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Interfaces with Other Disciplines

Ethics and OR: Operationalising discourse ethics

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ABSTRACT

Operational researchers help managers decide what they *ought* to do and yet this is generally evaluated in terms of efficiency or effectiveness, not ethicality. However, the combination of the tremendous power of global corporations and the financial markets, and the problems the world faces in terms of economic and environmental sustainability, has led to a revival of interest in ethical approaches. This paper explores a relatively recent and innovative process called discourse ethics. This is very different from traditional ethical systems in taking ethical decisions away from individuals or committees and putting them in the hands of the actual people who are involved and affected through processes of debate and deliberation. The paper demonstrates that discourse ethics has strong connections to OR, especially in the areas of soft and critical systems, and that OR can actually contribute to the practical operationalisation of discourse ethics. At the same time, discourse ethics can provide a rigorous discursive framework for "ethics beyond the model".

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1. Introduction

For many years managers were able to make business decisions having regard only to company profit and shareholder contribution but in recent years they have had to consider a much wider range of issues and values. To the extent that OR is essentially an aid to management decision-making it too has to share these perspectives. Recent global events such as the threat of environmental disaster, corporate dishonesty, the credit crunch and the rise of ethical consumerism mean that the ethical implications of management actions have also come to be more recognised. This is reflected in the OR literature where there has been a resurgence of interest in ethics and OR (Brans, 2002; Brocklesby, 2009; Gallo, 2004; Kunsch et al., 2007; Le Menestrel and Van Wassenhove, 2004; White, 2008). In the main, papers fall into three camps: (i) those concerned with OR as a profession, for example codes of ethics and the effects of ethical committees; (ii) those concerned with OR modelling and the extent to which ethical concerns can or should be incorporated within mathematical and systems models; and (iii) those concerned more widely with the effects of management decisions, and thus OR practice, on society and the environment.

However, within this literature there is relatively little consideration of existing ethical theories and how these might be relevant to OR. This paper will consider a particular, innovative, approach to ethics known as "discourse ethics", developed by Habermas (1992b, 1993b) and important in the world of politics as underpinning the notion of "deliberative democracy".

The first section will briefly review the main ethical theories in order to contextualise discourse ethics and then review the literature within OR. The next section will explain discourse ethics highlighting its strengths and weaknesses. One weakness is that it is overly abstract and idealistic, and it is here that OR methods, both hard and soft, can contribute to operationalising it. This will be developed in the third section.

2. Ethical theories in philosophy and OR

2.1. Philosophical ethics

Ethics has been an abiding question within philosophy going back to the Greeks and beyond. In more modern times, Kant is seen as the major figure and other theories can best be described in terms of their relationship to Kantian deontology (coming from the Greek for duty). I will outline what are seen as the three major positions within ethics – first, utilitarianism/consequentialism, second, deontology and third, virtue ethics and communitarianism (Baron et al., 1997; LaFollette, 2007; Singer, 1993). As we shall see, discourse ethics encompasses elements of all three.

One of the principal distinctions is whether an act should be judged as an act in itself or in terms of its effects and consequences. Consequentialists such as Hume (1967 (orig. 1750)) and Smith (2002 (orig. 1759)) held that proper actions are those that do the greatest overall good or the least overall harm. This was developed as utilitarianism by social reformers such as Bentham (1948 (orig. 1789)), who wanted to displace traditional duties and religious

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rules with actions that would genuinely improve peoples' lives. Thus "good" actions are those that bring about the most good for the most people. It seems to fit squarely with the philosophy of OR with one significant difference. OR's main principle is to evaluate different courses of action in terms of their effects or consequences and to choose the best, but the difference is that it does so not in the interests of all but only in the interests of the client or decision-maker.

Kant (1991 (orig. 1785)) developed his own theory in direct response to the utilitarians. Actions should be seen as morally right or wrong, just or unjust, in themselves regardless of their consequences or the extent to which they benefit particular people. He developed a principle, the "categorical imperative" that should be followed by all people at all times. The underlying argument for this is that most actions are done to achieve a purpose – they are means to an end, and it is the end that is valued. However, people may value different ends or objectives differently so can there be an universal end? Kant's answer was that there could be – human beings in themselves. It is rational human beings who make value judgments and so we need to treat other humans as equal to ourselves, as ends and not means. He formulated this in several ways:

> "Act only on that maxim through which you can at the same time will that it should become a universal law" (Kant, 1991 (orig. 1785), p. 97).
>
> "Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end" (Kant, 1991 (orig. 1785), p. 106).

So there are two primary aspects to the categorical imperative: that moral behaviour always involves treating people equally as ends in themselves, never as means to an end; and that action maxims should be those that can apply universally. We shall see both of these ideas being embodied in discourse ethics, although in a very different way. We can see immediately that this does not actually fit very well with, at least traditional, OR. The OR modelling approach, driven by the objectives of the client, has a tendency to treat people, "human resources", very much as any other type of resource – a means to an overall end. The workforce, for example, is often just another variable in a mathematical model.

Whilst Kant's theory was quite individualistic – it is the individual, rational subject who has to make these choices, the other two main approaches within the deontological tradition are based on the idea of a social contract rather than individual acts. This is closer to discourse ethics which expects to operate at the level of the society or group. Locke (1980 (orig. 1689)) based his approach on the idea of a set of natural human rights that society should enshrine, and this was influential in constructing the American Constitution and the Universal Declaration of Human Rights. More recently, Rawls (1971) introduced the idea of a "veil of ignorance" in determining an appropriate set of social rules. Suppose that you knew nothing about your own personal characteristics (e.g., gender, race, disability) or position (e.g., wealth, class) in a society. If you were then asked to decide on the rules for that society, surely you would choose a set of rules that were equally fair to all so that you would not be disadvantaged whatever situation you found yourself in. This is quite an attractive idea, and there has been considerable debate between Habermas and Rawls (Habermas, 1996). These social contract principles can be seen to underlie the idea of codes of practice for professional societies.

