plans indeed reduces, as the legislature assumes (legal reality), the level of conflict between parents in the case of divorce and results in the increased involvement of both parents with the child, a pure legal perspective does not provide the answers.⁷ Then quantitative and qualitative empirical non-legal data are necessary to assess aspects of the real reality, for instance by asking the parents and the legal professionals about their experiences. Many more research questions which require an external perspective may be mentioned, such as the presumption in Dutch family law that it is in the interest of a child that his/her prospective adoptive parents are not too young or old. This is a legal presumption and to test whether it mirrors reality, a researcher will have to leave the pure legal dimension and will have to look at its functioning in reality by using insights from other disciplines such as psychology.

In this context, it is not useful to make a distinction between, on the one hand, 'traditional legal research'⁸ and, on the other, 'modern or interdisciplinary research'. This terminology seems to suggest that the traditional approach is a somewhat suspicious category of research,⁹ as opposed to modern research, which apparently seems to meet all the demands of our time.¹⁰ However, it is neither tradition nor modernity which dictates what method is most useful: That is determined by the nature of the research question. Therefore, it is too easy to state that interdisciplinary research is always necessary and too simple to question pure internal legal research.¹¹ It depends on the aim of the type of research question what method is the most fruitful. As will be demonstrated in Section 3.4 below, both perspectives may be necessary in order to answer certain types of research questions.

5 Art. 815 Code of Civil Procedure and Art. 1:247a Civil Code.

6 See for instance: C.E. Ackermans-Wijn & G.W. Brands-Bottema, 'De invoering van het ouderschapsplan: goed bedoeld, maar slecht geregeld', 2009 *Trema*, no. 2, pp 45-53.

7 U.R.M. De Vries & L.M.A. Francot, 'The Legal Method Reconsidered', in M. Karanika-Murray & R. Wiesemes, *Exploring Avenues to Interdisciplinary Research, From Cross- to Multi- to Interdisciplinarity*, 2009, p. 169.

8 See for instance C.H. van Rhee, 'Geen rechtsgeleerdheid, maar rechtswetenschap!', 2004 *RM Themis*, no. 4, pp. 196-201; S. Taekema & B. van Klink, 'Dwarsverbanden, Interdisciplinair onderzoek in de rechtswetenschap', 2009 *NJB*, p. 2564.

9 See for instance C.H. van Rhee, 'Geen rechtsgeleerdheid, maar rechtswetenschap!', 2004 *RM Themis*, no. 4, pp. 196-201 who explicitly states that this term is not used in his contribution with this negative tone.

10 See also J.B.M. Vranken, 'Nieuwe richtingen in de rechtswetenschap', 2010 *WPNR*, pp. 318-329, at p. 319 who uses the term '*juridisch dogmatisch onderzoek*'.

11 See also: K.L. Levine, 'The Law is not the Case: Incorporating Empirical Methods into the Culture of Case Law Analysis', The Social Science Research Network Electronic Paper Collection, <<http://ssrn.com/abstract=869103>>, who argues that legal research methods such as case analysis are not sufficient to answer the relevant questions; social science techniques are indispensable.

2.3. Method matters

There is an ongoing debate in the Dutch legal discourse on methodological aspects of legal research and whether method is relevant. Method is relevant and to ignore methodological standards may result in unreliable research. In relation to the different types of effectiveness of a legal system, this implies the following. When results are presented on the effectiveness of a certain legal instrument, it should be clear what type of evaluation it concerns: external or internal. It is methodologically unsound to draw conclusions as to whether a legal approach functions in the real world¹² on research which does not include empirical data about the real world. On the basis of legal norms and standards (how things should be) no reliable deductions can be drawn as to how things are. For instance, if legal research on non-marital cohabitation would analyse some aspects of the external effectiveness of the law, for instance whether the presumptions in the legal system concerning people's behaviour with respect to relationships reflect the actual behaviour of partners, this can only be analysed by means of non-legal data,¹³ such as empirical sociological, demographical and economic data. To do otherwise results in unreliable, subjective and *opinion-based outcomes*.¹⁴ A collective misrepresentation of research in this respect should be avoided; productive research practices include greater accountability of the method, hypothesis and the effects of the methods on the reliability and validity of the research findings.¹⁵

In conclusion, both pure internal legal research and interdisciplinary research provide vital results. Nevertheless, there is an argument of a practical nature in favour of an interdisciplinary research design. Legal research is in a number of respects conceived as being atypical, compared with other disciplines which seem to use more generally accepted research methods and which seem to have more objective research results.¹⁶ Whether or not that is true is not an issue to be dealt with in this paper, but as legal research in the Netherlands is increasingly in competition with these other disciplines for research funds, it is an advantage to carry out interdisciplinary research, which at the moment is perceived as a new road to innovation.¹⁷

3. Methodological problems

In the Netherlands, few empirical legal studies have been published,¹⁸ in particular in relation to private law.¹⁹ As a result, hardly any attention has yet been paid to the methodological aspects

12 L. Epstein & G. King, 'Rules of Inference', 2002 *U. Chi. L. Rev.* 69, pp. 1-133, at p. 4.

13 Which could, for instance, also be a large-scale case law analysis, but then there are numerous methodological problems, including the fact that only a small percentage of all cases are reported. Unfortunately, little attention has been paid to these methodological problems.

