Mission: Impossible? On Empirical-Normative Collaboration in Ethical Reasoning

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1. The Dispute on the Role of Empirical Social Sciences in Ethics

Since the 1980s social sciences gained increasing influence in ethical debates where they felt hard opposition before (Borry et al. 2005). It entered mainstream thinking that 'the use of empirical research in ethics could help translate more general and abstract principles into specific and action-driven directives and guidelines that are both morally justified and workable in practice' (Borry et al. 2005). Such ideas drew empirical social sciences and normative theory closer together, but also kindled new debates about limits and possibilities of empirical-normative collaboration in ethics. Weaver and Trevino mention three diverging positions regarding such collaboration (Weaver and Trevino 1994): the *symbiotic* position 'supports a surface-level practical relationship in which normative and/or empirical […] ethics rely on each other for guidance in setting agenda or applying the results of their conceptually and methodologically distinct forms of inquiry' (Weaver and Trevino 1994). This form of collaboration accepts the limits of insight of empirical sciences on the one hand and normative sciences on the other, which are inherent to the respective methodological repertoire. However, according to proponents of symbiotic approaches these specific limits of insight require certain kinds of collaboration between empirical sciences and normative sciences. The two other positions are discussed with much more verve: on the one side the *parallel* approach, which 'advocates the separation of empirical and normative inquiry, and denies integration of any kind on both conceptual and practical grounds' (Weaver and Trevino 1994). On the other side the *integrative* approach, which postulates a 'deeper merging of *prima facie* distinct forms of inquiry, potentially involving alterations in or unifications of the substantive theory, metatheoretical assumptions, or methodology of each approach' (Weaver and Trevino 1994). While the parallel approach explicitly makes a clear cut between empirical sciences and normative theory and considers any form of collaboration impossible, the integrative approach 'rejects the very idea of distinguishing between purely normative and purely empirical claims' (Molewijk et al. 2004).

In our opinion, debates about the relationship between empirical social sciences and normative theory in ethics are very often disappointing as well-known philosophical arguments and analyses are not considered adequately, thus leading to terminological and argumentative vagueness. J. L. Nelson for example holds that descriptive statements always imply a normative core and concludes that 'inverting the common wisdom about the relations between the normative and the descriptive […] will yield interesting results both methodologically and substantially' (Nelson 2000). Unfortunately, Nelsons conclusions do neither, apart from citing empirical findings about the normative content in empirical description, offer any arguments what this would mean for a revision of the empirical-normative collaboration, nor discuss how such a revision could be realized. In order to clarify his position it would be important to explain e.g. what he basically means by the term 'normative' or what kind of relation exists between factual norms and ethical normativity. In addition, the lack of clarification conveys the presumption of a genetic fallacy, i.e. Nelson seems to think of the moral value of a certain practice as deriving from the factual process of how this practice has been established.

However, vagueness is not the only problem: sometimes polemic simplifications overshadow otherwise fruitful discussions. It is alleged for instance that ethicists would stick to a rigid philosophical position only because they fear loss of control over 'their' topic or that social scientists would deny the need for ethical analysis only because they cannot accept their role as an ancillary science in ethics (Fox and Swazey 1984). Such oversimplifications are detrimental to a constructive interdisciplinary discourse. Nevertheless, collaboration with practice, especially in applied ethics, obviously is necessary: normative-ethical conclusions have to be translated into practice with its specific context and conditions. At the same time, new technologies and societal developments raise novel questions which ask for ethical reflection. Therefore, there is no doubt that *some kind* of collaboration between normative theory and empirical social sciences is required in bioethics. Yet, the question remains *what* kind of collaboration. Following M.Z. Solomon we could ask 'How can 'Is' help 'Ought'?' (Solomon 2005).

The following is an attempt to answer this question by reconsidering and sharpening classical philosophical arguments. Therefore, we will sketch the research interests and limits of insight of normative and empirical social sciences from a methodological point of

view and substantiate our conclusions with logical reflections and pragmatic considerations. Subsequently, we will discuss three modes of adequate collaboration between empirical social sciences and normative theory. Finally, we will recapitulate our conclusions and explain why the symbiotic approach can be considered the only adequate approach to empirical-normative collaboration.