The third major strand of ethical theory dates back to Aristotle (2000) but has been developed in recent time by MacIntyre (1985), known as virtue ethics or communitarianism. Aristotle was not concerned with the consequences of acts, or dutiful acts in themselves, but rather with a whole person and their way of behaving. He argued that people should develop emotions, personality and moral habits such that they "naturally" behaved in a way that led to the well-being of the individual and the wider society. These ideas about what constitutes a virtuous and good life have been taken up by MacIntyre as a reaction to the a-historical individualism assumed by the deontologists, especially Rawls. MacIntyre argues that we only become socialized as human beings through our development within a particular community and that we inevitably take on the codes and values of that community. This means that values and practices always remain relative to a particular community and there can be no external standpoint from which to judge them. Whilst we can see that there certainly must be some truth in this argument, it leads to difficulties in arbitrating between conflicting cultural systems as is very much the case in the world today (Habermas, 2001).

2.2. Ethics and OR

Even though OR is devoted to trying to tell us (or at least managers) what they "ought" to do, which is after all *the* fundamental question of ethics, there has been relatively little discussion of ethical questions within the OR literature (Brans and Gallo, 2007). Certainly the founders of OR, e.g., Blackett, Gordon, Churchman or Ackoff, were very aware that OR had ethical implications. Indeed, for them OR was very much about bringing improvements to society not merely making more profit for companies (Rosenhead, 1989). Churchman (1970, 1971, 1994) has always argued that we need to consider the effects of our actions and decisions on the whole system of which they are only a part (Ulrich, 1994a) and that managing well means managing ethically, and Boulding (1966) also discussed the importance of ethics for OR.

There have been some attempts to set up professional ethical guidelines to govern practitioners' activity from a deontological perspective. In 1971, the Operations Research Society of America (ORSA) did publish just such a set in the journal *Operations Research* (Caywood et al., 1971). This was followed up in 1983 by a report from the ORSA Ethics Committee (Kettelle, 1983) proposing both guidelines and a specific ethical code. However, neither were adopted by ORSA and in fact no OR society in the world apart from the Japanese has one (Gass, 2009). It is interesting to speculate why operational researchers have been so reluctant to regulate ourselves in this way when most other professional societies do so (Oz, 1992; Rosenberg, 1998). In any case, we may not be able to do so much longer because of the increasing importance of Research Ethics Committees in regulating university research (White, 2008), although this approach does not fit well with discourse ethics.

There have been two significant debates within the literature. The first was sparked by Ackoff's discussion of the social responsibility of OR (Ackoff, 1974; Chesterton et al., 1975; Rosenhead, 1976). The debate is interesting as it surfaces some fundamental issues. Ackoff argued that, as a profession, OR has a duty to consider not only the interests of those involved in decision-making but also all other stakeholders who are affected by a decision, very much in line with discourse ethics as we shall see. He also argued that OR should offer assistance to those who cannot afford it, an aim eventually partially realised by the development of community OR (for and on behalf of groups who could not pay) in the UK (Midgley and Ochoa-Arias, 2004; Parry and Mingers, 1990).

The debate was not with Ackoff's first point, as might have been expected – i.e., that OR does not have any duty to stakeholders beyond the immediate client – but rather with Ackoff's further claim that it would generally be possible to find solutions that would satisfy all parties – i.e., that there were no fundamental and irreconcilable differences of interest between, say, managers and

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workers. This stimulated Rosenhead and Thunhurst's (1982) later analysis of OR from a Marxist perspective which showed the extent to which it had moved away from any form of concern for social improvement.

The second debate was a generalisation of the previous critique in that Jackson (1982, 1983) argued that soft OR/systems methods could never bring about radical change in a social or political sense since they would always reflect the views and interests of those using them, i.e., those in power. Ackoff (1982), Churchman (1982), and Checkland (1982) all responded arguing, in different ways, that one could not pre-judge the outcome of an intervention and that it was possible in principle for radical changes to occur. This debate was part of the development of the Critical Systems Thinking (CST) movement (Jackson, 1985, 1991b; Mingers, 1992a), drawing on the work of Habermas (1974, 1978). CST recognised different forms of knowledge – technical (hard), practical (soft) and critical. It also explicitly embodied an ethical or emancipatory commitment (Jackson, 1991a). Habermas's work on ethics will be the subject of much of the rest of the paper.

More recent work has focussed on how OR can actually help with the major social and environmental issues that we face, and on incorporating ethical concerns in OR practice. The former direction points out the extent to which the world now faces serious systemic problems in producing a sustainable future in terms of destruction of the climate and environment, depletion of natural resources, and excessive greed and short-term profiteering. The argument is that OR is in a strong position to help make beneficial choices both through its general approach, and some of its specific tools. Brans and Gallo (2007) emphasise the importance of systemic thinking as an approach, and system dynamics as a tool. It is not hard to see that the world's problems are inextricably linked and cannot be dealt with reductionistically. A classic example that, it is claimed, has led to the collapse of civilizations such as the Maya is the "tragedy of the commons" where a plentiful resource available to all is exploited until it is available to none (Diamond, 2005; Ostrom, 2009; Senge, 1990). Another example is the "tipping point" where many small changes generate a state change, pushing a system over the edge (Gladwell, 2001; Rockstrom et al., 2009). These can be easily modelled with system dynamics.

Brans (2002) champions the importance of Multicriteria Decision Analysis (MCDA) as a means of trying to balance the competing values and demands that complex social and economic problems always involve, a particular instance being PROMETHEE-GAIA (Brans and Mareschal, 1994). It is also beneficial to combine together MCDA with systems dynamics, e.g., in CO2 emissions control (Kunsch et al., 2004). A more comprehensive methodology for handling complex societal problems (COPRAM) has been developed by DeTombe (2001, 2002). This involves combinations of hard and soft OR methods within a multi-actor and stakeholder setting.