14 L. Epstein & G. King, 'Rules of Inference', 2002 *U. Chi. L. Rev.* 69, pp. 1-133, at p. 9; R.A.J. van Gestel, *Wetgeven is vooruitzien*, 2008; G. van Dijck, S. van Gulijk & M. Prinsen, 'Wat doen juridische onderzoekers?, Een empirische blik,' 2010 *Recht der Werkelijkheid*, pp. 44-64, at pp. 60-61.

15 I. Wendt, 'De opgekomen methodenvrees in het rechtswetenschappelijk debat in Nederland. Een voorstel', 2009 *NJB*, p. 785.

16 C.J.M.M. Stolker, 'Ja, geléerd zijn jullie wel', 2003 *NJB*, pp. 766-778; G. van der Geest, 'Hoe maken we van de rechtswetenschap een volwaardige wetenschap', 2004 *NJB*, pp. 58-66 and the resulting debate in 2004 *NJB*, pp. 1435-1441. See, however, I. Wendt, 'De opgekomen methodenvrees in het rechtswetenschappelijk debat in Nederland. Een voorstel', 2009 *NJB*, p. 786, who expresses the opinion that in relation to the methodology there are no differences between the legal research discipline and other scientific disciplines.

17 This does not mean that this tendency is a good one, but for practical reasons there might in the end not be so much choice at all. In addition, in my view legal researchers (including myself) should improve their methodology and should invest more time in their research design.

18 G.C.J.J. van den Bergh, edited by C.J.H. Jansen, *Geleerd recht: een geschiedenis van de Europese rechtswetenschap in vogelvlucht*, 2007, pp. 141-143.

19 In the USA more empirical research has been carried out, see for instance D. Snyder, 'Go Out and Look: The Challenge and Promise of Empirical Scholarship in Contract Law', 2006 *Tul. L. Rev.* 80, no. 4, p. 1009.

of this type of research.²⁰ The next section is therefore mostly based on my personal research experience.

3.1. The type of interdisciplinary research determines the methodological requirements

When a certain research design asks for a combination of two different perspectives, there will probably be a number of problems which the legal researcher will have to face. It is not an easy task to carry out methodologically sound interdisciplinary research. The conditions which have to be met in this respect depend on the aim of the interdisciplinary design of the research. A distinction has to be made between an external effectiveness test and the use of non-legal data to give context to a legal phenomenon. To test the law as to its external effectiveness requires much more stringent methodological conditions, since the legal data and the other (empirical) data will be integrated into one system in order to come to a conclusion as to whether the law works or not.²¹ This type of research may have implications for public policy, which stresses the significance of sound methodological standards.²² When the non-legal data are used as context less stringent norms apply. It is merely a combination rather than an integration of the two data sets, in which the legal results are complemented with empirical non-legal data, but are not used in order to assess whether redesigning the law is indicated.²³

The difference in the aims of the use of non-legal data might be illustrated by my research on family relationships which was originally aimed at testing the law on family relationships as to its internal and external consistency. The idea was to analyse and to bring together different areas of law such as criminal law, maintenance law, social welfare law, etc., all from the perspective of family solidarity. Why are which categories of family relationships relevant in what area of law? What legal consequences do family relationships have? For what reasons? For instance in social welfare law, a distinction is drawn between, on the one hand, parents and adult children who share a joint household and, on the other, siblings with a joint household. What is the underlying legal concept of family solidarity in these legal provisions? Why is such a distinction made? Is it consistent with the aims of the social welfare law? These questions can be answered with legal data, but whether the legal reality corresponds with the financial and economic solidarity between real relatives in real life had to be based on non-legal data.

Therefore, the first thing to be done in designing a research project is to clarify what is the purpose of the interdisciplinary nature of the research. Even when this is initially clear, at a later stage it might be necessary to adjust the original plan, when the aim is not feasible, due to certain methodological problems.

3.2. Pitfalls in general

In principle, there are two different routes to interdisciplinary research: unilateral and multilateral.²⁴ The unilateral method implies that a legal researcher aims at carrying out the research,

20 As opposed to the USA literature; see for instance L. Epstein & G. King, 'Rules of Inference', 2002 *U. Chi. L. Rev.* 69, pp. 1-133 who argue that empirical techniques should be used, but at the same time warn against (and criticize) the substantial risks involved, in particular in relation to legal scholars conducting empirical research themselves, S.H. Ramsey & R.F. Kelly, 'Social Science Knowledge in Family Law Cases: Judicial Gate-Keeping in the *Daubert* Era', 2004 *University of Miami Law Review* 59, no. 1, pp. 1-82.

21 See also the typology in five different categories of interdisciplinary research in general: Y. de Boer et al., *Building Bridges; Researchers on their experiences with interdisciplinary research in the Netherlands*, RMNO, KNAW, NOW en COS Report, 2006.