2. Possibilities of Empirical-Normative Collaboration in Ethics

2.1. The Necessity of Empirical-Normative Collaboration

2.1.1. Normative Theory Development

We start with some general thoughts on objectives, possibilities and limitations of normative theory construction: the fundamental aim of any normative theory consists in constructing action-guiding norms regarding a certain normatively constructed moral ideal.[1] Initially, these norms have to be developed under idealized conditions or, in Birnbachers terminology, as *basic principles* (Birnbacher 1988; authors' translation). That means to construct these norms with idealized agents in mind, which 'draw the right conclusion regarding their personal moral principles in every situation, where a decision has to be made' (Birnbacher 1988; authors' translation) and always act according to these conclusions. Hence, implementing basic principles would result in the aspired moral ideal. Unfortunately, everyday agents rarely meet the features of idealized agents, mainly because of *cognitive* and *motivational limitations*. Therefore, any normative moral theory has to translate basic principles into *practice rules* to come to terms with the specific limits of

[1] At this point some decisive metaethical assumptions have to be clarified which are underlying our understanding of normative theory: First, we do not believe in any kind of objectivity of moral norms and therefore believe moral norms to be strictly separated from facts. Hence, moral norms need to be *constructed* rather than *detected* quasi-empirically. Second, although we speak of 'moral ideals' we do not believe in the possibility of ultimate justification of any moral norm. What we mean by 'moral ideal' simply is the particular state of a normative theory, which would be reached through complete achievement of its specific moral target value. That does not only apply to consequentialist theories: Kant for instance specified the moral ideal as a state in which the rule of pure reason is absolute.

human thinking and acting (Birnbacher 1988; 1999).[2] Of course, the translation of basic principles into practice rules has to be based on empirical data. After all, the cognitive and motivational limits of humans which necessitate a translation can only be grasped by empirical methods.

It is of great importance here to note that practice rules *cannot* be developed without underlying basic principles (Birnbacher 1988).[3]: If practice rules were developed without underlying basic principles it would be possible to refer to any kind of cognitive and motivational limitations. In consequence, it would be possible to 'constitute' any kind of practice rule. However, if practice rules are derived from normatively developed basic principles, one can only refer to limitations that *in fact* limit the implementation of these specific basic principles. Furthermore, dealing with moral justifications in the context of basic principles opens a special room for reflection which allows for fundamental and systematic analysis and facilitates focusing core problems by reducing empirical complexity.

It is this relationship between basic principles and practice rules that is central for the further discussion of opportunities and limits of empirical-normative collaboration in ethics, because it sheds light on the essential possibilities and limits of normative theory as well as the resulting necessity of collaborating with empirical social sciences. As stated above, it must be seen as the very task of normative theory to develop basic principles and it is

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[2] In the course of this article we will discuss another kind of limitations that is also important for developing practical norms: limitations which we will call *external limitations*.

[3] To avoid misunderstandings, we have to hold here that in our opinion it is of no intrinsic value whether a basic principle can be implemented by everday agents or not. In principle, one can imagine basic normative systems which are logically coherent but cannot be implemented because of certain limitations of human beings. Therefore, basic principles only need to be translated into practice rules which can be implemented realistically if one decides to act in accordance to these basic principles. In such cases of acceptance, basic principles become *unrealistic* if one is not able to act according to them. As regards our project, it should be clear that translation is necessary in order to enable moral acting in ethical practice.

normative ethicists, who are, by their methodology, capable of 'dealing with moral concepts, arguments, norms and value systems' (Birnbacher 2003; authors' translation).

However, at this point it is important to take into account that normatively developed basic principles often include so-called *bridging principles* (Schurz 1997). Bridging principles are sentences following the pattern 'An action A is demanded in accordance to a moral norm N iff criterion C is met', whereby C must be grasped empirically. Thus, bridging principles tie the validity of basic principles down to empirical criteria C_a (Ruß 2002). In this context it is irrelevant what exactly N demands from agents, i.e. what moral instructions are formulated by N. What is of relevance here is the simple fact that C_a is connected to N in ways so that it can only be measured empirically whether N is to be applied in the present situation. This adds another player to the game: if basic principles include bridging principles, the conditions for application of a certain moral norm have to be identified empirically.