The latter stream revolves around the extent to which OR practice, and particularly OR models, can or should reflect ethical issues. This was initially debated in a workshop in 1989 resulting in a book on ethics in modelling (Wallace, 1994). Many of the contributors held to the view that modelling should aspire to be an objective process, akin to natural science modelling, and that ethical issues should be excluded from models except those pertaining to the process of modelling itself, i.e., that it be rigorous, explicit and unbiased. This is a view of modelling that Le Menestrel and Van Wassenhove (2004) call "ethics outside the model". However, many people would deny that the social and organisational world is in fact the same as the natural world. Rather, it is inherently value-laden and any model of it will reflect a variety of values of the modeller, the client, and perhaps the organisation (Brans, 2002; Brans and Gallo, 2007; Gallo, 2004; Mingers, 1980; Rosenhead, 1987).

This perspective leads to what Le Menestrel and Van Wassenhove call "ethics within models" where ethical concerns are explicitly brought into the model. An example is Brans (2002), who suggests adding additional constraints or additional objectives or weights to reflect social concerns. This, however, raises many issues such as where the weights come from? Who would determine them? And, the extent to which they could be used to legitimise particular interests. As a result, Le Menestrel and Van Wassenhove recommend "ethics beyond the model". By this they mean seeing the model, and the processes that lead to it, as being just a part of a wider communicative debate between the involved parties.

> "In a sense, we are trying to build on communicational ethics as a bridge between the theoretical and practical dimensions of human behaviour (Habermas, 1990)" (Le Menestrel and Van Wassenhove, 2004, p. 483).

This is a very interesting approach as it moves ethical responsibility firmly into the hands of those engaged in the project, and the social context and practices in which they are embedded. Whilst it is easy to say this, it is not easy to do as Brocklesby (2009) has illustrated and is a point we will return to later in the paper. Ulrich (2007) has also pointed to the potential relevance of discourse ethics although ultimately arguing that it is too impractical (Ulrich, 2006). Wenstøp and Koppang (2009) consider the problem of competing or conflicting values in OR. Their interesting paper highlights both the role of emotions in decision-making, in some ways antithetical to the rationalism of OR, and the potential of discourse ethics for approaching value conflict in a more rational way.

This is a move back in the direction suggested by Ackoff towards recognising a much wider range of stakeholders to an OR project than just the client or decision maker. Rosenhead (1994) argued this in his contribution to the ethics in modelling book mentioned above; Gallo (2004, p. 471), proposes the responsibility principle: "responsibility towards the *other* (the value), be it humankind (past, present and future generations) or nature"; Koch (2000) reminds us that we are citizens first and only modellers second; and Theys and Kunsch (2004) emphasise the importance of co-operative behaviour between all stakeholders in order to manage ethically and ensure a long-term sustainable future.

To summarise, recent interest in ethics has both suggested that OR has a special role to play in helping us deal with complex environmental and social problems, and argued that within OR projects ethical concerns cannot simply be inserted into models but need to be dealt with as part of wider discourses between involved stakeholders. We will take up both of these themes in discussing the contribution of discourse ethics in the next section.

3. Discourse ethics

Jürgen Habermas is a major sociologist and philosopher whose work has been influential within the management literature. His early theory (of knowledge-constitutive interests – KCI) was primarily epistemological, concerning human interests in different forms of knowledge and their corresponding methodologies (Habermas, 1978). The first, called the *technical* interest, was in being able to control and transform the physical world. This underwrites the natural or empirical sciences. But humans also have the ability to communicate through language and this enables them to coordinate their actions and agree on modes of behaviour. This leads to the *practical* interest in communication and understanding that governs the social world. Finally, he argued that we also have an *emancipatory* interest in our own self-development and freedom from false ideas that underpins what he called critical science.

From this, developed his Theory of Communicative Action (TCA) (Habermas, 1984, 1987) which argued that language, communica-

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tion and understanding were the foundations of human society. Rational discourse and debate rests on making and challenging validity claims concerning states of affairs in *the* material world (*truth*); valid norms of behaviour in *our* social world (*rightness*); and intentions and beliefs in *my* personal world (*truthfulness* or *sincerity*).

Along with the TCA, and drawing on prior work by Apel (1980), Habermas developed theoretical conceptions of discourse ethics (Habermas, 1992b, 1993b), law (Habermas, 1996) and deliberative democracy (Habermas, 1999b, 2001). This work is both highly systematic, and aspires to be of practical relevance. It brings in several of the ethical approaches discussed above, and also has a discursive dimension that resonates with developments in soft OR. For all these reasons, it is valuable to consider its relevance to ethics in OR.

Habermas's extensive theoretical work, generally prior to Discourse Ethics (DE), has been taken up in many ways within both OR/MS and management theory more generally. We will briefly review its history within OR before moving to DE.

Mingers (1980) was perhaps the first paper to draw attention to Habermas, comparing his early work on the relations between theory and practice (Habermas, 1971, 1974) with Checkland's newly developing systems approach called Soft Systems Methodology (SSM) (Checkland, 1981). A further paper (Mingers, 1984) critiqued the subjectivism inherent in SSM from a critical theory perspective. At the same time, Werner Ulrich had been extensively studying Habermas' work as well as that of C. West Churchman. This resulted in a major book (Ulrich, 1983) called "Critical Heuristics of Social Planning" which provided a method (Critical Systems Heuristics – CSH) for challenging the boundary judgements, made by planners and designers, that determine the facts and values incorporated in systems designs (Ulrich, 1991).

Jackson (1985, 1989), and later Flood and Jackson (1991), used the theory of knowledge constitutive interests to develop a metamethodology for choosing between different management science approaches – traditional, hard mathematical modelling, soft systems type approaches, and critical approaches such as CSH. This became know as Critical Systems Thinking (CST) or the Critical Systems Approach (CSA) and was also developed, in different directions, by Mingers (1992a,b) and Midgley (1989, 1995).

Habermas' later theory of communicative action, which replaced KCI, was also utilised (Midgley, 1992; Mingers, 1997b, 2003). By the 2000's critical systems was well established with important books by Jackson (2000, 2003c), Midgley (2000), Flood and Romm (1996) and Mingers (2006). There were also heated debates around issues such as the relationship between CSH and CST (Jackson, 2003a; Mingers, 2005b; Ulrich, 2003); the relationship between CST and multimethodology (Jackson, 2003b); and the relations between CST, OR practice and pragmatism (Mingers, 2005a; Ormerod, 2004; Ulrich, 2004).