22 L. Epstein & G. King, 'Rules of Inference', 2002 *U. Chi. L. Rev.* 69, pp. 1-133, at pp. 7-8.

23 See also specifically in relation to legal research: S. Taekema & B. van Klink, 'Dwarsverbanden, Interdisciplinair onderzoek in de rechtswetenschap', 2009 *NJB*, pp. 2560-2561; according to their typology, these types of research would probably both fall within the category of the other discipline as an auxiliary science.

24 The terminology is the author's own, since there are no generally accepted terms.

starting from a research question based in the legal arena, but making use of the data from another discipline.²⁵ Multilateral research is interdisciplinary research where from the start at least two experts from different disciplines work together. Depending on the type of research, different pitfalls might occur.²⁶ However, little information is to be found in Dutch legal research about these problems,²⁷ which might well be explained by the fact that these routes are relatively new and difficult.²⁸ What has been published mostly does not include concrete ideas on how to combine different perspectives, but is rather related to legal theory issues from an abstract level.²⁹ Hereafter, only a number of the typical problems of unilateral research will be dealt with and only from my limited experiences with the combination of law and sociology.

The following problems might play a role in relation to unilateral research:

1. The issue of how to find your way in and understand another discipline.
2. The risk of picking and choosing and of an incorrect understanding of the other discipline.
3. The dependency on the availability of data from the sociological discipline.
4. The difficulties in translating the legal concepts into socio-empirical equivalents.
5. The question how to integrate empirical results within the legal discipline.

All these problems require attention,³⁰ but in this contribution the pitfalls under numbers 3, 4 and 5 will be discussed; the focus will be on the nature of the problems at a concrete level.³¹ The aim is primarily to raise more awareness concerning these problems; even though it would be good to present a working set of answers to solve the pitfalls, at this stage and at the level of individual experience only, this is for the future. In the conclusion a number of lessons as to awareness will be presented in order to learn from the trial and error experiences.

3.3. Dependency on socio-empirical data

In this section some light will be shed on the nature of the problems which result from dependency on the data in the other discipline. What should a unilateral researcher be aware of in this respect? I leave aside the possibility of collecting one's own datasets: even apart from serious concerns in terms of money and time, legal researchers have had no training in the collection of

25 W.M. Schrama, 'Een multidisciplinaire benadering van het ongehuwd samenleven, Meerwaarde en minpunten van de combinatie van juridisch en sociaalwetenschappelijke onderzoek', 2007 *Ars Aequi*, no. 11, pp. 869-876.

26 R. Wiemeses & M. Karanika-Murray, 'The cross-disciplinary research Group', in M. Karanika-Murray & R. Wiesemes, *Exploring Avenues to Interdisciplinary Research, From Cross- to Multi- to Interdisciplinarity*, 2009, p. 3.

27 See H. Willekens, *Vrouwelijkheid, mannelijkheid en recht*, 1991 with emphasis on the theoretical aspects; M.A. Loth & A.M.P. Gaakeer, *Meesterlijk recht*, 2005; M. Barendrecht et al., 'Methoden van rechtswetenschap: komen we verder?', 2004 *NJB*, pp. 1419 et seq.; H. Franken, 'Rechtsgeleerdheid in de rij der wetenschappen', 2004 *NJB*, pp. 1400-1408; G. van der Geest, 'Hoe maken we van de rechtswetenschap een volwaardige wetenschap', 2004 *NJB*, pp. 58-66 and the resulting debate in in 2004 *NJB*, pp. 1435-1441; T. Hartlief, 'Oordelen over juridisch onderzoek anno 2006', 2006 *NJB*, pp. 420-423; R. van Gestel, 'Wetgeving en wetenschap', 2009 *Ars Aequi*, pp. 30-36; C.J.M.M. Stolker, 'Ja, geléerd zijn jullie wel', 2003 *NJB*, pp. 766-778; C.J.M.M. Stolker, 'Wat maakt een juridisch tijdschrift wetenschappelijk?', 2004 *NJB*, pp. 1409-1418; R.A.J. van Gestel et al., 'Rechtswetenschappelijke artikelen, Naar criteria voor methodologische verantwoording', 2007 *NJB*, pp. 1448-1461; S. Taekema & B. van Klink, 'Dwarsverbanden, Interdisciplinair onderzoek in de rechtswetenschap', 2009 *NJB*, pp. 2559-2566.

28 J.B.M. Vranken, 'Nieuwe richtingen in de rechtswetenschap', 2010 *WPNR*, pp. 318-329, at p. 322 and pp. 324-325.

29 See recently for instance: S. Taekema & B. van Klink, 'Dwarsverbanden, Interdisciplinair onderzoek in de rechtswetenschap', 2009 *NJB*, pp. 2559-2566 who deal with the relevance of interdisciplinary research from a legal theory perspective, which is highly interesting, but does not offer concrete support on how to actually carry out this type of research.

30 In the American literature a great deal of interesting material has been published on problems 1 and 2: see for instance S.H. Ramsey & R.F. Kelly, 'Social Science Knowledge in Family Law Cases: Judicial Gate-Keeping in the *Daubert* Era', 2004 *University of Miami Law Review* 59, no. 1, pp. 1-82 and L. Epstein & G. King, 'Rules of Inference', 2002 *U. Chi. L. Rev.* 69, pp. 1-133.

