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## **Innovation in Project Management:** Voices of Researchers

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Over the last few years, a fertile debate has gathered pace about the nature of the discipline of project management [1]. Building on this kernel of self-analysis, the 8<sup>th</sup> conference of the International Research Network of Organizing by Projects (IRNOP VIII), held at the University of Brighton in September 2007, concluded with a debate addressing the motion:

<sup>&</sup>quot;That this house believes that we no longer need the discipline of project management"

The debate was deliberately provocative and intended as a light way to end the conference after the hard work that preceded it. However, this light-hearted debate raised some hard issues about project management itself and about research on projects and project management.

The discussion was opened with an intriguing definition of 'discipline' not as a branch of knowledge, but rather as systematic training in obedience to regulations and authority. This definition was used polemically, but it provides interesting and valuable insights, functioning as a caricature of the traditional project management concepts. Another intriguing argument was that this area and the statement posed for discussion were based on the premise that the project management discipline exists - but does it really?

On the other hand, the discipline of project management as a field of study was defended. People have undertaken projects for more than 6,000 years, and projects are the key instrument for the development of society, starting from the pyramids and the Great Wall of China, and this is not going to change: people will keep undertaking projects, and it is our duty to our children and grandchildren to continue developing project management.

However, projects have been facing problems since the pyramids [2], and it is clear that the (traditional) discipline of project management as we know it today is unable to cope with all issues involved in the undertaking of projects. The discussion following the debate suggested that the discipline of project management is not passive to this critique, and has been developed, in both theory and practice, whether deliberately or not [3, 4, 5, 6, 7, 8, 9, 10]. One may argue about what the project management discipline comprises, whether what we have at the moment is adequate. However, we need a discipline of project management as a

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knowledge field. Thus, the question is how to develop and how to apply this knowledge in projects.

The arguments presented in the discussion are organised in four areas, which considered a broader definition of the actor in the statement, and whether the project management discipline is understood as the traditional approaches to projects or the research field of project management, as shown in Fig. 1.

		What?	
		Project Management as	Project Management
		Traditional Body of	Discipline as Knowledge
		Knowledge on projects	Field
	'We' as practitioners	1. Discipline needed –	2. Practitioners need the
Who?		often rejected without	knowledge discipline –
		disciplines being used	practice expanding and some
		rigorously. Some	highly challenging problems
		examples in complex	existing and emerging.
		projects were limiting at	
		high levels.	
	'We' as academics	3. Management academics	4. Discipline provides a point
		managing their projects	of convergence for teaching
		using a disciplined PM	and research.
		approach. Perish the	
		thought.	

Figure 1: Overview of the Arguments

Considering area 1: in a world where 'we' know what to do, goals do not change, and information is not ambiguous, the project management discipline is extremely relevant. Some academics hold the view that such a world does not exist; a project is *per se* complex, dynamic and unique, and its management is embedded and should take into account social networks, and consequently, 'the' discipline in projects is rather harmful. Another group argued that many projects are still in this zone – projectification has seen to that [11]. However, many reject the notion of discipline as 'too difficult,' without proper evaluation. This presents a paradox – projects are still failing with some regularity (e.g. [12]), and yet the failure is often ascribed to lack of basic processes [13, 14].

All agreed that where none of these aspects dominate, that is in a dynamic, complex ambiguous world, 'the' discipline of practice as currently described in the bodies of knowledge (e.g. [15, 16]) does have the potential to be harmful. The conventional, linear rational approach is insufficient, at least for some aspects of the project, and what 'we' need is an approach that recognises the social structuration of projects that is better able to deal with complexities.

Thus, the 'discipline' of project management means not only following good procedures on how to manage projects (these are essential) but also adherence to a 'rational' approach to project management, which is based on 'the' discipline (as a unitary discipline), rather than multi-disciplinary. Consequently, project management as a knowledge field should include more than only 'the traditional discipline'.

The practitioners' demand for the discipline of project management as a knowledge field is represented in area 2. A good project manager needs to develop and deploy personal

competences and good judgement in very difficult and changing circumstances – rather than 'stick to the traditional discipline'. However, at the task level in such projects, sticking to the discipline is considered by many to be vital. Consequently, one criticism of the current "discipline" of project management addressed the lack of consideration of social skills in projects and just as importantly, its lack of contextualisation.

Some attempts to provide more agile or extreme approaches to project management were mentioned – originating in IT projects (see for instance [17]). Whilst it is tempting at first glance to treat these as 'undisciplined', the truth is far from this. SCRUM, XP and other methods require much higher levels of discipline from people working in those environments than is otherwise expected.