3.1. The pragmatic, the ethical and the moral

Discourse ethics (somewhat inappropriately named) begins with the question, mentioned above, "what *ought* we do?" Habermas suggests that this question can occur with respect to three different kinds of problematic situation – pragmatic, ethical and moral.

> "Thus, the question 'What should I do?' takes on a pragmatic, an ethical, or a moral meaning depending on how the problem is conceived. In each case it is a matter of justifying choices among alternative available courses of action, but pragmatic tasks call for a different kind of action, and the corresponding question a different kind of answer, from ethical or moral ones" (Habermas, 1993a, p. 8, orig. emphasis).

Pragmatic problems are those concerned with finding an appropriate means to a well-defined end. How can we get the production line working again? What is the cheapest way of delivering our goods? They often concern the material world rather than the social or personal ones and may well be complicated, requiring knowledge and resources to resolve. The main criterion for success is *efficacy* – does the proposed solution work? In terms of ethical theory this is consequentialist as it judges an act in terms of its consequences but in distinction to utilitarianism it does not seek the greatest good for the greatest number but the greatest good for the interests of the client.

Often, however, problematic issues raise questions beyond merely the efficacious. There may be disagreement or uncertainty about appropriate objectives and goals, or about possible means of achieving them. Here we are concerned with strong values (Taylor, 1989) that people or groups may hold about how one should live a "good" life. This is where ethical questions enter. Should we be concerned about the effects of our actions on others? Should we always tell the truth? Is it ever right to give or accept bribes? What responsibilities do we have towards animals or the environment? These issues generally relate to the personal world of an individual or the social world of a group. The criterion is not efficacy but *goodness* or *virtue* and so it echoes the concerns of Aristotelianism or virtue ethics.

For Habermas, the answers to ethical issues may be different for different people or groups. We may legitimately disagree about what constitutes the good life. Religions, cultures, and individuals may come to different answers about questions such as vegetarianism or scrupulous honesty. But, are there are not some issues that affect everyone in such a way that they transcend the interests of particular groups and concern matters of *equity* or *justice* for all? This is the heart of the Kantian claim to universalization. If we do *not* accept that there are at least some universal moral norms, then we lose the capacity to ever criticise practices that contradict basic ideas of human rights and freedoms, and we open the way for inter-cultural conflict and authoritarianism in all its forms.

These issues Habermas refers to as moral questions and they necessitate going beyond the interest of the few to the interests of all.

> "We should not expect a generally valid answer when we ask what is good for me, or good for us, or good for them; we must rather ask: what is equally good for all? This 'moral point of view' constitutes a sharp but narrow spotlight, which selects from the mass of evaluative questions those action-related conflicts which can be resolved with reference to a generalizable interest; these are questions of justice" (Habermas, 1992a, p. 248).

And it is these moral issues that are actually the main focus of discourse ethics, despite it name. Some examples of such norms might be: the right of the individual to exercise basic freedoms which requires both others to respect these choices, and in turn, the individual to respect others' choices; the right to be given a fair wage for ones' labour; or the right not to be treated in a racialist way.

3.2. Discourse

The approach is clearly Kantian in its concern with universalisability but it is wholly novel in putting forward a process based not on the individual subject and their conscience but on practical debate and discourse between all those who might be affected. Habermas begins with the fundamental question of whether there are moral truths, or put in his terms, whether there are norms of action that can be universal, i.e., accepted by all, and, if so, how can these by justified? Habermas draws an analogy with the idea of truth in empirical science but we need to note that for Habermas truth, even empirical truth, is always a matter of discourse. He follows Peirce (1931–1958) and Mead (1934) in seeing truth as that which would emerge from an unlimited debate among a community of enquirers.

In theoretical (i.e., empirical) science we have particular facts or observations and from these develop generalised laws which may be said to have some degree of "truth". To go from one to the other we need bridging principles such as induction or falsification which warrants the validity of the generalised law. In the moral domain we need a similar bridging principle or "moral principle" to go from particular or individual action maxims or norms to those which may legitimately be seen to apply to all; to be general and universal.

Kant's categorical imperative was just such a bridging principle that aimed to exclude maxims that would succeed only if they were not followed by all. But the problem with this is that it rests on an individual person's judgement as to whether everyone would follow a norm after considering it consequences and side-effects; or alternatively that other people in a similar position would come to the same conclusion. Surely, a genuinely universal norm must be attested to not by a single individual but by the common assent of all concerned? This in turn requires those involved to also consider the interests of others – communicative action as opposed to strategic action is based on mutual recognition and commitments rather than threats or promises.

These considerations lead Habermas to propose what he calls the universalization principle (U):

> "A norm is valid when the foreseeable consequences and side-effects of its general observance for the interests and value-orientations of *each* individual could be *jointly* accepted by *all* concerned without coercion" (Habermas, 1999a, p. 42, orig. emphasis).

This is a very demanding test. The idea is that those affected (or perhaps their representatives) will participate in a real debate in an effort to resolve their differences. They should do so with the aim of creating a common will by trying to genuinely place themselves in the position of others, not simply by bargaining to an agreed compromise. The references to interests and values recognise that people will come with different pragmatic and ethical concerns which have to be addressed. The reference to "without coercion" is extremely important as it points to Habermas's concerns that such discussions must be equal and fair, determined by "the force of the better argument" rather than political or personal force (Habermas, 1990, p. 89).

In order to ensure that this should happen, Habermas has suggested certain rules or procedures that discourse should follow:

- All speakers are allowed equal participation.
- Everyone is allowed to:
  - Question any assertion or claim;
  - Introduce any assertion or claim;
  - Express their own attitudes, desires or needs.
- No form of overt or covert coercion should deny the above right.