31 See also W.M. Schrama, 'Een multidisciplinaire benadering van het ongehuwd samenleven, Meerwaarde en minpunten van de combinatie van juridisch en sociaalwetenschappelijke onderzoek', 2007 *Ars Aequi* no. 11, pp. 869-876.

large-scale data sets, nor qualitative methods, such as interviews with respondents. Therefore, this route would require a different infrastructure for the education of the legal researcher.

As for now, one of the major problems of unilateral research, at least with respect to the combination of family law and sociology, is the availability of sociological data which match with the legal research questions. Numerous problems might rise and it is good to be aware of the variety of potential mismatches between the legal and the non-legal data. There might be a complete lack of data, or a set of relevant data, which are limited to a period of time which is too old or too short to determine trends. Sociological data might be lacking for a number of legally relevant categories, or only data from other countries might be present. This means that it is essential that a research design includes realistic assumptions on the data which are necessary. However, that is sometimes more complicated than initially envisaged by the research plan. A first glance at an interesting research question might not reveal the complicated classification system which the legal system uses. The aim of the family relationships research was to test the external effectiveness of the legal system in the way it deals with different types of family relationships. Many legal provisions make assumptions relating to family solidarity in which many distinctions between different groups of family relations are relevant. The aim was to check whether this corresponds with what actually happens between relatives in real life. This is scientifically innovative since classical legal research does not put this into perspective. However, it is not without problems, since the law and the sociological discipline use different categories of family relationships. In Table 1 below the categories distinguished by the law on maintenance are shown: who is under a legal duty to maintain which relatives and partners? The upper part represents family relationships between parents and children and siblings, whereas the lowest two rows indicate partner relationships. It follows from Table 1 that a parent and a child are reciprocally under a duty to maintain each other.³² The begetter (according to the Dutch system a man who conceived a child by means of sexual intercourse with the mother is a begetter, as opposed to a donor) of a child who has only a mother is under a unilateral duty to provide maintenance to the child.³³ The same applies to a man who as the partner of the mother consented to the conception of a child, for instance by means of IVF.³⁴ Not only biological parents are under a maintenance duty; when a social parent exercises joint parental authority with a legal parent, the social parent is liable for the maintenance of the child.³⁵ Without dealing with all the categories in the table, it is clear that the law is based on a sophisticated classification system.³⁶

32 Art. 1:392 and 1:400 Dutch Civil Code.

33 Art. 1:394 Dutch Civil Code.

34 Art. 1:394 Dutch Civil Code.

35 Art. 1:253w Dutch Civil Code.

36 Art. 1:392-1:404 Dutch Civil Code; Art. 1:157 Dutch Civil Code.

Table 1 Family classification system in the law on maintenance.

Legal maintenance duty	Formal
Parent ↔ child	Yes
Begetter (not a legal parent) → child	Yes
Male ‘consenter’ → child	Yes
Social parent with parental authority → child	Yes
Step-parent → stepchild	Yes
Parents-in-law ↔ children-in-law	Yes
Sibling ↔ sibling	No
Spouse/registered partner ↔ spouse / registered partner	Yes
Non-marital cohabitant – non-marital cohabitant	No

Underlying this system is a legal concept of family solidarity about who are supposed to maintain each other, but is there in real life? The most important database on family relationships in the Netherlands is the Netherlands Kinship Panel Studies (NKPS), a large-scale multi-actor survey on the nature and strength of family ties in the Netherlands among over 8,000 respondents.³⁷ Even though it is the largest database, there are plenty of problems with matching the categories in the two disciplines. Firstly, only sociological data on the relationships between biological parents and children and biological siblings and formal stepfamilies are available, not on the *legal* relationships. Whether the respondents are legal families is not an issue in this database; the categories are constructed in terms of biology. One might even wonder whether the researchers have been aware of the difference between legal relationships and biological or social relationships. In many cases these categories will overlap, but not for all, for instance in the case of unmarried fathers and their children. A proportion of unmarried fathers do not recognise the child and they are consequently not a legal father.

Secondly, in the NKPS not the same data are available for all types of family relationships; e.g. no data on the exchange of financial support in stepfamilies have been collected, which is necessary in order to compare the different categories in relation to each other.

Thirdly, some categories, such as third-degree relatives, which constitute a legally relevant group of family relationships, are not included in the database at all. Little research has even been conducted on sibling solidarity in the Dutch context.³⁸ Other datasets in the Netherlands do not contain the necessary information either, since the NKPS is already unique in terms of the data on family relations.

³⁷ See <<http://www.nkps.nl>>.

³⁸ M. Voorpostel, *Sibling support: The exchange of help among brothers and sisters in the Netherlands*, Utrecht, ICS dissertation series 128, 2007.

A fourth mismatch becomes manifest in relation to social welfare law, in which family solidarity is a central concept as well.³⁹ The Dutch social welfare system classifies close personal relationships between people on the basis of joint residency. So when adult family members share a household, this will have effects in terms of (less) benefits compared to living alone. Interesting is that the parent-adult child relationship is distinguished from siblings and other family ties and partner relationships. It would be fascinating to match these norms with reality. However, in the NKPS databank the data on adult relatives with a shared household are limited and therefore unreliable.⁴⁰

The external effectiveness of a certain legal approach is generally related to the operation of the law in a specific cultural context. Therefore, it will usually not be sufficient when sociological data are available in relation to other countries. Data on family solidarity in the USA or Japan are irrelevant for the question whether a Dutch law, which operates in Dutch society, is functioning adequately.

