Jacques Pictet

EPFL, Lausanne, Suisse

and

Valerie Belton

Univ. Strathclyde, Glasgow, Scotland

In this article we discuss some of the arguments presented in the three last texts published in this section by Anna Ostanello, the authors of the MCDA manifesto (Denis Bouyssou, Patrice Perny, Marc Pirlot and Alexis Tsoukias) and Pekka Korhonen.

The latter was emphasising the need for publicity, especially towards practitioners. We also believe that this is an important issue for MCDA, but consider that a question has to be answered first, namely: what message do we want to make public ?

What message ?

This question highlights the need for a corpus of common beliefs (or a paradigm) which could be endorsed by all members of the MCDA community. As any good PR person knows, such a message should be clear, simple and unanimous. As long as we are not able to develop a "corporate image" of our field, the effectiveness of any publicity will be limited. We have to acknowledge the fact that, at the moment, our field looks more like an archipelago (Lootsma) or a group of villages (Bana e Costa, Pirlot, 1996) than a continent or an organised state.

This situation is due, in our opinion, not only to the existence of the so-called "schools", but also to the span of interest areas which are addressed by MCDA, ranging - as Pekka mentions - from very hard to rather soft ones. In both cases, this diversity is our richness, as long as we see it in terms of complementarity and not competition. If not, developing our "corporate image" will remain wishful thinking. The very fact that we cannot agree on a unique name for our field speaks volumes.

Thus, we believe that the development of a common MCDA paradigm should be addressed by the MCDA community as a matter of urgency. The three postulates proposed by Bernard Roy (1985) - about first order reality, the decision maker and optimum - and his definition of what a decision aid science should be about (1993) constitute the most serious attempt to date to ground such a paradigm. This could form the starting point for a discussion, which should involve the whole MCDA community through its working groups.

MCDA and OR/MS

Developing a MCDA paradigm should also help us to clarify our position in relation with related fields and should provide a basis for discussing our relationship with the OR/MS field on "logical" grounds. It is our belief that MCDA has, and should have, strong links with the OR/MS community and that we should not give the impression painted by Pekka of rats leaving a boat which we believe to be sinking. Indeed, we do not believe the boat is sinking - if you look at some of the most highly rated Business Schools in the UK (Warwick, Lancaster, Strathclyde) the OR/MS departments are strong and make valued contributions to teaching at undergraduate, postgraduate and MBA level, integrating the soft with the hard and incorporating something of MCDA.

Theory and Practice

A critical issue, which underlines the articles from Anna and the manifesto authors, is about practice versus theory-oriented relevance of MCDA. The former made her point clear that she stands for a better adjustment to the complexity of decision aid in the real world - at the possible price of stretching the theory. The manifesto authors put their weight in favour of a stronger theory. Furthermore, they state that "researchers are not practitioners (and vice-versa)". It is our view that MCDA is a practical subject, that it is worthless unless it is applied, and so research and theoretical developments must be grounded in practice. The development of theory, its implementation and evaluation in practice should form a continuous loop, as proposed by Kolb (1984, illustrated in Figure 1) and embodied in action research (Eden and Huxham, 1995). In this scenario, perhaps the only effective way of researching the use of MCDA in practice, the practitioner is the researcher and vice-versa. However, whether or not it should always be the job of practitioners to develop theory, or of theoreticians to put their theories into practice, is a question for debate. In reality it will depend on the individual and their predisposition to different forms of inquiry and to different ways of working (see, for example, Reason and Rowan, 1981). Whatever the answer, it is essential that practitioners and theoreticians communicate and collaborate and that research into practice is seen by those active in the field to be as valuable and as important as theoretical development.
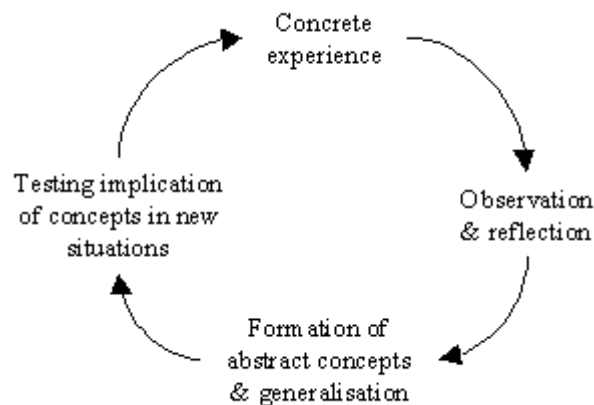