However, empirical analysis is neither part of the process of developing a moral norm nor included in the methodological repertoire of normative sciences. Hence, normative theory must rely on collaboration with empirical social sciences (a) when translating basic principles into practice rules and (b) when clarifying the criteria for applying a moral norm.

2.1.2. Obtaining Socio-Scientific Knowledge

Let us now turn to the question what social sciences can contribute to ethical debates and if they – as it is claimed for example by representatives of integrative approaches to empirical-normative collaboration – can help in developing or creating moral norms (Molewijk et al. 2004; van der Scheer and Widdershoven 2004). In analogy to our considerations regarding normative theory, we will initially focus on the epistemological interests as well as on the methodology of empirical social sciences.

First of all, it is worthwhile to notice that the field of empirical *social* sciences consists of a lot more disciplines than just empirical *sociology*. 'Social sciences' often is equated with 'sociology' and thus it is overlooked that disciplines such as empirical anthropology, psychology, ethnology, economics etc. belong to the field of social sciences as well. As a consequence, it is often neglected that these disciplines are also of great relevance for the

empirical aspects of ethical questions. Despite partly fundamental differences regarding their content, all *empirical* social sciences share the basic aim to grasp, describe and explicate social phenomena in scientific and systematic ways. Describing and explicating social reality thereby also includes the analysis of individual human thinking and acting. In order to come to terms with this aim, specific methods were developed which allow for descriptive capturing of social practice.

With regard to the specific requirements of ethical questions the following types of empirical social scientific knowledge have to be emphasized. First, the methods of empirical social sciences allow for specifying *internal cognitive* and *motivational* capabilities as well as limits of human agents. Furthermore, *externally* determined conditions can be captured, i.e. basic conditions of specific situations which structure the range of possible actions but cannot be influenced by the agents. At this point, it becomes clear why it is inappropriate to limit empirical social sciences to empirical sociology: whereas it is presumably the very task of empirical sociology to grasp externally determined conditions, in most cases the internally determined conditions are better captured by means of psychology and empirical anthropology.

Second, empirical social sciences can grasp, describe and explicate *collective* processes and changes. In doing this, they can for example measure the effects of certain norms and/or rules on the actual performance of agents or answer questions like how agents actually act in certain situations, which kind of underlying moral beliefs they share, which 'new' moral problems arise within a society – e.g. as a result of technological innovations – and how these new problems are discussed in society.

However, there are also limits for empirical social sciences regarding ethical questions which become clear when looking at its aims and methodology: empirical social sciences *per definitionem* cannot participate in generating moral norms by themselves, because they are – by their research interests as well as methodological means – determined and at the same time limited to grasp, describe and explicate social *reality*. In this regard normatively interested social scientists always have to rely on the methodological repertoire of normative sciences.

So far we have explained the extent to which normative sciences and empirical social sciences can attain knowledge regarding ethical questions. Furthermore we have shown

why and where collaboration between normative theory and empirical social sciences is mandatory when dealing with ethical questions. In the following we will discuss logical conditions that limit or allow empirical-normative collaboration in ethical questions.

2.2. Logical Considerations on Empirical-Normative Collaboration

2.2.1. Hume's Law

The principal limitation of empirical-normative collaboration follows from Hume's Law, which is stated in *A Treatise of Human Nature* (Hume 1992). Since G.E. Moore's considerations on the naturalistic fallacy, Hume's Law is primarily understood by the logical differences between empirical and normative statements: while the logical value of being true or false can be attached to empirical statements this is not possible for normative statements (Engels 2008; Moore 1993). Therefore it is logically inadmissible to *forthright* conclude from statements of 'Is' to statements of 'Ought'. Insofar 'Is' and 'Ought' have to 'remain on their respective sides of the fence' (Nelson 2000). This requirement especially concerns applied ethics which notably runs the risk of violating Hume's Law as a result of its immanent relation to practice.[4]

However, what does not follow from Hume's Law is that collaboration between empirical social sciences and normative theory is impossible in principle. It solely follows that