These examples illustrate that unilateral research limits the design of research which is aimed at the integration of data. The essential lesson is that it must be clear which data are needed in order to answer the research questions. This might sometimes only be possible after a first study of the legal data.⁴¹ It is also recommended that the legal researcher contacts a sociologist who is an expert in the relevant field in order to check the research design in respect of the match between the legal and sociological data. For the family solidarity research the lack of relevant data implied a downsizing of the original aim of the research. A real test approach was no longer feasible; however, the NKPS data demonstrated general trends in family solidarity and have been fruitful as contextual information.⁴²

3.4. How to translate legal concepts into socio-empirical equivalents (and what should be translated)?

Another issue is the question of what needs to be translated from the legal to the sociological discipline and how this can be done. Since the results of different translations might differ considerably, it is an important issue.

In order to test the effectiveness of the law, the question is whether what the legislature assumes about family relationships holds true in reality. Not only is it important what the legislature presumes that family relatives do (to support each other), but also why (because they are very close to each other, or because of responsibilities) this is the case. The legal ground or principle on which the legal norm is based can have relevance for the translation of the legal concepts into non-legal concepts.

A first step is to unravel the rationale of the legal provisions.⁴³ Why did the legislature consider some relatives to be relevant in, for instance, maintenance law and others not? This is a purely internal legal step, which requires an analysis of the legal provisions in their proper

39 W.M. Schrama & A.R. Poortman, Conference paper, 'Family solidarity from a legal and sociological perspective,' Paper III International community, work and family conference 2009, available at the NKPS-site: <<http://www.nkps.nl>>.

40 Probably because this is a category which is not so substantial in itself.

41 A complicating factor here is the tension between balancing time and investment in research proposals against the success rates of obtaining funding. On the one hand, researchers cannot spend too much time in writing research proposals, since the success rates are generally low, but on the other hand, when the project will be given funding, it is important to have a working proposal.

42 W.M. Schrama, 'Familiërelaties terecht (niet) in het strafrecht?', 2009 *Delikt en Delinkwent*, no. 4, pp. 353-375; W.M. Schrama & A.R. Poortman, 'Familiësolidariteit vanuit een juridisch en sociologisch perspectief', 2010 *Tijdschrift voor Familie- en Jeugdrecht*, pp. 154-161.

43 The same applies to rules resulting from case law.

context.⁴⁴ It sounds rather simple, but the rationale of a certain legal approach is sometimes difficult to determine. On the one hand, an analysis of the parliamentary history will reveal a number of arguments as to why the legislature created a certain provision. However, this might well be only a part of the (old and outdated) story. It is necessary to search for the underlying principles and the interests which are balanced against each other, but which are often not made explicit. A comparison is needed between the relative positions of the legal provisions and the categories involved.

The law on maintenance does not explicitly use the concept of family solidarity. In the parliamentary history, the legal literature and in the case law maintenance duties are presumed to be self-evident. Little attention has been paid to the legal grounds or reasons for maintenance duties. There is no legal theory to the effect that since parents and children do have important emotional and economic ties, which society as a whole deems to be important, certain legal consequences are attached to these relationships, of which one is the maintenance duty. Due to the lack of a developed legal theory on family solidarity, it is difficult to make a deduction in relation to the underlying concept, since there are a number of possibilities. An analysis could show that the underlying concept is that of financial family solidarity, but it could also be that the underlying principles are based on the close relationship of relatives and the procreational responsibility of parents.⁴⁵ When the relevant legal concept which has to be translated is financial solidarity, this is rather more limited than family solidarity as a container concept, in which financial ties are only one of the relevant aspects. When deduction does not result in one relevant concept which has to be translated into socio-empirical concepts, it is methodologically sound to test both concepts and to see whether this has different outcomes.

Next, the relevant legal concepts will have to be translated into terms and variables which can be measured with empirical research methods. The legal concept of family solidarity has to be translated into sociological terms. In this case sociological research has been carried out on family solidarity, which is close to the relevant criteria in the legal discipline. Family solidarity in sociological terms is divided into a number of aspects: contact, financial support and the exchange of other kinds of support. When family solidarity as a container concept has to be translated this would mean that all the relevant aspects should be taken into account.⁴⁶ The presumption would then be that family solidarity can be derived from contact between family members, by financial support, by emotional support and other kinds of support (see Tables 2 and 3 below).

On the other hand, if financial solidarity would be legally relevant, only those data should be taken into account.⁴⁷ The empirical results are different for the diverse aspects of solidarity, as Tables 2 and 3 show, which show the results of an NKPS analysis.⁴⁸

In Table 2 the results are presented in relation to contact between relatives. Respondents were asked how often they had met their parents or siblings during the last 12 months: (1) never to (7) daily. The second question posed to the respondents was how many times the respondent

44 It shows why this type of interdisciplinary research cannot be carried out without internal legal research, see Section 2. In this respect I do not agree with S. Taekema & B. van Klink, 'Dwarsverbanden, Interdisciplinair onderzoek in de rechtswetenschap', 2009 *NJB*, pp. 2564 who argue that from a scientific point of view it is not really challenging to use a purely internal monodisciplinary research design.