In area 3, the spectre of academics needing the discipline of project management was raised. In scientific research, this has provided considerable interest for researchers, but management researchers appear less reflective. For example, the fact that a computer generated 'scientific paper' programmed by Stribling et al. [18] was accepted in a conference is a clear evidence of this bureaucratisation of research [19]. Perhaps this is one area in which disciplines in managing the planning and execution of research, teaching and writing projects are 'one step too far'.

Area 4 represents the discipline as a point of integration for people researching, teaching and writing in the area and its position in relation to other disciplines – needed by academics. The aspect of teaching and research in the discipline does provide a challenge however. It has become expected that teaching project management involves educating students in tools and techniques. Those same teachers then research the very same practice with much more

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elaborate critical and mature concepts, only to find situations in which these are insufficient or just wrong (as described above). It was argued that it displays a lack of responsibility from our side to teach the discipline of project management (emphasizing "discipline") and then to criticise our students for using exactly what we have taught as soon as they become professionals. However, there is an argument that different levels of maturity in knowledge are at play here, and that as the taught discipline catches up with research and more advanced courses are offered, this phenomenon will occur less frequently. Thus, there is a gap between the theory on projects (including ambiguity and soft skills) and the practice as it is being presented in many class rooms and training sessions. In a way we tend to respond to a need for easy, generic and pragmatic solutions, whereas reality is, as always, complex, ambiguous and changing. As stated by Morris [20] already in 1994, "the great majority of publications on project management deal with techniques and procedures rather than management practice" (p.vii). The challenge is to combine these two views.

The modesty of project management research can be criticised: we are connecting to theories of management, organization sociology and strategy in our analysis of projects. Based on this, project management scholars should be contributing immensely to the debate, theories and discussions on general management. Project management research often concentrates on the temporary aspects of organizations, the uncertainty and ambiguity of organizations and the network character of organizational interactions. These are concepts and ideas that are current and timely in the wider management debate as well. We have the insights, the concepts and the empirical research, but too much is kept within the walls of traditional project management communities instead of extending into cutting edge organizational research.

Now there are classical administration scholars and even other social sciences (education, sociology) interested in the phenomenon of projects. They may dominate the arena within a

few years while project management researchers are being neglected and marginalized. Thus, the forum would like to see an enhancement of maturity of project management as a research discipline to facilitate a more comprehensive contribution to the wider management field.

Two reasons make us think that research in projects will benefit from all areas, and develop both the denial and the approval of the statement.

Firstly, project managers strive to create order, and are partly successful, as the existence of some order is deemed to be related to the success of projects [21].

However, 'discipline' is necessary but not sufficient. The wish to avoid inefficiency, and to dominate uncertainty and risks, bureaucratises the project work [22] and changes the function of project managers from a manager of creativity, change and risk to a manager of paper and forms [23, 24, 25, 26], and consequently, the traditional project management discipline may be harmful for projects, if followed blindly.

If we understand the project management discipline as a positivistic discipline, dreaming of order in the chaotic nature of a project, then its existence is significant. Perhaps it is time to accept, however, that "all models are wrong, but some are useful" ([27], p. 424), and consequently, it is not that one does not need some of the traditional tools of project management, such as Gant Charts or Work Breakdown Structure, even though practitioners and academics know that these tools do not display the reality of projects. 'The traditional discipline' of project management should be about striving for order by recognising and structurally considering the chaos embedded in projects. However, the phenomenon of a project demands more than just dreaming of structure, it demands a 'non-discipline', which looks into the chaotic reality of projects and proposes feasible ideas to deal with this reality. This discussion goes beyond the coexistence of approaches to manage projects. This leads to the second aspect: the diversity present in the research of project management.

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Projects, in empirical terms, have developed into being a multitude of things - from changing breakfast routines at day care centers to the construction of Hong Kong airport. This is considerably different from the post war situation, where projects were a much narrower concept in terms of where the term was used. Consequently, our research needs to mirror the diversity of the field.

Furthermore, looking for the answer is a sign of the field being immature, so part of the maturity of project management research is to accept the complexity present in real life and to accept several perspectives studying such reality.

The discussions indicate that project management research is in a fruitful moment of revolution of paradigms [28]. We wish that the new paradigm accepts the plurality of research in projects and comprises the discipline and "non-discipline" simultaneously. The research methodologies should be developed in this direction, for example as suggested by Bredillet [29], who proposes the combination of epistemologies and proposes the intelligence of adaptation in project practice and research. Drawing on Ashby's law of variety [30] it might be exactly this diversity and contradiction that may aid our comprehension of 'projects'.

Thus, we need (and are looking forward to reading) discussions supporting but also discussions refusing the 'motion' proposed in the IRNOP VIII, and by this means, proposing answers, rather than THE answer, to the future of 'the project management discipline'.

We may note that while carrying out research on project management, we may also be required to use the discipline of project management. That in itself would be worthy of research...

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[1] See for instance:

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