[4] One could argue that such kinds of logical fallacies rarely appear in scientific practice. We also think that naturalistic fallacies indeed are committed less often than claimed. In order to avoid that allegations of naturalistic fallacies become universal discussion stoppers, each premise and conclusion should be analyzed in detail. Closer inspections of controversial cases often show that the contested argument is logically correct as it includes normatively derived bridging principles that have just not been explicitly stated. This does not, however, affirm positions which advocate influence of empirical data on normative theory development. Rather, such cases once more show that empirical description and normative theory are distinct in a decisive respect. Statements like 'x is morally good, because x includes the natural feature y' might arouse the suspicion of committing a naturalistic fallacy. However, one can easily dispel this suspicion by adding a normative premise like 'the natural feature y is morally good because of z'. Thereby one has shown the distinction of empirical description and normative theory exemplarily. As soon as normative premises are introduced, debates have to address the *normative* question of its rightness.

forthright conclusions from socio-scientifically attained facts to normative statements are inadmissible. This was already a result of the considerations on the possibilities and limitations of the methodological repertoire of empirical social sciences and normative sciences. By now we can substantiate this result by means of logic: according to their particular methods, normative and empirical social sciences generate specific scientific statements which are different with regard to their logical status.

2.2.2. Ought Implies Can

Accepting Hume´s Law logically substantiates the *boundaries* of empirical-normative collaboration. In contrast, the so-called 'Ought Implies Can'-principle clarifies their particular *prospects*. Its current definition and in-depth analysis traces back to H. Albert, who stated:

> When we come back to our problem whether social sciences can contribute to answering the second Kantian question, there is a very simple answer: they can actually contribute extraordinarily much, even if Weber´s 'freedom from value judgments'-principle is upheld. That is because they can, framed in our concept of science, answer the question: what can we do? And this question has a fundamental relation to the question: what should we do? And most people will probably agree to the statement, which is, brought to its shortest fashion: Ought implies Can (Albert 1972; authors' translation).

It seems intuitively plausible that whether someone follows a moral norm in at least some way depends on the current factual abilities of that particular person. This intuition can be strengthened by looking at one important task of normative theory, which is to generate norms in the sense of practice rules by which we are enabled to act according to the concrete conditions of human beings. It is not sufficient for moral norms to demand acts which are logically possible, but empirically impossible due to factual incapacities of moral subjects.[5] This is one of the reasons why we regard attempts to argue against the logic of

[5] This insufficiency of logical possibility of course only applies to norms which in principle are adopted by agents (cf. note 3).

'Ought Implies Can' as implausible.[6] Accepting this principle creates yet another problem that consists in harmonizing 'Ought implies Can' with Hume's Law. At first sight 'Ought implies Can' seems to imply a deduction of 'Ought' from 'Is'. However, this problem only arises from an intuitive understanding of 'Ought implies Can'. In terms of logic, this interpretation of 'Ought implies Can' is represented by a biconditional which means that 'Can' (C) and 'Ought' (O) are at the rate of Ca≡Oa (Collingridge 1977; Stern 2004). Hence, something *ought* to be done if and only if it *can* be accomplished. This would in fact mean that moral rightness or falsity could be directly deduced from possible options for action of the respective person Thus, the intuitive understanding of 'Ought implies Can' violates Hume's Law.

However, if one takes a second look at the text passage quoted above, it becomes clear that Albert does not have such an intuitive understanding of 'Ought implies Can'. Although Albert affirms that empirical sociology is able to contribute to the question 'What should we do?' by giving answers to the question 'What can we do', he explicitly postulates that this has to be done while upholding Weber's principle of freedom from value judgements. Thus, Albert rules out forthright conclusions of normative Ought statements from descriptive Can statements. Hence, he disqualifies an understanding of 'Ought implies Can' as a biconditional.