Originally, Habermas called this approach the "ideal speech situation" but because of misunderstandings now refers to it as an "unrestricted communication community" following ideas of Peirce (1931–1958), Apel (1980) and Mead (1934).

We need to be clear about the status and justification of this principle, and its relationship to a wider principle called the discourse principle (D) which underlies discourse ethics. Habermas (1990, p. 76–96) argues that anyone who enters into a process of argumentation with another person is implicitly accepting or agreeing to procedural conditions that amount to accepting U. Part of the argument is based on Apel (1980) notion of performative contradiction. This occurs when someone makes a speech act with a certain propositional content which is contradicted by the actuality of the speech act. Thus, if a person actually says, "I am not speaking at the moment" they contradict themselves by the very act of speaking. Habermas shows that people who argue against U, or the rules that go with it, generate performative contradictions by the very fact of their arguing.

> "Demonstrating the existence of performative contradictions helps to identify the rules necessary for any argumentation game to work; if one is to argue at all there are no substitutes" (Habermas, 1990, p. 95).

We must now situate the universalization principle (or moral principle), U, within Habermas;' wider conception of discourse as the way in which society regulates itself. We have seen that communication is fundamental to the nature of human society and is used routinely and in a taken-for-granted way to direct and organise our social interactions. But at times there will be disagreement about speech acts and their validity claims and at this point ordinary communication is suspended and a discourse about the communication occurs. It is through this process of discourse or argumentation that societal norms become established and agreed upon (or not). These norms for action cover a wide range of situations and are not all of a strictly moral nature in the sense of being universal – ethical and pragmatic questions also arise. But all of these rely for their validation on what Habermas calls the discourse principle (D):

> "Just those action norms are valid to which all possibly affected persons could agree *as participants in rational discourses*" (Habermas, 1996, p. 107, my emphasis).

Thus D represents a general procedure for agreeing (or otherwise) the acceptability and validity of normative claims in general. It is procedural – it does not generate any norms itself (other than that of discourse) but provides a mechanism for testing the validity of putative norms. Moreover, Habermas intends that such debates will be real and actual, not hypothetical or theoretical, and they will take place within a particular social context dealing with actual problems:

> "It would be utterly pointless to engage in a practical discourse without a horizon provided by the lifeworld of a specific social group and without real conflicts in a concrete situation in which the actors consider it incumbent upon them to reach a consensual means of regulating some controversial social matter" (Habermas, 1990, p. 103).

But D covers a wider range of issues than those that are strictly moral ones, and D applies both to the formal systems of society such as law and democracy, and the more informal discourses of the lifeworld. In each case D needs to be restricted or interpreted appropriately. For example, when applied to the law it refers to those norms that are embodied in statutes; when applied to moral issues that concern all, it utilises U; when applied in ethical contexts it can be limited to only those involved in a particular form of life; and even in pragmatic contexts which tend to be based on strategic action the principle can inform procedures such as collective bargaining or dispute resolution (Habermas, 1996, p. 107).

We should elucidate the status of the ideal speech situation or the unlimited communication community. First, as shown above, Habermas claims that these presuppositions of argumentation are in fact always already assumed by people who genuinely and sincerely enter into discussion and debate for if any of them were clearly not to be the case, e.g., relevant people were excluded from a discussion, it would be obvious that the force of the better argument alone would not prevail.

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> "Argumentation ensures that all concerned in principle take part, freely and equally, in a cooperative search for truth, where nothing coerces anyone except the force of the better argument" (Habermas, 1990, p. 198).

However, in practice these very exacting conditions will only hold to a degree. There is not infinite time; not everyone will be able to be present; not all necessary information will be known or correct; everyone is not equally adept at arguing; and so on. So from this perspective it is simply a regulative ideal towards which real discourses can aspire and against which they can be measured.

3.3. Applications of discourse ethics

At first sight DE would appear to be highly idealistic and of little relevance to real-world situations but I will argue that in many ways it is more practical than other ethical theories. In this section I will describe several domains in which it has already been applied. We can begin by considering the law which is essentially a system for generating and legitimating norms of behaviour for society and organisations within it, and for then enforcing them. What is the relationship between law and morality? We can get a feel for this from the title of Habermas (1996) book dealing with law – "Between Facts and Norms". Law has a dual aspect – on the one hand it appears as a given; laws exist and govern social life, they are like social facts. On the other hand, in order to function they must rely on a degree of legitimacy with the people who must feel they *ought* to obey them not simply because of their fear of sanction. This is the normative aspect and this is where discourse operates – valid or legitimate norms are those which gain peoples' assent through processes of debate; through the discourse principle.

However, the law is not identical with morality. Law has to regulate all spheres of social life (Habermas, 1996, Section 3.2); it has to generate and operate legal norms that cover pragmatic conflicts of interest which may involve strategic rather than communicational action, and with protecting strong value-choices, as well as with questions of justice. (The same may be said of the organisational world – decisions and actions have repercussions in all three domains.) The law also has to ensure that its own workings are themselves properly constituted in the sense of a system of rights that ensures equal communicative participation for all. This leads to a reformulation of the discourse principle into the democracy principle: "Only those statutes can claim legitimacy that can meet with the assent of all citizens in a discursive process of legislation that in turn has been legally constituted" (Habermas, 1996, p. 110).

Each of the domains involves different reference groups and different discursive procedures. Moral questions are governed by considerations of fairness for all and ultimately relate to the world community. Moral norms can be justified through the universalization principle (U) but there also needs to be discourse about their application in particular situations. How does one judge which norms apply or are appropriate in a particular real-world situation (Habermas, 1993a, p. 37)? Ethical questions concern issues of self-understanding of particular communities or forms of life and are highly relevant to the multicultural societies that exist nowadays. Pragmatic questions involve bargaining and negotiating fair compromises between competing interests. These ideas have informed current debates within the realm of politics which go beyond the concept of liberal democracy, as we have at the moment, towards what is known as "deliberative democracy" (Dryzek, 2002; Gutman and Thompson, 1996, 2004; O'Flynn, 2006) which will be discussed later.