45 W.M. Schrama, 'Who needs to pay in the Netherlands?', in I. Curry-Sumner & C. Skinner (eds.), *Child Maintenance, Child Maintenance in the Netherlands and the United Kingdom. Persistent Problems, Finding Solutions*, 2009, pp. 15-30.

46 Which could cause problems; what if, for instance, two categories of family relationships have a similar total score, but very different subtotals?

47 There would also be a methodological problem in the sense that reports on financial relations are generally not very reliable.

48 On the basis of an analysis of the data by A.R. Poortman, ICS, Faculty of Sociology, Utrecht University.

had had face-to-face contact with these relatives. This information was used to calculate the number of contact days per year.⁴⁹

Table 2 Frequency of annual face-to-face contact with biological parents, step-parents, biological brothers/sisters and stepbrothers/sisters.

	Biological parents	Step-parents	Biological brother/ Sister	Stepbrother/ sister
Never (%)	3.5	15.1	4.2	24.2
Once (%)	2.6	5.8	7.2	19.6
A few times (%)	13.5	26.1	34.3	33.5
At least once a month (%)	28.9	29.0	33.9	19.3
At least once a week (%)	28.1	17.2	14.9	2.2
A few times a week (%)	17.9	6.0	3.9	1.2
Daily (%)	5.6	.9	1.5	0.0
Average number of days per year	56.9	24.5 ^a	22.9	5.4 ^b
N =	5101 (100%)	582 (100%)	7280 (100%)	168 (100%)

Note: Analysis based on weighted data. The number of persons is not weighted.

a The difference between biological parents and step-parents is significant ($p < 0.05$).

b The difference between biological siblings and stepsiblings is significant ($p < 0.05$).

First, people have more face-to-face contact with their parents than with their siblings. This can be derived from the comparison between biological parents and biological siblings and step-parents and stepsiblings. The percentage of people who meet their parents less than once a month is 20 percent (= 3.5+2.6+13.5%), whereas this is twice as high for biological siblings (46%). About 52 percent of the parents meet their children once a week or more, but for siblings this is 'only' 20 percent. A similar pattern characterises the comparison between step-parents and stepsiblings. The average number of days per year for biological parents (57 days) is substantially higher than for siblings (25 days), respectively 25 days for step-parents and 6 days for stepsiblings. Statistical tests⁵⁰ demonstrate that the differences between parents, on the one hand, and siblings, on the other, are significant.

Secondly, Table 2 shows that there is more face-to-face contact with the biological family than the stepfamily. Contact with the biological parents is twice as high as contact with the step-parents. The differences between biological brothers/sisters and stepbrothers/sisters are even more pronounced.

Table 3 presents descriptive statistics for the exchange of different types of support.

49 The different scores ((1) never to (7) daily) are converted into the number of days per year (1=0, 2=1, 3=3, 4=12, 5=52, 6=125, 7=300 days). When information was available for both parents or step-parents the results have been averaged. The same applies when the respondent had more than one sibling or stepsibling. In the situation of face-to-face contact the calculation of the frequency of the contact with the biological parents is based on the average scores for contact with the mother and the father. This also applies to step-parents and siblings and stepsiblings.

50 A weighted OLS regression analysis has been used in which the number of contact days per year has been regressed on the type of family relation (e.g. biological parents, biological siblings, step-parents stepsiblings).

Table 3 Support between respondents and biological parents and biological siblings.

	Biological parents		Biological brothers/sisters	
	Received	Given	Received	Given
<i>Instrumental support</i>				
Help with housework during the last 3 months				
None (%)	71.7	54.6	90.7	85.7
Once or twice (%)	21.8	26.1	8.0	11.8
Several times (%)	6.5	19.3 ^b	1.3 ^a	2.5 ^{ab}
Help with odd jobs during the last 3 months				
None (%)	60.3	41.1	78.7	75.2
Once or twice (%)	28.1	36.2	18.5	20.5
Several times (%)	11.6	22.7 ^b	2.8 ^a	4.3 ^{ab}
<i>Financial support</i>				
Money or assets in the past year (%)	25.5	5.2 ^b	1.9 ^a	2.5 ^{ab}
<i>Emotional support</i>				
Showing an interest in the last 3 months				
None (%)	8.7	5.4	14.4	14.7
Once or twice (%)	22.5	22.8	39.9	41.4
Several times (%)	68.7	71.8 ^b	45.7 ^a	43.9 ^{ab}
Giving advice during the last 3 months				
None (%)	31.3	25.2	53.6	48.5
Once or twice (%)	40.1	46.4	35.6	39.1
Several times (%)	28.8	28.4 ^b	10.8 ^a	12.4 ^{ab}
N =	4933 (100%)	4933 (100%)	6842 (100%)	6842 (100%)

Note: Analysis based on weighted data. The number of persons is not weighted.

a The difference between biological parents and biological siblings is significant ($p < 0.05$).

b The difference between providing and receiving support is significant ($p < 0.05$).