Unlike the intuitive understanding of 'Ought implies Can' the classical philosophical understanding is represented by a material implication between Ought and Can, i.e. Oa→Ca. However, this understanding in our opinion neither is adequate. After all, the sentence Oa→Ca is wrong if and only if Oa is true while Ca being wrong. That would be a case in which 'Ought implies Can' is violated. One can understand this as a purely descriptive statement. However, 'Ought implies Can' normally has some kind of normative status, i.e. the sentence Oa→Ca ought to be true. Hence, 'Ought implies Can' has to be adapted to the case at hand, i.e. inserting ¬Oa when ¬Ca is given in order to fulfil Oa→Ca. Unfortunately, this means to forthright conclude from ¬C to ¬O or, in other words, from Can (not) to Ought (not) by Modus Tollens. As a consequence, the classical philosophical

[6] For attempts of arguing against 'Ought implies Can' cf. e.g.: Pidgen 1990; Saka 2000. For arguments in favour of 'Ought implies Can' cf. exemplarily: Bailey 2006; Streumer 2003.

understanding of ‘Ought implies Can’ also violates Hume’s law. The only possibility of saving the classical understanding consists in limiting its validity to cases in which Ca is true. This however would lead the principle ad absurdum, since it would only be valid in cases where the agents actually have the ability to do what they ought to do.

What then could be an adequate understanding of ‘Ought implies Can’? In our opinion, a *weak* understanding in terms of an implication between Can and Ought allows for a far better understanding. Referring to formal logic this now means ’Can implies Ought’ (Ca→Oa) which is why we reckon ’Ought implies Can’ as an unfortunate term. Thereby, we constrain the validity of ‘Can implies Ought’ to such instances, for which Oa is true. That is important, because a general acceptance of Ca→Oa for all instances would lead to norm conflicts: if both a and ¬a are possible, i.e. Ca can become true as well as wrong, the openness of Oa regarding its logical value would end in a situation where both a and ¬a are ought at the same time. The question is whether such a restriction of Oa is admissible. In our opinion it is. The explanation is as simple as plausible: if no Ought is established, i.e. Oa is wrong, dealing with ‘Ought implies Can’ or, in our words, ‘Can implies Ought’ simply is irrelevant. It is then no Ought established, in contrast to which a Can has to be tested.

We can now clarify the consequences of the logical postulate Ca→Oa: ’Can implies Ought’ is true independently of the logical value of ’Can’. Therefore, the fact that something *can* or *can not* be done is irrelevant for the question whether it *ought* to be done. That might sound contra-intuitive at first. ’Ought’-sentences however, as we have demonstrated before, can exclusively be developed by means of basic principles whose validity is independent of empirical facts and factual abilities. ’Can implies Ought’ therefore corresponds to an epistemologically appropriate relation of basic principles and practice and does not violate Hume´s Law.

Nevertheless the question remains: what are the functions of ’Can’ if it does not logically influence ’Ought’? Because logical validity is not sufficient to establish a moral norm, basic principles have to be translated into practice rules which we are actually able to follow under human conditions. Therefore, this subtask of normative theory corresponds to our conclusion that following theoretic scientific principles, it is necessary to translate basic principles into practice rules. This is because the ’Can’ which is explicated by empirical

analysis refers to the cognitive, motivational and external limitations of human action. Yet the aim of this analysis is to approximate practice rules to basic principles as far as possible whereas during this process of translation basic principles remain valid for the reasons mentioned above. This means that on the one hand 'Can implies Ought' is true independently of the truth of 'Can'. On the other hand, it is compulsory for moral practice to empirically grasp the dimension of 'Can'. We propose to name that 'Ought' which is structured by the cognitive, motivational and external limitations of the respective agents 'practical Ought'. Therefore a more adequate formulation of 'Ought implies Can' which includes this aspect would be 'practical Ought presupposes Can'.[7]

2.3. Three Modes of Empirical-Normative Collaboration

So far we have analyzed the theoretic scientific principles concerning cognitive interest, prospects and limitations of normative and empirical social sciences as well as the resulting necessities and limits of collaboration as regards normative-ethical questions. Subsequently, we substantiated these results by some logical considerations. In the following, we propose three different modes of appropriate collaboration between empirical social sciences and normative theory.