DE has also been employed within business ethics generally. Reed (1999a,b) has suggested that the distinctions between legitimacy, morality and ethicality provide a more sophisticated and comprehensive approach to dealing with the normative bases of stakeholder claims; and that the underlying communicative theory goes beyond the abstract notions of a Rawlsian veil of ignorance towards actual debate and discourse, and a recognition of the realities of compromise and bargaining. Smith (2004) argues that increasingly companies will not be able to achieve their long-term strategic aims by acting in a purely instrumental, pragmatic manner – but need to become engaged within the moral and communicative spheres of society as a whole. In a similar vein, Palazzo and Scherer (2006) and Scherer and Palazzo (2007) argue that corporations need to become politicized in the sense that they need to become genuinely political agents within an increasingly globalised, "postnational" (Habermas, 2001) world.

4. Discourse ethics and operational research

In this section I shall argue that there are strong mutual connections between DE and OR. On the one hand, DE could provide a rigorous and innovative framework for managing the ethical implications of OR work, in line with Le Menestrel and Van Wassenhove's "ethics beyond the model". However, as has been noted above and by Ulrich (2006), discourse ethics as it stands is too utopian and idealistic to be practicable and so needs to be operationalised or pragmatised, and it is here that OR can make a contribution to DE.

I suggest that the positive features of DE are:

1. The idea of *practical discourse*. Unlike other ethical theories which locate ethical practices either within the individual or the community, DE envisages real, involved debate and discourse among those who will be affected by a proposal or decision. This resonates well with developments in soft and critical OR.
2. The emphasis on *universalism* pushes us to sweep in and involve as wide a range of stakeholders and affectees as possible. This picks up on ideas of boundary critique and marginalisation (Midgley, 2000; Ulrich, 1994b) which would seem to be of great relevance in today's fractured and divisive world.
3. That it is more *comprehensive* than other approaches. It recognises that there are different types of issues – pragmatic, ethical and moral – which have correspondingly different means of resolution. And, it thereby acknowledges the concerns of consequentialists over the efficacy and efficiency of outcomes, and the concerns of communitarians in recognising the legitimacy of particular, local practices or customs. In the long run, however, effective action requires the recognition of the just as well as the good and the practical.

Against these positive features, there are, of course, limitations and criticisms of discourse ethics. Criticism in the literature has tended to focus on the assumptions that Habermas makes about the nature of human judgement. In particular, that it is overly rationalistic, universalistic and male. In other words, that it presumes that moral judgement is an intellectual and rational exercise rather than one based on emotion or care for the other (Benhabib, 1992; Blaug, 2000; Gilligan, 1990).

However, I want to focus, from an OR viewpoint, on more practical concerns if DE is actually to become more than simply an interesting idea. Discourse ethics, as it stands, is too unrealistic in at least three ways: (i) in terms of involving and including all those affected by actions and decisions; (ii) in terms of approximating the ideal speech situation or communicative community that underpins and validates debate and discourse; and (iii) in deciding the extent to which issues raise pragmatic, ethical or moral imperatives. I will now discuss each of these in turn.

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4.1. Involvement

The fundamental tenet of deliberative democracy and discourse ethics is that legitimacy and justice comes from the active involvement of all relevant stakeholders in open and reflective deliberation. By relevant stakeholders we mean all those groups of people who will be significantly affected by the outcomes of a particular decision (or non-decision) whether they have a direct involvement with the organisation or not. There are two problems in applying this in an organisational context, whether it be in the public or private sector – convincing the primary participants – analysts and clients – to do it, and then gaining the effective engagement of an appropriate range of stakeholders. The former can be addressed both with generic arguments and with specific methodologies such as Critical Systems Heuristics (CSH) (Ulrich, 1994b), boundary critique (Midgley, 2000) and critiquing validity claims (Mingers, 2006, p. 251).

The general arguments concern the need for companies to behave, and be seen to behave, responsibly and ethically in the light of the problems of sustainability and corporate irresponsibility of so much concern today (Scherer and Palazzo, 2007). But it is not just a question of forcing companies to behave in this way, it is also arguably in the corporation's own long term interests given the rise of ethical consumerism and the necessity of engaging authentically with the wider civil society (Ozanne, 2009).

The specific contribution of OR is methods that focus on the boundary-drawing process in practical projects. All projects have to be delimited in some way but how those boundaries are drawn in terms of what aspects of the problem(s) are included; over what timescale; and, crucially, involving which stakeholders, places immediate limits on the extent of ethical discourse. The point to emphasise, made originally by Churchman (1970, p. 43) is that decisions about boundaries are never simply technical or neutral but are always value- or interest-based. This means that they will often need to be tested and challenged in order to encompass unrepresented groups or longer timescales. CSH, which was actually developed in part from the theories of Kant and Habermas, involves 12 critical questions which are answered in both the "is" and the "ought" mode. These cover issues such as the client, the decision-maker, witnesses on behalf of the affected but uninvolved, and sources of knowledge and expertise.

Midgley's work focuses mainly on those groups who are included (the "sacred") and those who are excluded (the "profane") in relation to particular boundary judgements. Mingers' approach involves four forms of critique – a critique of *rhetoric*, i.e., how the proposals are presented; a critique of *tradition* – not taking for granted the conventional wisdom; a critique of *authority* – questioning the views and interests of the powerful; and a critique of *objectivity* – questioning the knowledge and information available.

The second problem concerns gaining effective involvement from a range of stakeholders. There are already several methods for trying to facilitate this (Ozanne, 2009), for example: citizen's juries (Crosby and Nethercut, 2005) where a representative sample of those concerned convene together for a day or more to discuss a well-defined issue, and can call experts or witnesses; consensus conferences (Hendriks, 2005) where a panel of ordinary citizens are convened in public on a specific controversial topic. They interrogate experts and then set the agenda for discussion meetings with the aim of achieving a consensus. Or a deliberative focus group where a specific group, e.g., the visually-impaired, are convened to air their views on a specific topic.