Generally, emotional support is the type of support which is most provided and financial support is the least. People provide support more than they receive it. This applies to both biological parent-child relations and biological siblings and for nearly all types of support. This might be caused by an overestimation of the support given by the respondents in combination with an underestimation of the support given by their relatives.⁵¹ In general, the differences are not substantial. An exception applies to the instrumental support exchanged with parents which shows a substantial difference between received and provided support. Of the children 28 percent (=21.8+6.5%) received household help from their parents on one or more occasions during the last three months, whereas 45 percent provided this type of support for their parents on one or more occasions. This difference may be explained by the fact that parents are older.

51 J. Mandemakers & P. Dykstra, 'Discrepancies in Parent's and Adult Child's Reports of Support and Contact', 2008 *Journal of Marriage and Family* 70, no. 2, pp. 495–506.

With respect to financial support between parents and children the pattern is reversed. Parents more often provide financial support than children do (about 26% versus 5%). Statistical tests⁵² demonstrate that the differences between received and provided support for all types of support and for both biological parents and siblings are significant.

Secondly, Table 3 shows that, for both received and given support, more support exchange takes place in the parent-child relation than in the relation between siblings. This applies to all types of support. The differences between the parent-child relation and siblings are the smallest with regard to showing an interest in the other one's personal life. The differences in financial support provided to relatives are small: to parents about 5 percent and to siblings 3 percent. The most substantial difference relates to instrumental support. For all types of support, even showing an interest in personal life, the differences between, on the one hand, parents and children and, on the other, between siblings, are significant.⁵³

Therefore, it makes a difference as to the results which one of the sociological solidarity concepts is the reference point, since for different types of support between relatives different scores apply, as Table 2 and 3 show. When it is impossible to be sure what exactly the relevant legal concept is, the different options have to be made explicit as well as the arguments for and against each of these options. Above all, it should be explicitly stated that the deduction of the legal concepts results in a hypothesis which helps to build a legal theory rather than that it is a self-evident truth. When it is possible, depending on the data, it would be best to test both options and to give a range in which there might or might not be problems. It is important in all cases, however, to provide an insight into the underlying choices and to account for them explicitly.⁵⁴ In the end, in this way the legal debate could make progress in identifying the underlying concepts and build a legal theory. The legislature would be well informed about what happens in real life (not just based on the private opinions of legal scholars, but on empirical sociological data) and how that relates to the legal system.

3.5. Integration of socio-empirical data in the legal context

The transformation of empirical data in legal terms and norms is a problem that is typical for research which is aimed at the integration of the legal and non-legal datasets. In other words: how does one weigh the empirical results?⁵⁵ When the non-legal data are merely to function as a context, this issue is less relevant.

Two aspects can be discerned: firstly, what is a relevant difference between the legal and the real reality, and secondly, if there is a substantial difference, what this might imply for the legal reality.

Assume, in relation to the first issue, that sociological data indicate that some family relationships are less important for certain relatives than the law presumes them to be, whereas for other types of relationships it is just the other way around. What is a significant discrepancy between the legal presumption and the social reality? It would be naive to suggest that the law could always mirror social reality, but which standard is to be set? In other words, it is a matter of labelling the numbers and percentages which flow from the empirical research in legally measurable concepts. Again, there are no clear answers, but a system of comparison could work.

52 Chi2 tests have been used in which given support is cross-classified with received support on the basis of weighted data.

53 A weighted ordinal logistical regression has been used in which support has been regressed on an indicator of the type of relation (either parents or siblings). In case of financial support, a weighted logistic regression has been used.

54 See also: S. Taekema & B. van Klink, 'Dwarsverbanden, Interdisciplinair onderzoek in de rechtswetenschap', 2009 *NJB*, p. 2562.

55 *Ibid.*, p. 2564.

Since the legal system on family solidarity is based on a classification system, in which different types of relationships have different positions, this relative position might be used as a yardstick in order to compare the empirical data.

The second issue concerns the integration of the non-legal data, which show a significant divergence between the legal and the real reality, into the legal domain. When does an external argument result in a necessity to change the law? The transformation of the empirical data in the legal domain cannot take place on a one to one basis. Suppose, for the sake of argument, that in relation to social welfare law, the NKPS data (if they would have been available) would demonstrate that there are no significant differences, not in any of the various aspects of family solidarity, between first and second degree relatives who share a common household, whereas the legal reality departs from very different family solidarity concepts for these relationships.⁵⁶ From a social welfare perspective, the first degree relatives will qualify for state-financed benefits, whereas relatives in the second category do not. Would the contradicting socio-empirical data directly imply that the law needs to be reformed in this respect, since there is a strong external argument in favour thereof? No, it does not, since there are many relevant arguments. The external argument will have to be transformed into an internal argument and then to be weighed against the other arguments. For instance, the principle of equality could be infringed when two categories are divided on the basis of an inappropriate selection criterion, while empirical data show that there is no such difference. However, the sole fact that the norm of 'ought to' is proven not to be met in society is in itself not a legal argument. It is an argument concerning the effectiveness of the legal system, since the aims of the law will not, in the case of divergence with reality, be optimally achieved. So if, for instance, second degree relatives ought to take care of each other, and first degree relatives ought not to, while empirical data show that those relatives who share a household all support each other, the balance struck in the social welfare system between different general interests and individual interests is disturbed. Whether that is a reason to change the legal system depends on many factors. Relevant are the alternative solutions to end the internal inconsistency. This could be a reframing of the specific legal instrument, for example by means of a new legal theory and principles on family solidarity. The legislature could explicitly choose to treat first degree relatives more favourably in comparison to other relatives with the argument that first degree relationships are, from a societal point of view, more important than the other relationships, due to their nature (whether that would be true is a issue for empirical research). In addition, questions would arise as to practical problems in relation to a change in the law, for instance in relation to the abuse of general funds. Arguments in relation to the cost-effectiveness of controlling the legal system will also be put to the balance.