2.3.1. Derivation of Adequate Practice Rules

The first form of collaboration concerns the translation of normatively developed basic principles into realizable practice rules. With regard to their methodological possibilities empirical social sciences seem to be particularly qualified for such a translation since they

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[7] To avoid misconceptions we should clarify the difference between bridging principles which we regard as *biconditionals* and 'Ought implies Can' which is often also seen as a bridging principle. However, according to our weak understanding, 'Ought implies Can' is an *implication* rather than a biconditional. To put it another way, bridging principles are an integrative part of a normative theory and therefore are formulating testable empirical conditions which must be fulfilled in order to gain validity for the respective principle. In contrast, 'Ought implies Can' as we have demonstrated is not associated with normative validity. It is rather a touchstone for the *factual possibility* to act as requested by normative theory.

allow for conceiving cognitive and motivational capacities and boundaries as well as external limitations (Birnbacher 1988).[8]

This point can be clarified by taking a closer look at the ideal form of act utilitarianism, which states that an action is morally demanded if it maximizes the utility of all people affected by this action. However, it is obvious that in many cases human agents will not be able to act according to this basic principle. Cognitive limitations are one reason. It could simply be impossible to capture the (potential) utility of all people affected, especially if the effects of an action span over a huge temporal and spatial distance. Agents could also be motivationally overburdened by realizing basic principles. For instance, a person could lack the motivation to include utility and disadvantage of future generations. Moreover, external limitations can restrain the observance of basic principles. Financial constraints could for example detain a physician who is willing to act according to utilitarian principles from actually sticking to these basic principles. Within the scope of this paper we cannot give a detailed example for concrete practice rules. Nevertheless, it can be stated that all of the aforementioned kinds of limitations can be captured in principle by empirical social sciences.

Attention should be paid to the fact that empirical insights do not necessarily lead to restrictions of basic principles. In fact, especially the insight into motivational structures and their limitating effects on moral norms can allow for ways of regulation. If it becomes explicit for which reasons people diverge from moral norms although they are cognitively able to agree with them, it may be possible to open new ways of motivating people in order to observe these rules. Therefore, the results of empirical social sciences do not necessarily restrict the implementation of basic principles but merely allow for contriving new ways and means to approximate practice rules to basic principles.

However, this is not breaking Hume´s Law. The 'Ought' in question is not derived from what is found in reality but still from basic principles which are developed by normative theory. The ideal 'Ought' however is restricted to a practical 'Ought' that can be implemented by real actors. In other words: empirical insights can solely help *adapting*

[8] Albeit Birnbacher (1988) does not mention external limitations, we consider them as significantly important as stated previously.

basic principles to the capabilities of human agents. In doing so, basic principles always serve as target value and are only restricted if following them is actually impossible. But of course this does not mean to gain moral norms directly from empirical insights.

2.3.2. Empirical Detection of Bridging Principles

A second possibility of collaboration between empirical social sciences and normative theory regards so-called *'bridging principles',* which postulate empirically testable terms of implementation. These terms should not be confounded with the limitations described in the context of developing practice rules. In fact such conditions are expressed in terms like 'All sentient beings have to be treated in accordance with the norm N'. And, as stated before, it is up to moral theory to create the norm N as well as to establish its terms of implementation C_a, in this case of being sentient.

Yet, the identification of actual cases that require acting according to N is bound to empirical insights: to decide whether regarding to creature X it is required to act according to N we have to validate empirically whether X is actually sentient. Indeed the implementation term of being sentient is a criterion which has to be checked by *natural* sciences. However, there are several bridging principles that require validation by empirical *social* sciences. A well known example is the rule-utilitarian bridging principle 'If acting according to N helps stabilizing society one should act according to N'. This kind of bridging normative theory and empirical social sciences also does not violate Hume´s Law, because both the norm N and the criterion C for deciding on the application of N are developed normatively: in reference to our example, this means that 'stabilization of society' is constituted normatively in the first instance and subsequently moral norms are developed which are intended to serve this principle. Only after finishing this process, empirical social sciences come into play by raising the question whether a specific norm *actually* serves this superior aim. However, this contribution has no normative function.

2.3.3. Evaluation of Practice

The third and last option of adequate collaboration between empirical social sciences and normative theory concerns the measurement and evaluation of social practice regarding the implementation of moral norms and the genesis of new moral questions. As we have

shown, empirical social sciences are able to capture discourse and operation schemes of social practice. Based on these insights it is possible to evaluate social practice with regard to the question, whether it is in accordance with the underlying practical norms. If it turns out for instance that certain practice rules are not applied factually although they are considered to be morally valuable, it is possible to undertake steps which further the implementation of this practice rules.