Soft OR and group decision support methods can obviously also be used in this way. Examples here would include Nominal Group Technique (NGT), Team Syntegrity (Beer, 1994) and a range of other large-group interaction methods (Bryson and Anderson, 2000) such as Future Search, Open Space Technology, Strategic Options Development and Analysis (SODA). Many of these do more than simply involve participants, they also provide various ways of helping to structure thinking and debate which will be discussed further in the next section. Another recent approach to complex, multi-sectorial problems is that of Wiek and Walter (2009) called Transdisciplinary Integrated Planning and Synthesis. This utilises soft OR methods within a multimethodology framework to meet the needs and requests of all stakeholders including amongst these NGOs and citizens. There has also been a recent special issue of Systemic Practice and Action Research devoted to collaboration and participation (Newig et al., 2008).

4.2. Realising the ideal speech situation

Getting involvement is important but is not enough to ensure valid outcomes. Habermas sets up the notion of the ideal speech situation to try and ensure everyone is able to participate in the deliberations on a completely equal footing and that the arguments themselves should "win the day".

The ultimate aim is to generate a "common will" rather than simply an accommodation of competing interests by genuinely trying to take on and understand the position of others (Habermas, 1999a). Although Habermas generally talks about outcomes that are "equally" good for all, it may well be that in practice agreement will coalesce around outcomes that are "sufficiently" good for all, i.e., that meet their minimal requirements if not their optimal ones.

This clearly has many resonances with the aims of soft OR and problem structuring methods (Rosenhead and Mingers, 2001) methods such as Soft Systems Methodology (SSM) (Checkland and Poulter, 2006) and cognitive mapping (Bryson et al., 2004) as well as GDSS systems based around computerised voting. All these approaches would accept the above points although in practice there may be limits to that which I will mention below. But they go further in offering processes and devices to try and guide and structure the discussions.

- **Models** All these OR methods include a variety of forms of explicit models, generally pictorial rather than mathematical, to help participants express and explore their own and others ideas. Examples are: rich pictures, cognitive maps, influence diagrams and conceptual models. The point of these is that often people find it hard to fully articulate their own thought on a complex issue, let alone appreciate someone else's position. Expressing them openly, especially in easy to understand pictorial form, generates a greater degree of enlightenment and change of view.
- **Facilitation** Many of these methodologies use a facilitator to guide the process. This can be extremely important in ensuring that aspects of the ideal speech situation are realised, for example reducing the dominance of particular individuals through their position or force of personality and correspondingly enhancing the impact of those less able to articulate their views for whatever reason (Wiek, 2007).
- **Structured process** All the methods have their own particular processes to shape the discussions in effective ways. To mention just a few: SSM develops logical conceptual models, often embodying competing viewpoints, which are then counterposed with each other and with the actual situation. Strategic Assumption Surfacing and Testing (SAST) (Mason and Mitroff, 1981) forms groups of participants that are most diametrically opposed to each other in order to contrast and explore the often hidden assumptions underlying particular viewpoints. Team Syntegrity (Beer, 1994) has a sophisticated system of interlocking groups of participants so that ideas developed in one group can quickly inform all the other groups.

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- **Anonymisation** One of the concerns with an ideal speech situation is that some people may feel constrained about expressing their true opinions because of the other people present. One way round this is to use computer-assisted group decision support systems where responses, e.g., votes, can be registered anonymously (Ackerman and Eden, 2001). Such systems also allow access to large amounts of information on screens, and can also be used to facilitate large virtual groups.

Although no studies have yet been done to test this, it does seem to me that the above techniques could all potentially help to realise at least some aspects of an ideal speech situation.

4.3. Recognising ethical and moral issues

The third difficulty with DE mentioned above, is trying to decide the extent to which particular issues or decisions actually involve moral and ethical concerns, rather than merely pragmatic ones. Many OR problems, particularly tactical ones within organisations, tend to be seen initially as pragmatic questions of efficient means to agreed ends that do not raise wider concerns. Other problems, especially those in the public sector or involving complex societal issues (DeTombe, 2002) are recognised as ethical from the start. An interesting current example of a complex social issue is bioethics, that is all the ethical issues raised by developments in biology and genetics that can affect the body and health. France is currently holding a national consultation, based on principles of deliberation, about bioethics called États Généraux de la bioéthique (Picavet, 2009).

In the case of the more straightforward OR problems, one might adopt the practice of assuming that it is simply a pragmatic issue unless or until someone raises ethical or moral concerns. This is actually, to some extent, how Habermas himself visualises the process occurring (Habermas, 1996, p. 164). However, I would argue, as I have done in the context of multimethodology which raises similar concerns, that all issues have the potential for ethical and moral dimensions and therefore it is better to at least consider these from the start. In other words, at the beginning of a project, as part of scoping and boundary-setting (see above), all those who may potentially be affected by the project should be thought of and, if necessary, asked for their views, or at the very least have their possible viewpoint on the matter considered.

This approach might be seen as unrealistic and one could argue that organisational (and societal) change will always have winners and losers. So, it is perhaps worth drawing a distinction between interests and values. Discourse ethics is concerned primarily with values, that is, what is considered to be right or wrong, fair or good. That is different from a person's or group's interests which concern their (often economic) advantage or disadvantage. Thus a course of action (e.g., closing a factory) may well disadvantage particular people but that does not mean that it is necessarily immoral or unethical provided it is done in a fair and justifiable way. Making such difficult decisions through an open, deliberative procedure such as DE will improve their legitimacy even though people will still be disadvantaged in the end.

4.4. Discourse ethics and OR

At the start of the paper it was suggested that OR should have a close connection to ethical action and I hope that I have by now shown that this is indeed the case. OR is not just the science of better, but also the science of the good and the just.

How then should we apply DE to OR? Clearly this is not a simple procedure that can be laid down in a code or a set of steps. All projects will potentially have ethical and moral aspects and it has to be up to the OR practitioner, who is the driver of a project, to ensure that such matters are always considered. In some cases such issues will be clear from the start, whilst in others they may only emerge as the project progresses; what is important is that they are not ignored or sidelined and that every effort is made to involve and engage all the relevant stakeholders in a genuine and continuing dialogue.