Fig. 1

Transmission of knowledge

We share the concern expressed by the manifesto authors about the importance of the transmission of knowledge, both in terms of scientific corpus and of application skills. Concerning the former, it is not surprising that "specific MCDA classes in universities are not frequent". As we argue below it is perhaps questionable whether it stands alone as a subject. From a more "technical", i.e. modelling, perspective, there are good reasons to consider that MCDA should be taught within an OR/MS framework. Specific teaching is only needed at the doctoral level, which is the purpose of the summer schools, as mentioned by Pekka. On the more practical side, we agree that professional training should be improved. But these programmes should be adapted to the potential audience. Practitioners - e.g. consultants, OR people, engineers, planners - will be interested in techniques allowing them to cope with situations they face in their activity. This means that the design of such training should acknowledge the "chain of knowledge" (figure 2).

Colleagues
Partners

Decisions

Problems
Questions

Alternative "solutions" → Client(s)
Decision maker(s) →

Methods
Procedures
"Solutions"

Problems
Expectations

Alternative methods → Practitioner / Analyst
Facilitator →

Theories
Methods
Guidelines

Real-world cases
Questions
Feed-back
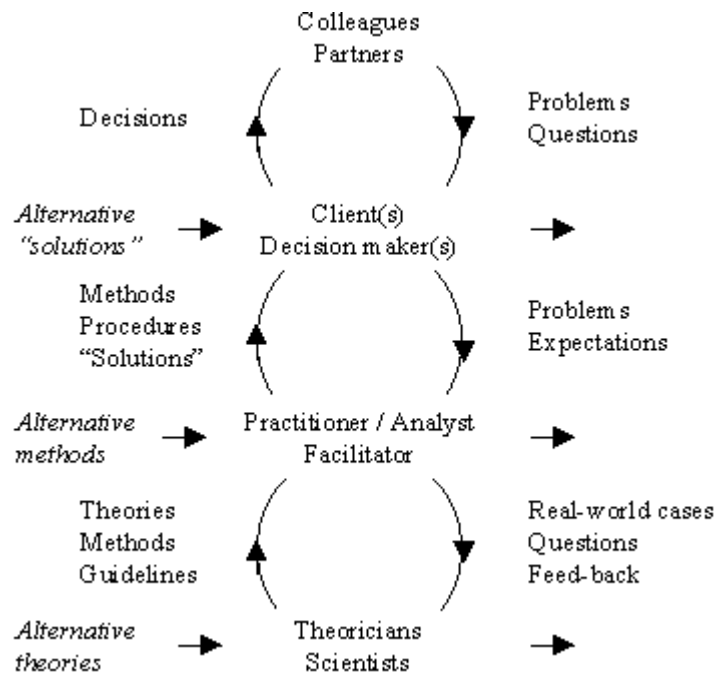
Alternative theories → Theoricians
Scientists →

Fig. 2

In this chain, the weakest link is the one linking the practitioner to the client. This is for a number of reasons, such as:

- It is the least stable link, usually based on a temporary relationship,

- The time pressure is high,

- The vocabulary gap has to be overcome.

Implementing MCDA

In order to strengthen this link attention must be paid to implementation issues - by which we mean both the implementation of the analysis (Belton, 1997) and the implementation of the decision (Pictet, 1996). This includes both content related issues - for example, the transparency of the modelling approach, which influences the extent to which the problem owners can "buy in" to the analysis - and process related issues, including the management of the social process.

Furthermore, practitioners find themselves in a rather competitive situation, where they have to convince a potential client of the relevance of MCDA. This is not necessarily apparent from the start, but only when the client has a clearer vision of their problem, which emphasises the need for the analyst to be skilled in the use of more general structuring tools, which do not force the analysis towards the use of MCDA. If the analyst waits until a "MCDA problem" is apparent, it may often be too late to intervene. However, the more generalist approach implies a need for a broader skill base: what if it turns out that MCDA is not appropriate ?

Can the MCDA Practitioner survive ?

These two issues suggest that perhaps the MCDA practitioner is too specialised to survive? At least, we need to look far beyond aggregation algorithms and embrace a wide portfolio of skills in order to ensure practical success. The alternative is to convince others, who already have this broad skills base,

to embrace MCDA. This brings us back to the key questions - what is the message we want to convey about MCDA and how do we convey that message, to potential clients and to potential analysts ?

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