Moreover, empirical social sciences are able to analyze the public discourse in order to identify new moral problems and debates which for example arise from recent technologies and to make them accessible for normative theory. The current 'moral helplessness' regarding new reproduction technologies is a good example for such a situation that is strongly in need of normative analysis. Identifying such 'moral helplessness' can only be incumbent on empirical social sciences.

Again this is no violation of Hume's Law as moral norms are not deduced from empirical facts. Rather analysis from social sciences serves as an *evaluation instance* concerning moral norms developed by normative theory.

3. Conclusions: Empirical-Normative Collaboration between Parallel, Symbiotic and Integrative Approaches

In the previous chapters we have demonstrated why and where collaboration between empirical social sciences and normative theory is mandatory in ethics. Thereby, the differences in research focus of each discipline must not be overlooked. Such differences are deepened by the limits of insight due to the different methodological approaches of each discipline. Empirical social sciences are able to collect and describe factual statements. Methods to develop and criticize normative statements are not in their repertoire. The opposite is true for normative sciences. While their methods do not allow for proving or falsifying factual statements, they are very well suited to assess normative statements. Although both sides have to be merged in application-oriented ethics in order to find good answers to difficult questions, the distinct methodological cores of each discipline can not substitute each other and must stay intact. Trying to mix them up in hope of a new methodological approach is futile.

We have shown that normative theory needs empirical sciences to translate basic principles into practice rules. Empirical sciences need normative theory to develop basic principles. These reflections regarding philosophy of science were supported by logical considerations about the relationship between 'Is' and 'Ought' as well as between 'Ought' and 'Can'. Afterwards, three possible modes of collaboration were characterized: first, the empirical assessment of conditions that actually necessitate the translation of normatively derived basic principles into practice rules; second, the empirical assessment of conditions for application of a moral norm which are formulated by bridging principles; third, the empirical assessment of social practice which allows (a) to judge whether adopted norms factually are implemented in practice or not and (b) to identify new moral problems which are in need of ethical guidance or solution.

Based on these reflections, we are finally able to take a position within Weaver's and Trevino's framework of approaches to collaboration between empirical social sciences and normative theory in ethics. First, let us take a view on the *parallel* approach. Representatives of this position strictly separate the processes of empirical and normative assessment. The main argument is the strict separation of 'Is' and 'Ought' (Weaver and Trevino 1994). We support this distinction, but only insofar as while *direct* transition from 'Is' to 'Ought' is not allowed from a logical as well as methodological point of view, whereas a reference to facts with the help of *indirect* bridging principles is possible. Furthermore, because options of indirect collaboration are neglected, the parallel approach misses to fulfill the criterion of 'Ought implies Can' in the sense of 'practical Ought presupposes Can': there is simply no basis for translating ideal norms into practice rules.

Representatives of the *integrative* approach postulate a 'theoretical hybridization' (Weaver and Trevino 1994) of normative and descriptive sciences.'Integrated empirical ethics' is an example which posits a close collaboration between empirical social sciences and normative theory 'to integrate moral theory and empirical data in order to reach a normative conclusion with respect to a specific social science' (Molewijk et al. 2004). This aim is supported by our methodological and logical reflections. What we criticize is the opinion 'that empirical research about normative practices can generate ethical theories with normative consequences' (van der Scheer and Widdershoven 2004), and that 'there is no fundamental distinction between fact and value' (Molewijk et al. 2004) or 'between

descriptive and prescriptive science' (Molewijk et al. 2004). This obviously violates Hume's Law. Another problem is the general vagueness which is probably owed to the featureless blending of two methods. If the authors do 'not believe that we should aim at arriving at "the" or "the best" identity of empirical ethics' (Molewijk 2004) and they do not 'offer concrete directives concerning the precise character of the interaction' (Molewijk et al. 2004), they erect a wall of self-protection that evades further discussion and makes it difficult to put it to any practical use.