But we also have to be realistic. Habermas accepts (Habermas, 1996, p. 164), at the level of society, that the law has to deal with all three types of issues and that at times situations will be driven by strategic action or bargaining and even conflict. DE does not put itself forward as a panacea but it does provide a processual template against which proposals and decisions can be tested for ethical legitimacy, and, if followed, should lead to actions that are better in the long run for both organisations and civil society as a whole.

OR relates to DE not just procedurally, in terms of making DE more practicable and operational, but also substantively in addressing the practical, ethical and moral domains. Table 1 tries to show these relations. The first three rows of the Table show the domains of the pragmatic, ethical and moral, respectively and how OR methods and methodologies can contribute to these. The relationship of the OR methods to the three domains has not been explicitly developed and justified in this paper, which has been primarily concerned with the ethical dimension, but the relationships to Habermas's three worlds has been demonstrated in several earlier papers (Jackson, 1985, 1990; Mingers, 1992a, 1997a, 2003).

I have also included the idea of legitimacy in this Table, which was briefly introduced in Section 3. For Habermas, legitimacy is distinct from, and encompassing of, morality and ethics (Habermas, 1996). The law has a need to establish its legitimacy, that is its acceptability by the people who are governed. But the law has to deal with more than just moral issues – it has to regulate all

Table 1
Relations between OR methods and the domains of discourse ethics.

Habermas's world	Aspect of discourse ethics	Measure of performance	Description	OR contribution
Material world	Pragmatic	Efficacy (does it work?)	Issues that can be addressed in terms of efficacy – means that achieve agreed ends or goals. Could be physical or social	Traditional OR which can help by finding better solutions to practical problems
Personal world	Ethical	Ethicality (is it good for the individual or group?)	Issues where people or groups may genuinely differ over their values and such differences can be accepted	Soft OR, e.g., cognitive mapping, SSM, MCDA, Web2.0 to explore and recognise differences
Social world	Moral	Equity (is it fair and just?)	Issues that affect many people where there is a need for solutions that all can agree with	Soft OR, GSS, CSH, critical systems, TSI to recognise and alleviate barriers to open discourse
The "real" world of organisations	Legitimacy	Effectiveness	In practice, these issues are not separable and will often occur together. Law and business must cope with all	Multimethodology – combining the different approaches together

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the practical issues of day-to-day society which include ethical disputes and pragmatic clashes of interest. It has, in other words, to be able to deal with all three domains. I am arguing that the same is true in the organisational world where all of these types of issues come together and need to be resolved *effectively*, in a way that includes efficiency, ethicality and equity.

The need for legitimacy ties into wider debates about the role of science and technology (and knowledge more generally) in developing a sustainable future. Cash et al. (2003) have studied both successful and unsuccessful examples and conclude that scientific information needs to be *credible*, *salient* and *legitimate* to be successful in influencing policy. By legitimate they mean: "the perception that the production of information and technology has been respectful of stakeholders' divergent values and beliefs, unbiased in its conduct, and fair in its treatment of opposing views and interests" (p. 8086). This is very much in line with our use of the term to include moral, ethical and practical questions. Cash, Clark et al. also draw attention to the very important question of boundaries, both between different interest groups, and between experts and decision-makers, which was explored in Section 4.1.

4.5. Limitations and weaknesses

We must recognise that deliberative processes are not a magic bullet but still have many practical limitations:

- **Power** Those in power may still be able to manipulate the outcomes of deliberative processes through agenda setting, boundary fixing, limiting resources and information, or choice of experts. It could be argued that this makes the situation even worse as it gives the appearance of legitimacy to what is actually a strategic process.
- **Engagement and inclusion** Creating deliberative spaces does not of itself ensure that they will be properly utilised, especially with marginalised groups. People may not wish to join in such a process, and if they do they may well be in a disadvantaged position with respect to those more privileged and better-educated. Cultural capital will always work in favour of the dominant groups.
- **Reasoned debate** DE is grounded in reasoned debate and argument and a weighing of different viewpoints. But this is a very Western, intellectual tradition that favours those who have had an advanced education or have good rhetorical skills. Some groups, particularly marginalised groups, may well express their views in more emotive ways especially where it concerns their living or livelihood.
- **Time** Clearly time will always be a constraint on the discourse process. For Habermas, and Peirce on whom he drew, truth and moral rightness are the outcomes of a potentially infinitely debate but both recognise that this is simply a regulative ideal. In practice, time will always be limited and it will be up to those engaged in the discourse to judge whether a sufficient consensus has been reached on all, or perhaps just some, of the issues at hand.
- **Debate and action** Even supposing that an effective deliberation has occurred will that necessarily lead to action? Or may it just be a talking-shop which actually supplants really engaging with a difficult problem and taking action.

5. Conclusions

OR practitioners generally work for and on behalf of large organisations and corporations advising them on what actions they ought to take. In the past OR has largely ignored difficult ethical questions on the grounds that it was only serving the needs of its clients. However, we currently face an uniquely disturbing situation in which corporations often have more power and influence than nation states; there have been serious breaches in corporate responsibility; and we are in danger of destroying ourselves economically or environmentally. In these circumstances it is imperative that we consider the ethical and moral implications of our policy recommendations.

There are many approaches to ethics – codes of practice, deontology, communitarian and so on – but this paper has explored a relatively recent and innovative process called discourse ethics. This is unique in taking ethical decisions away from individuals or committees and putting them in the hands of the actual people who are involved through processes of debate and deliberation. The paper has argued that in fact discourse ethics has strong connections to OR, especially in the areas of soft and critical systems. These methods can actually contribute to the practical implementation of DE while art the same time DE can provide a rigorous discursive framework for "ethics beyond the model". This does not mean that discourse ethics is not without its problems and limitations, but at a political level there is considerable practical interest in forms of deliberative democracy and this should encourage us to try operationalising DE within OR.

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