In other areas of law the same question arises. If empirical research findings would suggest that the criminal law provisions which include relatives in the fourth degree do not correspond with the actual significance of this type of family relationship in society, while other types of relationships, which are legally irrelevant, but not socially, should be included,⁵⁷ that is just one argument in favour of an amendment to the criminal law provisions. However, the argument that an adaptation would be likely to result in an abuse of the provisions also has to be taken into account.

56 Elsewhere (W.M. Schrama & A.R. Poortman, Conference paper, 'Family solidarity from a legal and sociological perspective,' Paper III International community, work and family conference 2009, available at the NKPS-site: <<http://www.nkps.nl>>) I have argued that the argument of the legislature (namely that adult children do not choose to live with their parents, whereas siblings do) for making this distinction is internally inconsistent and invalid.

57 W.M. Schrama, 'Familiërelaties terecht (niet) in het strafrecht?', 2009 *Delikt en Delinkwent*, no. 4, pp. 353-375.

In conclusion, all the different aspects and interests involved have to be balanced against each other and the single fact of a divergence between the legal and real reality is not decisive. Further, socio-empirical data are essential in order to provide the legal debate and the legislature with the relevant arguments.

4. Conclusion

In conclusion, there is a real challenge in building bridges between the legal discipline and other sciences. As Vranken has pointed out, legal research in the Netherlands has just started out on this new road,⁵⁸ which is not an easy one to take. Both purely internal legal research and interdisciplinary research are necessary; they do complement each other and together they will create knowledge on the development of a good functioning legal system, which does justice to the legal reality, on the one hand, and the actual reality on the other.

From my individual experiences a number of lessons can be learned, in particular in relation to the combination of law & sociology. Although these lessons might appear to be open doors, open doors are often passed by and it is only afterwards that one wishes otherwise. Attention for methodological aspects, in particular in relation to this relatively new route of interdisciplinary legal research by legal researchers, is therefore important.

The first open door is that it is essential to determine the aim of the interdisciplinary nature of the research. At least two different goals may be discerned: to give context to a legal problem or to test a specific legal approach as to its external effectiveness. The last one calls for an integration of the legal and the non-legal datasets, which requires more stringent methodological conditions.

The second suggestion is that one should realise that a choice between a unilateral and a multilateral research design has implications in terms of methodological pitfalls and advantages. A unilateral research design makes a legal researcher very much dependent on datasets and information which are already available. That is not necessarily a problem, but when the aim of the research is to collect both legal and sociological data on legally relevant categories, there is a considerable chance that the respective systems of categorisation will be different. This causes problems when the aim is to compare and to integrate the two perspectives. For combinations of law and disciplines which are more concerned with individual persons rather than with groups of people, such as in sociology, this might be different. To conduct unilateral interdisciplinary research is in some respects probably more challenging than multilateral research, although a number of problems are identical for both types.

The translation of legal concepts into empirically measurable concepts might require extensive internal legal research. The underlying legal theory of the legal provision has to be discerned and the interests involved have to be explicitly identified. This is essential, since otherwise an irrelevant legal theory or assumption will be tested. In addition, it is important to explicitly account for methodological choices and arguments, in particular when more options are present; different hypotheses may be tested and the results might demonstrate a certain range of divergence between the legal and the real reality.

External arguments are necessary pieces of information in evaluating the law. To think or to assume what human behaviour amounts to is in no way equivalent to knowledge about what people actually do on the basis of empirical, evidence-based research. Whether external argu-

58 J.B.M. Vranken, 'Nieuwe richtingen in de rechtswetenschap', 2010 *WPNR*, pp. 318-329, at pp. 324-325.

ments, which indicate or even prove a divergence between the real reality and the legal reality, result in a need for reform depends on objective criteria which are valid according to generally accepted legal standards, such as the practical feasibility of a certain solution, its legal predictability, the legal justice thereof and the norms on equality. As long as the researcher provides a complete insight into the underlying presumptions, the different arguments for and against the alternative approaches, and explicitly accounts for the concepts chosen, the methodological requirements will be met.

When, after a great deal of trial and error, the perspectives of law & sociology will be (more) successfully combined, this will result in a more evidence-based approach to the evaluation of the law. This will contribute to an increased effectiveness of the legal system.