In contrast, our concept of *distinct methodological collaboration* 'envisions a pragmatic, collaborative relationship between normative and empirical inquiry, in which the theoretical cores of each approach remain essentially distinct' (Molewijk et al. 2004). Therefore, we position ourselves in the symbiotic corner of Weaver's and Trevino's triad. Our approach is not only characterized by a strict distinction of the theoretical and methodological cores of each discipline or the postulate that both disciplines depend on a mutual collaboration, it also concisely states three possible ways of collaboration and describes them for further discussion. Thereby, both the criteria of Hume's Law and 'Ought implies Can' as 'practical Ought presupposes Can' are fulfilled.

References

Albert H (1972) Konstruktion und Kritik. Aufsätze zur Philosophie des kritischen Rationalismus. Hoffmann und Campe. Hamburg

Bailey AM (2006) Why ‚Ought' still implies ‚Can'. http://www.andrewmbailey.com/OughtImpliesCan.pdf. Accessed 31 March 2008

Birnbacher D (1988) Verantwortung für zukünftige Generationen. Philip Reclam jun., Stuttgart

Birnbacher D (1999) Ethics and Social Science: Which Kind of Co-Operation? Ethical Theory Moral Pract 2: 319-336.

Birnbacher D (2003) Analytische Einführung in die Ethik. Walter de Gruyter, Berlin/New York, NY

Borry P, Schotsmans P, Dierickx K (2005) The Birth of the Empirical Turn in Bioethics. Bioethics 19: 49-71

Collingridge DG (1977) ‚Ought-Implies-Can' and Hume's Rule. Philosophy 52: 348-351.

Engels EM (2008) Was und wo ist ein „naturalistischer Fehlschluss"? Zur Definition und Identifikation eines Schreckgespenstes der Ethik. In: Brand C, Engels EM, Ferrari A et al (eds) Wie funktioniert Bioethik? Mentis, Paderborn, pp 125-141

Fox RC, Swazey, JP (1984) Medical Morality is not Bioethics. Perspect Biol Med 27: 337-360

Hume D (1992) A Treatise of Human Nature. Oxford University Press, Oxford

Molewijk B, Stiggelbout AM, Otten W et al (2004) Empirical Data and Moral Theory. A Plea for Integrated Empirical Ethics. Med Health Care Philos 7: 55-69

Molewijk B (2004) Integrated empirical ethics: In search for clarifying identities. Med Health Care Philos 7: 85-87

Moore GE (1993) Principia Ethica. Cambridge University Press, Cambridge

Nelson JL (2000) Moral Teachings from Unexpected Quarters. Lessons from the Social Sciences and Managed Care. Hastings Cent Rep 30: 12-17

Pidgen CR (1990) Ought-implies-can: Erasmus, Luther, and R.M. Hare. Sophia 29: 2-30

Racine E (2008) Which Naturalism for Bioethics? A Defense of moderate (pragmatic) Naturalism. Bioethics 22: 92-100

Ruß HG (2002) Empirisches Wissen und Moralkonstruktion. Eine Untersuchung zur Möglichkeit und Reichweite von Brückenprinzipien in der Natur- und Bioethik. Hänsel-Hohenhausen, Frankfurt a. M./München/New York, NY

Saka P (2000) Ought does not imply Can. Am Philos Q 37: 93-105

van der Scheer L, Widdershoven G (2004) Integrated Empirical Ethics: Loss of Normativity? Med Health Care Philos 7: 71-79

Schurz G (1997) The Is-Ought Problem. An Investigation in Philosophical Logic. Kluwer Academic Publishers, Dordrecht

Solomon MZ (2005) Realizing Bioethics´ Goals in Practice: Ten Ways "Is" can help "Ought". Hastings Cent Rep 35: 40-47

Stern R (2004) Does ‚Ought' imply ‚Can'? And did Kant think it does? Utilitas 16: 42-61

Streumer B (2003) Does 'Ought' Conversationally implicate 'Can'? European Journal of Philosophy 11: 219-228

Weaver GR, Trevino LK (1994) Normative and Empirical Business Ethics: Separation, Marriage of Convenience, or Marriage of Necessity? Bus Ethics Q 4: 129-143